Responses to Comments from Groups, Organizations, and Companies (Comment Sets B1 through B4)

Responses to Comment Set B1 Joint Conservation Organizations

- B1-1 The involvement of the Conservation Organizations in statewide renewable energy siting and their opposition to the Revised Project is acknowledged.
- B1-2 This introduction summarizes the roles of each of the Conservation Organizations; no response is required.
- B1-3 The preference of the Conservation Organizations for location of solar projects on low value habitats is acknowledged; however, note that the County does not agree with the impact characterization presented in this comment. The Draft SEIR does not define any significant and unavoidable impacts to biological resources. In addition, the commenter's characterization of the Panoche Valley and its habitat values is acknowledged. Please see responses to the following comments regarding biological resources issues.
- B1-4 This comment summarizes the habitat present on the project site. No response is required.
- B1-5 As described in Section C.6.1.1 of the Draft SEIR, substantial biological resource data has been collected by the Applicant since the analysis of the Approved Project in 2010. This additional information was independently reviewed in order to compile an accurate description of the baseline biological conditions for the Revised Project and to evaluate changes to potential biological resource impacts and related mitigation measures. Biological resource data sources included, but were not limited to, the following:
 - A search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was conducted to determine special-status plants, wildlife, and vegetation communities that have been documented within the vicinity of the Revised Project site,
 - Aerial photographs, Geographic Information Systems (GIS) data, United States Geological Survey (USGS) topographic maps,
 - Previously prepared reports and regional planning documents (general plan policies, Habitat Conservation Plans [HCPs], Environmental Impact Reports [EIRs], and published scientific literature),
 - Additional studies conducted by agency and academic researchers related to key species, listed below.

The Applicant's technical reports and data (including vegetation mapping and specialstatus species locations and survey data) as incorporated into Chapter C.6 of the Draft SEIR are listed below.

Additional Studies by Agency and Academic Researchers

Endicott, R. L., L. R. Prugh, and J. S. Brashares. 2014. Surplus-killing by endangered San Joaquin kit foxes (*Vulpes macrotis mutica*) is linked to a local population decline of

endangered giant kangaroo rats (*Dipodomys ingens*). The Southwestern Naturalist. 59(1): 110-115. Online with subscription: <u>http://www.bioone.org/doi/abs/10.1894/</u><u>N01-JKF-39.1</u>

- Bean, W. T., R. Stafford, H. S. Butterfield, J. S. Brashares. 2014. A Multi-scale distribution model for non-equilibrium populations suggests resource limitation in an endangered rodent. PLoS ONE. 9(9): e106638 doi: 10.1371/journal.pone.0106638.
- Prugh, L. R. and J. S. Brashares. 2012. Partitioning the effects of an ecosystem engineer: kangaroo rats control community structure via multiple pathways. Journal of Animal Ecology. 11/2011; 81(3): 667-78.
- Gurney, C., L. R. Prugh, and J. Brashares. 2011. Biotic soil disturbance and foraging behavior function at different scales in explaining the keystone effect of an endangered rodent. 96th ESA Annual Convention, 08/2011.
- Bean, W. T., R. Stafford, L. R. Prugh, H. Scott Butterfield, and J. S. Brashares. 2012. An evaluation of monitoring methods for the endangered giant kangaroo rat. Wildlife Society Bulletin. 36: 587-593. Doi: 10.1002/wsb.171.
- Bean, W. T., R. Stafford, and J. S. Brashares. 2012. The effects of small sample size and sample bias on threshold selection and accuracy assessment of species distribution models. Ecography, 35: 250-258. Doi: 10.111/j.1600-0587.2011.06545.x.
- Cypher, B. and C. Fiehler. 2014. San Joaquin Kit Fox Demography, Ecology, and Conservation in the Northern Carrizo Plains. California State University/California Department of Fish and Wildlife. Carrizo Colloquium Presentation. November 7, 2014.
- Illowsky, D. 2014. Long-term habitat management planning for the endangered bluntnosed leopard lizard (Gambelia sila) in California's Central Valley. Brown University and University of California Santa Cruz.
- Prugh, L. and J. Brashares. 2014. Carrizo Plain Ecosystem Project. 2013 Annual report.

Reports and Survey Results Provided by the Applicant

These references are available on the Panoche Valley Solar Project page, accessed from the County's website home page: <u>http://www.cosb.us/</u>.

Blunt-Nosed Leopard Lizard (BNLL) Avoidance Plan (April 2014)

GKR Relocation Plan (November 2013)

- Antelope Squirrel Relocation Plan (April 2014)
- San Joaquin Kit Fox Conservation Measures (November 2013)
- BNLL Focused Survey, Silver Creek Ranch (Summer 2012); Camera Trapping for SJKF, Silver Creek Ranch (Summer/Fall 2012); Spotlighting for SJKF, Silver Creek Ranch (Summer/ Fall 2012)
- Dry Season Branchipod Surveys (September 2010)

Wet Season Branchipod Survey (2009-2010)

Non-Protocol Branchipod Survey (April 2010)

California Tiger Salamander Mitigation Pond Proposal (June 2012)

Golden Eagle Use Survey (fall and winter 2013-2014)

Golden Eagle Nesting Survey (winter and spring, 2014)

- Giant Kangaroo Rat Distribution Survey, Project Footprint and Conservation Lands (February/March 2013)
- BNLL Full Protocol Survey of Project Footprint and Valley Floor Conservation Lands (October 2013)

Abbreviated BNLL Survey of Target Area on Project Footprint, Summer 2014

California Tiger Salamander Relocation Plan (November 2014)

Transmission Line Natural Resources Assessment Report (October 2014)

Additionally, since publication of the Draft SEIR an Early Season Rare Plant Survey was performed (March 2015), and an Ephemeral Pools Survey Memo was prepared (March 2015). A California Tiger Salamander Technical Memorandum was prepared (March 2015) and a San Joaquin Kit Fox Trapping Memorandum was prepared (February 2015). These reports are available as Appendix 4B-3, 4B-9 and 4B-10, 4B-7, and 4B-6, respectively.

As set forth in the 2010 Final EIR, and the Draft SEIR, the "environmental setting" is based on expert review and analysis of databases and relevant available published literature and reconnaissance and protocol level biological resources surveys that were performed on the project site. In *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, the Court specifically addressed what information is required to adequately determine the significance of impacts to special-status species in an EIR. According to the Court, "CEQA does not require a lead agency to conduct every recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required," particularly, where, as here, there is sufficient information regarding the biological resources on site to determine potential impacts, and the research cited by the commenter includes unpublished data not available at the time of the preparation of the SEIR. The survey data and published literature relied up on in the SEIR and described above demonstrate that an adequate biological baseline was established for purposes of the analysis in the DSEIR.

- B1-6 As described in Response B1-5 and Section C.6.1.1 of the Draft SEIR, substantial biological resource data has been collected by the Applicant since 2009, which includes both periods of above average rainfall (2009-2011) and below average rainfall (2012-2014). This additional available information was independently reviewed in order to compile an accurate description of the baseline biological conditions for the Revised Project and to evaluate changes to potential biological resource impacts and related mitigation measures. An attempt to isolate drought induced effects on local populations of specialstatus species within the Panoche Valley would require speculation. The survey data collected over multiple years and published literature demonstrate that an adequate biological baseline was established for purposes of the analysis in the DSEIR. Furthermore, as described above, a key focus of the conservation strategy for the project is maintaining intact habitat supporting known populations of special-status allowing the species to adapt to future climate conditions and/or providing future options for conservation in light of the uncertainty associated with climate change predictions.
- B1-7 See Response A2-18 regarding climate change impacts on BNLL. The Draft SEIR provides a robust discussion on BNLL habitat on the project site that is based on site specific surveys that have been undertaken over the past six years. The survey data and pub-

lished literature relied upon in the Draft SEIR demonstrate the adequacy of the conservation strategy for BNLL. Moreover, preserving these large areas of intact, contiguous, occupied BNLL habitat in perpetuity within the Panoche Valley and surrounding area meets the recovery goals of the species and provides future options for conservation in light of the uncertainty associated with climate change predictions.

The comment also questions whether the 24,176 acres of on and off-site conservation lands can adequately mitigate species impacts because of genetic differences between BNLL on the valley floor and BNLL on the adjacent Silver Creek Ranch. The proposed mitigation strategy was prepared in consultation with the Applicant's expert biologists, who have concluded that the conservation lands will be adequate to compensate for the Revised Project's impacts on BNLL and other sensitive species on the site. These mitigation lands are comprised of approximately 10,782 acres of high value habitat within the Panoche Valley that have slopes less than 11 percent contiguous with the valley floor, and are occupied by blunt-nosed leopard lizard (as well as other sensitive species such as the San Joaquin kit fox and giant kangaroo rat) and are considered likely to contain the same genetically distinct populations of these species that occur on the Revised Project site. The survey data and published literature relied upon in the SEIR demonstrate the adequacy of the conservation strategy for BNLL. As stated above, preserving these large areas of intact occupied BNLL habitat in perpetuity within the Panoche Valley and surrounding area meets the recovery goals of the species and provides future options for conservation.

- B1-8 Please see Responses B1-5, B1-7, and Section C.6.1.1 of the DSEIR.
- B1-9 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Analysis of Foraging Habitat Impacts, and Adequacy of the Draft Eagle Conservation Plan and Avian Conservation Strategy.
- B1-10 The commenter states that CDFW released a revised staff report on burrowing owl mitigation in March 2012, following certification of the Final EIR. The commenter requests that these guidelines be utilized to guide survey protocols, impacts analyses and mitigation measures. Furthermore, the commenter states that reliance on the Avian Conservation Strategy is deferral of mitigation.

In response to the comment regarding recent CDFW recommendations for burrowing owl, the Draft SEIR has been updated to require compliance with the *Staff Report on Burrowing Owl Mitigation* guidelines (CDFG, 2012). Modification to relevant portions of the Draft SEIR are included below:

MM BR-G.5 Burrowing owl. The Applicant shall compensate for permanent impacts to burrowing owls or their habitat with the creation of permanent conservation easement(s), <u>purchase of credits from or</u> an approved mitigation bank, <u>or transfer land in fee to a CDFW approved conservation holder with a deed restriction or other appropriate agreement for the management of the land pursuant to the approved HMMP. The mitigation lands <u>will comply with the mitigation guidelines set forth in the Staff Report on Burrowing Owl Mitigation guidelines (CDFG, 2012), which include among other requirements, a requirement that the lands will be of equal or</u></u>

greater habitat quality after any restoration activity (as defined in [2010 Final EIR] Table C.6-6) compared to the impacted habitat, and will be preserved and managed for this species in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). California Burrowing Owl Consortium (1995) guidelines, an area of 6.5 acres per pair will be preserved and managed for this species. This mitigation may occur on lands used simultaneously as mitigation for impacts to other species.

- MM BR-13.1 Focused pre-construction burrowing owl surveys and implementation of avoidance measures. No more than 30 days <u>and no less than</u> <u>14 days</u> prior to the commencement of initial ground disturbing activities, the Applicant shall implement focused pre-construction reconnaissance level surveys for burrowing owls. Surveys shall be conducted prior to the initiation of ground disturbance and be conducted by County-approved, qualified biologist(s) with experience surveying for burrowing owls. Surveys for burrowing owls shall be conducted in conformance with the <u>Staff Report on Burrowing Owl</u> <u>Mitigation (CDFG, 2012)</u> California Burrowing Owl Consortium's <u>1995</u> protocols. , which consist of a minimum of three site visits. Surveys shall be completed within all areas proposed for ground disturbance and shall include the following avoidance measures:
 - 1. Occupied burrows shall not be disturbed during the nesting season (1 February through 31 August) unless a qualified County-approved biologist verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Owls present on site after 1 February will be assumed to be nesting unless evidence indicates otherwise. If western burrowing owls are present at the site, a gualified biologist will determine whether an exclusion zone can be established in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) protocols. A 250-foot exclusion buffer around any active nest would be erected. This protected buffer area will remain in effect until 31 August, or based upon monitoring evidence, until the young owls are foraging independently or the nest is no longer active. If a buffer consistent with the staff report (CDFG, 2012) cannot be established, an experienced burrowing owl biologist will develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the reproductive success of the owls. If a biologist experienced with burrowing owl determines the relocation of owls is necessary, a passive relocation effort may be conducted in coordination with CDFW as appropriate. During the nonbreeding season (generally 1 September–31 January), a qualified biologist may passively relocate burrowing owls found within construction areas

in accordance with Staff Report on Burrowing Owl Mitigation (CDFG, 2012). Prior to passively relocating burrowing owls, a Burrowing Owl Exclusion Plan shall be prepared by a qualified biologist in accordance with Appendix E of the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012). The Burrowing Owl Exclusion Plan shall be submitted to the CDFW for review prior to implementation, or as otherwise required by the CDFW during the permitting process for this

 For burrowing owls present during the non-breeding season (generally 1 September to 31 January), a 150 ft buffer zone will be maintained around the occupied burrow(s).

Monitoring: Biological monitor shall ensure implementation of avoidance measures and that buffer delineations are kept in good working order.

AMM-BR-PGE-17 Conduct preconstruction surveys and avoidance of active western burrowing owl burrows. CDFW (2012) recommends that preconstruction surveys be conducted at all work areas (except paved areas) in project study areas and in a 250-foot-wide buffer zone around the work areas to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows no more than 30 days prior and no less than 14 days prior to the start of construction in accordance with the Staff Report on Burrowing Owl Mitigation (CDFW, 2012).according to the CDFW guidelines. If no burrowing owls are detected, a letter report documenting survey methods and findings will be submitted to CDFW, and no further mitigation is required.

> If western burrowing owls are present at the site, a qualified biologist will work with O&M staff to determine whether an exclusion zone of 160 feet during the non-nesting season and 250 feet during the nesting season can be established establish an exclusion zone in accordance with the Staff Report on Burrowing Owl Mitigation (CDFW, 2012). If it cannot, an experienced burrowing owl biologist will develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the reproductive success of the owls. If a biologist experienced with burrowing owl determines the relocation of owls is necessary, a passive relocation effort may be conducted as described below, in coordination with CDFW as appropriate. During the nonbreeding season (generally 1 September-31 January), a qualified biologist may passively relocate burrowing owls found within construction areas. Prior to passively relocating burrowing owls, a Burrowing Owl Exclusion Plan shall be prepared by a qualified biologist in accordance with Appendix E of the Staff Report on

Burrowing Owl Mitigation (CDFW, 2012). The Burrowing Owl Exclusion Plan shall be submitted to the CDFW for review and to the County for approval prior to implementation as required.

In response to the comment that the Draft SEIR must include a discussion of impacts to and mitigation for impacts to western burrowing owl, see Impact BR-13 for a discussion of potential impacts to western burrowing owl. Mitigation Measures BR-13.1 and BR-G.5, as modified (see text above) present avoidance and mitigation measures.

In response to the request that the Avian Conservation Strategy be provided for public review, please see Response A2-15.

B1-11 In response to the addition of new breeding colony location data, the Table C.6-2 of the Draft SEIR has been updated, and as follows for Impact BR-7b:

The tricolored blackbird nests in colonies near fresh water, preferably in emergent wetlands with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herbs. Recently, colonies have also been found in grain and silage crops. The species forages on the ground in croplands, grassy fields, and flooded land, and along edges of ponds. Nesting habitat for tricolored blackbirds is absent from the Revised Project site; however, they are known to forage on the site, and there is a large colony at Little Panoche Reservoir, approximately 8 7 miles north of the Project site (CNDDB, 2014). A tricolored blackbird colony of approximately 500 individuals was identified 5.9 miles north of the Project site in 2011 (UC Davis tricolored blackbird database, http://tricolor.ice.ucdavis.edu/).

In response to the recommendation of annual surveys of nearby wetlands, the SEIR contains sufficient survey requirements to detect any tricolored blackbirds present on the Project site, including general preconstruction surveys for special-status species (Impact BR-3.1), nesting bird preconstruction surveys (see Impact BR-6.1) and non-breeding season preconstruction bird surveys (see Impact BR-7b.1).

- B1-12 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B1-13 The commenter feels the DSEIR failed to incorporate an analysis of the effects of climate change on bird wintering and breeding grounds and provides a link to the Audubon society website that purports to provide climate models. The purpose of the DSEIR is to analyze the Revised Project's potential impact on the existing environment. While an attempt to consider the effects of climate change on local breeding and wintering populations of birds within the Panoche Valley would require speculation, Section C.6.3.3 (Impact BR-7b [p. C.6-31 – C.6-32], Impact BR-11 to Impact BR-14 [p. C.6-37 – C.6-40]) of the SEIR properly analyzes whether the Revised Project would result in any change in impacts to habitat for birds, including the tricolored blackbird and golden eagle. The SEIR concluded that nesting habitat for tricolored blackbirds is absent from the Revised Project site, although the site is a known foraging site. However, studies and observations at one solar site showed tricolored blackbirds being observed foraging and roosting/perching in the grasslands within solar arrays and directly underneath the solar panels during and following project development (HTH, 2013a). Accordingly, changes in foraging habitat are not expected to result in habitat degradation resulting in a range restriction or a reduction in numbers of the species. Moreover, the Revised Project

Footprint is smaller than the Approved Project and the Applicant has proposed to preserve over 21,000 acres of land be placed into Conservation Lands that will be protected in perpetuity. This land is being preserved to protect moderate to highly suitable habitats for wildlife species found on the Revised Project site and mitigate for loss of up to 1,888 acres of potential habitat from construction of the Revised Project. The team of project biologists has concluded that the DSEIR adequately analyzes and mitigates the Revised Project's potential impacts on birds. Finally, the electricity generated by the Revised Project would reduce regional GHG emissions, resulting in an overall beneficial impact to climate change.

B1-14

The commenter states that the timing of the biological surveys was inadequate to assess impacts, and specifically, the GKR occupancy surveys (February and March 2013) were conducted too early to provide an adequate baseline.

Survey methodology is discussed in detail in the SEIR under Impact BR-16, where the results of the following surveys were discussed: reconnaissance surveys conducted in April 2009, multiple focused biological surveys performed in the Study Area between 2009 and 2012 (total of over 20,000 survey hours), a 100 % coverage survey in February and March 2013 and follow-up surveys conducted in July 2013 to evaluate cells that were recorded as inactive during the initial survey subsequent to giant kangaroo rat reproduction (Energy Renewal Partners, 2013). This survey methodology was approved by CDFW prior to implementation (see the Draft GKR Relocation Plan, available with Draft SEIR supporting materials at http://cosb.us/wp-content/uploads/Draft-GKR-Relocation-Plan.pdf).

Within the Project Area, the survey grid accounted for 100 % coverage, plus a 500 foot buffer (in areas where landowner access was granted). The Valley Floor Conservation Lands ("VFCL") are interlaced within the Project Area. For this reason, the VFCL was surveyed using the same grid system as the Project Area and was subject to 100 percent coverage. The data were post-stratified following collection in the field and the results were treated separately. Based on this survey methodology the timing of the surveys was adequate to determine impacts to potential GKR habitat from construction of the Revised Project. Moreover, the Revised Project will result in an overall reduction in permanently disturbed areas (415 acres less than the impacts described in the 2010 Final EIR for the Approved Project) and an increase in mitigation lands. The Revised Project was adjusted to avoid areas of highest giant kangaroo rat occupancy that were identified during surveys conducted in 2013 (Energy Renewable Partners, 2013). These areas of high occupancy would be preserved in perpetuity via conservation easement as part of the VFCL (2,514 acres as opposed to 2,072 acres for the Approved Project) and are no longer included in the project footprint.

B1-15 The commenter states the methodology for the GKR surveys was problematic, as there was no trapping conducted. Furthermore, the commenter states that considering the drought conditions in 2013 and 2014, trapping should have been part of the survey protocols, or the applicant should have at least addressed how their chosen survey methodologies could potentially impact the assessment of presence/absence, population density, and population extent for giant kangaroo rats.

As described in Impact BR-16 in the SEIR, an attempt was made to field verify the density of giant kangaroo rats per active cell; however, based on field conditions (heavy

grazing), it was not possible to identify individually clipped precincts within the grid cells. Without performing systematic grid trapping study, it was conservatively assumed that each active cell within the project footprint was occupied with at least one individual giant kangaroo rat. In addition, each 30 meter by 30 meter cell was assumed occupied regardless of how much activity was present; therefore, a single burrow present in the corner of a grid cell that was actually part of a precinct in the adjacent cell was counted in both locations. This resulting assumed minimum density is consistent with some of the lower densities recorded in the region by some research (Williams et al., 1992) and above the density predicted by the Habitat Suitability Model (HSM) for the Revised Project. Energy Renewal Partners (2013) also noted that giant kangaroo rat populations can fluctuate substantially and postulated that the first areas to be occupied on the project footprint would be the cells that were noted as inactive. Therefore, if all inactive cells were occupied, a minimum of 285 giant kangaroo rats may be present on the site. Energy Renewal Partners (2013) provided an additional estimate of the onsite population based on estimated giant kangaroo rat density of 7.9 individuals per acre found on the nearby Valadeao Ranch (Williams et al., 1995), which suggests there may be more than 500 giant kangaroo rats within the Revised Project footprint. This is consistent with empirical data collected in 2009 and 2010.

B1-16 The commenter states that the vegetation surveys on PG&E Upgrade sites occurred September through November 2014, which is far outside of the flowering period for most species, including many of the listed plant species mentioned in the draft SEIR, even in "normal" precipitation years, let alone in 2014, one of the worst droughts on record. Thus survey timing is inadequate for biological baseline development and impact analysis.

The impacts on special-status plants were assessed in the SEIR based upon existing biotic and abiotic conditions and is noted in Table C.6-1 (Special-Status Plant Species with Potential to Occur) and Table C.6-2 (Special-Status Wildlife Species with Potential to Occur) within the SEIR. To mitigate and offset potential impacts to special status species and biotic habitats, PG&E will implement AMM BR-PGE-15 which states, if a covered plant species is present following special-status plant survey, a qualified biologist will stake and flag exclusion zones of 100 feet around plant-occupied plant habitat of the covered species prior to performing the activities. If an exclusion zone cannot extend the specified distance from the habitat, the biologist will stake and flag a restricted activity zone of the maximum practicable distance from the exclusion zone around the habitat. This exclusion zone distance is a guideline that may be modified by a qualified biologist, based on site-specific conditions (including habituation by the species to background disturbance levels).

Further, in response to this comment and to meet the requirements of Mitigation Measure BR-3.1, the Applicant performed protocol-level surveys for special-status plants from March 2 through March 13, 2015. Appendix 4B-3 (Early Season Rare Plant Surveys) is a memo from McCormick Biological summarizing observations made during those surveys. Additional protocol-level surveys for plants that may not have been evident or identifiable during the early season survey will be performed by the Applicant in late spring and/or summer in accordance with Mitigation Measure BR-3.1. The timing of surveys will be determined by a qualified biologist familiar with the phenology of the plant species with the potential to occur, the Project's geographic location, the natural communities present, and the weather patterns.

B1-17 The commenter states that appropriate surveys were not done for California tiger salamander ("CTS") although the Draft SEIR recognizes that this species has "high" likelihood of occurrence on the project site.

California tiger salamanders were detected in two off-site stock ponds during surveys conducted in 2009-2010. One of these stock ponds is immediately outside of the north-western border of the Revised Project site and the other is located south of the western-most corner of the site. CTS were not observed during protocol CTS larval surveys in two ponds in the northern portions of the Valley Floor Conservation Area in which breeding records of the species exist from 1992 (CNDDB, 2014).

As noted in the Draft SEIR, due to the presence of occupied CTS pools and potential breeding ponds within and adjacent to the Project Footprint, the Draft SEIR concludes that the Revised Project (like the Approved project) "could result in injury and mortality of individual California tiger salamanders (including larvae), substantial habitat losses and modifications, and changes in the composition and distribution of small mammal species, on whose burrows California tiger salamanders rely for cover and periods of dormancy." To mitigate this potential impact, the Applicant will implement a CTS Specific Avoidance and Minimization Plan that will protect CTS during construction and operation of the Project. A draft of the CTS Avoidance and Minimization plan was provided for public review with the Draft SEIR materials on the County's website (available at http://cosb.us/panoche-valley-solar-farm-project/#.VRynTvnF9KY). A final version of the CTS Avoidance and Minimization Plan will be developed in consultation with wildlife agencies.

As stated in Mitigation Measure BR-9.1, the Applicant shall perform pre-construction California tiger salamander surveys (see Interim Guidance on Site Assessment and Field Surveys for Determining Presence of a Negative Finding of the California Tiger Salamander (CDFG October 2003) for guidelines on survey techniques, limitations, and inference limits) prior to the construction of all project phases in areas within the project boundary fence line of suitable aestivation or breeding habitat within 1.2 miles of known or potential breeding ponds. Avoidance measures for California tiger salamander shall include those outlined in Mitigation Measure BR-G.2 (Implement Best Management Practices). Please also refer to Responses A2-8 and A2-9 for additional discussion of CTS and impacts analysis in the SEIR.

B1-18 The commenter states that it was unclear if protocol level surveys were completed for San Joaquin kit fox although the draft SEIR confirms that kit fox are present at the project site. The presence of the SJKF within the Project Area is assumed due to the data and information already collected within the Panoche Valley. Therefore, additional protocol level surveys were not necessary to determine presence; however, based on anticipated regulatory agency requirements and in accordance with Conservation Measures proposed in the Biological Assessment for the Panoche Valley Solar Project, San Joaquin kit foxes were radio-collared by permitted biologist Dr. Brian Cypher of the California State University (CSU) Stanislaus, Endangered Species Recovery Program. Trapping and radio-collaring was conducted from January 5 to 11, 2015. Additional trapping and collaring may occur after May 1, 2015 as needed and possibly for those portions of the Revised Project that do not fall within the initial construction schedule (eastern half of the site). A letter report summarizing Dr. Cypher's trapping and radio collaring effort is included as Appendix 4B-7 (SJKF Trapping and Collaring Report) to the Final SEIR.

- B1-19 The documents requested, the Blunt-Nosed Leopard Lizard Protection Plan, Habitat Restoration and Revegetation Plan, Wetland Mitigation and Monitoring Plan, and the Avian Conservation Strategy and Eagle Conservation Plan will be developed as specified in Mitigation Measures Mitigation Measure BR-G.3 (Habitat Restoration and Revegetation Plan [HRRP]), Mitigation Measure CR-G.5 (Wetland Mitigation and Monitoring Plan [WMMP]), Mitigation Measure BR-G.6 (Develop a WMMP and a Habitat Management Plan for mitigation lands), Mitigation Measure BR-14.2 (Avian Conservation Strategy and Eagle Conservation Plan). Drafts of the Avian Conservation Strategy and Eagle Conservation Plans were provided with publicly available materials to support the Draft SEIR (available at http://cosb.us/wp-content/uploads/AvianConservationStrategy.pdf and http:// cosb.us/wp-content/uploads/Draft-Eagle-Conservation-Plan-SM.pdf, respectively). The BNLL Protection Plan is part of the Biological Assessment prepared for the USFWS and was not included with publicly available materials. However, a Draft BNLL Avoidance Plan was included with the Draft SEIR (available at http://cosb.us/wp-content/uploads/ Draft-BNLL-AvoidancePlan.pdf). Drafts of the HRRP and WMMP are currently being prepared by the Applicant. Final drafts of these plans will not be provided for public review, but will be developed in coordination with and subject to approvals from the resource agencies. The mitigation measures listed above set forth performance standards and specific corrective actions if performance criteria were not met which would mitigate the significant effect of the project. Therefore these measures, as written, comply with CEQA and further development of the plans at this time within the public process is not required by CEQA. See also General Response 1 regarding deferral of mitigation.
- B1-20 The commenter is concerned that protocol level surveys were not conducted for Swainson's hawk. As described in the 2010 Final EIR, Swainson's hawk has not been observed on the Revised Project site during the approximately 25,000 survey hours logged by biologists.

Although, protocol level surveys were not conducting for the Swainson's hawk, the SEIR noted that the species is known to nest and forage in the Central Valley east of I-5 in the vicinity of the PG&E Upgrade route. Accordingly, AMM BR-PGE-16 will be implemented to protect the Swainson's hawk during construction of the PG&E Upgrades.

B1-21 Protocol level surveys for vernal pool fairy shrimp have been completed for the Project. As described in the SEIR (Impact BR-8), after the publication of the 2010 Final EIR, LOA completed a second season of vernal pool branchiopod surveys (LOA, 2010a and 2010b). Dry season surveys were conducted September 27-30, 2010 during which soil samples from 117 ephemeral pools was collected and analyzed for the presence of branchiopod cysts. An additional non-protocol survey was conducted on April 14, 2010 during which seven pools were sampled. Dry season sampling found cysts in two adjacent pools, one of which was also found to be occupied by vernal pool fairy shrimp during previous wet season sampling. Therefore, these cysts are likely vernal pool fairy shrimp. As disclosed in the SEIR, development of the Revised Project has the potential to impact vernal pool fairy shrimp individuals and alter or destroy occupied habitat. Field surveys have identified the presence of vernal pool fairy shrimp in three ephemeral pools, all of which occur within the Revised Project footprint. Potentially suitable habitat (ephemeral and vernal pools) was identified throughout much of the project site.

- B1-22 The cumulative project list was updated for the Draft SEIR, including many additional solar projects in Fresno and Kings Counties. The commenter suggests consideration of the Kern Solar Ranch project (located about 95 miles south of the Panoche Valley in Kern County), and the California Flats Solar Ranch project (located about 65 miles south of the Panoche Valley in Monterey County). These projects have been added to the cumulative project list in the Final SEIR, and the analysis previously presented remains accurate.
- B1-23 The threshold of significance used in the EIR is not a "no net loss" standard. These significance criteria are outlined in Section C.6.3.1 in the Biological Resources section. For listed species, the EIR states that the project would have a significant effect if it would "have an adverse effect, either directly or through habitat modifications, on any species listed as endangered, threatened, or proposed or critical habitat for these species" or if it would "Have a substantial adverse effect, either directly or through habitat modifications on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG or FWS." Nonetheless, the Applicant is pursuing an Incidental Take Permit (ITP) with CDFW and through that process will meet the requirements of CESA. CESA does not require "no net loss" Criteria for issuance of an Incidental Take Permit are listed in Title 14 of the California Code of Regulations Sections 783.4 subdivisions (a) and (b).

As described in the SEIR, permanent preservation of high-quality habitat in compliance with Mitigation Measure BR-G.5 (create conservation easements as mitigation for impacts to biological resources), in combination with the other biological mitigation measures that would be required for avoidance of species, would reduce impacts to special-status species and their habitat to less-than-significant levels based on the thresholds mandated by CEQA.

B1-24 As recommended by the commenter, the SEIR has been thoroughly reviewed to ensure enforceable mitigation measures and eliminate and ambiguity. While it is unclear which specific references to terms (e.g., "should," "avoid," or "will") the comment is referencing, the proper use of these terms has been confirmed and clarified where appropriate in the context of the mitigation measures. The term "construction" is likewise used throughout the SEIR in various contexts. The activities associated with the construction phase of the project are described in revised Project Description (see Section B.7), and the use of this term was thoroughly reviewed in the SEIR.

The approval of various plans required in Mitigation Measures BR-14.2, BR-16.1, and BR-17.1 will be subject to the approval of CDFW and/or the USFWS per the conditions of permit approvals, and does not improperly defer mitigation under CEQA. See General Response GR-1.

- B1-25 In response to this comment, the language of Revised Mitigation Measure BR-G.2 has been further clarified to describe the animals permitted on the site.
 - To prevent harassment or mortality of listed, special-status species and common wildlife, or destruction of their habitats, no domesticated animals of any kind shall be permitted in any project area with the exception of grazing animals such as

cattle, goats, or sheep that are being used for vegetation management on the site, trained working animals used specifically for livestock management or species surveys (e.g., horses, livestock working dogs, and scent detection dogs). Livestock and scent detection dogs shall be immunized against rabies, parvovirus, and distemper.

B1-26 Mitigation Measure BR-G.5 has been modified to clarify the definition of the "start of construction."

Milestones: Prior to the disturbance of vegetation start of construction (defined as ground or vegetation disturbance), the Applicant shall obtain County approval of the location of mitigation lands, the holder of conservation easements, and the restrictions contained in the conservation easement(s) created for the permanent protection of these lands. Documentation of recorded conservation easement(s) shall be submitted to and approved by the County prior to the start of construction. Verification of having met habitat mitigation requirements (per [2010 Final EIR] Tables C.6-6 and C.6-7 and supporting documentation) shall be reviewed and approved prior to construction of the project by the County. This documentation will be posted on the County's website for public review. If this milestone is not met, construction shall not commence.

- B1-27 The commenter suggests that the SEIR should evaluate a "wholesale distributed generation alternative." Section E.3.3 of the SEIR does present a distributed generation alternative, and explains why this alternative was not fully analyzed. The description of this alternative was completely updated in 2014 so it reflects the current status of distributed generation in California.
- B1-28 The commenter suggests consideration of a utility-scale alternative on lands of low biodiversity conservation value. The SEIR does consider such an alternative: Section E.2.5 of the SEIR presents the Westlands CREZ Alternative, which is considered specifically because it would be in an area of lower biological resource value. The description and status of this alternative were updated in the Draft SEIR to present current information about Westlands.
- B1-29 The opposition of the Conservation Organizations to the PVSP is acknowledged.
- B1-30 The commenter states that the SEIR does not meet CEQA's purpose of information the public and decision makers about the significant effects of the proposed project. The 2010 certified EIR, in combination with the 2015 Final SEIR, fully discloses the impacts of the project, the mitigation measures that would reduce impacts, and considers alternatives consistent with CEQA requirements.

Responses to Comment Set B2 Mercey Hot Springs

B2-1 The SEIR addresses air quality impacts of the Revised Project in Section C.4.3.3, under Impact AQ-1 (Construction activities would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants). This impact is found to be less than significant (Class II) with implementation of APM AQ-2, Mitigation Measures AQ-1.1 and AQ-1.2. Measure APM AQ-2 was updated to include a bullet point addressing alternatively fueled construction equipment on site (Please see Response A3-4 for the full text of the revised measure).

- B2-2 SEIR Section C.10.3.1 presents the CEQA Significance Criteria for recreation, stating that an impact would be significant if it would "Preclude an existing or permitted land use, or create a disturbance that would diminish the function of a particular land use." While there is expected to be substantial construction traffic using Little Panoche Road, visitors to Mercey Hot Springs would not be prevented from using the resort. Also, construction workers may opt to rent cabins at Mercey Hot Springs to reduce their travel time to the Panoche Valley, increasing rental income to the commenter.
- B2-3 The SEIR addresses potential reduced enjoyment of recreational facilities under Impact RC-1 (Construction activities would temporarily reduce, disrupt, or preclude access and visitation to established recreational areas) in Section C.10.3.3.
- B2-4 Please see Response B2-2.
- B2-5 The discussion of impacts to emergency response personnel in Section C.13.3.3 addresses "County Sheriff" staff, which refers to both Fresno and San Benito County. The revisions to traffic Mitigation Measure TR-1.4 require PVSP to coordinate with both County Sheriffs' offices to ensure traffic safety and emergency access. See also General Response GR-3 regarding the revision to Mitigation Measure TR-1.4.
- B2-6 Please see Response B2-5.
- B2-7 Reference to the revised traffic Mitigation Measure TR-1.4 has been added to Table C.13-1 to reflect the importance of this measure in ensuring traffic safety during construction.
- B2-8 Please see General Response GR-3, describing the revisions to Mitigation Measure TR-1.4, which would ensure traffic safety.
- B2-9 Please see General Response GR-3, describing the revisions to Mitigation Measure TR-1.4, which would ensure traffic safety.
- B2-10 Please see General Response GR-4 on Valley Fever.
- B2-11 The commenter's concern about the potential effect of project construction on Mercey Hot Springs is acknowledged. The SEIR addresses these issues in assessment of air quality, recreation, and traffic impacts (SEIR Sections C.4, C.10, and C.14).

Responses to Comment Set B3

San Benito Residents for Responsible Development

- B3-1 This comment accurately describes the Revised Project.
- B3-2 The comment is incorrect in stating that the County "claims that the revised Project … will address the concerns raised by environmental groups and concerned citizens." The portion of the Draft SEIR referenced in this comment (page C.6-1) simply describes the changes made to the Approved Project and the resulting characteristics of the Revised Project, as they relate to biological resources. The commenter's concerns about project effects on biological resources are acknowledged, and are responded to in detail in the

following responses. Regarding the San Joaquin kit fox, potential impacts are fully disclosed, and mitigation is proposed, as presented in SEIR Section C.6.33, under Impact BR-19 (The project could result in the loss of San Joaquin kit fox, loss of foraging habitat, and loss of occupied habitat).

- B3-3 The SEIR fully describes the Revised Project and its impacts, and appropriately relies on the 2010 certified EIR for impact determinations that were not affected by the 2014 changes.
- B3-4 The commenter's concern about the current drought and its effects on groundwater are addressed in Responses B3-C35, B3-23, and B4-40.
- B3-5 The commenter's assertion that "construction of power plants and other developments throughout the state have substantially interfered with habitat connectivity" are not supported with any references or specific evidence. The SEIR specifically addresses the improvements in habitat connectivity that result from the configuration of the Revised Project, in comparison with the Approved Project.
- B3-6 This comment provides an introduction to the specific comments presented in the remainder of the comment letter; responses are presented below.
- B3-7 The commenter's Statement of Interest is acknowledged.
- B3-8 The commenter states that the Project Description is inadequate. This is incorrect. The SEIR presents a detailed description of the Revised Project in Section B, including several maps and graphics. The description includes the PG&E Upgrades, which are specifically included because they are foreseeable consequences of the project itself.
- B3-9 The commenter states that Fresno County should be included as a responsible agency under CEQA. San Benito County has provided all 2010 documents and notices to Fresno County, as well as the 2014 Draft SEIR. However, Fresno County has no discretionary actions to take with respect to the PVSP or the PG&E Upgrades, so it is not a responsible agency under CEQA.

For the P&GE Upgrades, the California Public Utilities Commission (CPUC) has exclusive permitting jurisdiction over the upgrades and modifications to electrical facilities owned and operated by PG&E. Nonetheless and although the PG&E facilities upgrades are exempt from local land use and zoning regulations and permitting, General Order 131D, Section III.C requires that the utility communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any nondiscretionary local permits. The only permits anticipated to be required from Fresno County will be ministerial, e.g. traffic control or encroachment permits.

B3-10 The commenter states that Fresno County approvals for portions of the PG&E Upgrades have been omitted from the SEIR. This is incorrect. PG&E is regulated by the California Public Utilities Commission, and is not subject to local permitting requirements. As stated above under response to B3-9, although the PG&E facilities upgrades are exempt from local land use and zoning regulations and permitting, General Order 131D, Section III.C requires that the utility communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any nondiscretionary local permits. PG&E will obtain permits as needed, which may include traffic control and encroachment permits. B3-11 The commenter states that the Project Description is inadequate because it "fails to provide a sufficiently detailed account of the extent of grading and trenching required for Project construction" in order to fully analyze and understand impacts on vernal pool fairy shrimp and California tiger salamander. The Project Description does include information on the grading and trenching requirements of the Revised Project in Section B.5.1 (p. B-8 and B-9). Site development at designated areas within the Project Footprint would include implementation of stormwater Best Management Practices (BMPs) to control offsite and onsite erosion, clearing of existing vegetation as necessary, rough and fine grading, construction of roads, installation of perimeter fencing, installation (trenching) of underground cables, construction of solar panel arrays, installation of temporary biological exclusion fencing as needed, and installation of electrical equipment. Project grading requirements are anticipated to result in cut-and-fill activities with no anticipated cubic yards of export. Aggregate will be imported for the permanent roads and the substation. The substation, switchyard, and O&M building area would be permanently disturbed through grading, installation of concrete foundations, placement of Class 2 base (gravel), and drilled concrete piers. Laydown areas would be located along Little Panoche Road near access points for the construction team. These areas may be permanently graded or aggregate material installed to allow for use of these areas during operation of the project. All ground disturbances with potential to impact waters of the State will be permitted and approved by CDFW, as per the Lake and Streambed Alteration Agreement. Approximately 392 acres will be graded for this Project. Figures depicting the extent of grading have been provided in Section C.6 (Biology) of the SEIR.

Regarding Vernal Pool Fairy Shrimp (VPFS) impacts, VPFS were detected in only one pond location during the VPFS Surveys conducted in 2009 and 2010 wet and dry season. Surveys have indicated there are no other VPFS found within the Revised Project Foot-print. The identified pool has now been placed under protection within the Valley Floor Conservation Lands. The VPFS located in this pond will be placed within the Conservation Easement and preserved in perpetuity.

Regarding California tiger salamander (CTS) impacts, the Applicant has included additional avoidance and minimization measures for the protection of CTS. Please see Section C.6 (Biology) of the Revised SEIR for a detailed description of the additional CTS protection measures.

B3-12 The commenter states that insufficient detail is provided in order to analyze impacts. Specifically, the commenter requests details regarding the dimensions for trenching and the depth of support post installation. Limited grading is expected to be required because of the nearly flat terrain. Grading would be required on slopes greater than 3 percent for PV power blocks. Final grading plans for the project are currently under development. The Revised Project includes 393 acres of proposed grading areas along with the general layout for trenching of underground electrical lines and maps of the perimeter access roads. Unless the panel area overlaps with the graded area, no ground preparation such as disking/harrowing/rolling is proposed. The grading areas and ground disturbance is depicted in Figure B-4 of the SEIR.

Solar panels and associated electrical equipment would be installed on approximately 185,000 support post foundations. Posts would be steel I-shaped sections with a cross sectional area of 4.5 square inches each. Concrete foundations associated with inverters

and MV transformers would impact approximately 96,000 square feet (151 foundations total). Combining switchgear concrete foundations would disturb approximately 9,000 square feet (11 foundations). Each of these areas is included within the solar array disturbance calculation in Table B 3 of the Final SEIR. Depth of support posts will depend on geologic conditions, which vary across the site and are subject to the recommendations of geotechnical reports (provided with the Draft SEIR materials). Final design of the arrays is in progress. Hydrological impacts were addressed in the Water Resources section and the support posts were designed to account for potential scour and stormwater control devices and grading design will be implemented to offset potential hydrological changes to the site and offsite. Biological species are addressed in the Biological Resources section. Minimization measures to burrowing animals species are proposed to offset impacts associated with support posts.

The entire substation, switchyard, and O&M building area would be permanently disturbed through grading, installation of concrete foundations, placement of Class 2 base (gravel), and drilled concrete piers. Laydown areas would be located along Little Panoche Road near access points for the construction team. These areas may be permanently graded or aggregate material installed to allow for use of these areas during operation of the project.

The existing Vasquez Road would be replaced with a new road that would run outside of the project fenceline south of Las Aguilas Creek.

In addition to permanent impacts from project infrastructure, temporary impacts associated with construction of permanent project features and material and equipment staging will take place on the site. Temporary impacts were not estimated in the 2010 Final EIR, but are summarized Table B-3, Section B. Project Description of the Final SEIR for the Revised Project.

B3-13 The commenter expresses concern regarding the characterization of grading areas and disturbed areas. Specifically, the commenter requests clarification (with regard to Table B-3) regarding the relationship between the 857 acres to be disturbed and the 392 acres to be graded and requests that each component of the 392 acres of grading is identified (i.e., support post foundations, concrete inverter foundations, MC transformers, and switch gear foundations). The commenter states that without clarification of project components that require trenching and foundation installation, and the calculated area for grading the public and decision makers cannot fully determine and assess Project impacts on the environment.

Please see Response B3-12 for additional information regarding grading. Please see Table B-3 of Section B, Project Description of the Final SEIR for additional information.

B3-14 The commenter requests timing related to PG&E Upgrades and the extent of potential overlap of construction with the solar array, so that impacts to air quality can be fully identified and mitigated. The Applicant prepared air emissions calculations for the PG&E Upgrades. Those calculations are included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) to the Final SEIR. The PG&E Upgrades would result in less than significant impacts to air quality due to the generation of exhaust and dust emissions during construction, operations, and maintenance. Emissions would be reduced with imple-

mentation of PG&E's Avoidance and Minimization Measures. The PG&E Upgrades will take place over a 12 to 16 week period, concurrent with development of the solar array. The combined impacts of the Revised Project and those of the PG&E Upgrades do not exceed established thresholds and were determined to be less than significant. Refer to the updated Air Quality Calculations in Appendix 4A-1 and Appendix 4A-2.

B3-15 The commenter states that the SEIR does not adequately present the environmental baseline. This is incorrect. In each discipline's analysis chapter (in Section C), the Draft SEIR presented updated discussion of the environmental baseline where it had changed since 2010, and relied upon the 2010 certified EIR for information that had not changed.

This particular comment is an introduction and summary statement. The detailed responses regarding baseline information for biological resources, air quality, and groundwater are included in subsequent comments and responses (B3-16 through 26 for biological resources, B3-27 for air quality, B3-28 for jurisdictional waters, and B3-29 through B3-33 for groundwater.)

- B3-16 This paragraph refers to specific comments presented later; responses are presented below.
- B3-17 This comment is an introductory paragraph; responses are provided in the following paragraphs.
- B3-18 The commenter expresses concern that the impacts and existing setting of the microwave tower site at Panoche Mountain are not adequately assessed. The microwave tower at Panoche Mountain will be collocated on existing equipment owned by American Tower Corporation (ATC), within a fenced and developed piece of property. There will be no impacts beyond the existing developed area and access will be via existing access road. Please see General Response GR-2.
- B3-19 The commenter states that biological resources for the proposed microwave tower site at Panoche Mountain were not assessed and requests environmental baseline information to be included in a recirculated Draft SEIR.

Please refer to General Response 2.

- B3-20 In addition to the special-status plant surveys conducted in 2010, the Applicant completed protocol level special-status plant surveys in the spring 2015 of the entire Project site (including the PG&E upgrade route). The SEIR will be updated accordingly with this new survey data (See Appendix 4B-3 of the Final SEIR). The survey data referenced in the SEIR (including 2015 surveys), as well as published literature and species occurrence data demonstrate that an adequate biological baseline was established for purposes of the analysis in the SEIR.
- B3-21 As noted by the commenter, a table describing the potential occurrence of specialstatus plants was unintentionally omitted from the Transmission Line Natural Resource Assessment ("TLNRA") provided by the Applicant. However, the potential for occurrence of special-status plants is described in Table C.6-1 of the SEIR. The conclusions and analysis in the SEIR regarding special-status plant species with the PG&E Upgrades resulted from independent CNDDB and CNPS searches, evaluating the species found in these searches based on habitat types and soil affinities cited on CNPS, CNDDB, and voucher

specimen notes, and confirmation through site surveys to determine likelihood of presence, including a review of 2015 protocol level special-status plant surveys on the Project Site (including the PG&E upgrade route) conducted by the Applicant (See Appendix 4B-3 of the Final SEIR). Additional protocol-level surveys for plants that may not have been evident or identifiable during the early season survey will be performed by the Applicant in late spring and/or summer in accordance with Mitigation Measure BR-3.1. The timing of surveys will be determined by a qualified biologist familiar with the phenology of the plant species with the potential to occur, the Project's geographic location, the natural communities present, and the weather patterns. The analysis within the SEIR and the information provided in Table C.6-1 provides an appropriate substitute for any information unintentionally omitted from previous technical reports provided by the Applicant.

- B3-22 The reference to California jewelflower (*Caulanthus californicus*) in Appendix B of the TRLNA was made in error. This species was not encountered in 'Study Area 1' or any of the other study areas in the Transmission Line Natural Resources Assessment Report (TRLNA). The nearest known population of this species is in the Coalinga area. In addition, the BLM resource specialist knowledgeable of the lands where the proposed project is located and who reviewed the DSEIR considers this species to have a low potential to occur. Furthermore, as described above, early season rare plant surveys were conducted in 2015 per the appropriate protocol, and the species was determined to be absent (See Final SEIR Appendix 4B-3). Additional protocol-level surveys in late spring will be conducted by the Applicant in satisfaction of MM BR-3.1.
- B3-23 California condors have not been observed on the Project site. The observation of two condors during golden eagle nest surveys conducted by Bloom Biological (2014) did not occur on the Project site, but rather 10.2 miles southwest of the Project east of Pinnacles National Monument. Table C.6-2 has been revised to clarify the location of this sighting in relation to the Project site.

The SEIR notes that California condors have a low potential to occur on the proposed project site in Table C.6-2. Impacts to California condor foraging habitat is discussed in Impact BR-12 of the SEIR, and impacts to California condors from electrocution or collision with overhead wires are discussed in Impact BR-14 on pages C.6-92 and C.6-93 in the Draft EIR.

As described in the SEIR, potential impacts to California condors, should they occur on the site, related to trash on the proposed project site would be reduced to a less-thansignificant level by the implementation of APM BIO-33, and Mitigation Measures BR-G.1 (Implement a Worker Environmental Education Program including a discussion of microtrash), BR-G.2 (Implement Best Management Practices including appropriate disposal of microtrash), BR-G.3 (Develop and implement a HRRP), BR-G.4 (Implement biological construction monitoring), BR-G.5 (Create permanent conservation easement(s) as compensation for impacts to foraging habitat), BR-G.6 (Develop and implement a HMMP), BR-6.1 (Construct preconstruction surveys for nesting birds and implement avoidance measures, including restrictions on construction activity if condors are found roosting or nesting in the vicinity of the Project), BR-12.2 (Avoid and report California condors), and AQ-1.1 (Reduce fugitive dust); also listed in Table C.6-3 of the SEIR. Additional species-specific surveys for California condor are not required. As described in Response B1-5 above and Section C.6.1.1 of the SEIR, extensive surveys were completed for the proposed project site, which provide an adequate baseline for measuring potential impacts of the Revised Project.

- B3-24 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Surveys.
- B3-25 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Foraging Habitat and Impacts.
- B3-26 The 2010 Final EIR and the SEIR address habitat impacts (including cumulative impacts) to the core population of San Joaquin kit foxes that occupy the Ciervo-Panoche Natural Area. The DEIR and SEIR also relied on both the *Recovery Plan for Upland Species of the San Joaquin Valley* ("Recovery Plan," USFWS, 1998) and the San Joaquin Kit Fox Five-Year Review (USFWS, 2010) as critical baseline biological resource data points.

The Recovery Plan is discussed in the context of the regional biological setting for San Joaquin kit fox, giant kangaroo rat, and blunt-nosed leopard lizard in Section C.6.1.1 of the Draft EIR, and it is discussed in the context of the regulatory setting for biological resources in Section C.6.3.3 of the Draft EIR. Also, Section C.6.4.2 of the Draft EIR on page C.6-126 describes the goals of the Recovery Plan in the context of the analysis of cumulative biological resources impacts. The San Joaquin Kit Fox Five-Year review was an integral part of the cumulative impacts analysis and the development of the San Joaquin kit fox conservation measures incorporated into the Project.

B3-27 The commenter is incorrect and misquotes the Draft SEIR (Section C.4.3.5, Impact AQ-1). The text from the SEIR states,

Construction of two to three new microwave communication towers would utilize construction equipment that would generate exhaust emissions and dust emissions, ... Although these activities would generate exhaust and dust emissions, construction related emissions would not contribute substantially because the ambient levels for these pollutants in the San Joaquin Valley APCD are well below State and Federal ambient air quality standards, and the emission of CO and SO2 from construction of the PG&E work would be negligible and of short duration.

Emissions discussed were CO and SO2, which are in attainment, rather than NOX and ROG as incorrectly asserted in the comment. Furthermore, the Draft SEIR sets forth the attainment status of various air pollutants including ozone, in SEIR Table C.4-3, Attainment Status for the San Joaquin Valley Air Basin.

Ozone and particulate matter are in nonattainment are presented in SEIR Table C.4-3 and are correctly analyzed in the Draft SEIR. However, the SJVAPCD has also not established quantitative CEQA thresholds for ozone precursors associated with construction activities. In lieu of CEQA significance thresholds for construction emissions of ozone precursors, projected emissions can be compared to the SJVAPCD's operational CEQA threshold of 10 tons per year for both NOx and Reactive Organic Gases (ROG). Therefore, the quantities of emissions associated with NOx and ROGs do not exceed the threshold of 10 tons/year. However, the Applicant recognizes that the ambient standards are frequently exceeded for both ozone precursors and PM10 and has incorporated measures AMM AQ-1 and AMM AQ-2 to reduce the impact of emissions to a level less than significant. The applicant has now prepared air quality calculations for the PG&E Upgrades construction.

With regard to the commenter's request to quantify ozone precursors (NOx and ROG), the Applicant has completed a revised model/calculations that are summarized in Response B3-B3 and are included as Appendices 4A.1 and 4A.2 to the Final SEIR. As illustrated in these calculations, the Applicant estimates emissions from NOx and ROG combined will be approximately 1 ton for all PG&E Upgrades construction activities to be performed in both MBUAPCD and SJVAPCD. Therefore, the quantities of emissions associated with NOx and ROGs do not exceed the threshold of 10 tons/year.

B3-28 The commenter requests clarification regarding the linear feet of channels subject to the jurisdiction of the USACE and CDFW. Specifically, the commenter mentions that Las Aguilas Creek is part of Panoche Creek and more information is required regarding the relationship between the measurements of linear impacts. Furthermore, the commenter goes on to state that it is unclear what portions of the creeks are jurisdictional waters regulated by the USACE. The comment refers to a letter from the USACE (dated October 18, 2010, after publication of the Final EIR in 2010), and states that the letter rescinded the previous jurisdictional delineation and that new information was not addressed in the 2010 Final EIR. Furthermore, the commenter states that it is unclear whether and to what extent this determination changed the Final EIR's conclusion.

> The Revised Project will impact 32 separate jurisdictional drainage features. Site development at designated areas within the Project Footprint would include implementation of stormwater Best Management Practices (BMPs) to control offsite and onsite erosion, clearing of existing vegetation as necessary, rough and fine grading, construction of roads, installation of perimeter fencing, installation (trenching) of underground cables, construction of solar panel arrays, installation of temporary biological exclusion fencing as needed, and installation of electrical equipment. The Project perimeter road includes impacts to waters of the State (State waters) due to the crossing of ephemeral drainages which also include five waters of the United States ([U.S.] Federal waters). In addition to the impacts created by the perimeter road crossings, the construction of the Project will also impact State waters by grading and trenching needed for electrical underground cables. There is one planned impact to State waters outside the Project Footprint (Impact #32). This impact is due to the creation of a California tiger salamander (*Ambystoma californiense* or CTS) pond located to the northwest [outside] of the Project Footprint. This pond will be created as per Mitigation Measure BR-9.1 of the Final EIR.

> There are approximately 13.7 acres (29,996 linear feet) of waters of the State within the Project Footprint. Total impacts to waters of the State will be approximately 7.93 acres (21,193 linear feet). The total length of federally jurisdictional waters within the Project Footprint total approximately 0.39 acres (6,081 linear feet [ft]). Of the 0.39 acres of federally jurisdictional waters, only 0.122 acres (3,504 linear ft) of federal waters will be permanently impacted by the Revised Project. The following text has been added to the Final SEIR in Section C.6.3.3, under the discussion of Impact BR-20:

Based on survey information provided by the Applicant since the 2010 Final EIR, approximately 7.86 7.93 acres of ephemeral drainage channels would be subject

to impacts by the Revised Project. Survey data indicates that approximately 0.12 acres of USACE jurisdictional habitat would be subject to impacts associated with crossings of the perimeter road and civil work needed to control stormwater and erosion, and 7.86 <u>7.93</u> acres of ephemeral drainages that constitute waters of the state State subject to CDFW jurisdiction would be subject to impacts throughout the remaining areas of the Revised Project site.

B3-29 The commenter states that the Draft SEIR fails to set forth an adequate baseline against which impacts on groundwater should be measured. The commenter summarizes BLM water allocations, and California Department of Water Resources (DWR) allocations to support a statement that the current drought has significantly changed existing conditions and that the current drought conditions were not adequately addressed.

> The current drought is relatively severe from a historical perspective; therefore, groundwater level declines would be expected. Note that historical groundwater level data from 2004 to the present for over 40 wells are available. These data indicate that over the past 10 years groundwater levels have declined at some wells and have increased at others despite the drought. The average change in groundwater level for 43 wells during this period is a decrease of just 1.6 feet. The mitigation measures to be implemented, including the pumping test and groundwater monitoring program, will enhance our ability to predict changes to groundwater levels within the basin and to quickly react to and mitigate unexpected changes in water levels.

> A continued drought would directly affect the amount of drawdown experienced over the long term, because the amount of recharge to the aquifer system is reduced compared to normal rainfall. This might result in greater drawdown. However, impact to local watercourses would be apparent only if the watercourses are directly fed by groundwater (e.g., gaining streams), and impact to plants would occur only to phreatophytes (i.e., plants that directly tap groundwater). Because the depth to water is typically greater than 30 feet and considering the vegetation that is generally present in the Panoche Valley, it is unlikely that any of the watercourses rely on groundwater baseflow or that phreatophytes are common. Thus, additional drawdown that might occur due to the ongoing drought is unlikely to have the suggested impact.

> In its December 2014 memorandum, Geologica includes historical groundwater levels for over 40 wells within the basin, thus providing information on pre-project conditions and trends starting in 2004. Geologica indicated a general downward trend in water levels during the recent drought, although groundwater levels in some wells increased during this period.

B3-30 The commenter states that the Technical Groundwater Memorandum (Groundwater Memo) appended to the Draft SEIR does not include enough information about the aquifer underlying the Project site. The commenter refers to a Water Supply Assessment (WSA) that was provided as a supporting document to the 2010 Final EIR, which provided more information regarding groundwater availability, without which an assessment of California's groundwater supply can't be adequately established.

In response to the technical comments and issues raised by San Benito County Residents, Jim Finegan, PhD, PG, CHg, and Principal Hydrogeologist with Kleinfelder, was retained to address these comments. Dr. Finegan's letter is included as Appendix 4C-4 to the Final

SEIR. Below is a summary of Dr. Finegan's response to the commenter's concerns about the adequacy of baseline ground water information presented in the 2014 Geologica report. Dr. Finegan concluded that the Draft SEIR's analysis is adequate. While the commenter and their consultant may disagree with Geologica and Dr. Finegan, this disagreement does not mean the Draft SEIR's analysis of conclusions are inadequate.

Several existing wells within the basin currently extract small volumes of water from the aquifer system. The addition of extraction by the construction project will add to the overall groundwater extraction within the basin. While the new temporary extraction may be larger than the other individual existing extractions, it will not cause more drawdown than is predicted by the hydraulic characteristics of the aquifer system. Note that Geologica's model already shows the effect of project pumping reaching the basin boundaries, which they discuss, and shows the additional drawdown that will be caused by this pumping. Also note that wells do not pump "as if the aquifer domain has an infinite extent," although pumping test solutions often make this assumption, and pumping from just one well can create a cone of depression that reaches a hydraulic boundary; more than one well is not required for this. It is correctly stated that a hydraulic barrier can magnify drawdown, and this is numerically accommodated in models by use of "image" wells. Following additional aquifer testing, further modeling will be performed to update aquifer parameters and incorporate known conditions within the basin.

The transmissivity values used were calculated from a pumping test, which already implicitly incorporate the natural condition of the aquifer rather than the suggested concept of isolated intervals exhibiting more or less drawdown. Further aquifer testing and ongoing groundwater monitoring throughout the basin, as required by Mitigation Measure WR-1.1, will provide additional data on aquifer conditions and the actual effects of long-term pumping for the project. The groundwater-level data will be used in real time to monitor the effects of extraction, which can be adjusted as needed.

B3-31 The commenter states that the groundwater recharge rates presented in the Draft SEIR are not accurate because the Draft SEIR assumes the entire aquifer receives one inch per year of recharge, according to input from Dr. Tom Myers (hydrogeologist). Dr. Finegan addressed this alleged deficiency in the 2014 Geologica report in his letter, included as Appendix 4C-4 to the Final SEIR and his response to set forth below.

> Dr. Finegan concluded that the Geologica's contouring has been conducted using standard contouring approaches and depicts a flow regime that is reasonable to expect within a valley such as this, and changing gradients are often seen where, for example, hydraulic conductivity of the geologic material changes and/or between recharge and downgradient areas.

> Recharge can be highly variable, both temporally and spatially, in arid to semi-arid areas. However, the value used by Geologica is not unreasonable for similar areas. For example, Scanlon et al. (2006) found that "Average recharge rates estimated over large areas (40–374 000 km2) range from 0.2 to 35 mm year-1 [0.008 to 1.4 inches], representing 0.1–5% of long-term average annual precipitation." In addition, while recharge will vary spatially, as indicated by the commenter, this is not especially relevant to the analysis performed by Geologica, which provides a water balance for the entire basin.

The water balance was prepared using a standard accepted approach, which includes appropriate inputs and outputs to the system. Groundwater pumping is a component of the water output just as recharge is a component of the input. As stated, discharge from the system may occur by different mechanisms, but understanding these mechanisms individually is important whether the system is in equilibrium or in transition due to a new stress (e.g., pumping). Understanding all components of the budget is especially important in a transient model because of changes in storage that occur from pumping.

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- B3-32 The commenter states that the DSEIR's groundwater modeling is not based on substantial evidence because the model cannot predict site-specific impacts without a site-specific estimate of outflow. Dr. Finegan, however, concluded that the groundwater modeling was adequate (See Appendix 4C-4 to the Final SEIR). Validation of modeling and drawdown effects is addressed in the Finegan memorandum on page 7. As Dr. Finegan explained, Geologica's model, like all models, attempts to capture the key attributes of groundwater systems. While models always provide simulations and may not capture all site specific variables and details, models can attain steady-state conditions as can natural systems.
- B3-33 The baseline model developed for the Draft SEIR incorrectly relies on recharge rates for irrigated lands, rather than recharge rates for upland habitat. Input from Dr. Myers is summarized with regard to the infiltration of irrigated agricultural areas vs. unirrigated natural grassland. Please see Response B3-31 for information regarding recharge rates.
- B3-34 This comment incorrectly states that the SEIR does not adequately analyze or mitigate project impacts, and does not rely on current information. The SEIR includes updated information after the 2010 certified EIR, and fully discloses the environmental consequences of the Revised Project and the PG&E Upgrades.
- B3-35 The comment incorrectly states that the SEIR inadequately discloses and analyzes environmental impacts and defers formulation of mitigation measures. With the 2010 certified EIR, the SEIR presents a complete and accurate disclosure of impacts and mitigation measures that effectively reduce the severity of defined impacts. Please see General Response GR-1 regarding the alleged deferral of mitigation.
- B3-36 PG&E continues to work on final design of the PG&E upgrade activities, including the telecommunication upgrades and interconnection components. Following the release of the DSEIR, PG&E's telecommunications group confirmed that the existing American Tower Company microwave tower on Panoche Mountain will meet secondary communication needs for PG&E. Therefore, a new microwave tower will not need to be constructed on Panoche Mountain. The Project Description and Impact BR-14 in Section C.6.3.5 have been revised accordingly.

B3-37 As described in General Response GR-2 and in Response B3-36, a new microwave tower will not be constructed on Panoche Mountain. New microwave towers of approximately 100 feet tall will be constructed only at the PVS Substation and at PG&E's Helm substation.

In accordance with the recommendations of the USFWS, the new towers will not be more than 199 feet above ground level (AGL) and construction techniques will not require guy wires (*e.g.*, a monopole design will be utilized). As described in the SEIR, existing 120 ft tall 230 kV towers are present in both locations and neither location is adjacent to wetlands or other areas of high avian concentration.

As described in the SEIR, work associated with the PG&E Upgrades would be in compliance APLIC guidelines, which would reduce impacts to birds by reducing or minimizing collision and electrical risk. While the APLIC guidelines do not specifically address suggested practices specific to communication towers, as noted by the commenter, PG&E would also comply with the Federal Communications Commission (FCC) approval process and Federal Aviation Administration (FAA) filings and approval, including installations of appropriate markers and FAA-lights on the microwave towers, as required. All such markers and/or lighting would be approved by PG&E and be consistent with USFWS guidance on avian safety. The County also recommends that PG&E implement its existing Avian Protection Plan to track and minimize impacts on birds (available at <u>http://www.pge.com/en/about/environment/pge/stewardship/birds/index.page</u>). This Plan includes avian safety measures that can be applied to the communication towers at both the PVS and Helm substations.

B3-38 As described in Response B3-23, California condors have not been observed on the Project site. The observation of two condors during golden eagle nest surveys conducted by Bloom Biological (year) did not occur on the project site, but rather 10.2 miles south of the Project.

The SEIR notes that California condors have a low potential to occur on the proposed project site in Table C.6-2. Impacts to California condor foraging habitat is discussed in Impact BR-12 of the SEIR, and impacts to California condors from electrocution or collision with overhead wires are discussed in Impact BR-14 on pages C.6-92 and C.6-93 in the Draft EIR.

As described in the SEIR, potential impacts to California condors, should they occur on the site, related to trash on the proposed project site would be reduced to a less-thansignificant level by the implementation of APM BIO-33, and Mitigation Measures BR-G.1 (Implement a Worker Environmental Education Program including a discussion of microtrash), BR-G.2 (Implement Best Management Practices including appropriate disposal of microtrash), BR-G.3 (Develop and implement a HRRP), BR-G.4 (Implement biological construction monitoring), BR-G.5 (Create permanent conservation easement(s) as compensation for impacts to foraging habitat), BR-G.6 (Develop and implement a HMMP), BR-6.1 (Construct preconstruction surveys for nesting birds and implement avoidance measures, including restrictions on construction activity if condors are found roosting or nesting in the vicinity of the Project), BR-12.2 (Avoid and report California condors), and AQ-1.1 (Reduce fugitive dust); also listed in Table C.6-3 of the SEIR. As described in Response B3-37, PG&E would comply with APLIC guidelines (applicable to condor), measures included in the FAA recommendation, and PG&E's existing Avian Protection Plan, all of which include measures specific to reducing impacts to California condor.

- B3-39 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B3-40 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B3-41 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B3-42 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B3-43 Please see Response B3-20 and Mitigation Measure BR-3.1. In addition to the specialstatus plant surveys conducted in 2010, the Applicant completed protocol level specialstatus plant surveys in spring 2015 of the entire Project site (including the PG&E upgrade route). The SEIR will be updated accordingly with this new survey data (See Appendix 4B-3 of the Final SEIR). The survey data referenced in the SEIR (including 2015 surveys), as well as published literature and species occurrence data demonstrate that an adequate biological baseline was established for purposes of the analysis in the SEIR. All surveys will be reported to the County and applicable agencies per the protocols.
- B3-44 The commenter is concerned the SEIR lacks the basis for concluding impacts to special status plants would be mitigated by the Conservation Lands because it does not provide any evidence that the species that would be impacted by the Revised Project (i.e., gypsum loving larkspur, recurved larkspur, and serpentine linanthus) occur on the proposed Conservation Lands.

As described in the SEIR (see Mitigation Measures BR-3.1 and BR-G.5) conservation lands that may be needed for special-status plant species shall be of equal or greater habitat quality after any restoration activities (as defined in [2010 Final EIR] Table C.6-6) to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same number of individuals or greater, of the State or Federally listed plants that are impacted.

To date comprehensive, site-wide botanical surveys consistent with CDFW protocols for special-status plant species (2009-2010), a year of above average rainfall, have resulted in no identification of state or federally listed plant species. The surveys were timed to maximize potential observations of special-status species that may occur on the site. Surveys were designed and scheduled based on multiple consultations with CDFW and regional botanical experts, and visits to special-status plant species reference sites. No plants that could be confused with either San Joaquin woollythreads or California jewelflower were found in 2010. The latest 2010 survey detected only four widely scattered individuals that are classifiable as the recurved larkspur (California Rare Plant Ranks [CRPR] List 1B), three populations of gypsum-loving larkspur (CRPR List 4) and four populations of serpentine leptosiphon (CRPR List 4). In addition, the Applicant completed protocol level special-status plant surveys in the spring 2015 of the entire Project site (including the PG&E upgrade route), resulting in no identification of state or federally listed plant species. Additional protocol-level surveys for plants that may not have been evident or identifiable during the early season survey will be performed by the Applicant in late spring and/or summer in accordance with Mitigation Measure BR-3.1. The timing of surveys will be determined by a qualified biologist familiar with the phenology of the plant species with the potential to occur, the Project's geographic location, the natural communities present, and the weather patterns. The SEIR will be updated accordingly with this new survey data (See Appendix 4B-3 to the Final SEIR).

Figure C.6-5, *Rare Plant Location Map* provided in the 2010 Final EIR identified gypsumloving larkspur, recurved larkspur, Serpentine Linanthus located on the Valadeao Ranch Conservation Lands.

Additionally, for impacts to State and Federally Threatened, Endangered, Proposed, Petitioned and Candidate plants, mitigation shall occur at a ratio of 1:1 (one acre preserved for each acre impacted). Temporary Impacts to individual plants will be offset through conservation of offsite individuals at a 0.5:1 ratio (on conservation lands to be conserved in perpetuity). The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality after any restoration activities (as defined in [2010 Final EIR] Table C.6-6) to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same State or Federally listed (Endangered, Threatened, Proposed, Petitioned and Candidate) plants that are impacted. This mitigation may occur on lands used simultaneously as mitigation for impacts to other species. This text has been modified in the Final SEIR (Section C.6.3.4, MM BR-G.5).

B3-45 Please see Responses B3-20, B3-43, B3-44, and Mitigation Measure BR-3.1. To date, there is no survey data supporting the conclusion that San Joaquin woollythreads occurs on the site. The latest survey data from 2009-2010 (a year of above average rainfall) determined the species to absent from the project area. However, if the species is present based on preconstruction survey data, buffer areas will be established per Mitigation Measure BR-3.1. The relevant part of this measures states:

Prior to site grading, any populations of listed plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands, and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County of San Benito. If impacts to listed plants are determined to be unavoidable, the USFWS shall be consulted for authorization. Additional mitigation measures to protect or restore listed plant species or their habitat may be required by the USFWS before impacts are authorized, whichever is appropriate.

B3-46 The commenter is concerned that impacts to drainages will impact vernal pools and the addition of solar paneling to the Project site will compromise the viability of vernal pool

fairy shrimp habitat, such as preventing dispersal of fairy shrimp, as the movement of wildlife and flooding is essential to maintaining habitat connectivity.

The Applicant conducted VPFS surveys in 2009 and 2010 wet and dry seasons. Results from the surveys indicated VPFS were present in only one pool, out of 128 pools sampled. This pool has been placed under preservation of the VFCL and will be protected in perpetuity.

The DSEIR acknowledges that development of the Revised Project has the potential to impact vernal pool fairy shrimp individuals and suitable habitat. However, all occupied pools were avoided. Additionally, a supplemental evaluation of ephemeral pools was prepared and is available as an appendix to the Final SEIR as Ephemeral Pools Memo and Ephemeral Pool Locations (see Appendix 4B-9 and 4B-10).

Furthermore, the Applicant will preserve 24,176 acres of Conservation Lands, which contains suitable habitat for VPFS and vernal pools. These ponds/habitats will be protected in perpetuity.

The Applicant will compensate unavoidable loss of ephemeral pools through the preservation and management of 2 acres of occupied vernal pool fairy shrimp habitat (2:1 preservation ratio) and the creation, management, and preservation of 1 acre of vernal pool habitat (1:1 creation ratio) at a location approved and pursuant to authorization received from the USFWS or through the purchase of credits at a USFWS-approved mitigation bank.

Due to the presence of vernal pool fairy shrimp at the Revised Project site and the unique habitat requirements of these species, the loss of occupied vernal pool fairy shrimp habitat, and the loss of individuals (including eggs) as a result of construction, or O&M activities, would be a significant impact. Implementation of previously recommended and adopted Mitigation Measures BR-G.1 through BR-G.6 would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; and (4) Biological construction monitoring is implemented. Previously recommended and adopted Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust. Previously recommended and adopted Mitigation Measure BR-8.2 would require avoiding disturbance to ephemeral pools occupied by vernal pool fairy shrimp to the maximum extent practicable and mitigating for unavoidable impacts. Previously recommended and adopted Mitigation Measure BR-8.3 would require creating a 100-foot construction buffer for seasonal depressions and known waterbodies which have been verified to be occupied by listed fairy shrimp. Implementing these mitigation measures would reduce impacts to vernal pool fairy shrimp to less than significant levels.

- B3-47 The commenter is concerned the proposed mitigation measures for the vernal pool fairy shrimp (VPFS) will lead to habitat fragmentation. Please refer to Response B3-46.
- B3-48 Please see Responses B1-9 and B1-12
- B3-49 Please see Responses B1-9 and B1-12.

B3-50 The commenter generally states that the DSEIR provides a faulty analysis of the project's impacts on groundwater to support its conclusion that project impacts on groundwater would be reduced below a level of significance. Specifically, the comment states that the Draft SEIR fails to set forth the actual rate of drawdown (underestimates), and doesn't disclose assumptions (size of cells and location of the constant head boundary [CHB]) used for the MODFLOW model.

Please see Response B3-C8. The response has been provided below for the reader's convenience. A memorandum was prepared by the Applicant's consultant to respond to these comments and is provided as Appendix 4C-4. In this memo, Dr. Finegan concluded that Geologica's water balance was prepared using a standard accepted approach, which includes appropriate inputs and outputs to the system. Groundwater pumping is a component of the water output just as recharge is a component of the input. As stated, discharge from the system may occur by different mechanisms, but understanding these mechanisms individually is important whether the system is in equilibrium or in transition due to a new stress (e.g., pumping). Understanding all components of the budget is especially important in a transient model because of changes in storage that occur from pumping.

The commenter also states that the CHB (constant head boundary) is not described or shown in a figure. However, review of Geologica's 2014 technical memorandum shows that the assigned constant head value of the boundary is provided on page 8 in Section 5.1 as 925 feet and indicated as being "...on the eastern edge of the model grid." The hydraulic characteristics of this boundary would be those of the model cells it occupies.

B3-51 The commenter states that the use of MODFLOW model is inappropriate and underestimates the drawdown near the pumping well based on input from the commenter's consultant, Dr. Myers. Specifically, the comment states that the Draft SEIR failed to simulate withdrawal from a specific well or reduce the cell area to simulate the use of a single well, and suggests an alternate model approach should have been used that focuses on a single well. Dr. Myers states: "The Well package for MODFLOW assumes that pumped water is drawn from the entire model cell, so that pumping drawdown is spread over the model cell. A cell is much larger than the well area, so the predicted drawdown is always much less than actually occurs at the well. Usually, a model is developed with model cells that become smaller, or telescope down in size, around a well so that the simulated drawdown is more realistic."

Dr. Finegan addresses this comment in his letter (Appendix 4C-4 to the Final SEIR). Dr. Finegan states that recharge in the numerical model is applied equally to the entire domain, and potential short-term hydraulic effects will not be apparent following long-term pumping. In addition, baseflow within the simulated aquifer is the primary source of recharge to the pumped cell. Dr. Finegan further states the well drawdown function is solved at the cell node, which in MODFLOW is the center of the cell, no matter what size the cell is, so the solution will not be affected by the cell size. If MODFLOW operated in the suggested fashion, it would be very difficult to use. Thus, the calculated drawdown will be as accurate in a large model cell as in a small model cell.

B3-52 The comment states that drawdown is underestimated in the Draft SEIR because it fails to adequately assess impacts that would result from withdrawing water from an aquifer with multiple layers (transmissivity). The comment refers to input from Dr. Myers and

states that the theoretical model used does not reflect existing conditions and instead the simulation assumes a single transmissivity.

Dr. Finegan addresses this comment in his letter (Appendix 4C-4 to the Final SEIR). Dr. Finegan responds that the assumption implicit in using a one-layer model is that the various conductive lithologies within the aquifer system are actually hydraulically connected throughout the basin. This is likely an accurate assumption for the "shallower" wells; there are a few wells that appear to be screened within a deeper, hydraulically separated, aquifer in the basin. Because the transmissivity values used were calculated from a pumping test, they already implicitly incorporate the natural condition of the aquifer rather than the suggested concept of isolated intervals exhibiting more or less drawdown. This varying drawdown may occur in the very short term due to local vertical hydraulic conductivity differences, but will not be significant after longer pumping times. Although the heterogeneity of the materials is not accounted for in the model, the model is likely to simulate the system with sufficient accuracy that drawdown can be predicted. Further aquifer testing and ongoing groundwater monitoring, as required by Mitigation Measure WR 1.1 and 1.2, throughout the basin will provide additional data on aquifer conditions and the actual effects of long-term pumping for the project. The groundwater level data will be used in real time to monitor the effects of extraction, which can be adjusted as needed.

Dr. Finegan further clarifies that confining conditions in an aquifer occur when a zone of low permeability overlies a zone/unit of high permeability. This condition is not present at this site where the lower permeability silt lies below the more permeable alluvial aquifer. The interbedded nature of alluvial systems may result in localized areas with leaky or semi-confined conditions (refer, for example, to Freeze and Cherry, 1979); one reason for an extended (72-hour test) is to identify conditions that may affect long term well performance. Accordingly, in compliance with Mitigation Measure WR-1.2, the Applicant will conduct a minimum 72-hour pumping test prior to the start of groundwater extraction operations.

B3-53 The commenter states that the Draft SEIR fails to analyze significant cumulative impacts from pumping groundwater in combination with other proposed and existing projects. The commenter requested that more information regarding pumping of other wells in the area is disclosed and analyzed in a cumulative context.

The projects that have been constructed or proposed in the area of potential cumulative effects have changed since 2010, as described in Section D of the DSEIR. Incremental impacts when compared to the impacts of other cumulative projects would be less than significant and not cumulatively considerable. The project would not interfere substantially with drainage patterns, nor would it create additional stormwater runoff. The Revised Project presents less than significant impacts related to groundwater withdrawals or flooding hazards. Many of the potentially incremental impacts are specific to the immediate vicinity of the project construction and operation locations (i.e., alteration of drainage patterns). Because the cumulative projects would not physically overlap with the Revised Project construction or infrastructure, the Revised Project's contribution to any cumulative impacts would not be cumulatively considerable.

In addition, while the comment states that the Draft SEIR's analysis fails to "consider pumping of other wells in the area, which would also discharge from the domain (i.e. the same aquifer), this comment does not identify which wells have been omitted. Therefore, the County is unable to evaluate whether or to what extent the wells that the comment states were improperly omitted from the cumulative impacts analysis.

B3-54 The comment states that the Draft SEIR fails to account for reduced recharge to the wells that will result from the addition of impervious surface area and from grading the Project site. According to Dr. Myers, more precipitation will run off from the panels than what was predicted by the model. Specifically, the comment states that newly impervious land (413 acres) will result in lost recharge of up to 34 acre-feet, which is not discussed in the Draft SEIR.

Dr. Finegan addresses this comment in his letter (Appendix 4C-4 to the Final SEIR) and explains that recharge can be highly variable, both temporally and spatially, in arid to semi-arid areas. However, the value used by Geologica is not unreasonable for similar areas. For example, Scanlon et al. (2006)¹ found that "Average recharge rates estimated over large areas (40–374000 km2) range from 0.2 to 35 mm year-1 [0.008 to 1.4 inches], representing 0.1–5% of long-term average annual precipitation." In addition, while recharge will vary spatially, as indicated by the commenter, this is not especially relevant to the analysis performed by Geologica, which provides a water balance for the entire basin.

B3-55 The commenter states that the Draft SEIR fails to require feasible mitigation for impacts to groundwater resources and states that the Applicant's mitigation measure to submit a Groundwater Monitoring and Reporting Plan is not adequate because it does not provide guidance regarding the specific wells to be used for monitoring.

> The proposed Groundwater Monitoring Plan requires implementation of procedures and methods for groundwater monitoring and reporting. The Plan will be based on information collected at the wells located on site. Furthermore, the modeling and testing completed by Geologica in 2010 and 2014 is appropriate to predict post-construction groundwater trends. Implementation of Mitigation Measures WR-1.1 and WR-1.2 will further refine post-construction assumptions and protect groundwater resources during construction. The mitigation measures to be implemented, including the pumping test and groundwater monitoring program (Mitigation Measures WR-1.1 and WR-1.2), will enhance the ability to predict changes to groundwater levels within the basin and to quickly react to and mitigate unexpected changes in water levels.

B3-56 This comment refers to the Groundwater Monitoring and Reporting Plan mitigation measure and states that overdraft conditions associated the pumping should be established more clearly and that the threshold for detecting impacts should be specified for the monitoring well to prevent the 5-foot drawdown at a private well. The commenter also requests that performance standards are incorporated that would ensure withdrawals of ground water remain insignificant.

> The mitigation measures to be implemented, including the pumping test and groundwater monitoring program (Mitigation Measures WR-1.1 and WR 1.2), will enhance the

¹ Scanlon, B.R., K.E. Keese, A.L. Flint, L.E. Flint, C.B. Gaye, W.M. Edmunds, and I. Simmers, 2006. Globalsynthesis of groundwater recharge in semiarid and arid regions. Hydrol. Process. 20, 3335–3370.

ability to predict changes to groundwater levels within the basin and to quickly react to and mitigate unexpected changes in water levels. Implementation of these measures would ensure that groundwater extraction for the Revised Project would be properly monitored and that drawdown at nearby private wells would not exceed 5 feet.

- B3-57 The commenter claims the Draft SEIR's analysis of the Revised Project's impact on watercourse is inadequate and not supported by substantial evidence. The commenter specifically states the DSEIR did not provide linear stream footage information or any design drawings or photos to support this conclusion. Please refer to Response B3-28 for more specific information on watercourse impacts.
- B3-58 The commenter is concerned the Draft SEIR fails to address impacts to watercourses from drainage and erosion that will result if culverts and armoring are added to the ephemeral streams.

Erosion controls have been included in the engineering design of the project. In general, along the eastern perimeter road, the majority of surface flows from offsite upland areas will be intercepted by a channel located on the upland side of the road. The flows are then conveyed to either a low water crossing, culvert, and/or discharged at the end of the channel. At the downstream end of the culvert or end of channel, the surface grade will be transitioned and flatted from a channel shape to a level spread, so the flows are converted from concentrated flows to sheet flows. Similarly, the low water crossings will act as the spreader, and the proceeding surface grades will continue to spread and level out, promoting the transition to sheet flows. Rip rap or other energy dissipation BMPs will be used in the channel and surface grade transitions as needed to ensure the flows are converted from concentrated flows to sheet flows. In areas where no channel is adjacent to the perimeter road, upland offsite flows will sheet across the road in the same manner as pre-development.

Once in the main interior of the site, the stormwater runoff will sheet flow to its respective main water course; either to Las Aguilas Creek, the unnamed north south tributary into Las Aguilas Creek, one of four detention ponds, or Panoche Creek. The stormwater detention ponds are located within the west half of the project. These ponds are designed to intercept the sheet flows from respective sub-basin watershed and to attenuate the additional flows from the Project's added impervious surfaces. Attenuation from the ponds will be achieved by volume storage and discharge via a riser structure and outlet pipe. Full drawdown and discharge from each detention pond is to occur within 24 hours. The outlet pipe discharge will have outlet protection rip rap aprons that are designed in accordance with state and local standards. The rip rap aprons are designed to dissipate the energy and spread the flows.

Downstream discharge of flows from the western half of the project footprint will enter into its respective culvert or bridge along Little Panoche Road. Discharge from the eastern half of the Project Footprint will sheet flow into the Las Aguilas Creek. Flows from both sides of the site will ultimately be conveyed to the confluence of Las Aguilas Creek and Panoche Creek. The culverts and bridges along Little Panoche Road as well as the confluence of the two major creeks will be designed so that post-development runoff flow rates do not exceed pre-development runoff flow rates. With regard to the comment regarding the flooding and erosion that could result from grading vernal pools; SEIR Section C.6.1.4 identifies approximately 0.26 acres of vernal pools. There has been no modification to the estimated number of vernal pools that will be impacted by construction from the FEIR to the SEIR. Further, Dr. Finegan remarks that the indicated vernal pool area is 0.26 acres, which is a very small area within the overall project area of several thousand acres, and is not likely to have a significant effect on the water budget. Moreover, the occupied vernal pool (containing fairy shrimp) is being protected from grading and engineering design will protect overall hydraulics related to this occupied vernal pool.

B3-59 The commenter states that the SEIR does not consider the "cumulative impacts that the construction of road crossings constructed at the Project site may have on drainage and erosion."

Refer to Responses B3-C16 and B3-C18.

B3-60 The commenter is concerned that the elimination of Draft SEIR APM BIO-8 which required the avoidance of waters, washes, and drainages within the project footprint will adversely impact water resources within the Project. Additionally, the commenter is concerned that the Draft SEIR lacks substantial evidence to support is conclusion that Project construction and operation will not result in significant impacts to watercourses.

The Applicant will impact approximately 7.93 acres of waters of the State. These drainages will be permanently will be impacted due to the design features necessary for the Project (i.e., perimeter roads, PV array installation, O&M building, substation, switchyard, etc.). The Project has been designed to protect water quality during construction and operation. Please refer to Response B3-58 for erosion and sedimentation deterrents that will to be implemented.

The removal of APM BIO-8 would not create a new biological impact or substantially increase the severity of a biological impact because Project features that impact state and federal jurisdictional waters will be permitted through approval of a USACE 404 permit and/or Streambed Alteration Agreement (SAA) from CDFW. Grading plans for the entire Project would be reviewed by USACE and CDFW through approval of the 404 and LSAA, and protective buffers would be consistent with these permitting requirements.

The 2010 Final EIR concluded that compliance with various regulatory requirements, including securing the requisite 404 permit from the USACE for federal jurisdictional waters and 401 Water Quality Certification from the RWQCB, and obtaining a Lake and Streambed Alteration Agreement from the CDFW for impacts to other ephemeral washes or state jurisdictional waters, and implementation of the recommended mitigation would reduce impacts to a less than significant level.

Since the 2010 Final EIR was approved, further design and engineering of the Revised Project resulted in the need to impact jurisdictional features identified on the project site. While it still holds true that impacts to State and Federal drainage features will be subject to regulatory permits and approvals and that the conditions of those permit approvals would reduce impacts to a less than significant level, the Draft SEIR nevertheless included measures to protect drainage features. These include Mitigation Measures BR-G.1 through BR-G.6, which would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices

(BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Wetland Mitigation and Monitoring Plan (WMMP) is developed and implemented for mitigation lands. Mitigation Measure BR-1.1 would ensure the preparation and implementation of a Weed Control Plan and Mitigation Measure BR-1.2 would ensure the development of a Grazing Plan for vegetation management on the site. Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust.

Furthermore, as stated above in Response A2-16, Mitigation Measure BR-G.2 would include the following language regarding protective buffers: "In other locations, not subject to the jurisdiction of the USACE or CDFW, where complete avoidance of reaches of streams and washes are proposed, Project activities and Project work limits shall include an average 50-foot setback from the top of bank of the avoided stream reaches. The 50-foot average shall apply to the avoided reach length. Although the average setback must be at least 50 feet over the length of the avoided reach, in some isolated locations it may be necessary to place structures within 50 feet of the avoided streambed. In these cases a minimum 25-foot setback shall be observed from avoided streambed habitat in all locations (i.e., work limits may come no closer than 25 feet from the top of bank in any specific area along the avoided reach). Where existing roads occur parallel to and within 50 feet of avoided streams, it will be impossible to maintain a 50foot average setback or even a 25-foot minimum setback, because even to realign the road, work near the avoided streams would be required. In these cases, Project activities and Project work limits shall be set back 10 feet from the top of bank. All setbacks to be avoided by the Project shall be fenced or flagged before construction occurs in adjacent areas, and shall be subject to an on-site biological monitor."

Implementation of these mitigation measures would reduce both direct and indirect impacts to jurisdictional waters to less than significant levels.

B3-61 The commenter disagrees with the Draft SEIR's conclusions that compliance with laws that are intended to address the Revised Project's impacts on watercourse would mitigate the Revised Project's impacts to a level of insignificance. However, compliance with applicable regulatory standards can provide a basis for determining that the project will not have a significant environmental impact. *Tracy First v City of Tracy* (2009) 177 Cal.App.4th 912. As the court explained in *Oakland Heritage Alliance v City of Oakland* (2011) 195 Cal.App.4th 884, 906, "a condition requiring compliance with regulations is a common and reasonable mitigation measure and may be proper where it is reasonable to expect compliance."

In this case and in accordance with California Fish & Game Code section 1602 and Section 404 of the federal Clean Water Act, the Applicant has submitted an application for a Lake and Streambed Alteration Agreement (LSAA) with CDFW, a 404 Permit Application to USACE, and a 401 Application to the Regional Water Quality Control Board (RWQCB). As part of these regulatory processes, these responsible agencies will be identifying specific avoidance and minimization measures to ensure that the Revised Project's impact on watercourse would be less than significant.

Additionally, the Applicant will comply with the setbacks described above in revised Mitigation Measure BR-G.2. The Applicant has also designed the Project to decrease sedimentation and erosion across the site. Please refer to Response B3-58 for additional information on erosion control. Impacts to drainages are also addressed in Response B3-28.

B3-62 The Hollister Fire Department, as documented in its letter to the Applicant, concluded that relying solely on Little Panoche road would not meet the ingress/egress requirements for fire department emergency access and that a perimeter road would be required. The Fire Department letter was posted on the County's website at the time the Draft SEIR was published (<u>http://cosb.us/wp-content/uploads/Fire-Dept-Letters.pdf</u>)

The Least Environmentally Damaging Practicable Alternative (LEDPA) is not a requirement of CEQA, and will be addressed through a 404(b)1 Alternatives Analysis and NEPA process. An EIS is currently being prepared for the project and a 404(b)1 Alternatives Analysis was submitted to the Corps of Engineers and will be reviewed and processed in accordance with Section 404 Clean Water Act requirements.

- B3-63 Please see Responses B3-C1 through B3-C32.
- B3-64 Please see General Response GR-4 on Valley Fever.
- B3-65 The commenter states the DSEIR's conclusions regarding air quality are not supported by substantial evidence in the record based on an analysis conducted by the commenter's consultant, Dr. Petra Pless. According to Dr. Pless, the Revised Project's alleged use of "non-typical" construction equipment could generate ozone emissions and requires consultation with the Monterey Bay Air Pollution Control District (MBAPCD).

The construction equipment that would be used to construct the Revised Project is "typical" construction equipment. Also, the equipment used for installation of the PG&E Upgrades is typical for equipment used by PG&E for operations and maintenance throughout their service territory. There is no definition of "typical equipment" in the CEQA Air Quality Guidelines or MBUAPCD's rules, though examples of typical equipment are listed in the Guidelines. Moreover, the MBUAPCD reviewed and provided a comment letter on this Draft SEIR and did not request any further consultation regarding the types of construction equipment that would be used during construction. For the portable equipment, such as generators, that will be used, the Applicant will maintain compliance with the Portable Equipment Registration Program (PERP) and MBUAPCD will be notified of all diesel powered portable equipment over 50 hp maintained at the Project site for more than 5-days. See <u>http://www.arb.ca.gov/portable/portable.htm</u> for more details regarding this program.

Table C.4-7 PG&E Equipment for OPGW Installations lists the equipment anticipated to be utilized by PG&E during the construction period. This equipment list has been further refined in the emissions calculations for PG&E Upgrades included as Appendix 4A.1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades).

B3-66 The commenter states the Draft SEIR incorrectly claims that emissions associated with PG&E Upgrades "would not occur at significant levels due to the short construction period, the limited extent of equipment use, and the small footprint of the proposed upgrades." Accordingly, more information is needed regarding hours of use per day, horsepower, load factors, etc. that would support its claim that impacts associated with the upgrades are insignificant.

In response to this comment, the Applicant has prepared detailed emissions calculations for the PG&E Upgrades included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) that provide estimated hours of use per day, horsepower, emissions factors and total days used. As shown in the calculations tables, all equipment will not be running simultaneously and to calculate maximum peak daily emissions, activities that could occur contemporaneously were grouped to provide a conservative estimate of emissions from all equipment would be running simultaneously. The conservative estimate resulted in calculations that were determined to have less than significant impacts to air quality with incorporation of AMMs (see Responses B3-B1 through B3-B4 of the Pless letter).

B3-67 The commenter claims the Draft SEIR fails to incorporate the modeling assumptions used to determine the maximum emissions from construction. According to the DSEIR, the Project's PM10 emissions will not exceed MBUAPCD's threshold of significance. Although the DSEIR incorporates the watering and maximum disturbance requirements, "the number of haul trucks per day (35) and the quantity of soil imported (1200 tons/day) are not reflected in the DSEIR's mitigation measures." Because the DSEIR's significance determination rests on the incorporation of these assumptions, they must be included as enforceable mitigation.

Calculations were based on a peak day, worst-case scenario for a conservative estimation of emissions using maximum acres of 50 acres in a single day and 35 haul trucks. The Applicant would remain in compliance with the daily thresholds for fugitive dust emissions, however if the maximum site disturbance threshold (50 acres) in a single day is not required, the contractor may utilize more haul trucks while still being compliant with fugitive dust emissions limits. The reference above regarding watering 3 times per day and 50 acres of maximum site disturbance is a commitment reflected in the mitigation measure; however the use of haul trucks and amount of soil imported should remain flexible and is not appropriate for inclusion in mitigation measures. Equipment utilized will vary depending on project construction activities on any given day.

Please see the responses to comments for Attachment B: Air Quality Comments (Pless Letter) B3-B1 through B3-B9, below. These comments include tables that detail maximum daily and overall emissions for construction of the solar project and the PG&E Upgrades.

- B3-68 Please see General Response GR-1 on deferred mitigation.
- B3-69 Please see General Response GR-1 on deferred mitigation.
- B3-70 This conclusion paragraph summarizes issues raised in the previous comments; no specific response is required.

Comment Set B3, Attachment A: Cashen Biology Comments

- B3-A1 The introductory portion of the letter presents the commenters experience. No response is required.
- B3-A2 The commenter states the focused botanical surveys referred to in the Draft SEIR are outdated and must be updated to accurately disclose, analyze, and mitigate potentially sig-
nificant impacts to special-status plant species. The commenter claims that the Draft SEIR fails to justify the claim that suitable habitat for the special-status species is "unlikely to occur within disturbance limits."

The Draft SEIR analyzes the impacts of the Revised Project and PG&E Upgrades on special status plant species in Section C.6.3.3 (Impact BR-3) and Section C.6.3.5 (Impact BR-3) respectively. The 2010 Final EIR first previously analyzed project impacts on special status plants, which was based on comprehensive site wide botanical surveys under-taken by Live Oak Associates in 2009 and 2010. The survey methods were consistent with CDFW protocols. The surveys were also timed to maximize potential observations of special-status species that may occur on the site. Surveys were designed and scheduled based on multiple consultations with CDFW and regional botanical experts, and visits to special-status plant species reference sites. No federal or state listed plant species were found during these surveys.

Since then, the team of project biologists have concluded that the physical conditions of the Revised Project site have not changed in a manner that would alter the conclusions of those surveys, which the 2010 Final EIR explained were undertaken during a time of above average rainfall. In other words, the 2010 Final EIR's conclusions about the likelihood that certain special status plants would occur at the Revised Project site are still relevant today.

In addition to the above referenced surveys, supplemental protocol-level rare plant surveys confirming the presence or absence of rare plants in the Revised Project footprint and PG&E Upgrades were conducted March 2-13, 2015. (See Appendix 4B-3, Early Season Rare Plant Surveys) The 2015 Rare Plant Survey concluded that "No federal or state listed rare, threatened or endangered plant species were observed within the survey area during this early season survey." Additional protocol-level surveys for plants that may not have been evident or identifiable during the early season survey will be performed by the Applicant in late spring and/or summer in accordance with MM BR-3.1. The timing of surveys will be determined by a qualified biologist familiar with the phenology of the plant species with the potential to occur, the Project's geographic location, the natural communities present, and the weather patterns.

Because the scope and location of the PG&E Upgrades were unknown in 2010 and therefore not addressed in the 2010 Final EIR, additional surveys were conducted for the work areas associated with the PG&E Upgrades, the results of which are described in Section C.6.3.5 of the Draft SEIR. As described in Section C.6.1.2 (PG&E Upgrades: Environmental Setting), numerous special-status plant species are known to occur in the region and potentially suitable habitat for many of these species occurs along the OPGW route. Three plant species listed under the federal and/or California Endangered Species Acts that could potentially occur in work areas for PG&E Upgrades are the federally threatened San Benito evening primrose, the federally and state-endangered California jewelflower, and the federally endangered San Joaquin woollythreads. At the time surveys were conducted along the OPGW route (i.e., prior to conducting site-wide, proto-col-level botanical surveys), no special-status plants were identified.

Impacts on a small portion of a population (i.e., a few individuals) of plants that are not federally or State-listed, or impacts to a population that would not substantially affect the range of the species, are not considered significant impacts under CEQA. However,

temporary impacts to special-status plant species can also have long-term permanent impacts due to specific microhabitat requirements. Therefore, temporary impacts to individual special-status plants would be offset through conservation of offsite individuals at a 0.5:1 ratio (on conservation lands to be conserved in perpetuity). While the PG&E upgrade activities are limited to 0.78 acres, there is potential for presence of special-status plant species. Therefore impacts may be significant depending on the species and population within the construction area.

Nonetheless and to ensure that potential impacts to rare plants would be less than significant, the Revised Project would implement Mitigation Measure BR-3.1 (Draft SEIR, p. C.6-80), which requires pre-construction surveys for special-status plant species and implementation of avoidance measures to ensure that any impacts on previously undetected rare plants would be less than significant. Mitigation Measure BR-3.1 is in addition to the comprehensive mitigation and conservation strategy that is set forth in previously adopted and updated Mitigation Measures BR-G.1 through BR-G.6. The Draft SEIR has been modified as follows to reference Mitigation Measure BR-3.1 in the Draft SEIR's conclusion (p. C.6-28) regarding potential impacts to sensitive plant species:

However, previously recommended and adopted Mitigation Measures BR-G.1 through BR-G.6 would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Habitat Mitigation and Monitoring Plan and/or a Habitat Management Plan is developed and implemented for mitigation lands.

Previously recommended and adopted Mitigation Measure BR-1.1 would require the preparation and implementation of a Weed Control Plan and Mitigation Measure BR-1.2 would require the development of a Grazing Plan for vegetation management on the site. Mitigation Measure BR-3.1 requires pre-construction surveys for special-status plant species and implementation of avoidance measures to ensure that any previously undetected plant species are properly protected. In addition, previously recommended and adopted Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust. With the implementation of these measures, impacts on special-status plants would be less than significant.

The Draft SEIR also includes recommendation that PG&E implement and that the CPUC adopt AMM BR-PGE-1 through BR-PGE-9 to minimize general environmental impacts. In addition, AMM BR-PGE-15 would require conducting surveys and establishing exclusion zones to avoid special-status plants. PG&E has committed to the measures listed above and enforcement of those measures by the CPUC. With the implementation of these measures, impacts would be less than significant.

B3-A3 The commenter states the Draft SEIR failed to disclose the presence of the California Jewelflower in the Revised Project Area. The commenter stated the presence of California jewelflower was detected in Study Area 1, which could imply the jewelflower may exist elsewhere within the Revised Project Footprint. The comment appears to be referring to the Transmission Line Natural Resources Assessment Report, Appendix A. The results of the surveys in Study Area 1 (Section 4.1 of the T-Line Natural Resources Report) do not indicate presence of California jewelflower. The commenter appears to be referring to a reference to California jewelflower in Appendix A, Special-Status Species with Potential to Occur. Any reference to the California jewelflower in Appendix A was a typographical error. Furthermore, as noted in Response B3-A2, the 2015 Rare Plant Survey confirmed that California jewelflower is not present in the Revised Project footprint and PG&E Upgrades areas.

In addition, implementation of Mitigation Measure BR-3.1 and the other mitigation measures (see comment B3-A2, above), will provide additional assurance that impacts to jewelflower, if detected, on the Revised Project site would be reduced to a less than significant level. Similarly, implementation of PG&E AMM BR-PGE-15, provides additional assurance that impacts to jewelflower, if detected on the Revised Project site, would be reduced to a less than significant level.

B3-A4 The commenter states the SEIR inaccurately stated there were/are no California condors observed in or near the Project Footprint during avian surveys. The commenter stated the Bloom Biological, Inc. detected a pair of California condors during the Golden Eagle nesting survey conducted in 2014.

During the 2014 Final Golden Eagle Nesting Survey Report an adult pair of California condors were seen emerging from a crevice in a cliff. However; this sighting was located approximately 10.2 miles southwest of the project footprint. Additionally, the pair of California condors was identified outside the established Study Area for the survey (see Exhibit 3 of the 2014 Golden Eagle Nesting Report).

Table C.6-2, *Special-Status Wildlife Species with Potential to Occur* of the SEIR, identified the potential for California condors to occur within the Project Footprint as low. Therefore, both the 2010 Final EIR for the original project and now the Draft SEIR for the Revised Project conclude that the project could result in the loss of foraging habitat for California condors (Impact BR-12, p. C.6-37 – C.6-38) and identify mitigation measures to minimize potential impacts on this foraging habitat. For example, mitigation measure BR-12.2 would require avoidance, work area restrictions, and reporting of California condors that land on the Project site. Mitigation measures BR-G.1, BR-6.1, and BR-12 prescribe additional avoidance and minimization efforts to protect California condors.

- B3-A5 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy.
- B3-A6 Please see General Response GR-2 regarding the Panoche Mountain microwave tower and PG&E's intent to install only a dish on an existing tower. The commenter is concerned the construction of the microwave tower located at Panoche Mountain will adversely affect BNLL habitat and other sensitive biological resources at the tower construction site.

PG&E has refined the construction methodology at this location. Construction of new microwave tower is no longer required at Panoche Mountain. PG&E will now collocate equipment on an existing tower owned by American Tower Corporation on Panoche Mountain. The additional equipment would be similar to existing infrastructure already located in the area. Therefore, comments associated with construction of a new microwave tower at Panoche Mountain are no longer applicable.

B3-A7 The commenter states that the potential risk to avian mortality due to microwave tower construction was not addressed in the Draft SEIR. The commenter claims the Draft SEIR did not identify the type of FAA lighting system that would be installed on the proposed microwave towers nor address the correlation between microwave tower height and avian mortality. The commenter is concerned that potential avian mortality will not be mitigated to less than significant with the implementation of APLIC guidelines and PG&E's Avian Protection Plan.

As described in General Response GR-2, PG&E has refined the construction methodology at Panoche Mountain and will no longer construct a new tower. PG&E will collocate microwave equipment on existing facilities at Panoche Mountain (owned by American Tower Corporation). Microwave towers would still be constructed at the PVS Project Site and the Helm Substation Tower. There have been very few studies documenting the avian collision risk of various lighting systems on communication towers. Underlying mechanisms behind the disorientation of birds at lighted communications towers is not well understood and may be related to other factors. The need for standard tower lighting to meet the Federal Aviation Administration (FAA) will be determined by an FAA study, if required. PG&E is required to comply with the Federal Communications Commission (FCC) approval process and FAA filings and approval, including installations of FAA lights on the microwave tower, if required.

The Draft SEIR addresses the collision risk with towers on page C.6-105, "Avian interactions with transmission lines, towers, and structures and the risks those interactions impose vary greatly by location." The Avian Conservation Strategy (ACS) published with the Draft SEIR materials (available at <u>http://cosb.us/wp-content/uploads/AvianConservation</u> <u>Strategy.pdf</u>) addressed avian interactions with transmission line and panels and found collision rates generally increase in low light conditions; during inclement weather, such as rain or snow; during strong winds; and during panic flushes when birds are startled by a disturbance or are fleeing from danger. Collisions are more probable near wetlands, valleys that are bisected by power lines and towers, and within narrow passes where power lines run perpendicular to flight paths.

Therefore the SEIR adequately addressed the commenter's concerns and the impacts, with implementation of mitigation measures would be less than significant.

- B3-A8 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Analysis of Concentrated Light, Electrocution, and Collision Impacts, Collisions.
- B3-A9 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Analysis of Concentrated Light, Electrocution, and Collision Impacts, and Adequacy of Draft Eagle Conservation Plan and Avian Conservation Strategy.
- B3-A10 The commenter states the Draft SEIR's conclusion that the Revised Project's potential impacts to special-status plants would be reduced to a level of insignificance lacks any basis because there is no evidence that plant species impacted by the Revised Project (e.g. gypsum loving larkspur, recurved larkspur, and serpentine linanthus) would occur on the proposed conservation lands.

The redesign that created the Revised Project did not did not alter the 2010 Final EIR's analysis or conclusion relating to impacts on vegetative communities and special status plants on the Revised Project site. The previously adopted mitigation measures including

Mitigation Measure BR-G5, which requires impacts on vegetative communities to be mitigated at a 1:1 ratio and Mitigation Measure BR-G.6, which requires implementation of a Habitat Mitigation and Monitoring Plan (HMMP) that includes a detailed analysis showing that the mitigation lands meet the performance criteria required by Mitigation Measure BR-G.5, are adequate to reduce the impacts of the Revised Project. While the mitigation lands have not been specifically surveyed for the same species mentioned in the comment, based on the proximity of these mitigation lands, including the on-site valley floor conservation areas, and the adjacent off-site mitigation lands, the project biologists have reasonably concluded that these areas would support these plant species. In the event that surveys do not identify the presence of these species on the mitigation lands, the applicant would still be required to mitigate the impact by identifying and securing other lands that support these plant species.

B3-A11 The commenter states the Draft SEIR provided no evidence that the USFWS approved the results of the 2009/2010 Vernal Pool Fairy Shrimp (VPFS) protocol level surveys, nor does the SEIR account for the potential changes in the distribution of listed branchiopods since the 2010 Final EIR was approved. The commenter states the County has not provided evidence that protecting small patches of vernal pool habitat, as proposed in the Draft SEIR, would be a successful conservation measure to mitigate impacts from the project to less than significant.

As stated in Section C.6.3.3 of the Final EIR, Live Oak Associates identified 128 ephemeral pools and identified the presence of vernal pool fairy shrimp in only three of those pools. Pools containing special-status fairy shrimp have been avoided and made part of the Valley Floor Conservation lands. The locations of the 128 pools provided in Figure A of the original LOA map have been overlain onto the Revised Project footprint; this demonstrates that only 40 pools from the 2010 LOA survey are within the Revised Project. This leaves approximately 80 pools within the conservation lands to mitigate for impacts to pools within the Revised Project. These figures are included as Appendix 4B-10. Further, a follow-up evaluation was performed by McCormick Biological dated March 25, 2015 to evaluate the 40 pools within the Project Footprint. The results of that field evaluation show that only two of the 40 pools identified are possible vernal pools within the Revised Project. A copy of that evaluation memo is included as Appendix 4B-9.

B3-A12 The cumulative impacts to biological resources are fully addressed in the 2010 certified EIR and in the SEIR. The cumulative impact analysis of the 2010 proposed project for biological resources is presented in detail in C.6.4.2 of the 2010 Final EIR. While the 2010 Final EIR concluded that the proposed project would have considerable contributions to cumulative impacts, the conclusion for the 2010 Approved Project (Alternative A Revised) was that the contribution would be less than considerable.

Section E.3.1 of the 2010 Final EIR presented the impact analysis of Alternative A Revised, which is the project that was approved in 2010 (the "Approved Project" in the 2014 Draft SEIR), which states the following:

... Alternative A Revised project's contribution to cumulative impacts on upland species of the San Joaquin Valley would be mitigated to a level that is less than significant through the implementation of Mitigation Measures BR-16.3 (Preserve, manage, and maintain giant kangaroo rat habitat corridors across the project footprint) and BR-23.1 (Create conservation easement on all project areas retired

from the development footprint) (Class II). These mitigation measures require the maintenance and monitoring of giant kangaroo rat habitat corridors and for the Applicant to place the approved project footprint into a biological conservation easement to be preserved in perpetuity when areas within the project footprint are retired.

B3-A13 The commenter states the Draft SEIR lacks enforcement mechanisms to ensure specialstatus plant surveys will be properly conducted and reported prior to ground disturbance activities. The commenter states the Draft SEIR does not require surveys or mitigation for California Rare Plant Rank (CRPR) 1 and 2 species; therefore, impacts on these species remain potentially significant and unmitigated. The commenter also states the SEIR failed to justify the conclusion that a 50-foot buffer would adequately mitigate impacts to list plant species.

This mitigation measure (BR-3.1) was previously adopted in 2010 when the County approved the original project. The mitigation measure was incorporated into the Mitigation Monitoring and Reporting Program that the Board of Supervisors adopted and all of the mitigation measures were incorporated as conditions of approvals of the original project. If the Board decides to approve the Revised Project and similar to what occurred in 2010, this mitigation measure (which includes some minor revisions) would be included in the adopted Mitigation, Monitoring and Reporting Program, and incorporated as a condition of approval.

In addition and as noted in Response B3-A2, a supplemental rare plant survey confirming the presence or absence of rare plants, including the San Joaquin woollythreads, in the Revised Project footprint and PG&E Upgrades was conducted March 2–13, 2015, after circulation of the Draft EIR. The 2015 Rare Plant Survey concluded that: "No federal or state listed rare, threatened or endangered plant species were observed within the survey area during this early season survey."

Regarding CRPR species impacts, the California Native Plant Society initially created five California Rare Plant Ranks in an effort to categorize degrees of concern. California Rare Plant Rank 1A lists plants presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125; (c) and/or §15380. Plants with a California Rare Plant Rank of 2A are presumed extirpated because they have not been observed or documented in California for many years. All of the plants constituting California Rare Plant Rank 2A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Except for being common beyond the boundaries of California, plants with a California Rare Plant Rank of 2B would have been ranked 1B. All of the plants constituting California Rare Plant Rank 2B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. The botanical surveys prepared for the original and Revised Project identified all threatened and endangered plants with potential to occur within the Project site.

In accordance with mitigation measure Mitigation Measure BR-3.1, all listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared. Surveys of reference populations shall be conducted along with surveys on the project site to document that precipitation conditions would not have adversely affected the ability to detect the species. If a listed plant species cannot be avoided, consultation with USFWS and CDFW will occur.

Mitigation Measure BR-3.1 further states that prior to site grading, any populations of listed plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The exact size of the buffer depends upon the proposed use of the immediately adjacent lands, and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County of San Benito. If impacts to listed plants are determined to be unavoidable, the USFWS shall be consulted for authorization. Additional mitigation measures to protect or restore listed plant species or their habitat may be required by the USFWS before impacts are authorized, whichever is appropriate.

Furthermore, the Revised Project Mitigation Measures BR-G.1 through BR-G.6 would serve to minimize impacts to special-status plant species, including creation of a conservation easement. Previously recommended and adopted Mitigation Measures BR-G.1 through BR-G.6 would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Habitat Mitigation and Monitoring Plan and/or a Habitat Management Plan is developed and implemented for mitigation lands. Previously recommended and adopted Mitigation Measure BR-1.1 would ensure the preparation and implementation of a Weed Control Plan and Mitigation Measure BR-1.2 would ensure the development of a Grazing Plan for vegetation management on the site. In addition, previously recommended and adopted Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust. With the implementation of these measures, impacts on special-status plants would be less than significant.

Additionally, for impacts to State and Federally Threatened, Endangered, Proposed, Petitioned and Candidate plants, mitigation shall occur at a ratio of 1:1 (one individual preserved for each individual impacted). Temporary Impacts to individual plants will be offset through conservation of offsite individuals at a 0.5:1 ratio (on conservation lands

to be conserved in perpetuity). The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality after any restoration activities (as defined in [2010 Final EIR] Table C.6-6) to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same State or Federally listed (Endangered, Threatened, Proposed, Petitioned and Candidate) plants that are impacted. This mitigation may occur on lands used simultaneously as mitigation for impacts to other species. This text has been modified in the Final SEIR (Section C.6.3.4, MM BR-G.5). See also, Response B3-44.

B3-A14 The commenter states because the SEIR only requires standard APLIC guidelines, it fails to ensure potentially significant impacts to the California condor are mitigated for (i.e. potential electrocution).

The comment addresses an impact to California Condors that was previously disclosed and analyzed in the 2010 Final EIR. Like the Draft SEIR, the 2010 Final EIR concluded that compliance with APLIC guidelines would reduce potential impacts to State and/or federally protected birds from electrocution and collisions; this also includes impacts to California condors. Accordingly, this is not a new conclusion that is being disclosed for the first time in the Draft SEIR. Moreover, the adequacy of the 2010 Final EIR and its analysis of impacts and recommended measures to reduce impacts is no longer subject to comment or challenge.

Nonetheless, the SEIR does not require the implementation of "standard" APLIC guidelines, but rather MM BR-14.1, as presented in the 2010 Final EIR, requires the implementation of APLIC guidelines, which currently suggest larger spacing in areas where larger birds are present. Moreover, during over 30,000 hours of surveys conducted, no observations of California condors were recorded within the Project Footprint. Moreover, the risk of electrocution of a California condor from perching on a transmission line is low as the 2006 APLIC guidelines state that "power line collision have a greater threat to the California condor than electrocutions."

In addition, the PG&E Upgrades discussed in the draft SEIR include only the replacement of an existing static wire with optical ground wire (OPGW) on the existing 230kV transmission towers. OPGW is used for telecommunications; therefore, the Upgrades would not pose an increased risk of electrocution to the California condor.

- B3-A15 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Adequacy of the Draft Eagle Conservation Plan and Avian Conservation Strategy, and The Proposed Adaptive Management Approach.
- B3-A16 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Proposed Mortality Monitoring.
- B3-A17 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Proposed Mortality Monitoring.
- B3-A18 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, the Proposed Adaptive Management Approach and Proposed Mortality Monitoring.
- B3-A19 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Collisions.

- B3-A20 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, Polarized Light and Proposed Mortality Monitoring.
- B3-A21 Please see General Response GR-5 on Golden Eagle and Avian Conservation Strategy, the Proposed Adaptive Management Approach.

Comment Set B3, Attachment B: Air Quality Comments

B3-B1 The commenter, Pless Environmental, Inc. expresses that the Draft SEIR analysis of impacts on air quality during construction is flawed and that the Draft SEIR conclusion that emissions from construction would be less than significant do not survive scrutiny. The commenter lists several arguments to support this claim, each of which is discussed below in subsequent responses. Specifically, this commenter states that the emissions of the Revised Solar Project and PG&E Upgrades were not analyzed to determine whether combined emissions would exceed applicable thresholds.

In response to this comment and to further validate that the conclusions of the Draft SEIR that pollutant emissions from the PG&E Upgrades would be negligible and less than significant, the Applicant prepared air emissions calculations for the PG&E Upgrades. Those calculations are included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) to the Final SEIR and for the convenience of the commenter, peak daily emissions from possible contemporaneous activities scenarios are shown in Table RTC-B.1 below:

		Emissions (lbs)					
Scenario	Activity	ROG	CO	NOx	SOx	PM10	PM2.5
1	Survey	0.0	0.2	0.0	0.0	1.7	0.4
2	ROW Clearing	2.5	9.0	19.8	0.0	19.1	4.5
3	Guard Structure Installation/Install OPGW-A	7.9	19.7	30.1	0.1	29.6	7.0
4	Install OPGW-B/Guard Structure Removal	7.9	19.7	31.3	0.1	31.4	7.4
5	Restoration	1.4	5.3	10.8	0.0	17.1	3.9

Table RTC-B.1. Construction Emissions Summary – PEAK DAILY – Controlled Dust (Scenarios by Possible Simultaneous Activities)

As described in the 2010 Final EIR and Draft SEIR, the only construction-related emissions threshold for MBUAPCD is 82 lb/day of PM10. As shown in the table above, the peak daily PM10 emissions is 31.4 lb/day. This combined with the anticipated peak PM10 emissions of 31-lb/day from Project construction presented in the Draft SEIR Attachment: PM10-CalEEMod, found at <u>http://cosb.us/wp-content/uploads/PM10-CalEEMod.pdf</u>, demonstrates that the 82-lb/day significance threshold for Monterey Bay Unified APCD will not be exceeded. Moreover, only approximately one-third of the PG&E Upgrades will be completed in the Monterey Bay Unified APCD; therefore, peak daily PM10 emissions associated with the PG&E Upgrades are anticipated to be one-third of those presented in the table above and much lower than the significance threshold of 82 lb/day. Please see Response B3-B3 for a discussion of emission thresholds adopted by SJVAPCD and a comparison to the Revised Project emissions. As discussed in Section C.4.3.5 of the Draft SEIR, there will be no increase in operational emissions as a result of the PG&E Upgrades since inspection, maintenance and repair of the OPGW and ADSS will be performed as part of the transmissions line operations and maintenance activities.

B3-B2 The commenter refers to the MBUAPCD's Air Quality Guidelines (2008) requirement that "District should be consulted regarding emissions from non-typical equipment (e.g., grinders and portable equipment)." The comment argues that the Revised Solar Project requires non-typical equipment for construction of the solar array and the PG&E Upgrades. The commenter states that the Draft SEIR did not indicate that the District was consulted, contributing to the commenter's conclusion that the air quality analysis is flawed.

The construction equipment proposed for use in construction of the solar arrays has not changed as part of the SEIR. However, the construction equipment proposed for use at the solar array is typical for a construction project. Also, the equipment used for installation of the PG&E Upgrades is typical for equipment used by PG&E for operations and maintenance throughout their service territory. There is no definition of "typical equipment" in the CEQA Air Quality Guidelines or MBUAPCD's rules, though examples of typical equipment are listed in the Guidelines. Moreover, the MBUAPCD reviewed and provided a comment letter on this Draft SEIR and did not request any further consultation regarding the types of construction equipment that would be used during construction. For the portable equipment, such as generators, that will be used, the Applicant will maintain compliance with the Portable Equipment Registration Program (PERP) and MBUAPCD will be notified of all diesel powered portable equipment over 50 hp maintained at the Project site for more than 5-days. See http://www.arb.ca.gov/portable/portable.htm for more details regarding this program.

Table C.4-7 (PG&E Equipment for OPGW Installations) lists the equipment anticipated to be utilized by PG&E during the construction period. This equipment list has been further refined in the emissions calculations for PG&E Upgrades included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades).

B3-B3 The commenter points out that the DSEIR relies on the SJVAPCD's 2002 Guide for Assessing and Mitigating Air Quality Impacts for its claim that there are no thresholds for construction emissions within SJVAPCD. The commenter is correct in demonstrating that SJVAPCD has adopted CEQA thresholds of significance for construction emissions of carbon monoxide ("CO"), NOx, ROG, sulfur oxides ("SOx"), PM10, and PM2.5.10. These are presented in the table below, found at <u>http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf</u>:

		Operational Emissions			
Pollutant/Precursor	Construction Emissions	Permitted Equipment and Activities	Non-Permitted Equipment and Activities		
	Émissions (tpy)	Émissions (tpy)	Emissions (tpy)		
CO	100	100	100		
NOx	10	10	10		
ROG	10	10	10		
SOx	27	27	27		
PM ₄₀	15	15	15		
PM ₂₅	15	15	15		

<u>Air Quality Thresholds of Significance – Criteria Pollutants</u>

As discussed, only approximately two-thirds of PG&E Upgrade construction activities will be completed in SJVAPCD; however, emissions for all PG&E Upgrade work will remain below the thresholds shown above. These calculations are presented in Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) to the Final SEIR and are included below for the convenience of the commenter. As shown below the emissions presented in tons for each of the criteria pollutants that will be produced during construction of PG&E Upgrades are significantly less than the thresholds maintained by SJVAPCD.

-	Emissions (lbs)						
Activity	ROG	со	NOx	SOx	PM10	PM2.5	
Survey	0.1	1.0	0.1	0.0	8.4	1.8	
ROW clearing	47.3	171.3	370.4	0.8	320.8	76.5	
Guard structure installation	24.9	94.2	173.6	0.4	254.0	57.7	
Install OPGW	311.7	670.7	920.7	1.7	744.7	181.4	
Guard structure removal	13.8	47.8	98.0	0.2	124.2	28.6	
Restoration	13.7	51.2	102.6	0.3	157.4	35.5	
Total Project Emissions (lbs)	411.59	1036.21	1665.42	3.30	1609.58	381.46	
Total Project Emissions (tons for duration)	0.206	0.518	0.833	0.002	0.805	0.191	

Table RTC-B.2. Construction Emissions Summary – DURATION – Controlled Dust (by Activity)

B3-B4

The commenter expresses concern that a quantitative analysis of operational emissions of NOx and ROG was not provided. Furthermore, the commenter refutes the language from the Draft SEIR stating that construction of the new microwave communications tower would generate exhaust and fugitive dust emissions, but would not contribute substantially, because the ambient levels for these pollutants in the San Joaquin Valley APCD are well below State and Federal ambient air quality standards. The commenter reasons that ambient levels for ozone and particulate matter in the SJVAPCD are frequently above State and Federal ambient air quality standards. The comment summarizes data collected to support this concern.

As acknowledged by the commenter, the Draft SEIR sets forth the attainment status of various air pollutants including ozone and PM10, presented in DSEIR Table C.4-3, Attainment Status for the San Joaquin Valley Air Basin.

With regard to the commenter's request to quantify ozone precursors (NOx and ROG), the Applicant has completed a revised model/calculations that are summarized the Response B3-B3 above and are included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) to the Final SEIR. As illustrated in these calculations, the Applicant estimates emissions from NOx and ROG combined will be approximately 1 ton for all PG&E Upgrades construction activities to be performed in both MBUAPCD and SJVAPCD.

Moreover, the Applicant recognizes that the ambient standards are frequently exceeded for both ozone precursors and PM10 and has incorporated APM AQ-2 to further reduce impacts of Project construction emissions.

B3-B5 The commenter expresses that emissions associated construction of PG&E Upgrades, which are expected to occur over a 16 week duration, are not considered "short-term" (which the commenter states is appropriate for an hourly or daily basis) and requests information regarding the hours of use per day, horsepower, load factors, etc. that support the claim that emissions would be short term and would not occur at significant levels.

In response to this comment, the Applicant has prepared detailed emissions calculations for the PG&E Upgrades included as Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) that provides estimated hours of use per day, horsepower, emissions factors and total days used. As shown in the calculations tables, all equipment will not be running simultaneously and to calculate maximum peak daily emissions, activities that could occur contemporaneously were grouped to provide a conservative estimate of emissions from all equipment would be running simultaneously. The conservative estimate resulted in calculations that were determined to have less than significant impacts to air quality with incorporation of AMMs (see Responses B3-B1 through B3-B4 above).

B3-B6 The commenter requests that the SEIR be revised to include a quantitative analysis of construction emissions compared to the SJVAPCD's CEQA thresholds of significance for construction and further support the conclusion that construction of the PG&E Upgrades would result in less than significant impacts on air quality.

Please see Responses B3-B1 through B3-B4 above, which support the assertions made in the SEIR that PG&E Upgrades would result in less than significant impacts on air quality in conformance with MBUAPCD and SJVAPCD CEQA thresholds.

B3-B7 The commenter requests that additional information regarding hours of use per day, horsepower, fuel use, load factors, etc., for the construction equipment anticipated to be used for the PG&E Upgrades. The commenter stated that the list appeared to be incomplete and that additional equipment, referenced elsewhere in the Draft SEIR, was not included. Furthermore, the commenter requests clarification regarding helicopter use at the project site. Overall, the commenter requests that the Draft SEIR is revised to include accurate information about all construction equipment and quantitative emission estimates.

The list of equipment has been refined as discussed in Response B3-B5. These components were included in an updated air quality emissions analysis for PG&E Upgrades which is addressed in detail above, in Responses B3-1 through B3-B4. Moreover, emissions estimates from use of helicopters were based on total usage of helicopters, not the number of helicopters that may be used. As shown in Appendix 4A-1 (Peak Daily Construction Emissions for PG&E Upgrades) and Appendix 4A-2 (Total Construction Emissions for PG&E Upgrades) to the Final SEIR, approximately 300 hours of helicopter flight time with 1 landing or take-off (LTO) for every hour of use was used to estimate emissions from helicopter use.

B3-B8 The commenter states that the DSEIR fails to require adequate mitigation for emissions during construction of the revised project, specifically noting that the number of haul trucks and quantity of soil imported are not included in the DSEIR's mitigation measures.

Refer to Response B3-67.

B3-B9 The commenter states that the DSEIR fails to analyze increase in operational fugitive dust emissions due to changing gravel access roads to dirt path transportation corridors and the new perimeter road.

Section C.4.3.3 of the 2010 Final EIR stated,

The direct operating emissions for routine operation of the solar project are based on approximately 3,633 daily vehicle- miles traveled by workers commuting and trucks for on-site and off-site deliveries, plus travel and routine activity on permanently disturbed (unpaved) area generating a controlled level of dust (SCEC, 2010).

The Applicant has not proposed any changes to these conservative estimates, including the estimated emissions from the movement of vehicles on unpaved roads included in Appendix 3 of the FEIR, Table 8-1: Daily and Annual Operating Emissions and Appendix E. Further, the Revised Project includes a decrease in the amount of Project roads from 168 acres of interior gravel roads included in the Approved Project to 30 acres of perimeter gravel roads. The perimeter road will have gravel or similar overlay to minimize dust and erosion.

B3-B10 Please see General Response GR-4 regarding Valley Fever.

Comment Set B3, Attachment C: Groundwater

B3-C1 Thank you for your comment on the Draft SEIR. The commenter provides an overview of the Project and states that a deficiency in the SEIR is a lack of a discussion regarding general topography of the Project site. However, ground surface topographic information is provided within various project documents within the Final EIR. For the convenience of the commenter, aerial photos of the project site are provided as Appendices 4B-1 and 4B-2. Further, topographic information is available publicly on Google Earth to show changes in surface elevations at the Project site. The commenter also describes a number of refinements to the project from the 2010 Final EIR to the Revised Project presented in the 2014 SEIR.

In response to the comments raised by Dr. Myers, the Applicant requested that Jim Finegan, PhD, PG, CHg and Principal Hydrogeologist with Kleinfelder, review Dr. Myers' comment letter and prepare a letter addressing some of these concerns. Dr. Finegan's letter is included as Appendix 4C-4 to the FSEIR.

- B3-C2 The commenter requests a speed limit be instituted to minimize erosion on the project site and indicates that the addition of temporary construction ponds is the reason for a higher pumping rate. Section C.4.3.4 of the DSEIR includes Mitigation Measure AQ-1.1 which requires "Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site." In addition, as stated in Appendix 4C-4, Dr. Finegan clarifies that filling the construction ponds and tanks will take approximately six days at the rate proposed for the aquifer pumping test (500 gpm). This is a relatively short span of time, and the impact from this relatively minor water use is unlikely to have a significant effect on the overall drawdown caused by project pumping.
- B3-C4 The commenter summarizes the technical analysis of the groundwater impact reports prepared for the DSEIR. These summaries are noted below.

The commenter states that the upper zone is subdivided into two or three zones, from 90 to 170 ft bgs and from 180 to 400 ft. bgs. This is a classic alluvial aquifer with highly heterogeneous zones with variable transmissivity separated by layers of low-transmissivity clay. Geologica (2010b) indicated that many wells had been drilled to 600 ft. but only screened to from 200 to 400 ft. bgs because the deeper layers were low-yielding silt. This description also indicates that most of the wells and groundwater flow would behave as if in a confined aquifer.

In response Dr. Finegan clarifies that confining conditions in an aquifer occur when a zone of low permeability overlies a zone/unit of high permeability. This condition is not present at this site where the lower permeability silt lies *below* the more permeable alluvial aquifer. The interbedded nature of alluvial systems may result in localized areas with leaky or semi-confined conditions (refer, for example, to Freeze and Cherry, 1979); one reason for an extended (72-hour test) is to identify conditions that may affect long term well performance. Accordingly, in compliance with Mitigation Measure WR-1.2, the Applicant will conduct a minimum 72-hour pumping test prior to the start of groundwater extraction operations.

The commenter continues to state that two deeper wells (well #s 10 and 25) have water levels more than 150 ft bgs which means that the deeper aquifer has lower ground-water level and that there probably is downward flow (recharge) from the upper to lower layer.

In response Dr. Finegan states that what the above description indicates is that there is a vertical hydraulic gradient (i.e., groundwater head potential), but it does not indicate that there is flow. Groundwater flow is dependent on the hydraulic gradient as well as the hydraulic conductivity. Flow through a zone of low hydraulic conductivity will be very slow. Generally, the larger the head difference between two zones, the less flow is likely occurring, because if a significant amount of groundwater flow was occurring between two vertically separated zones they would likely have a more similar water level.

B3-C5 The commenter summarizes groundwater pumping data and existing drought conditions and compares the existing drought to historical drought data. A Figure summarizing historical depth to groundwater measurements in wells throughout the Panoche Valley is provided.

In response to the comment, Dr. Finegan points out that 1992-1993 was an El Niño winter, so should not be included in a drought period. The current drought is relatively severe from a historical perspective, so groundwater level declines would be expected. He notes that historical groundwater level data from 2004 to the present for over 40 wells are available. These data indicate that over the past 10 years groundwater levels have declined at some wells and have increased at others despite the drought. The average change in groundwater level for 43 wells during this period is a decrease of just 1.6 feet. The mitigation measures to be implemented, including the pumping test and groundwater monitoring program (Mitigation Measure WR-1.1 and WR 1.2), will enhance the ability to predict changes to groundwater levels within the basin and to quickly react to and mitigate unexpected changes in water levels.

B3-C6 The commenter states that the groundwater level map is irregular and there are notable differences in the contours of the map and the depth of the aquifers.

In response, Dr. Finegan points out that Geologica's contouring has been conducted using standard contouring approaches and depicts a flow regime that is reasonable to expect within a valley such as this, and changing gradients are often seen where, for example, hydraulic conductivity of the geologic material changes and/or between recharge and downgradient areas. As described by the commenter, well #25 is a deep well, screened in a deeper aquifer, and it is clear that deeper wells were not used to develop the interpreted potentiometric surface contours on the groundwater level figure. Because there are just a few deeper wells, it would be difficult to develop a deeper interpreted groundwater surface. However, areas of vertical gradients are readily apparent on Geologica's map simply by comparing the indicated groundwater elevation differences at adjacent wells.

B3-C7 The commenter states that recharge estimate used for this project (one inch/year over the project site) is too high to be used for groundwater modeling of project impacts by Matthews and Haizlip (2014a and b).

Dr. Finegan responds by stating that recharge can be highly variable, both temporally and spatially, in arid to semi-arid areas. However, the value used by Geologica is not unreasonable for similar areas. For example, Scanlon et al. $(2006)^2$ found that "Average recharge rates estimated over large areas (40–374000 km2) range from 0.2 to 35 mm year-1 [0.008 to 1.4 inches], representing 0.1–5% of long-term average annual precipitation." In addition, while recharge will vary spatially, as indicated by the commenter, this

² Scanlon, B.R., K.E. Keese, A.L. Flint, L.E. Flint, C.B. Gaye, W.M. Edmunds, and I. Simmers, 2006. Global synthesis of groundwater recharge in semiarid and arid regions. Hydrol. Process. 20, 3335–3370.

is not especially relevant to the analysis performed by Geologica, which provides a water balance for the entire basin.

The commenter states that the 2010 Geologica analysis of hydrogeologic conditions at the project site was defective because it references a study of groundwater recharge undertaken by Young and Wallender (2002) that the comment claims addressed only recharge in "irrigated" areas. To support this claim, the commenter includes the abstract of the referenced paper (Young and Wallender, 2002) in a footnote. First, the comment asserts a belated attack on the adequacy of a technical study that was prepared in 2010 to support the 2010 Final EIR. The 2010 Final EIR and the various studies that were prepared to support that document and the various methodologies employed in those studies are no longer subject to challenge. Second, a review of the abstract by Dr. Finegan revealed that the footnote does not support the San Joaquin Valley," when it specifically refers to a single water district on the west side of the valley and does not specify only "irrigated areas."

B3-C8 The commenter states that the groundwater modeling completed for the project likely underestimates drawdown because the model was poorly designed and inappropriate for the task of estimating drawdown. Further, the commenter states, the Draft SEIR studies incorrectly subtract groundwater pumping from the balance to estimate recharge because groundwater that is pumped had to recharge before it was pumped.

Dr. Finegan remarks that the water balance was prepared using a standard accepted approach, which includes appropriate inputs and outputs to the system. Groundwater pumping is a component of the water output just as recharge is a component of the input. As stated, discharge from the system may occur by different mechanisms, but understanding these mechanisms individually is important whether the system is in equilibrium or in transition due to a new stress (e.g., pumping). Understanding all components of the budget is especially important in a transient model because of changes in storage that occur from pumping.

The commenter also states that the CHB (constant head boundary) is not described or shown in a figure. However, review of Geologica's 2014 technical memorandum shows that the assigned constant head value of the boundary is provided on page 8 in Section 5.1 as 925 feet and indicated as being "...on the eastern edge of the model grid." The hydraulic characteristics of this boundary would be those of the model cells it occupies.

The commenter states that in practice, steady state conditions become reestablished when drawdown ceases to increase; in reality, steady state is never reached because drawdown continues to draw from further in the model domain or from the boundaries.

In response, Dr. Finegan maintains that a natural system can attain steady-state conditions under many varying sets of conditions and in response to a wide variety of stresses such as changes to recharge conditions following flooding or increase in groundwater extraction. Models attempt to capture the key attributes of groundwater systems, but they are always simulations and may not capture all aspects and details; however, models can attain steady-state conditions as can natural systems. Dr. Finegan confirms that both the modeling analyzed as part of the 2014 Draft SEIR (Geologica, 2014) and the additional modeling to be performed following the proposed pumping test are appropriate based on known site conditions and construction requirements.

The commenter states that typically, a model is developed with model cells that become smaller, or telescope down in size, around a well so that the simulated drawdown is more realistic. This was not done here; therefore, the predicted drawdowns based on the storage coefficients used are grossly too small.

Dr. Finegan states that this is an incorrect understanding of the numerical solutions in MODFLOW and the Well Package that is associated with MODFLOW. The solution does not "care" about the size of the cell. The well drawdown function is solved at the cell node, which in MODFLOW is the center of the cell, no matter what size the cell is, so the solution will not be affected by the cell size. If MODFLOW operated in the suggested fashion, it would be very difficult to use. Thus, the calculated drawdown will be as accurate in a large model cell as in a small model cell.

B3-C9 The commenter also states that the DSEIR simply does not adequately describe the hydrogeology of the wells to be pumped for the project or the wells that could be affected by the project.

Dr. Finegan responds that the assumption implicit in using a one-layer model is that the various conductive lithologies within the aquifer system are actually hydraulically connected throughout the basin. This is likely an accurate assumption for the "shallower" wells; there are a few wells that appear to be screened within a deeper, hydraulically separated, aquifer in the basin. Because the transmissivity values used were calculated from a pumping test, they already implicitly incorporate the natural condition of the aquifer rather than the suggested concept of isolated intervals exhibiting more or less drawdown. This varying drawdown may occur in the very short term due to local vertical hydraulic conductivity differences, but will not be significant after longer pumping times. Although the heterogeneity of the materials is not accounted for in the model, the model is likely to simulate the system with sufficient accuracy that drawdown can be predicted. Further aquifer testing and ongoing groundwater monitoring, as required by Mitigation Measures WR 1.1 and 1.2, throughout the basin will provide additional data on aquifer conditions and the actual effects of long-term pumping for the project. The groundwater level data will be used in real time to monitor the effects of extraction, which can be adjusted as needed.

- B3-C10 The commenter states again that the significant cause of the model underestimating drawdown is recharge, which in turn causes the model to underestimate the effects of pumping. He appears to suggest that simulated pumping in the numerical model will selectively "pull in" recharge from nearby cells before recharge from other areas of the model. Dr. Finegan is not certain what the intent of this comment is by Mr. Myers, but states that recharge in the numerical model is applied equally to the entire domain, and potential short-term hydraulic effects will not be apparent following long-term pumping. In addition, baseflow within the simulated aquifer is the primary source of recharge to the pumped cell.
- B3-C11 The commenter states that the project will increase the impervious area at the site by covering it with solar panels, which will cause more runoff from these areas than predicted by the modeling. The Draft SEIR does not account for this impact.

The Revised Project does not include new components from those described in the 2010 Final EIR that would result in a change to the analysis of Section 15.3.3, Impact WR-4: Creation of new impervious areas could cause increased runoff resulting in flooding or increased erosion downstream. As described in the DSEIR, "Although the total graded area for the Project would increase from approximately 200 acres to approximately 392 acres, the total area of permanent disturbance has decreased, and the amount of impervious surface associated with the substation, switchyard, and O&M building remains unchanged. Compliance with existing regulations, including implementation of a SWPPP, would ensure that runoff is properly controlled. Therefore, this impact would remain less than significant (Class III). Moreover, the control of stormwater as a result of solar panel installation and construction of other impervious surfaces within the Revised Project is mitigated.

The commenter also states that the Draft SEIR does not mention vernal pools. Vernal pools fill with water seasonally and drain by percolating into the ground. Most of this percolation becomes groundwater recharge. The project will cause this recharge to be lost, but the Draft SEIR does not describe the impact or attempt to mitigate it.

Section C.6.1.4 identified approximately 0.26 acres of vernal pools. There has been no modification to the estimated number of vernal pools that will be impacted by construction from the FEIR to the SEIR. Further, Dr. Finegan notes that the indicated vernal pool area is 0.26 acres, which is a very small area within the overall project area of several thousand acres, and is not likely to have a significant effect on the water budget. Moreover, the occupied vernal pool (containing fairy shrimp) is being protected from grading and engineering design will protect overall hydraulics related to this occupied vernal pool.

- B3-C12 The comment is an introduction to subsequent paragraphs, summarizing existing discussion of drainages and wetlands impacts presented in the Draft SEIR. The commenter states that having a permit from the Corps of Engineers does not mean the project will not have substantial impacts. The comment is noted. Discussion of the SEIR's evaluation of drainage patterns and flooding is provided below under responses B3-C13 through B3-C18.
- B3-C13 The commenter requests clarification of which washes have been delineated as federally jurisdictional and what the impacts of the Revised Project would be to these drainages.

The County will update the language in the Final SEIR to include the following information for clarification:

Survey data indicates that the total length of federally jurisdictional waters within the Project Footprint totals approximately 0.39 acres (6,081 linear feet [ft]). Of the 0.39 acres of federally jurisdictional waters, only 0.122 acres (3,504 linear ft) of federal waters will be permanently impacted by the Revised Project.

B3-C14 The commenter requests clarification on the planned impacts to the federally jurisdictional waters. The Applicant will impact five (5) jurisdictional waters of the U.S. due to the construction of the required perimeter road and project elements. The following information does not include the planned impacts to the State waters, only the impacts associated with crossing the federally jurisdictional portions of the creek/drainage. There are two proposed crossings of on the west side of the Project site and three planned on the east side of the Project site, as follows:

- Drainage Impact #1 The project proposes to construct a single span bridge that would require fill and grading of waters within the channel of Las Aguilas Creek. This fill is associated with the placement of rock armoring (riprap) to protect the banks at the crossing within the Ordinary High Water Mark (OHWM) of the federal portion of the Creek. Fill and grading is also required for the perimeter road within the State jurisdictional portion of the Creek (Secondary Bench). Permanent disturbance from fill will be approximately 34 feet squared (ft²) and grading activities would result in impacts to approximately 2,376 ft². Total permanent impacts to the channel within Las Aguilas Creek will be approximately 2,410 ft².
- Drainage Impact # 2 The project proposes to construct a single span bridge that would require a small amount of fill of waters of Panoche Creek. This fill is associated with the placement of rock armoring (riprap) to stabilize the banks at the crossing. Permanent disturbance would result in approximately 24 ft² (0.001 acres) of cut and fill within the OHWM of the Panoche Creek.
- Drainage Impact # 14 The project will impact approximately 0.05 acres (2,317 linear feet) of waters due to the installation of the arched culvert and the required grading/ filling of the drainage below the arched culvert installation.
- Drainage Impact # 19 The project will impact approximately 0.04 acres (1,747 linear feet) of waters due to the installation of the LWC and the associated necessary grading/ filling of the drainage below the LWC installation.
- Drainage Impact # 22 The project will impact approximately 0.03 acres (1,267 linear) of waters due to the filling and diversion of the stream.

The Final SEIR has been modified to include the following information in Impact BR-20 (Section C.6.3.3):

The single span bridges would result in permanent upland habitat disturbance based on the use of permanent upland fill needed at each end of the span to accommodate the higher deck elevation.

At Drainage 1, a single span bridge will be constructed that would require fill and grading of waters within the channel of Las Aguilas Creek. This fill is associated with the placement of rock armoring (riprap) to protect the banks at the crossing within the Ordinary High Water Mark (OHWM) of the federal portion of the Creek. Fill and grading is also required for the perimeter road within the State jurisdictional portion of the Creek (Secondary Bench). Permanent disturbance from fill will be approximately 34 feet squared (ft²) and grading activities would result in impacts to approximately 2,376 ft². Total permanent impacts to the channel within Las Aguilas Creek will be approximately 2,410 ft².

At Drainage 2, a single span bridge will be constructed that would require a small amount of fill of waters of Panoche Creek. This fill is associated with the placement of rock armoring (riprap) to stabilize the banks at the crossing. Permanent disturbance would result in approximately 24 ft² (0.001 acres) of cut and fill within the OHWM of the Panoche Creek. These elevated roads and approaches will result in a wider footprint that could impact additional covered species habitat adjacent to the drainages. Additionally, there would be temporary disturbance of adjacent upland from installation of the bridges and from staging areas needed to assemble the bridge parts and lift them into place.

On the eastern side of the Revised Project, construction would impact three of the five drainages delineated by the USACE (Drainages 14, 19 and 22). The construction of the pipe arched culvert to be placed at Drainage 14 and the necessary grading/filling of the downstream channel would result in the permanent disturbance of approximately 0.05 acres (1,545 2,317 linear feet) of impacts below the OHWM associated with this drainage. There would be less than 0.01 acres (47 linear feet) of disturbance associated with the culvert and roadway installation and 0. 05 acres (1,497 linear feet) of disturbance would be caused by the filling/grading of the channel. The planned construction of the low water crossings (LWCs) proposed at Drainage 19 include the impacts to approximately 0.04 acres (1,165 1,747 linear feet) of jurisdictional drainages due to the installation of the LWC and the associated necessary grading/filling of the drainage below the LWC installations. At Drainage 19, the construction LWC would permanently impact approximately 0.003 acres (89 linear feet) while the grading/filling of the downstream channel would result in approximately 0.038 acres (1,039 linear feet) of permanent impact.³

The planned impacts to the jurisdictional drainage at Drainage 22 involve the construction of the perimeter roadway and the diversion of the jurisdictional drainage into a roadside drainage feature. As stated previously, this roadside drainage feature would convey the surface water from the impact area southeast to an unnamed ephemeral drainage. The jurisdictional channel downstream of roadway installation would be filled and graded and protected from erosion as stated above. This construction would impact approximately 0.03 acres (794-1,267 linear) of jurisdictional stream.

Any activities that involve modification of the bed, bank, or channel of CDFW jurisdictional waters would require permits and approvals from State and federal agencies. Federal crossings would be permitted through obtaining a USACE Section 404(b)(1)-permit and 401 Certification by the RWQCB. The federal crossings, as well as the crossings of washes, creeks, and drainages that are potentially waters of the state and regulated by CDFW, would be permitted through the submittal of an LSAA Notification and ultimately an LSAA that would include requirements for protection of biological resources.

- B3-C15 The commenter states the SEIR does not provide adequate information of each of the federally jurisdictional water impacts. Please see Response B3-C14 for additional information regarding the proposed impacts to the federally jurisdictional waters.
- B3-C16 The commenter requests that the USACE 404(b)(1) analysis of the Least Environmentally Damaging Practicable Alternative ("LEDPA") be provided in the SEIR. The commenter is

³ Impacts include grading and crossings and totals may overlap.

also concerned the culverts proposed on the east side will alter the drainage patterns and affect the downstream hydrology of the drainages. The commenter states bridges would be best suited for the federally jurisdictional crossings.

Regarding incorporating the LEDPA analysis into the Draft SEIR, this analysis is a required component of the USACE's evaluation of the Project's application for a permit to fill portions of federal jurisdictional waters on site. CEQA does not require that these analyses be presented in a Draft EIR. CEQA, does, however require that an EIR analyze the Project's potentially significant environmental impacts, including impacts on drainage and hydrology, and identify feasible mitigation measures and alternatives to the project as a whole. The Draft SEIR does precisely that. An EIR is not required to consider alternatives to an individual component of a project. California Native Plant Society v City of Santa Cruz (2009) 177 CA4th 957, 993. Moreover, the Project's potential impacts on federal jurisdictional waters was disclosed in 2010. To the extent that the commenter had issues or concerns that the 2010 Final EIR was defective for failing to present the LEDPA analysis, the commenter should have raised the issue in 2010 prior to the County's certification of the 2010 Final EIR. While the Revised Project includes some additional impacts to federal jurisdictional waters, this project's impact on federal jurisdictional waters has been known since 2010, when the original Draft EIR was circulated for public review and comment. This is not new information that is being presented for the first time in the Draft SEIR.

Nonetheless, the Applicant has worked closely with professional engineers to design drainage/creek crossings that will have the least damaging impacts to the downstream hydrology of drainages. The Project has been carefully designed so the majority of surface flows (along the eastern perimeter road) from offsite upland areas will be intercepted by a channel located on the upland side of the road. The flows are then conveyed to either a low water crossing, culvert, and/or discharged at the end of the channel. At the downstream end of the culvert or end of channel, the surface grade will be transitioned and flatted from a channel shape to a level spread, so the flows are converted from concentrated flows to sheet flows. Similarly, the low water crossings will act as the spreader, and the proceeding surface grades will continue to spread and level out, promoting the transition to sheet flows. Rip rap or other energy dissipation BMPs will be used in the channel and surface grade transitions as needed to ensure the flows are converted from concentrated flows to sheet flows. In areas where no channel is adjacent to the perimeter road, upland offsite flows will sheet across the road in the same manner as pre-development.

Once in the interior of the site, the stormwater runoff will sheet flow to its respective main water course; either to Las Aguilas Creek, the unnamed north south tributary into Las Aguilas Creek, one of four detention ponds, or Panoche Creek. The stormwater detention ponds are located within the west half of the project. These ponds are designed to intercept the sheet flows from respective sub-basin watershed and to attenuate the additional flows from the Project's added impervious surfaces. Attenuation from the ponds will be achieved by volume storage and discharge via a riser structure and outlet pipe. Full drawdown and discharge from each detention pond is to occur within 24 hours. The outlet pipe discharge will have outlet protection rip rap aprons that are designed in accordance with state and local standards. The rip rap aprons are designed to dissipate the energy and spread the flows.

Downstream discharge of flows from the western half of the Project Footprint will enter into its respective culvert or bridge along Little Panoche Road. Discharge from the eastern half of the Project Footprint will sheet flow into the Las Aguilas Creek. Flows from both sides of the site will ultimately be conveyed to the confluence of Las Aguilas Creek and Panoche Creek. The culverts and bridges along Little Panoche Road as well as the confluence of the two major creeks will be designed so that post-development runoff flow rates do not exceed pre-development runoff flow rates.

- B3-C17 The commenter states the Draft SEIR fails to provide analysis of the effects of erosion at the stream crossings on the east. Please see Response B3-C16 regarding erosion control measures along the eastern portion of the Project.
- B3-C18 The commenter states the Draft SEIR fails to assess how culverts will affect overall drainage pattern on the east side of the project or provide an alluvial fan specific analysis. Please see Response B3-C16 regarding erosion control measures along the eastern portion of the Project. All proposed features of the Project, including the culverts, have been designed in accordance with San Benito County Flood Damage Prevention Ordinance Section 23.31.042 to decrease erosion and scour across the Project site and prevent flooding during storm events. In addition, a comprehensive Hydraulic report analyzed various design flood frequencies at several study points to be used for the hydraulic design of bridges and culverts, as per requirements in Caltrans Highway Design Manual. The Report included hydrologic analysis of the overall watershed draining to the extreme downstream point of the site, and hydraulic analysis of proposed drainage features such as low water crossings, culverts and perimeter channels. It has been formatted to match San Benito County Flood Damage Prevention Ordinance Section 23.31.044 Drainage Report as applicable. While the comment recommends that the DSEIR include an "alluvial fan specific analysis," the County is not required to conduct all the recommended tests or exhaust all research methodologies to evaluate impacts. (See, e.g. Save Panoche Valley v. County of San Benito ("Save Panoche Valley") (2013) 217 Cal.App.4th 503, 524 ["Simply because an additional test may be helpful does not mean an agency must complete the test to comply with the requirements of CEQA"]. In addition, the lead agency may exercise its discretion and decline to undertake additional tests. (Id.)
- B3-C19 The commenter is concerned the construction activity and excavation could degrade water quality due to erosion and sedimentation.

The Applicant will implement a Storm Water Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to minimize erosion, runoff, and potential pollution to water. The SWPPP will be prepared in accordance with the California Construction General Permit Order 2012-0006-DWQ (CGP). Sediment and erosion control will include the use of appropriate stormwater control measures such as hydro-seeding, soil binders, geotextiles and mats, drainage swales, and velocity dissipation devices during construction activities to prevent the discharge of sediment-laden runoff into certain watercourses.

Some of the measures that will be employed to prevent sediment from entering watercourses during or after construction are summarized below.

- A Habitat Restoration and Revegetation Plan for restoration of temporary impact areas within the Project Footprint will be developed for the Project prior to the start of construction.
- All construction and maintenance activities shall be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and intermittent or perennial stream banks.
- B3-C20 The commenter is concerned the Project would increase the impervious area which would increase runoff which could increase flooding and erosion downstream of the drainages and creaks. As described in the 2010 Final EIR, impermeable surfaces created by solar panel arrays and cement slab foundations for the transformers and inverters, switchyard, and buildings would alter hydric and solar regimes through reduced solar radiation and the interception and concentration of precipitation. Some areas within the Revised Project site would receive no direct precipitation, while other areas along the margins of panels would experience increased volumes and flows. This is not a new impact of the Revised Project. In fact, the impact would be less due to the reduction in impervious coverage.

Nonetheless and to address this impact, the Applicant has designed four detention basins that will be constructed as a stormwater control measure pursuant to County requirements and the CGP. These basins are designed to hold sheet flow from stormwater for up to 24 hours to help decrease scour/erosion within the Project Footprint.

All basins were designed using HEC-HMS (Version 4.0) hydrologic modeling software developed by the U.S. Army Corps of Engineers, was used to model the overall water-shed and proposed detention ponds. Storm frequencies analyzed in this report are the 2-year, 10-year, 25-year and 100-year 24-hour storm events. Three proposed detention ponds have been located on the west side of the site to meet peak rate attenuations. Another detention basin is proposed for the Las Aguilas Switching Station, which will be separately owned and operated by PG&E.

The stormwater detention ponds are located within the west half of the project. These ponds are designed to intercept the sheet flows from respective sub-basin watershed and to attenuate the additional flows from the Project's added impervious surfaces. Attenuation from the ponds will be achieved by volume storage and discharge via a riser structure and outlet pipe. Full drawdown and discharge from each detention pond is to occur within 24 hours. The outlet pipe discharge will have outlet protection riprap aprons that are designed in accordance with state and local standards. The riprap aprons are designed to dissipate the energy and spread the flows.

Downstream discharge of flows from the western half of the Project Footprint will enter into its respective culvert or bridge along Little Panoche Road. Discharge from the eastern half of the Project Footprint will sheet flow into the Las Aguilas Creek. Flows from both sides of the site will ultimately be conveyed to the confluence of Las Aguilas Creek and Panoche Creek. The culverts and bridges along Little Panoche Road as well as the confluence of the two major creeks will be designed so that post-development runoff flow rates do not exceed pre-development runoff flow rates.

B3-C21 The commenter is concerned the Project features located in a floodplain or watercourse could result in additional flooding and erosion. Please see Responses B3-C16 and B3-C20.

B3-C22 The commenter states that the Draft SEIR did not consider pumping from any wells in basin other than the project site to include as part of its groundwater modeling. Further, the DSEIR has not considered cumulative pumping, which for 18 months will be more than doubled. The commenter also states that wells pump as if the aquifer domain has an infinite extent, but that boundaries will magnify the drawdown from pumping several wells.

Dr. Finegan responds that several existing wells within the basin currently extract small volumes of water from the aquifer system. The addition of extraction by the construction project will add to the overall groundwater extraction within the basin. While the new temporary extraction may be larger than the other individual existing extractions, it will not cause more drawdown than is predicted by the hydraulic characteristics of the aquifer system. Moreover, Geologica's model (Geologica, 2014) already shows the effect of project pumping reaching the basin boundaries and shows the additional drawdown that will be caused by this pumping. Also note that wells do not pump "as if the aquifer domain has an infinite extent," although pumping test solutions often make this assumption, and pumping from just one well can create a cone of depression that reaches a hydraulic boundary; more than one well is not required for this. It is correctly stated that a hydraulic barrier can magnify drawdown, and this is numerically accommodated in models by use of "image" wells. Following additional aquifer testing, further modeling will be performed to update aquifer parameters and incorporate known conditions within the basin. This will be performed in compliance with Mitigation Measures WR 1.1. and 1.2.

B3-C23 The commenter states that Mitigation Measure WR-1.1 Groundwater Monitoring and Reporting should have been available for public review. Please see General Response GR-1, which explains that the EIR did not improperly defer mitigation. The commenter also states that the Groundwater Monitoring and Reporting plan should provide more details regarding the location of the new or existing pumping wells. Please see General Response GR-1 on deferred mitigation.

The commenter states that there is no guidance as to the depth or thickness of the screens in a monitoring well and goes on to explain how the water level in a well depends on the pressure in the aquifer.

Dr. Finegan clarifies that the water level measured in a well will generally more closely represent the zone with the highest head value, not a weighted average of just the pressure in zones penetrated by the well. In addition, any difference from this higher head value, which is likely to be small, will be a function of the hydraulic conductivity of the layers, as added by the commenter in a subsequent phrase. However, it is not clear if the commenter is suggesting that different head values will be due solely to differences in the aquifer material, which would not be correct.

The commenter continues to state that the DSEIR simply fails to provide any guidance regarding downward and upward vertical gradients and provides suggestions for monitoring well construction. Dr. Finegan responds that a downward vertical gradient simply indicates the potential for downward flow, not that flow is actually occurring. A very steep vertical gradient may be present across a confining layer of low hydraulic conductivity but flow will be limited because of the low conductivity. An artesian condition simply means that the potentiometric head value of an aquifer is above the ground sur-

face elevation. It is possible that the commenter means "under confining pressure" rather than artesian. In addition, the length of a screen interval can be more than 20 feet and still accurately represent the hydraulic head within an aquifer. Regarding the comment with suggestions for well construction to evaluate vertical gradients, Dr. Finegan assumes that the commenter means that, to establish differences in hydraulic head between layers, multiple *hydraulically separated* openings would be required in one well. Separate wells screened in different layers can also be used to evaluate vertical gradients.

The commenter also states that it is necessary to monitor the existing wells for impacts due to the proposed project, but it is not sufficient. Dr. Finegan acknowledges that any well with known construction details can be useful for the monitoring of water levels, including existing pumping wells, which can still provide useful data.

The commenter believes that the monitoring plan is ineffective "to establish pre- and post-construction groundwater level trends" for purposes of addressing off-site well impacts. The commenter's specific criticisms and deficiencies are summarized below with a corresponding response.

- a) The commenter states that it is not possible to establish any kind of trend representative of pre-project conditions by submitting a monitoring plan 60 days before the commencement of pumping and recommends 1 year as the minimum time for establishing a pre-project trend. Dr. Finegan responds that in Geologica's December 2014 memorandum, Geologica includes historical groundwater levels for over 40 wells within the basin, thus providing information on pre-project conditions and trends starting in 2004. Geologica indicated a general downward trend in water levels during the recent drought, although groundwater levels in some wells increased during this period. Therefore, pre-project conditions have already been established and disclosed.
- b) The commenter states that the DSEIR implies that "post-construction ... trends" can be determined before pumping begins since that would be the only trend that can be compared "against observed and calculated trends." Dr. Finegan responds that there are 10 years of groundwater monitoring data for over 40 wells against which post-pumping conditions can be compared. In addition, monitoring for the program mandated by Mitigation Measure WR-1.1 will commence prior to project pumping and will include analysis of trends in water levels.
- c) The commenter states that the DSEIR does not specify what a "calculated trend" might be; in general that would likely be an analytical or numerical model of project pumping with calibrated aquifer parameters, but there is no requirement that, that be provided. The calculated trend would have to be estimated prior to pumping to be able to compare against it. Dr. Finegan responds that, as indicated above, at least 10 years of groundwater level data already exist for over 40 wells within the basin. A method such as the Mann-Kendall would be used to analyze available data and calculate a statistically based trend. New data collected during project activities will be combined with historical data, where available, to calculate long-term trends.

- d) Comparing against a calculated trend would only be comparing whether the estimate was correct, not whether it was causing an impact. Dr. Finegan reiterates the above responses.
- e) A calculated trend would result from an adequate model based on calibration against the established pre-pumping trend. That has not been done for the DSEIR, as it should have been, nor is it proposed for the monitoring. Dr. Finegan reiterates the above responses. Furthermore, the proposed monitoring and reporting program includes evaluation of groundwater levels and comparison to historical levels within the basin.

In further response to comments (b) through (e), it is noted that the modeling and testing completed by Geologica in 2010 and 2014 is appropriate to predict post-construction groundwater trends. Implementation of Mitigation Measures WR-1.1 and WR-1.2 will further refine post-construction assumptions and protect groundwater resources during construction.

- B3-C24 The commenter states that Mitigation Measure WR-1.2 (Aquifer Testing and Well Interference Analysis) is insufficient. Dr. Finegan responds that seventy-two hours is a standard and well-accepted length for a large-scale aquifer test for this type of work, and is expected to stress a sufficiently large volume of the aquifer system to obtain reliable hydraulic characteristics that can be applied to the interference analysis. The existing historical records (described above) and the proposed ongoing high-frequency groundwater monitoring will provide further information on the effects of pumping and whether adjustments are needed during project construction.
- B3-C25 The commenter is concerned that the natural drainage features will not be restored until the facility is decommissioned. The commenter believes this will increase water pollution by allowing overland flow to cause erosion and transport sediment across the site.

The Project has been carefully engineered to dissipate the energy of surface water flow throughout the Project site to decrease scour and erosion potential. The features (culverts, bridges, energy dissipaters, riprap, etc.) of the Project have been designed specific to the hydrologic/hydraulic conditions of the Panoche Valley and the Project. The interior will be graded in certain areas to assists surface flow through the Project. These design features must stay in place to protect the solar panel arrays, O&M building, other structures, and overall water quality (i.e., decrease off-site sedimentation). Once the Project is decommissioned and the concern for scour and erosion on the site is no longer an issue, the Applicant will return the Project site to pre-construction design to allow the natural hydrology to become established.

B3-C26 The commenter has provided a summary of his concerns that the DSEIR has provided an inadequate discussion and estimation of the potential for the project to affect ground-water supplies and groundwater recharge. The reasons include an overestimation of recharge and a numerical model inadequately constructed to estimate drawdown, as described above. The commenter feels project could substantially alter the existing drainage pattern, and the DSEIR changes the mitigation such that disturbance would not be restored until the project is over. Construction could cause erosion and sedimentation and would decrease the impervious area so that runoff would increase. There

would be project features constructed in waterways that could cause erosion and sedimentation.

These concerns have also been addressed in Responses B3-C1 through B3-C25.

- B3-C27 The commenter feels the Draft SEIR should include a mitigation or APM setting a speed limit for transport in these areas. As required in Mitigation Measure AQ-1.1, the Applicant will strictly enforce a 15 MPH speed limit throughout the Project Footprint for all construction vehicles.
- B3-C28 The commenter feels the Applicant should restore areas disturbed by construction to pre-construction conditions once construction for the Project is complete. As required in Mitigation Measure BR-G.3, the Applicant must restore disturbed areas to pre-construction conditions or better. Prior to the issuance of a building permit and removal of any soil or vegetation, the Applicant shall retain a County-approved, qualified biologist, knowledgeable in the area of annual grassland habitat restoration, to prepare a Habitat Restoration and Revegetation Plan (HRRP). The biologist would also be responsible for monitoring the initial implementation of the plan as the Applicant's attainment of the established success criteria. The purpose of the HRRP will be to explicitly identify the process by which all disturbed areas shall be restored to at least pre-construction conditions. The plan will address restoration and revegetation related to disturbance from construction. It will also address restoration and revegetation required after decommissioning of the project. Where topsoil is replaced, a County-approved, qualified soil expert shall assess soil conditions after restoration is complete to ensure that Grade One agricultural soils are returned to their pre-construction condition.
- B3-C29 The commenter states that recharge should be re-estimated using appropriate procedures for the site. Please see Response B3-C7 regarding the recharge rate.
- B3-C30 The commenter feels the groundwater modeling report should be rewritten to include calibration in steady state and with transient conditions and presented in the report. Please see response provided for recharge rate in comment B3-C8.
- B3-C31 The commenter feels the groundwater monitoring plan should be revised to remedy the issues discussed regarding dedicated monitoring wells. Guidance from Sara (2006), Nielsen and Schalla (2006) and Einarson (2006) should be considered in designing a new plan. Please see Response B3-C23 regarding the recharge rate.
- B3-C32 The commenter feels the DSEIR should be rewritten and provided again for public review in draft form to address the issues in the water resource analysis section of the SEIR. The County does not intend to rewrite and recirculate the DSEIR because the DSEIR comprehensively analyzed the potential hydrology, water quality, and water supply impacts of the Revised Project, which is based on expert opinion and analysis.

Attachments D and E: CDFW letters

These letters do not require response.

Responses to Comment Set B4 Sierra Club and SCV Audubon Society

B4-1 This comment is introductory and does not require a response.

- B4-2 The comment generally states that the revised project would not meet the stated project objectives of (1) meeting the state's renewable portfolio goals, (2) minimizing impacts on the environment and (3) achieving full operation in 2016. These general comments are introductory to subsequent comments in the letter that elaborate on these statements. As stated in more detail in Responses B4-3 through B4-7, the revised project would meet the stated project objectives and therefore no reevaluation of project alternatives is required.
- B4-3 The commenter is concerned that the project objective of minimizing environmental impacts by location outside of designated habitat conservation area will not be achieved because of its location within a core population area in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998) for the recovery of San Joaquin kit fox (*Vulpes macrotis mutica*), blunt-nosed leopard lizard (*Gambelia sila*) and the giant kangaroo rat (*Dipodomys ingens*). The commenter expresses concern that the kit fox population is declining, and that two other remaining core recovery areas (the Carrizo Plain and Western Kern County) have been subjected to development, increasing the value of the Panoche Valley core recovery area.

The Draft SEIR addresses the species discussed in the Recovery Plan for Upland Species of the San Joaquin Valley (i.e., San Joaquin kit fox, blunt-nosed leopard lizard, and giant kangaroo rat). The Recovery Plan discusses segmentation of populations of sensitive species. The Revised Project does not conflict with the Recovery Plan. The County also determined that the Approved Project's contribution to cumulative impacts on upland species of the San Joaquin Valley would be mitigated to a less than significant level (Class II) through the implementation of Mitigation Measure BR-16.3 (Preserve, manage, and maintain giant kangaroo rat habitat corridors across the project footprint) and Mitigation Measure BR-23.1 (Create conservation easement on the entire footprint of the Approved Project prior to the start of construction.). These mitigation measures require the maintenance and monitoring of giant kangaroo rat habitat corridors and for the Applicant to place the approved project footprint into a biological conservation easement to be preserved in perpetuity when areas within the project footprint are retired. Additionally, the Draft SEIR includes measures (such as permanent conservation of mitigation lands, and creation of wildlife movement corridors) to reduce impacts to these species to less than significant levels.

- B4-4 The commenter states that the PVSP is not needed to meet California's 33% Renewable Portfolio Standard, because the renewable energy market is "now very mature." The determination as to whether or not this particular project is required to help meet RPS is complex, and requires information that is not publicly available. The project certainly helps to meet renewable energy goals. The County is obligated to evaluate and consider approval of a project that is proposed and consider whether its benefits outweigh its impacts.
- B4-5 The commenter points out that the Draft Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS was released for public comment. The Final DRECP is currently being prepared by the state and federal lead agencies managing its development; the final document is expected to be published later in 2015. No further response to this comment is required.

- B4-6 The commenter suggests that an alternative be considered within the DRECP plan area. The 2010 certified Final EIR did evaluate a Mojave Desert Alternative (Draft SEIR Section E.3.2 and 2010 Final EIR Section E.4.3, Mojave Desert BLM Land Alternative). The analysis concludes that, "Although solar projects are being proposed within the Mojave Desert on both private lands and federal land under the jurisdiction of the BLM, these sites do not present significant environmental advantages to the proposed project. The impacts would affect different sensitive biological species and vistas, but would also create significant impacts."
- B4-7 The comment expresses concern that the Revised Project will not be able to meet the basic project objective of achieving full operation in 2016 to qualify for the Investment Tax Credit (ITC) under the Energy Improvement and Extension Act of 2008 due to the need to obtain regulatory permits as well as the Environmental Impact Statement (EIS), which are still in progress. The commenter summarizes the permitting requirements necessary for the project and requests that the Applicant evaluate whether the Revised Project can obtain the ITC objective and, if necessary, revise the project objective accordingly.

The Revised Project is on track to begin construction in mid-2015 and receive the ITC. Regulatory permit approvals are in process. Most recent submittals for regulatory permits are listed below:

- California Endangered Species Act, Section 2081 (State Incidental Take Permit) Submitted March 2015
- Section 7 Consultation (Biological Assessment) Submitted April 2014
- Clean Water Act, Section 404 Submitted December 2014
- Clean Water Act, Section 401 Submitted December 2014
- Waste Discharge Requirements Submitted December 2014
- The EIS is currently in Administrative Draft form and is expected to be issued for public review in March 2015.

While all of these processes have not been completed, the applicant has applied for and is diligently pursuing the requisite permits, is actively engaged with the various regulatory agencies to facilitate prompt processing of the various permits, and is confident that the project will be in operation by the end of December 2016. While the comment disagrees that the deadline is achievable, this disagreement does not make the SEIR's statement of project objectives somehow defective or inadequate.

- B4-8 This introductory statement does not require a response.
- B4-9 Please see General Response GR-1 regarding deferred mitigation. Regarding the statement that the plans and mitigation measures may be inconsistent with recommendations by the USFWS and CDFW, those agencies were consulted in preparing the 2010 certified EIR. The mitigation measures are intended to comply with CEQA's requirement that defined impacts be reduced or avoided to the extent feasible. The measures are not required to comply with all permitting requirements required by USFWS and CDFW.
- B4-10 The commenter states that the current proposed avoidance buffer for BNLL is not consistent with CDFW recommendations. In addition, the commenter expresses concern

over the preconstruction survey timing being changed to within 30 days of construction, rather than immediately prior to construction.

The Applicant has conducted protocol-level surveys with guidance from the CDFW for BNLL as described under Impact BR-10 in Section C.6.3.3. Mitigation measures include preconstruction surveys for BNLL within 30 days, which the team of biologist has concluded is a sufficient survey window to avoid potential impacts to BNLL that could occur in the construction area. Moreover, the preconstruction survey requirement is just one of the numerous mitigation measures that are designed to completely avoid take of BNLL. Collectively, these measures ensure that impacts would be mitigated to a less than significant level.

Moreover, while the County acknowledges the comment request for a different or additional preconstruction survey, it is important to note that an agency is not required to conduct all the recommended tests (such as preconstruction surveys immediately prior to construction) or exhaust all research methodologies to evaluate impacts. (See, e.g. *Save Panoche Valley v. County of San Benito* (*"Save Panoche Valley"*) (2013) 217 Cal.App.4th 503, 524 citing *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1396 [*"Simply because an additional test may be helpful does not mean an agency must complete the test to comply with the requirements of CEQA"*]. In addition, the lead agency may exercise its discretion and decline to undertake additional tests. (*Id.*)

This issue raised in the comment about the need for a 395 acre buffer to adequately protect BNLL was addressed and rejected by the Court of Appeal in *Save Panoche Valley, supra*, 217 Cal.App.4th at p. 524, who concluded that the recommended 22-acre BNLL buffer would be protective of the species and was supported by substantial evidence in the record. Nonetheless and to afford the BNLL even greater protection, the Revised Project includes an even larger buffer areas (52.4 acres) and protocol level surveys have been completed to document individual BNLL. Accordingly, there is substantial evidence that negative impacts will be sufficiently eliminated with implementation of the mitigation measures proposed in the Draft SEIR. Additional details of mitigation measures that will be implemented to protect BNLL are contained in the Applicant's BNLL Avoidance Plan, which was provided in draft form with the Draft SEIR on the County's website (available at http://cosb.us/wp-content/uploads/Draft-BNLL-AvoidancePlan.pdf). The draft plan will be finalized in consultation with wildlife agencies.

B4-11 The commenter states that impacts to GKR will be greater than expected (based on higher than expected GKR densities found on 2014 surveys). The commenter also expresses concern that GKR densities are underestimated since 2014 surveys occurred during a drought year. The commenter recommends at least 2 consecutive years of surveys in years of average precipitation to establish an accurate baseline.

Commenter incorrectly states that surveys were conducted in 2014 for GKR. Surveys were conducted in 2013. Methods used to determine GKR occupancy included an onsite ground assessment of characteristic burrow presence within 30-meter grids. Every grid in which either active or inactive burrows showing characteristics of GKR activity (suitable burrow size and configuration, scat, tracks) was mapped and considered in the occupancy estimate to be occupied, regardless of activity status at the time of the survey. All burrows found to be inactive at the time of the initial survey in 2013 were

revisited in the summer of 2013 to assess whether subsequent activity was evident. On the Project Footprint, site specific conditions related to historic disking and heavy cattle grazing made detection of clipping and mounds that are typical of long-occupied GKR precincts problematic. Therefore, no attempt was made to count individual precincts. Instead, densities calculated from mark-recapture studies available in the literature for the Panoche Valley area were applied across all of the 30-meter grids identified as potentially occupied (both active and inactive) to calculate a range of individual GKR that may be present.

The methods that were implemented to determine extent of GKR activity on the project footprint and potential occupancy were also used by Bean (2012) during a study in which he compared to mark-recapture trapping and aerial surveys to ground assessment for GKR. Bean found that on ground assessment of GKR burrows performed nearly as well as trapping in determining extent of occupied habitat on a specific site for this species. Additionally, where vegetation clipping was visible, the observer was able to count and differentiate between individual GKR territories (Bean, 2012).

The lack of rainfall and subsequent low annual vegetative cover resulted in greater visibility and detection of burrows. Therefore, these burrow detection surveys would be a reasonable indicator of the potential extent of GKR occupation within the surveyed area.

The commenter misinterpreted the use of the word "typical" in the following sentence from the SEIR: "During periodic population increases, giant kangaroo rats may reproduce in large numbers, making it problematic to predict the upper limit of such a population; however, these conditions would not be considered typical." "Typical" was intended to refer to the population peaks that are difficult to predict and would not be considered typical conditions.

For these reasons, the survey work, data presented and the interpretation regarding potential impacts to GKR are adequately addressed in the Draft SEIR. Mitigation measures also have been included that will reduce the impacts to GKR (See Mitigation Measure BR-16).

B4-12 The commenter states that the GKR/SJAS Relocation Plans have not been approved by the USFWS or CDFW. The commenter also expresses concern that the proposed relocation sites are unoccupied and therefore may not be suitable habitat. The commenter recommends that both GKR and SJAS need to be monitored post-relocation for a minimum of 5 years, and that more definitive success criteria must be provided, and that remediation for lack of success needs to be ensured before any disturbance of the existing populations on the project site.

The Draft SEIR states that Draft Relocation Plans will be developed in coordination with wildlife agencies and that the final plans would be subject to approval and conditions set forth by the wildlife agencies. See language excerpted below from the Draft SEIR, Section C.6.3.3, Mitigation Measure BR-16.1 and Mitigation Measure BR-17.1. Note that only relevant portions of the text are included.

MM BR-16.1 Conduct focused pre-construction giant kangaroo rat burrow/precinct surveys and avoid. ...If avoidance is not possible, the Applicant

and qualified biologist will take the following sequential steps when working in such areas:

- 1. Giant kangaroo rats present in impact areas shall be live trapped and relocated to suitable habitat, as described in an approved Giant Kangaroo Rat Relocation Plan (described below). The Final Giant Kangaroo Rat Relocation Plan will be developed in coordination with wildlife agencies (USFWS and CDFW). ... The Giant Kangaroo Rat Relocation Plan would generally include these components; however the details of the final plan will be subject to the approval and conditions set forth by wildlife agencies.
- MM BR-17.1 Conduct pre-construction San Joaquin antelope squirrel surveys and implement avoidance measures. ... The Final San Joaquin Antelope Squirrel Relocation Plan shall be developed in coordination with wildlife agencies (USFWS and CDFW) and details of the plan will be subject to final agency authorization and conditions of approval.

In addition, the 60-90 day monitoring period proposed for SJAS goes beyond the typical relocation monitoring in currently authorized CESA ITP's (Seneca DEC-12; Gunslinger; Linn Energy; etc.). The purpose of SJAS relocation activities is to avoid direct mortality and injury from project construction activities, thereby reducing potential impacts to individual San Joaquin antelope squirrels. The proposed SJAS relocation plan adequately minimizes the impact by providing a means of removing SJAS from the proximity of direct impacts.

Additional information is presented in the SEIR regarding GKR relocation that is based on experience of biologist at H.T. Harvey at another large scale solar project called the California Valley Solar Ranch (HTH, 2013d).

B4-13 The commenter disagrees with the proposed mitigation ratios for SJKF and claims that they are inadequate. The commenter also disagrees with the SJKF conservation measures and claims that they do not provide enough information regarding habitat suitability determination, and that important criteria such as vegetation type and density, prey availability, surrounding land use and topography, and existing SJKF density are not included in determining suitability. CEQA recognizes that there could be and often are disagreements regarding an EIR's conclusion about potential impacts or the efficacy of mitigation measures; however, such disagreements do not mean that the environmental analysis or mitigation measure is inadequate (14 Cal. Code Regs 15151; See also *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603).

With regard to the commenter's concern about relying on the Haight, et al (2002) model, the reference to use of the Haight model was inadvertently included in the Draft SEIR. This had been removed from the 2010 Final EIR (in APM BIO 19.1).

In this case, the Draft SEIR's analysis of the Revised Project's potential impacts on the SJKF is based on the combined expertise and experience of the team of project biologists. The project biologists have concluded that proposed mitigation ratios for SJKF are adequate and when combined with the numerous other measures that would minimize

impacts on SJKF (APM BIO-19, Mitigation Measure BR-G.5, Mitigation Measure BR-19.1, AMM BR-PGE-12) sufficiently address impacts to SJKF. It is also important to note that "mitigation need not account for every square foot of impacted habitat to be adequate. What matters is that the unmitigated impact is no longer significant." (*Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233.)

With regard to the commenter's view that mitigation lands proposed for conservation are not analyzed sufficiently to determine suitability, this same alleged deficiency was raised in comments attacking the 2010 Final EIR and was rejected by the Court of Appeal in *Save Panoche Valley, supra,* 217 Cal.App.4th at 527-528. The Court of Appeal explained:

Save Panoche Valley finds faults with the Board's conclusion that the mitigation lands, specifically the Silver Creek Ranch and the Valadeao Ranch, are suitable for conservation. We find no merit to this claim. There is substantial evidence in the administrative record supporting the Board's determination that the mitigation lands appropriately reduced the biological impacts to species.

To restate, there is substantial evidence in the administrative record supporting the Draft SEIR's determination that the mitigation lands appropriately reduced the biological impacts to species, such as the SJKF. According to the 2010 Final EIR and the Draft SEIR, the proposed mitigation land at Silver Creek Ranch was specifically identified in the Recovery Plan for Upland Species of the San Joaquin Valley in 1998 as an area with high habitats for many of the special status species in the area. Live Oak Associates surveyed Silver Creek Ranch on behalf of the Project in August and September of 2010, and found the presence of blunt-nosed leopard lizards, loggerhead shrikes, mastiff bats, giant kangaroo rats, San Joaquin kit foxes, antelope squirrels, and American badgers. Additional surveys were completed by Energy Renewal Partners and McCormick Biological in 2013 and 2014 and identified giant kangaroo rats, San Joaquin kit fox, golden eagle, burrowing owl, San Joaquin antelope squirrel, blunt nose leopard lizard, and American badger. The USFWS has also previously identified the Silver Creek Ranch as a critical component for the recovery of many of the species of special concern. Additionally, the Applicant has committed the mitigation lands to be preserved in perpetuity as conservation easements, further bolstering their ability to serve as a vehicle for conservation. Through the implementation of measures outlined in the Conservation Management Plan, the mitigation lands will be managed in a way that promotes the overall wellness and population of the special status species. Though the commenter may have differing views as to the viability of these mitigation lands, there is sufficient evidence in the record to substantiate the SEIRs findings that the proposed lands are adequate.

B4-14 The commenter asks for clarification regarding sheep fencing design and impacts as well as clarification to Mitigation Measure BR-G.2. Modifications to this measure removed the language, "sheep or goat grazing for weed management. Dogs associated with sheep grazing shall not be authorized." The commenter requested clarification regarding whether sheep grazing was proposed as part of the project. Furthermore the comment states that livestock dogs may introduce a new potentially significant impact, but fails to cite any scientific data or evidence to substantiate this claim.

Fencing was included in the ground disturbance estimates. Sheep grazing would occur during operation of the Revised Project during years when there is enough forage on the

site to support grazing. Ongoing grazing will be similar to the levels anticipated in the 2010 Final EIR. The fencing used for sheep grazing would be temporary and would be similar to the perimeter security fencing used around the project boundary. As described in Section B.4.5 of the Draft SEIR, the fence around the project site would be smooth-top chain link in the upper portion, smooth wire in the bottom portion, and a maximum height of 6 feet. Fencing around the site would be 4 feet of chain link with a 5- to 6-inch gap from ground surface to fence bottom to allow for wildlife movement. Fences around the sheep grazing areas and O&M building would utilize the same plan, unless otherwise determined by CDFW and USFWS. All permanent materials would be industrial strength with galvanized steel to aid visual dulling over time

There is no evidence to suggest that utilizing dogs for livestock management would introduce a new potentially impact to the project. The SEIR addresses concerns mentioned by the commenter regarding dogs harassing or killing wildlife. The modifications to the Mitigation Measure BR-G.2 address those concerns by stating that trained animals would be used and would be immunized; see Response B1-25.

The project description clearly states the Applicants intention to allow sheep grazing onsite as described in Section B.10, APM AG-1 and AG-2 of the Final SEIR. These APMs have not been modified since the Draft SEIR, but are included below for the reader's convenience.

- APM AG-1 Grazing sheep on the project site. Sheep If necessary for vegetation control, sheep would be grazed throughout the project site, except on the 50-65 acres where new roads and, buildings, switchyard/sub-station are constructed or where safety concerns would prevent grazing. The grazing operation would be a rotational system using short-duration intensive grazing alternating with periods of rest. The project site would be divided into pastures, which could provide forage for between 750 and 3,600 adult sheep depending on annual rainfall and temperatures. The project site would be grazed between January and May. The Applicant would construct new sheep fencing as necessary. Each pasture would have access to water from existing livestock watering facilities.
- APM AG-2 Allow grazing on lands covered by conservation easement created for biological resource mitigation. Cattle grazing would be used as appropriate to increase biodiversity and maintain the suitability of mitigation lands for protected species habitat. The grazing program would be developed in accordance with grazing BMPs outlined by the Bureau of Land Management and protected species habitat requirements as determined by the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS). The grazing management plan would be developed, implemented, and monitored by the land trust or public conservation agency that holds the habitat conservation easement in consultation with-CDFW and USFWS.

B4-15 The comment states that the Draft SEIR does not discuss how the collaring of SJKF will be used, who will capture and monitor collared animals, or the fact that permits would be required from both the USFWS and CDFW for this activity.

Mitigation Measure BR-19.1 sets forth the framework for the San Joaquin kit fox Conservation Measures document. The reference made by the commenter to collaring is one potential component of the overall measure should the resource agencies agree that this would be an effective measure to reduce impacts. As the measure makes clear, all San Joaquin kit fox avoidance measures, including collaring, would be developed and implemented in coordination with the wildlife agencies (USFWS and CDFW) and that final details will be subject to approval authority of the wildlife agencies.

B4-16 The commenter requests information as to why APM Bio-8 (avoiding washes and streams by 50 feet) was deleted, why text was added that allowed ground disturbance within 100 feet of drainage features, and what mitigation measures are being taken to protect these resources at a comparable level.

Since the 2010 Final EIR was approved, further design and engineering of the Revised Project resulted in the need to impact jurisdictional features identified on the project site. As stated by the Commenter, only those project features that impact state and federal jurisdictional waters will be permitted through approval of a USACE 404 permit and/or LSAA from CDFW. Site specific grading plans for the entire Project would be reviewed by USACE and CDFW through approval of the 404 and LSAA, and protective buffers for those specific project features would be consistent with these permitting requirements.

While it still holds true that impacts to State and Federal drainage features will be subject to regulatory permits and approvals and that the conditions of those permit approvals would reduce impacts to a less than significant level, the Draft SEIR nevertheless included measures to protect drainage features. These include Mitigation Measures BR-G.1 through BR-G.6, which would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Wetland Mitigation and Monitoring Plan (WMMP) is developed and implemented for mitigation lands. Mitigation Measure BR-1.1 would ensure the preparation and implement of a Grazing Plan for vegetation management on the site. Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust.

In order to provide protective measures for those other locations, not subject to the jurisdiction of the USACE or CDFW, Project activities and Project work limits shall comply with setbacks in accordance with revised MM-BR-G.2 (See Response A2-16 for the revised text of MM-BR-G.2).

Implementation of these mitigation measures would reduce both direct and indirect impacts to jurisdictional waters to less than significant levels. The Applicant is in the process of obtaining permits from the USACE, RWQCB, and CDFW to address impacts to State and Federal jurisdictional drainages.

B4-17 The commenter requests additional explanation regarding the proposed change from the 2010 Final EIR to incorporate a new transportation corridor (which the commenter refers to as "New Vasquez Country Road" to provide access to the western portion of the Valadeao Ranch Conservation Lands from Little Panoche Road. The commenter expresses concern that this adds additional impacts and runs closer to a waterway, and is fenced on both sides.

> The Project Description states that the additional transportation corridor will be a maintained fenced-off dirt path, and would be placed south of Aguilas Creek and north of the perimeter fence line. This transportation corridor would replace the existing Vasquez Creek Road and would provide access to the western portion of the Valadeao Ranch Conservation Lands from Little Panoche Road for landowners and ranchers. This new dirt corridor was determined to be a better option for access to the project site than the previous design set forth in the 2010 Final EIR. The Draft SEIR analysis found no evidence that the new transportation corridor would cause potentially significant impacts.

B4-18 The commenter is concerned that the interior project road identified as "New Vasquez Creek Road" is not clearly discussed in the draft SEIR. The commenter states there is no information about the proximity of the road to the Valley Floor Conservation Lands or to Las Aguilas Creek and is concerned about the amount of traffic anticipated, the type of fence to be installed and the impacts of fence and road construction on SJKF, BNLL and other special status species.

To clarify, 'New Vasquez Creek Road' is within the Revised Project Footprint. Appendix 4B-8 to the Final SEIR has been created to illustrate the location of the new road more clearly. The road is runs adjacent to the project fence that is south of Las Aguilas Creek and is approximately 100 feet to 300 feet away from Las Aguilas Creek. The perimeter fence to the north of the road will be the same chain link fence to be installed around the entire Revised Project and is designed with a gap at the bottom to not inhibit the movement of SJKF and other species across the project during operations. The new road will be used by adjacent landowners and by Project personnel during O&M and is not anticipated to have more than approximately 6 vehicle trips on an average day. Preconstruction surveys will be conducted along the new road prior to ground disturbance in compliance with project mitigation measures and all ground disturbance will be monitored by a biologist to prevent potential impacts to special status species. No BNLL have been observed within at least 52.4 acres of this portion of Las Aguilas Creek or the proposed new road.

- B4-19 Please see General Response GR-1 regarding deferred mitigation.
- B4-20 The commenter is concerned about the potential impacts of three proposed temporary construction ponds and the absence of a more detailed description of their use, size, location, and management. The commenter expresses concern that the ponds could result in mortalities to wildlife, either as a breeding "sink" or by attracting predatory species (such as the non-native red fox).

The construction ponds referred to in this comment are described in Section B.4-6 in the Draft SEIR. Two ponds are depicted on Figure B-4. The reference to three construction
water ponds was an inadvertent typo, which has been revised in the Final EIR and is included below:

In order to accommodate water usage during construction, the Applicant proposes to construct three two temporary construction water ponds with a combined capacity of approximately 4.4 million gallons, along with three temporary 20,000-gallon water tanks near existing or new wells.

The use of the construction ponds is to accommodate water usage during construction. Final design is not complete, however the Draft SEIR provides sufficient information to assess impacts associated with these features. Approximate capacity and locations of the tanks are included in the Project Description and summarized here. The Applicant proposes to construct two temporary construction water ponds with a combined capacity of approximately 4.4 million gallons, along with three temporary 20,000-gallon water tanks near existing or new wells. Temporary exclusionary fencing would be installed around the ponds for safety and to restrict access by special status species. The temporary ponds would be removed at the end of construction. Temporary piping would be used to transport water from the ponds to drop tanks at designated locations around the project site. Permanent piping would be installed from permanent water storage tanks to operations and maintenance (O&M) building for use during operations, including providing water to the fire suppression system. As stated above, the exclusionary fencing would be installed to prevent wildlife mortality and was determined to be sufficient mitigation to reduce potential impacts to less than significant levels.

With regard to wildlife safety, the following measure was included in the Biological Resources section (Section C.6.3.3, Impact BR-22) of the Draft SEIR. Measure Mitigation Measure BR-22.1 (partially included below) includes a requirement for barrier fencing that is at least 6 feet tall, made of fine material (at the bottom), and buried at least 2 feet to keep out small animals (including California tiger salamander), regular monitoring and reporting to the wildlife agencies. This was determined to be effective at reducing wildlife exposure. Note that only relevant portions of the measure are included below.

- MM BR-22.1 Fence temporary pond to exclude wildlife. The perimeter of the temporary ponds shall be surrounded by a barrier fence (or combination of fencing) designed to keep wildlife species out. The temporary chain link fence shall be tall enough (6 feet) to keep out large mammals and fine enough at the bottom, and additional fine material exclusionary fencing shall be buried at least 2 feet, to keep out amphibians, reptiles, birds, and small and medium sized mammals. This mitigation measure will be effective because the barrier methods employed will reduce wildlife exposure. The monitoring shall at a minimum include the following:
 - A designated biologist shall regularly survey the ponds at least once per month starting with the first month of <u>construction</u> operation of the ponds. <u>If special-status species</u> <u>are observed dead</u>, entangled or attempting to breach the <u>exclusion fence</u>, the designated biologist will take immediate <u>steps to remedy these problems in coordination with CDFW and</u>

USFWS. The designated biologist shall report the death of any special status species within 24 hours of discovering the carcass to the CDFW and USFWS; non-special status birds or other wildlife deaths shall be reported within two days of discovering the carcass. The designated biologist shall report any bird or other wildlife deaths or entanglements within two days of discovering the carcass to the CDFW and USFWS.

Prepare reports for the County, CDFW, and USFWS. No less than 30 days prior to operation of the ponds, the project owner shall provide to the County engineered drawings of the ponds. The designated biologist shall submit annual monitoring reports to the County, CDFW, and USFWS describing the dates, durations, and results of monitoring conducted at the ponds. The annual reports shall fully describe any wildlife deaths and shall describe actions taken to remedy these problems. The report shall be submitted to the County, CDFW, and USFWS no later than January 30th of every year for construction of the project.

B4-21 The commenter states that while the construction schedule has decreased from 5 years to 18 months, the SEIR does not discuss increased impacts that can be expected from this concentrated work schedule. In addition, the commenter recommends mitigating by requiring that construction does not start until after 2 years of average or more rainfall is recorded in the valley.

The Draft SEIR evaluated the potential impacts associated with the shorter, more intense construction timeframe. Traffic impacts associated with increased construction intensity (and increased personnel requirements) were assessed under Section C.14.3.3. Noise/ vibration impacts associated with the increased construction intensity (including increased traffic projections) are assessed in Section C.11.3.3. Air Quality impacts associated with the increased construction intensity (including fugitive dust) were assessed under Section C.4.3.3. Water use impacts associated with the increased construction intensity (including fugitive dust) were assessed under Section C.4.3.3. Water use impacts associated with the increased construction intensity (including groundwater use for watering of work areas) were addressed in Section C.15.3.3. Furthermore, the Applicant's consultant, Geologica, analyzed whether the increased water pumping during the shorter, 18-month, construction period would substantially deplete local groundwater supplies or interfere with recharge (Geologica, 2014, appended to the Draft SEIR).

Increases in construction intensity that could contribute to biological impacts were addressed thoroughly in the Draft SEIR in Section C.6.3.3. Impacts to San Joaquin kit fox in particular were assessed (Impact BR-19) with regard to increased traffic associated with the more intense construction period. Impact BR-6 also analyzes the potential impacts on wildlife from the accelerated construction schedule, but concludes that these short term construction impacts can be mitigated with implementation of the previously adopted mitigation measures to address this impact.

The Draft SEIR sufficiently evaluated impacts associated with the increased intensity of construction and includes measures to reduce potential impacts to less than significant levels.

B4-22 The commenter states that the use of interstitial space between PV panel rows for transportation corridors (APM Bio-26) could result in burrow collapse and mortality of special-status species (including SJKF, GKR, SJAS, BNLL, BUOW, and badger).

The project has potential to impact burrowing species, such as GKR and others mentioned by the commenter. The use of interstitial space between PV panel rows (transportation corridors) will replace the need for additional, permanent, on-site roads for internal circulation. The transportation corridors were included as project components and evaluated in the Draft SEIR. APMs and Mitigation Measures were proposed which will offset potential impacts to these species to less than significant levels. Though burrow collapse for some burrowing species is a potential impact, implementation of the recommended measures (listed below) are considered sufficient to reduce impacts to less than significant levels.

For all special-status species: Mitigation Measure BR-G.1 through BR-G.6 requires implementation of Best Management Practices (BMPs) that would further reduce impacts to all these species to less than significant levels.

Giant Kangaroo Rat (GKR) – On-site conservation measures for GKR are achieved through APM BIO-15, which would require a GKR relocation plan be developed and implemented prior to start of construction. Off-site conservation measures to GKR are addressed through APM BIO-16 which requires a 3:1 mitigation ratio on conservation lands, and 5 years of monitoring with an adaptive management approach in consultation with wild-life agencies. Furthermore, an incidental take permit from CDFW (Section 2081 Permit) and a Biological Opinion issued by USFWS (Section 7 consultation process) is in the approval process that will cover incidental take of SJKF, GKR, and SJAS. Mitigation Measure BR-16.3 sets forth requirements for preserving, managing, and maintaining giant kangaroo rat habitat corridors across the project footprint. AMM BR-PGE-11 requires avoidance of giant kangaroo rat during PG&E Upgrade construction.

San Joaquin Kit Fox SJKF – Mitigation measure Mitigation Measure BR-19.1 requires pre-construction surveys and implementation of avoidance measures for San Joaquin kit fox. APM BIO-19 sets forth off-site conservation measures for the SJKF.

San Joaquin Antelope Squirrel – AMM BR-PGE-11 requires avoidance of giant kangaroo rat and San Joaquin Antelope Squirrel during PG&E Upgrade construction. Mitigation Measure BR-17.1 would require pre-construction surveys for San Joaquin antelope squirrel and the implementation of avoidance measures.

Blunt-Nosed Leopard Lizard (BNLL) – As with the Approved Project, previously recommended and adopted Mitigation Measures BR-G.1 through BR-G.6 would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Habitat Mitigation and Monitoring Plan and/or a Habitat Management Plan is developed and implemented for mitigation lands. Previously recommended and adopted Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust. In addition, previously recommended and adopted Mitigation Measure BR-10.1 would require pre-construction surveys for blunt-nosed

leopard lizard and the implementation of avoidance measures. Implementation of these measures would also reduce potential for take of individual blunt-nosed leopard lizards.

Burrowing Owl (BUOW) – AMM BR-PGE-17 requires preconstruction surveys and avoidance of western burrowing owl burrows for PG&E Upgrades construction. In addition previously recommended and adopted Mitigation Measure BR-13.1 would require preconstruction burrowing owl surveys and implementation of avoidance measures and previously recommended and adopted Mitigation Measure BR-14.2 would require that an Avian Conservation Strategy is developed and implemented.

American Badger – Mitigation Measure BR-18.1 would require pre-construction surveys for American badger and implementation of avoidance measures. In addition, AMM BR-PGE-12 would require avoidance of San Joaquin kit fox and American badger dens as feasible.

With these APMs, and mitigation measures, the potential for burrow collapse or direct mortality will be reduced to less than significant levels.

B4-23 The commenter states that preconstruction surveys proposed for the PG&E Upgrades cannot ensure avoidance of take of BNLL because lizards may go undetected in underground burrows, and that take of this species cannot be permitted through an Incidental Take Permit or Biological Opinion.

> Impacts to BNLL with regard to PG&E Upgrades are assessed under Impact BR-10 in Section C.6.3.5. AMM BR-PGE-13 addresses exclusion zones for BNLL. The measure includes a provision to deal with underground BNLL (in burrows) through preconstruction monitoring. The project biologists have concluded that this measure is adequate to ensure that the potential impacts to BNLL due to the relatively small scale and temporary PG&E construction period would be less than significant levels. The full text of the AMM is included below for reader convenience.

- AMM BR-PGE-13 Exclusion zones for blunt-nosed leopard lizard. If activities take place within the range of the species and outside the road shoulder, a qualified biologist will identify if burrows are present and if work can avoid burrows. If work cannot avoid the burrows, a qualified biologist will evaluate the site for occupancy and stake and flag an appropriate exclusion zone around the burrows prior to activities at the job site.
- B4-24 The commenter expresses concern that Draft SEIR fails to assess the impacts of the transmission line upgrades on vernal pool fairy shrimp (VPFS) and states that surveys for VPFS were not conducted along the proposed transmission line.

However, the Transmission Line Natural Resources Assessment Report, which was available for public review along with the Draft SEIR (available at http://cosb.us/panoche-valley-solar-farm-project/#.VPqeEPzF9KY) did disclose and analyze the potential VPFS impacts. The following is an excerpt from the report discussing the method used to evaluate vernal pool fairy shrimp (and other brachiopods).

Longhorn Fairy Shrimp, Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, and Vernal Pool Tadpole Shrimp

Surveys for these vernal pool brachiopods are typically required to be conducted by surveyors permitted by the USFWS, and must be completed during the full wet season survey and full dry season survey (USFWS, 1996). Though the transmission line survey was conducted outside the general vernal pool brachiopod survey protocol, the overall purpose of this survey for LHFS, CFS, VPFS, and VPTS was to assess potential habitat within each study area. Potential vernal pool brachiopod habitat was assessed based on topography, local hydrology, and geology. Transects were spaced 30-m apart and surveyors walked on adjacent transect lines, surveying 15-m on either side of their line and stopping occasionally to scan for activity.

According to Appendix A of the Transmission Line Natural Resources Assessment Report, these species are "not likely to occur" within any of the study areas that were surveyed. Therefore, the Draft SEIR did not include a detailed analysis of potential impacts of the PG&E transmission line improvements on these species.

- B4-25 The commenter refers to a court case where the court decided that a Lead Agency could change or eliminate mitigation measures as long as they have a legitimate reason for the change. Where the SEIR proposes to change or eliminate previously adopted mitigation measure, it should do so only after explaining the need for the change (e.g. the previous measure was infeasible, circumstances had changed) and that explanation should be backed by substantial evidence. Detailed responses to specific examples cited by the commenter will be included below. However, in general, the Revised Project has been significantly reduced in size and scope. Changes to mitigation measures were necessary after continued engineering designs and determinations (i.e., emergency access road/ perimeter road) resulted in changed circumstances that made the mitigation previously proposed infeasible from a project execution standpoint.
- B4-26 The commenter requests explanation for the deletion of APM Bio-8, and explanation of the mitigation measures that are being taken to protect these resources at a comparable level. This is a duplicate comment; please refer to Response B4-16.
- B4-27 The commenter requests explanation for the modification of APM Bio-9 that eliminates buffer zones around small mammal burrows and observed BNLL locations in the bottom of washes and streams.

This measure was presented in the Final EIR to mitigate for potential impacts to burrowing animals, such as BNLL. However, since protocol surveys were completed for BNLL and none have been observed on the project footprint, and further engineering has resulted in the infeasibility of full avoidance of streams and washes, this measure as it was written is not applicable to current circumstances. The Applicant understands the BNLL ability to survive is greatly dependent on viable habitat. As such, the Applicant has secured the option to purchase Silver Creek Ranch and will acquire this parcel prior to start of construction, where BNLL have been detected and where suitable and plentiful habitat for BNLL exists. The Applicant has provided a BNLL Proposed Project-Specific Avoidance Buffer Rationale (BNLL Plan) to the wildlife agencies, dated April 23, 2014. This BNLL Plan was included as with Draft SEIR (available at http://cosb.us/wp-content/ <u>uploads/Draft-BNLL-AvoidancePlan.pdf</u>) and provides scientific rationale for modifying the buffer to 52 acres.

Furthermore, the Applicant has included additional measures; Mitigation Measure BR-10.1 requires preconstruction surveys and stringent avoidance measures, including 52.4 acre buffers (using flagging) as described in the BNLL Avoidance Plan.

From Table C.6-4: These minor language changes would not create a new biological impact or substantially increase the severity of a biological impact because protocollevel blunt-nosed leopard lizard surveys have been completed by the Applicant since the approval of the 2010 Final EIR and preconstruction surveys would be performed prior to any ground disturbance.

B4-28 The commenter requests explanation for the deletion of APM Bio-10, which included avoidance of BNLL by a 5-acre buffer. This APM was deleted because it called for full protocol surveys, which had already been completed by the time the Draft SEIR was published. Additionally, the requirement for preconstruction surveys has not been deleted. Preconstruction surveys are required as part of APM BIO-9. Mitigation Measure BR-10.1 requires preconstruction surveys and stringent avoidance measures, including 52.4 acre buffers (using flagging) as described in the BNLL Avoidance Plan.

> From Table C.6-4: The removal of this APM would not create a new biological impact or substantially increase the severity of a biological impact because protocol-level bluntnosed leopard lizard surveys have been completed by the Applicant since the approval of the 2010 Final EIR for the Revised Project site.

B4-29 The commenter requests explanation for deletion of a 50-foot buffer requirement around all BNLL (from APM BIO-23), and an explanation of what measures are in place to provide comparable protection for BNLL. The commenter specifically asks if highly visible markers are no longer required.

This APM was deleted because it called for full protocol surveys, which were already completed. Mitigation Measure BR-10.1 requires preconstruction surveys and stringent avoidance measures, including 52.4 acre buffers (using flagging) as described in the BNLL Avoidance Plan.

From Table C.6-4: The removal of APM BIO-23 would not create a new biological impact or substantially increase the severity of a biological impact because the revisions reflect the completion of protocol-level surveys completed by the Applicant since the approval of the 2010 Final EIR.

B4-30 The commenter requests explanation for deletion of APM Bio-26, which previously restricted project vehicles to defined access routes unless a biological monitor allowed alterations, and asks what measures are in place to provide comparable mitigation. The commenter also requests explanation for changes to APM Bio-11, which included the removal of construction zones demarcated by fencing and buffer zones, and instead references the BNLL Protection Plan, and asks what mitigation measures are in place to ensure comparable protection for BNLL and other species.

APM BIO-26 was deleted because the content is addressed in APM BIO-9, APM BIO-11, APM BIO-13, and Mitigation Measure BR-10.1. Mitigation Measure BR-10.1 requires

preconstruction surveys and stringent avoidance measures, including 52.4 acre buffers (using flagging) as described in the BNLL Avoidance Plan.

B4-31 The commenter requests an explanation of the changes to APM Bio-20, and speculates that this change would allow an employee or contractor to avoid required training programs by borrowing a helmet.

As drafted, the measure continues to state that after the completion of training, employees would be given "a badge or a hardhat sticker that is required for admittance onto the PVSF." There is still the potential for a "badge"; however, the specific contents of the badge has been deleted because it was determined that a measure to use photo identification with color coding is not feasible for implementation in the field due to time to produce/verify each worker in this way. Badges may still be used, but would not require photo identification. Furthermore, it is reasonable to assume that workers will comply with all job requirements, as opposed to speculating that workers will avoid training by simply borrowing the construction helmet of a co-worker, who went through the training.

B4-32 The comment refers to APM AQ-3, which was revised to require gravel track systems. The commenter requests clarification about changes made to this measure since the 2010 Final EIR and the role that gravel trucks could play in fugitive dust emissions.

CEQA does not require this level of detailed analysis. The impacts were quantified in a peak worst-case scenario. Mitigation Measures AQ-1.1 and AQ-1.2 require measures such as watering and implementing speed limits, which will minimize impacts related to fugitive dust to less than significant levels. Under the California Environmental Quality Act (CEQA), an agency is not required to conduct all possible tests or exhaust all research methodologies to evaluate impacts. Cal. Pub. Res. Code § 21002.1(a); Cal. Code Regs. tit. 14, § 15126. The research and calculations set forth in the Draft SEIR, which include peak, worst-case-scenario conditions are adequate to assess impacts.

B4-33 The commenter states that the SEIR must analyze impacts to wildlife from the increase in traffic due to the shortening of the time period of construction, and incorporate measures to avoid or mitigate these impacts.

See Response B4-21. Increases in construction intensity that could contribute to biological impacts were addressed thoroughly in the Draft SEIR in Section C.6.3.3. Impacts to San Joaquin kit fox in particular were assessed (Impact BR-19) with regard to increased traffic associated with the more intense construction period. Mitigation Measures BR-G.1 through BR-G.6 would ensure that (1) All construction personnel participate in the Worker Environmental Education Program; (2) Best Management Practices (BMPs) for biological resources are implemented; (3) A Habitat Restoration and Revegetation Plan is developed and implemented; (4) Biological construction monitoring is implemented; (5) Conservation easements are created for permanent habitat protection as appropriate; and (6) A Habitat Mitigation and Monitoring Plan is developed and implemented for mitigation lands. Mitigation Measure BR-1.1 would ensure the preparation and implementation of a Weed Control Plan and Mitigation Measure BR-1.2 would ensure the development of a Grazing Plan for vegetation management on the site. Mitigation Measure AQ-1.1 would reduce impacts from fugitive dust. In addition, Mitigation Measure BR-19.1 requires pre-construction surveys and implementation of avoidance measures for San Joaquin kit fox. The Applicant would also implement the San Joaquin Kit Fox Conservation Measures. With the implementation of these mitigation measures, and the protected 500-meter wide San Joaquin kit fox corridor through the Revised Project site, impacts to San Joaquin kit fox would remain less than significant.

- B4-34 As illustrated in Appendix 2 to the Draft SEIR, a traffic study was completed for the Revised Project. The study concluded that the traffic levels would not affect the Level of Service for project roadways. However, the Draft SEIR in Section C.14.3.3, under Impact TR-1 (Construction would create unsafe conditions on public roadways), does acknowledge that the increased traffic resulting from the Revised Project has the potential to affect roadway safety. Please see General Response GR-3 regarding traffic safety and changes to mitigation measures that would enhance project safety.
- B4-35 This comment is an introduction to comments B4-36 through B4-38. Please see the responses to the following comments.
- B4-36 The commenter expresses that all sections of roads and bridges on both Panoche Road and Little Panoche Road should be improved to specifications recommended by AASHTOG (18 feet). The roads referred to in the comment are County-maintained roadways. The Applicant is required to implement maintenance measures during construction and rehabilitate roadways as needed pursuant to previously adopted Mitigation Measure TR-1.2. Furthermore, in accordance with the Traffic Control Plan, signage and flagging would be implemented along each segment of Little Panoche Road that is narrower than 18 feet. The Traffic Control Plan required by previously adopted Mitigation Measure TR-1.1 also requires the Applicant to identify measures to ensure safe transport of all trucks to the project site. Roads have been evaluated to confirm that they are capable of supporting the traffic necessary to construct and operate the project with the implementation of required traffic mitigation measures.
- B4-37 The Draft SEIR analyzed the physical conditions of the roadways and determined that the proposed mitigation program will offset impacts to a less than significant level. The analysis considered sharp turns, heavy hauls, and large trucks, and thus the Applicant proposed an additional traffic safety plan. Mitigation Measure TR-1.4 will be implemented to ensure traffic safety through development of a Traffic Safety Plan in coordination with the County and County Sheriff. Impacts were sufficiently analyzed and offset through this measure.
- B4-38 The comment states that pavement degradation is not addressed by Mitigation Measure TR-1.2 (Rehabilitate and monitor roadway pavement). The comment states that pavement degradation is not addressed by Mitigation Measure TR-1.2 (Rehabilitate and monitor roadway pavement).

While there will be an increase in construction traffic on local roadways, the Draft SEIR concludes that the previously adopted Mitigation Measures TR -1.2, which requires roadways to be rehabilitated prior to construction and monitored during construction and TR 1.3, which requires repair of roadway damage, would mitigate this impact. These measures will ensure that the roads can accommodate the increase in construction traffic and will ensure that the condition of the roads will be returned to their preconstruction condition. The comment does not explain how these mitigation measures would be ineffective to mitigate the Revised Project's impact on local roadways. Instead,

the comment criticizes the mitigation as being too vague and lacking in specifics. However, because this mitigation measure is unchanged and was part of the 2010 Final EIR, the time for commenting on the adequacy of that measure was in 2010.

- B4-39 The comment states that the dust control plan (Mitigation Measure AQ-1.1, Control fugitive dust) is deferred mitigation. Please see General Response GR-1 regarding deferred mitigation.
- B4-40 The commenter states that the increase of water use, particularly in light of recent drought, would result in faster drawdown of water and may impact onsite and offsite watercourses and cause impacts to plants and animals. Furthermore, the commenter goes on to state that the mitigation measure Mitigation Measure-WR-1.1 would be difficult to implement in low water years. Also the commenter requests that the SEIR identify how significant drawdown in local wells would be determined to be from pumping or from drought and identify how sample wells would be chosen and what alternate source of water would be utilized if a significant drawdown is identified.

A continued drought would directly affect the amount of drawdown experienced over the long term, because the amount of recharge to the aquifer system is reduced compared to normal rainfall. This might result in greater drawdown. However, impact to local watercourses would be apparent only if the watercourses are directly fed by groundwater (e.g., gaining streams), and impact to plants would occur only to phreatophytes (i.e., plants that directly tap groundwater). Because the depth to water is typically greater than 30 feet and considering the vegetation that is generally present in the Panoche Valley, it is unlikely that any of the watercourses rely on groundwater baseflow or that phreatophytes are common. Thus, additional drawdown that might occur due to the ongoing drought is unlikely to have the suggested impact.

Mitigation Measure-WR-1.1 consists of a groundwater monitoring and reporting plan. Implementation of this plan is unlikely to be impacted by drought (i.e., low-water) conditions. Although shallow wells may go dry during drought conditions, most appear to be sufficiently deep that this is not expected to occur, and replacement wells will be incorporated into the program if any of the monitored wells are compromised.

A substantial database of water levels from 2004 through the present already exists for over 40 wells throughout the valley, and the recent drought is apparent in that water levels have typically declined during the past few years. Therefore, water-level trends due to the drought are already known and will continue to be monitored along with the more rapid changes that are expected from project pumping. In addition, because the monitoring program will commence prior to project pumping, pre-existing water levels and local pumping drawdown may be distinguished from project drawdown. The wells selected for monitoring include those known to be actively pumping, specifically so this effect can be monitored.

B4-41 The commenter again requests that more clarification is provided to explain why new unlined construction ponds would be built after the lined evaporation pond was removed from the plans. The comment expresses concern that wildlife will be subject to harm because the ponds, despite fencing, would attract species such as California tiger salamander. Clarity regarding the pond fencing and whether it would be sufficient to exclude small species such as CTS is requested.

The lined evaporation pond was eliminated and construction water tanks are proposed to accommodate construction water usage. Refer to Response B4-20.

B4-42 The commenter refers to the Draft SEIR, Section B.5 Project Description and the reference for septic and leach field. The commenter suggests that the Final SEIR identify how the system will deal with significantly increased number of workers and activities on the project site and whether the plans were modified to accommodate increased usage for the shorter, more intense 18-month construction period. Specifically, the commenter requests that the Final SEIR evaluate significance criteria related to water quality standards, discharge, polluted runoff (Draft SEIR, Section C.16-3).

The septic and leach field will be constructed for use during operations rather than for use during construction, as the commenter implied. No changes were made to this component of the project because the operations component of the project has not been modified substantially since the 2010 Final EIR. During construction the Revised Project would require the use of portable sanitary facilities. In summary, as stated in the Draft SEIR, Section B.5.5 Other Wastewater, a septic tank and leach field would be constructed alongside the laydown area near the O&M building. The water resources analysis (Section C.15) considers the overall water use by the project and the potential for impacts to groundwater as a whole, including the use of a septic system and leach field.

B4-43 The commenter requests an analysis of alternatives to the proposed microwave towers. If the microwave towers are built as identified in the SEIR, the commenter recommends a monitoring system for impacts to avian species.

> Two microwave towers (approximately 100 feet tall) are proposed to be newly constructed (at the PVS substation and the Helm Substation), and two additional ones would be collocated on existing equipment. The microwave towers do not represent a new addition to the existing environment that would cause operational impacts to avian species as other structures of equivalent height are already in the area. Thus additional monitoring systems would not be warranted.

- B4-44 The County acknowledges its mitigation monitoring or reporting obligations under CEQA first in SEIR Section C.1.4 (Mitigation Monitoring). The 2010 adopted Final EIR included two mitigation measures adopted by the County:
 - Mitigation Measure EM-1 (Provide funding for environmental monitoring) defines the monitoring plan that the Applicant would be required to prepare, and its components. The plan will address authority to stop work, and other requirements.
 - Mitigation Measure EM-2 (Provide documentation for monitoring), establishes a reporting requirement for the Applicant to report on mitigation measure compliance on an annual basis during construction.

Table I-1 presents each adopted measure and the monitoring/reporting actions, timing and methodology, agency or county responsibilities, and Applicant responsibilities.

With respect to the County's funding mechanism to ensure adequate staff resources to support mitigation monitoring, the County anticipates that funding to support County monitoring staff will be provided by the Applicant based on the County agreement with PVSP.

With respect to the mechanism the County can use to address problems with mitigation implementation or permit compliance, the County's issuance of a Conditional Use Permit allows the County to ensure that the Applicant is in full compliance with all adopted measures and permit conditions. If there are problems identified arising from an inspection or a complaint, the County can issue a stop work order to the project, and such an action could result in a CUP modification/revocation hearing.