Appendix C Response to USFWS Comments Regarding Section 7 Consultation

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January 14, 2008



Bakersfield 661-334-2755

Fresno 559-497-0310

Irvine 714-508-4100

Palm Springs 760-322-8847

Sacramento 916-383-0944

San Bernardino 909-884-2255

> San Ramon 925-830-2733

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 88 First Street N.E. Washington, D.C. 20426

Subject: Revised Response to USFWS Comment Letter Regarding Formal Section 7 Consultation for the Lake Elsinore Advanced Pump Storage and Talega-Escondido/Valley-Serrano 500-kV Interconnect Projects, FERC No. 11858

Dear Ms. Bose:

This letter serves as a response to comments given in the United States Fish and Wildlife (USFWS) letter dated June 26, 2007 to the Federal Energy Regulatory Commission (FERC) regarding additional information necessary to complete Formal Section 7 Consultation. This letter report contains project specific impact information requested by the USFWS in order to complete the Formal Section 7 Consultation for the Lake Elsinore Advanced Pump Storage and Talega-Escondido/Valley-Serrano 500-kV Interconnect Projects (LEAPS and TE/VS). This revised letter also addresses the December 2007 designation of final critical habitat for the coastal California gnatcatcher and any changes in impacts related to that report.

For the purpose of this response, MBA and The Nevada Hydro Company (Nevada Hydro) analyzed project impacts as described in the Final Environmental Impact Statement (FEIS), which includes one reservoir location (Decker Canyon), one powerhouse facility (Santa Rosa Facility), two transmission line alternatives (FERC Staff's alternative and Co-Applicant's alternative), a loop-line transmission alignment, two substations (a northern and a southern substation), 316 total transmission line towers, and associated access roads.

As part of the Pre-Certification Process, FERC has requested that Elsinore Valley Municipal Water District and Nevada Hydro coordinate with the USFWS office in order to assist in preparation of the Biological Opinion. MBA has prepared this letter report on behalf of Nevada Hydro as part of the consultation process requested by FERC. MBA has addressed all USFWS comments contained in the June 26, 2007 comment letter. Individual comments are quoted with their corresponding response in the Response to USFWS Comments of June 26, 2007 section below.

MBA, under direction of Nevada Hydro, completed a habitat assessment and focused surveys for quino checkerspot butterfly (*Euphydryas editha quino*), arroyo toad (*Bufo californicus*), and coastal California gnatcatcher (*Polioptila californica*), within all suitable habitat areas within the originally proposed facilities and transmission line alignments. Focused surveys for quino checkerspot butterfly, arroyo toad, and coastal California gnatcatcher were conducted from 2001 to 2006 with negative results (Michael Brandman Associates, 2004 [MBA 2004], Terrestrial Biological Resources Study Lake Elsinore Advanced Pump Storage/Talega-Escondido/Valley-Serrano Interconnect Project).

MBA recently completed an updated analysis of the potential impacts associated with the LEAPS and TE/VS projects on quino checkerspot butterfly, arroyo toad, coastal California gnatcatcher, and Stephens' kangaroo rat as requested by FERC. A habitat assessment based on the FEIS including the

FERC Staff's alternative transmission alignment, the Co-applicant's modified transmission alignments as well as associated access roads was conducted for the four listed species mentioned above. Based on these new transmission line alignments, no new suitable habitat areas were identified for the above-mentioned sensitive species.

Methods

The impact assessment began with a thorough review of existing biological documentation including, but not limited to general biological resource studies, focused surveys for sensitive plant and wildlife species, Jurisdictional Delineation of the Reservoir Sites, the Draft EIS, and the FEIS.

The FERC Staff's alternative, as described in the Draft EIS was used for the initial impact analysis, which includes a single reservoir within Decker Canyon, a northern and southern transmission line alignment, a loop-line transmission line alignment, a single powerhouse location, two substations, associated access roads and several construction staging areas. These project elements were overlaid on a United States Geological Survey (USGS) 7.5-minute topographic quadrangle map and recent aerial photograph in order to begin project assessment. Following the submittal of the FEIS, the new Co-applicant's modified transmission alignment was also overlaid and these new areas were updated prior to completing this response letter.

Nevada Hydro provided MBA with an estimated tower footprint area and an average length between towers as well as several construction staging areas in order to estimate all project related impacts. MBA used this information within the confines of general route localities analyzed in years of field studies and refined more specific tower locations based on vegetation community, close association to existing access roads, and location of existing drainage features (MBA 2004).

Once the estimated tower locations were selected, a more refined assessment of tower location habitat was conducted. The proposed tower locations were overlaid on a 3-dimensional topographic map using an elevational modeling software program. The software provides the ability to place proposed tower locations along ridgelines and gentle slopes, while avoiding steep slopes and canyon bottoms. The 3-dimensionality of the program also allows for accurate placement of towers so that topography would not interfere with transmission lines height requirements or locations.

The vegetation associated with each tower was determined based on the existing plant community data collected by MBA over 6 years of study (MBA 2004). After the tower locations were identified, tower access roads were designed to minimize project impacts to sensitive habitat areas. Existing access roads were not included in the assessment unless it was determined that road widening or other improvements were needed that would create additional impacts to roadside areas. Access roads were placed in areas for ease of access to each site as well as to minimize impacts to potentially sensitive plant and wildlife habitat.

All project-related layers were entered into a Geographical Information System (GIS) database for analysis. Information used during the analysis included the following layers, but was not limited to: topographic maps, recent aerial photographs, soils, critical habitat, California Natural Diversity Data Base (CNDDB), Multiple Species Habitat Conservation Plan (MSHCP) Layers, blue-line drainage crossings, and Stephens' kangaroo rat fee and core reserve areas.

Discussion

As shown in Table 1 and Table 2 in Appendix A, project impacts will result in the removal of seven plant communities and two geographic features including open water and disturbed areas (Appendix B, Plant Community Maps). The vegetation trimming impacts associated with the vegetation management areas will occur within the temporary workspace surrounding the permanent tower impact area and is included in the impact calculations in Table 1 and 2.

The removal of common plant communities such as non-native grasslands, chaparral, ornamental woodlands, disturbed areas, open water, and agricultural areas do not require mitigation measures under National Environmental Policy Act (NEPA) Guidelines. Removal of coastal sage scrub, southern willow scrub, and oak woodland habitat may considered adverse with respect to potential impacts to quino checkerspot butterfly, arroyo toad, coastal California gnatcatcher, and Stephens' kangaroo rat, as these habitats have the potential to support these species.

Based on the FEIS, impacts to coastal sage scrub will be replaced at a 1:1 ratio. Final plant community impacts will be calculated once a final plan has been designed. Although impact amounts are anticipated to be less than indicated in the FEIS, the mitigation ratio will remain the same. A Restoration Mitigation Plan will be prepared to restore suitable habitat areas temporarily impacted by project installation for the federally listed threatened and endangered species mentioned above.

Road impacts have been divided into three separate categories; Existing Roads, Improved Roads, and New Roads. Total impacts associated with access road construction are shown in Table 4 in Appendix A. Where possible, access roads were contained within the 600-foot wide buffer area surrounding the transmission route centerline. The buffer area has been thoroughly surveyed for several years to determine presence/absence of sensitive wildlife species. Access roads that are located outside of the buffer area were not surveyed at the same amount of effort as the transmission line right-of-way, but have recently been evaluated for suitable habitat concerning federal and/or state listed species. These roads are separated based on whether they occur within the existing transmission line right-of-way or outside the right-of-way within Table 4.

The FERC Staff's transmission alignment alternative and Co-applicants' modified transmission line alignment occur within designated critical habitat for quino checkerspot butterfly and California gnatcatcher as well as San Bernardino Kangaroo Rate Fee Area and San Bernardino kangaroo rat core reserve areas included in Table 3 of Appendix A.

The following information is based on the project facilities presented in the FEIS. All areas have been surveyed and assessed and are included in the impact calculations provided in this letter report.

Quino Checkerspot Butterfly

MBA began conducting focused surveys for quino checkerspot butterfly in 2001 based on the approved USFWS protocol. All surveys were conducted east of Interstate (I) 15 within 157.9 acres of marginally suitable habitat based on the previous transmission line alternatives (MBA 2004), but includes both the FERC Staff Alternative and the Co-applicant modified transmission line alignment. Brenda McMillan, a former USFWS representative, recommended focused quino checkerspot butterfly surveys at the time of the original habitat assessment in 2001. The marginal quality habitat is dominated by non-native grasslands with elements of coastal sage scrub. The coastal sage scrub

does not contain a sufficient amount of cover to be considered a separate plant community. The survey area for quino checkerspot butterfly also contains hilltop areas, rocky outcrops, scattered patches of plantago, and cryptogrammic crusts.

Survey areas for this species are shown in Appendix C, Exhibit 1. Surveys for quino checkerspot butterfly were continued for six consecutive years, ending in 2006. No quino checkerspot butterfly were observed or otherwise detected within any of the marginally suitable habitat areas. Common butterfly species observed during the surveys were considered typical for the region suggesting that conditions of the surveys were acceptable for quino observations. The closest recorded occurrence of QBC is approximately 5 miles east of the project site.

There is approximately 8.0 acres of the project facilities located within designated critical habitat for quino checkerspot butterfly (Appendix C, Exhibit 2). This area is located in the northern portion of the transmission line route north of I-15 and includes fourteen transmission line towers and several proposed access roads.

After six years of surveys, MBA has determined that even though there are several elements commonly associated with quino checkerspot butterfly habitat, the portion of the transmission line and the loop-line north of I-15 is considered unoccupied by this species. It is unlikely that this species will occur within the project site or immediate vicinity in the near future.

Arroyo Toad

MBA began conducting focused surveys for arroyo toad in 2001 within marginally suitable riparian habitat. Following the 2001 survey, the areas where re-evaluated and determined to be unsuitable for this species. Subsequently, surveys were not conducted in 2002 or 2003. During MBA's resource agency consultation in 2003, a known occurrence of arroyo toad was recorded by the United States Geological Service within the vicinity of established LEAPS/TV/VS study area near Los Alamos Creek. Surveys for arroyo toad were again conducted in 2004 and continued in both 2005 and 2006.

Marginally suitable habitat for arroyo toad is found at the base of Corona Lakes (formerly Lee Lake) and at the Los Alamos Creek crossing of the transmission line within the Cleveland National Forest (Appendix C, Exhibit 1). The drainage feature that flows from the Corona Lakes Dam is approximately 20 to 30 feet wide and ranges from one to six feet in depth. The drainage contains swift moving water for the majority of the year. The drainage feature does not contain the sand bars and alluvial deposits often associated with this species. There are several ephemeral drainage features west of the main drainage feature, but these features do not provide suitable habitat for arroyo toad.

Los Alamos Creek is an intermittent drainage feature that is approximately four feet wide and less than one foot deep along the portion of the drainage feature potentially affected by transmission line crossing. More suitable habitat is located downstream of this location. Although there are some elements commonly associated with suitable arroyo toad habitat, these areas are not considered moderate to high quality habitat for this species.

Arroyo toad surveys were conducted in four of the last six years, with the last three years being consecutive. No arroyo toads were observed or otherwise detected within the marginally suitable habitat areas that were surveyed.

After four years of surveys, MBA has determined that even though there are several elements commonly associated with arroyo toad habitat, the portion of Los Alamos Creek and Temescal Wash near Corona Lakes, that the transmission line crosses is considered unoccupied for this species. Although direct impacts are not likely to occur during project construction, indirect impacts may occur at occupied habitats located downstream from the project site. The use of erosion control measures and best management practices (BMPs) will eliminate any indirect impacts. BMPs will be specifically described in a Sensitive Species Management Plan. For a more detailed description of the plan please refer to Response to Comment 5 below.

Coastal California Gnatcatcher

MBA began conducting focused surveys for California gnatcatchers in 2001. Suitable habitat is found from the foothills of the Cleveland National Forest to the area near I-15. Survey areas for these species are shown in Appendix C, Exhibit 1. The largest survey area was located at the proposed powerhouse location. Approximately 48.3 acres of coastal sage scrub habitat occurs at this location. California gnatcatcher surveys were conducted within the proposed Powerhouse Facility and selected portions of the transmission line alignment as well as surrounding habitat. Surveys for California gnatcatcher were continued for 6 consecutive years and were completed in 2006. No California gnatcatcher were observed or otherwise detected within any of the suitable habitat areas including all transmission line alignments, project facilities, access roads, and/or additional work space areas.

Total impacts to California sage scrub (CSS) associated with tower impacts is approximately 4.3 acres including both permanent and temporary impacts, which is less than 5 percent of the total amount of impacts to CSS (88 acres). The remaining 83.7 acres includes the powerhouse, northern substation, construction staging areas, and access roads, all of which is outside the designated critical habitat for this species.

Approximately six tower locations are within final designated critical habitat for California gnatcatchers (December 2007). A total of 2.6 acres will be impacted by project related activities, both temporary and permanent within final designated critical habitat for California gnatcatchers (Appendix C, Exhibit 2). The critical habitat areas within the project site are located within the northern portion of the transmission line route and include six tower locations and two access roads. This area includes both the FERC Staff Alternative and the Co-applicant modified transmission line alignment as well as the proposed loop line.

The habitat within the portions of the project site within the designated critical habitat is dominated by non-native grasslands. Suitable California gnatcatcher habitat is located in distinct patches within the vicinity of the project site, but is not directly within the proposed alignment.

After six years of surveys, MBA has determined that even though there are elements associated with suitable habitat for coastal California gnatcatcher habitat, the transmission line alignment, substation, and powerhouse facility are considered unoccupied for this species and coastal California gnatcatchers are not likely to occur within the project site.

Stephens' Kangaroo Rat

Project-specific focused surveys were not conducted for Stephens' kangaroo rat because the sitespecific tower locations, access roads, and staging areas were not designed until 2007. For assessment purposes, the following information was obtained in order to determine the significance of project-related impact to Stephens' kangaroo rat.

The project site contains approximately 50.2 acres of temporary and permanent impacts within the Stephens' kangaroo rat fee area only. This area includes both the FERC Staff's Alternative and the Co-applicant modified transmission line alignment. An additional 8.0 acres, (7.6 acres of temporary and 0.4 acres of permanent impact) occur within the Stephens' Kangaroo Rat Core Reserve Area, including 14 transmission line towers and several proposed access roads (Appendix C, Exhibit 1). These acreages represent the worse-case scenario and project related impacts will likely be less than the above mentioned areas, but will not be any more than what is stated above.

Results

Based on the presence/absence surveys conducted within the project site from 2001 to 2006, MBA has determined that it is unlikely that quino checkerspot butterfly, arroyo toad, and coastal California gnatcatcher occur within any of the proposed impact areas within the project site. Although we cannot completely rule out the possibility that these species may occupy the habitat onsite in the future, the likelihood of these species establishing significant populations in the near future is unlikely. It is highly likely that Stephens' kangaroo rat occupies at least some portion of the survey area north of I-15 due to the close recorded occurrence adjacent to the site and the presence of suitable habitat.

The information presented above and verified with six years of surveys, coupled with comprehensive reviews of the vegetation communities and potentials for these communities to support sensitive species under consideration, provides the foundation for response to USFWS requests listed below.

Response to USFWS Comments of June 26, 2007

MBA and Nevada Hydro have prepared the following responses to the specific USFWS requests as stated in the June 26, 2007 letter. These responses are intended to clarify circumstances regarding impacts to the four federally listed species currently under consideration for Biological Opinion.

Comment 1. "The analysis in the FEIS does not include the potential effects of temporary and permanent roads associated with the construction and operation of the project. Please identify the proposed location of the roads, the acreage of habitat affected, any survey results, and an analysis of effects associated with road building, use and maintenance on federally-listed species."

Response to Comment 1. Included as Appendix A, the Project Impact Tables include all project related impacts as assessed under the FEIS transmission line alignments, project facilities, staging areas, vegetation management areas, and access roads with regard to plant community and suitable habitat for federally listed species. Appendix B includes maps indicating the specific location of the transmission line alignments, loop-line, proposed access roads, tower locations, substations, reservoir

location, powerhouse, and staging areas and the plant communities associated with them (Exhibits 1 to 12b). Appendix C includes maps of the project site illustrating focused survey areas (Exhibit 1) and designated critical habitat areas (Exhibit 2).

An increase in recreational use caused by the installation of additional access roads is not anticipated. Representatives for USFS have specifically stated that all new or improved access roads will be blocked prohibiting recreational activity. Nevada Hydro has agreed to incorporate the USFS policy to all access roads constructed outside of the Forest boundary.

Comment 2. "The FEIS indicates that intensive vegetation management will occur surrounding the proposed structures and transmission lines, but the potential effects of the vegetation management activities do not appear to be fully described. Please identify the acreage of habitat affected, any survey results, and an analysis regarding vegetation management and effects to federally-listed species."

Response to Comment 2. It is likely that some vegetation trimming may be required at each transmission line tower; these areas are referred to as vegetation management areas. A vegetation and road management plan will be required prior to initiation of construction activities. The plan will cover issues such as erosion control, migratory bird treaty act issues, restoration activities, and biological monitors. The plan will be designed as a working document for construction foreman to assist construction crews in avoiding significant biological resources during construction activities. An initial educational program and periodic updates on sensitive species issues will be required for construction workers prior to working on the project. Information necessary for minimizing impacts includes the identification of suitable habitat, species activity periods, species identification, and construction equipment requirements, such as vehicle speed and noise levels.

The vegetation trimming associated with the vegetation management areas will occur within the temporary workspace surrounding the permanent tower impact area and is included in the impact calculations in Table 1. Currently, there are no plans to go beyond the limits of temporary work space. In the event that additional vegetation trimming is required outside of the temporary workspace area, resource agencies will be contacted to discuss the appropriate action prior to implementation if suitable habitat for listed species will be impacted.

Comment 3. "Please specify what noxious weed control measures will be implemented in areas with threatened or endangered species habitats."

Response to Comment 3. Nevada Hydro proposes to design and implement an integrated pest management plan to prevent the introduction of weeds during construction and to control any populations of weeds that are identified near construction sites during project implementation. USFS revised preliminary 4(e) condition no. 33 is very similar, specifying that the Nevada Hydro should consult with the USFS to develop and implement a plan to monitor and control noxious weeds and non-native invasive species, but the USFS specifies this plan should be continued

through any license period. Nevada Hydro has agreed to fulfill these requests not only on USFS lands, but on all project facilities and transmission line alignments.

USFS also indicates that the vegetation and invasive weed management plan should be consistent with guidance provided in the Cleveland National Forest Land Management Plan, including consulting with USFS to design and conduct an invasive non-native plant and noxious weed risk assessment, using weed lists that are current at the time of survey. Implementation of USFS revised preliminary 4(e) condition no. 29, which provides for annual employee awareness training, would apply to noxious weeds and invasive nonnative plants, as well as to special status plants, as described above.

Although the co-applicants may not propose to construct any new project features during the license period, routine project maintenance could cause ground disturbance at project facilities, and project-related traffic could pose a risk of introducing and spreading weeds. Public use of any access roads would have an especially high potential for adverse effects because it would likely be difficult to control. Implementation of a noxious weed management plan throughout the term of any new license for both USFS and non-USFS lands within the project boundary would reduce these risks and help to protect native plant communities and wildlife habitat values. This approach would minimize planning costs and would provide coverage for weeds and invasive exotic plants throughout the project area, as a whole.

Comment 4. "Please provide a focused discussion regarding the potential effects of the proposed project on habitat conditions and the distribution of federally-listed species for the whole project area. In addition to the lack of complete habitat assessment/survey information for roads and vegetation management activities described above, the FEIS indicates on page 3-137 that "Surveys were not conducted in areas where the co-applicants' proposed alignment or staff alternative transmission alignment differ from the original alternatives, or at the southern substation that is currently included in both the co-applicants proposal and the staff." In order to address the missing information documented above for roads, vegetation management, and the proposed facilities, we recommend the completion of habitat assessments and appropriate presence/absence surveys for areas where these studies have not been done."

Response to Comment 4. Portions of the Co-applicants' modified transmission line alignment were re-designed for the FEIS. A habitat assessment was conducted on the Final Staff's Alternative and Co-applicants' modified transmission line alignment as well as the additional work-space areas, access roads, powerhouse facility, loop-line transmission line, and substation facilities with respect to the presence/absence of suitable habitat to support federally or state listed threatened or endangered species. Based on the transmission line locations in the FEIS, the impacted habitat is similar with respect to vegetation communities to the previous route described in the MBA 2004 report (Terrestrial Biological Resources Study). Although these portions of the transmission line routes are in different locations, the habitat type and quality are similar making the conclusions to the impact analysis also similar with respect to the presence/absence of suitable habitat for the four listed species

mentioned above. The re-designed portions of the transmission line alternative contains no additional suitable habitat for the four listed wildlife species.

The majority of the additional access roads required for transmission line tower access are contained within the original 500 foot buffer survey area and focused surveys were conducted where appropriate as part of the FEIS with negative findings. There are two proposed roads in the northern portion of the transmission line alignment that are outside of the original survey area. These roads have been designed to avoid all potentially suitable quino checkerspot butterfly habitat in the area. The roads are located in dense non-native grassland areas that avoid all plantago patch locations in the local vicinity. These areas are not within suitable habitat for quino checkerspot butterfly and surveys are not required. The remaining access roads are located in disturbed areas or dense northern mixed chaparral, which is not considered suitable habitat for any of the above mentioned sensitive species.

Comment 5. "The May 23, 2007, letter provides additional information regarding the potential for release of Lake Elsinore water into the San Juan watershed. Your letter indicates that water from Lake Elsinore would primarily be released into the San Juan watershed during flood events. Please estimate how often these releases could potentially occur, the magnitude of the potential releases, and the nature of the effects to the water quality. Also, the FEIS indicates that remediation measures will be implemented upon the release of non-native species into San Juan Creek. Please specify what measures would be implemented. Finally, the proposed project indicates that transmission towers would be located outside of riparian areas to avoid adverse effects to riparian vegetation and stream habitat. Please specify how far transmission towers will be located from drainages where arroyo toads occur and what erosion control measures will be implemented."

Response to Comment 5. There has been a great deal of concern regarding potential impacts to downstream populations of arroyo toad as a result of over-topping of the reservoir during extreme rain events. The following are examples of minimization measures that will be included in the Sensitive Species Management Plan. Reservoir levels will be monitored constantly during the rain season to make sure the reservoir does not over-top. In the event that the reservoir fills to a point where over-topping can occur, the valves will be opened lowering the reservoir level by allowing the water used for power generation to flow into Lake Elsinore.

A filtering system will be installed into the pipe system, which will prevent larger nonnative invasive wildlife species from entering the upper reservoir from Lake Elsinore, thus reducing the potential for invasive species from entering the freshwater drainage system. There is no way of completely eliminating the possibility of invasive species entering the upper reservoir. A biological monitor will conduct annual surveys downstream of the reservoir for approximately 1,000 linear feet to monitor for any non-native invasive plant and wildlife species, which may adversely affect the downstream populations of arroyo toad or other sensitive species. If observed, all invasive species will be removed immediately and surveys will be conducted monthly

for six months following the removal and return to annual surveys at the discretion of the monitor.

Based on the results of MBA's focused surveys, arroyo toad does not occur within any of the drainage features crossed by transmission lines. The proposed tower locations located near Los Alamos Creek and Temescal Creek are greater than 500 feet from either side of the drainage feature. This project design completely avoids the drainage feature and provides protection for occupied arroyo toad habitat further downstream. BMPs associated with erosion control and water quality will be in place throughout the project area. These BMPs will be designed to protect all project area drainages from erosion and sedimentation.

Comment 6. "Specify whether or not the proposed transmission lines impact the Habitat Conservation Plan for the Stephens' Kangaroo Rat Core Reserve lands and identify the extent of the effects within these area. We also requested specific information regarding any proposed off-setting measures."

Response to Comment 6. Since the project site is located within the established Stephens' kangaroo rat fee area as determined in the 1995 Habitat Conservation Plan (HCP), mitigation measures include payment of the standardized Stephens' kangaroo rat fee for all areas that occur within the Stephens' kangaroo rat fee area. The applicant will comply with all parameters of the HCP. Due to the nature of the project, the fee area will only include the project footprint and not the entire survey area. The total project area of disturbance that occurs within the fee area is 50.15 acres. In addition, 8.0 acres of both temporary and permanent impacts are located within the Stephens' kangaroo rat core reserve area. This area includes 0.4 acres of permanent impacts associated with fourteen of the transmission line towers.

Focused surveys for Stephens' kangaroo rat, although not required, are necessary to determined presence/absence of this species within impact areas once the final tower locations have been designed. If occupied habitat is present at a facility location, options to avoid or minimize impacts will be explored. This could include: relocation of the project facility to another unoccupied location, reduction of the construction footprint, tower design changes, and/or elimination of access roads.

The following mitigation measure will be implemented for compensation with regard to direct and indirect impacts associated with Applicant-initiated ground-disturbing activities undertaken within the Stephens' kangaroo rat (SKR) Core Reserve Area, the Applicant shall acquire, lease, or otherwise obtain possessory interests in compensatory real property containing suitable SKR habitat and subject to the following criteria: (1) compensating real property, off-setting physically disturbed acreage in the Core Reserve Area, shall be on a 1:1 basis, based on the actual area of disturbance; (2) to the extent feasible, the off-setting property or properties shall be located within or directly adjacent to the boundaries of the Lake Mathews-Estelle Mountain Core Reserve Area; (3) the off-setting property or properties shall be occupied by SKR or shall contain suitable habitat for that species; (4) the property shall be maintained for conservation purposes by the existing landowner, the

Applicant, and/or by a wildlife conservation agency; (5) with regards to the selected property or properties, the Applicant shall obtain the concurrence of the United States Fish and Wildlife Service (Service), which shall not be unreasonably withheld. Implementation shall occur within twelve months of commencement of project-related ground-disturbing activities.

As defined by the Riverside County Habitat Conservation Agency, "suitable habitat" shall constitute "lands which are occupied by SKR, as well as lands that are not occupied by SKR but which would benefit SKR if included in a reserve operated and maintained to preserve SKR and its habitat, including, but not limited to potential SKR habitat, wildlife corridors, areas connecting patches of occupied SKR habitat, and areas buffering SKR occupied habitat from adjacent land uses."

In the event that properties cannot be reasonably obtained within or contiguous to the boundaries of the Lake Mathews-Estelle Mountain Core Reserve Area or in the event that the cost to acquire and maintain suitable off-setting properties within that area exceeds the cost of acquiring and maintaining such lands in an established mitigation bank located in southwestern Riverside County, the Applicant shall be authorized to fulfill these obligations through participation in the mitigation bank associated with the Southwest Riverside County Multi-Species Reserve. Purchase of compensating mitigation bank credits at a 1.5:1 ratio shall constitute full compliance with the criteria identified herein.

Applicant's obligations hereunder shall run concurrent with but not extend beyond the terms of any permits, licenses, and/or other approvals issued to the Applicant defining the duration of the Applicant's entitlements and shall terminate on the revocation of such permits, licenses, and/or approvals and/or upon the cessation of facility operations, the removal of related improvements within the Core Reserve Area, and the revegetation of the areas of disturbance with suitable native plant materials.

Comment 7. "Upon development of the above information, we recommend discussions with our agency regarding the inclusion of specific conservation measures to minimize effects to listed species for incorporation into the proposed action. The May 23, 2007, letter indicates that the proposed action is to recommend the development of plans to minimize effects to listed species to the applicant, but does not commit to implementing specific measures. We recommend committing to implementing specific conservation measures as part of the proposed action and including these specific measures in the proposed action. If conservation measures are included, please provide detailed information regarding the proposed measures, especially with regards to the acquisition and dedication of replacement habitat as part of the proposed action."

Response to Comment 7. MBA and Nevada Hydro have ongoing informal consultation with USFWS to assist in providing additional information necessary to complete a Biological Opinion for the Lake Elsinore Advanced Pump Storage and Talega-Escondido/Valley-Serrano 500-kV Interconnect Projects. Nevada Hydro has agreed to commit to all recommended measures in the FEIS as part of the proposed

> action and includes these specific measures in an Impact Assessment Letter Report prepared for USFWS in July 2007. Please refer to the EIS report for detailed information regarding the proposed measures. Furthermore, Nevada Hydro agrees to all of the USFS conditions as stated in the Revised Forest Service Preliminary Section 4(e) Conditions, submitted in 2006 and where appropriate will implement these conditions throughout the project area for all project components. In addition, all BMP's in the Cleveland National Forest Land Management Plan will also be reviewed and implemented where appropriate. All mitigation measures required for this project will be implemented prior to or during ground disturbance activities.

Thank you for reviewing these responses to the USFWS comments. If you have further questions, please feel free to call me at 714.508.4100.

Sincerely,

Scott Crawford, M.A. Section Manager of Natural Resources **Michael Brandman Associates** 220 Commerce, Suite 200 Irvine, CA 92602

Enclosures:	Appendix A: Project Impact Tables
	Appendix B: Project Community Maps
	Appendix C: Sensitive Species Maps

cc: Peter Lewandowski, The Nevada Hydro Co. James Fargo, FERC

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Appendix A: Project Impact Tables

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Main Main Transmission Transmission Line Loop-Line Loop-Line Line Southern Construction Temporary Permanent Temporary Permanent Northern Access Total Total Total Tower Reservoir Powerhouse Substation Substation Tower Tower Tower Staging Road Temporary Permanent Total Survey **Natural Community** Impacts Impacts Impacts Impacts Impacts Impacts Impacts Impacts Areas Impacts Impacts Impacts Impacts Area Non-Native 32.5 2.7 0.5 1.9 .4 0 0.8 13.2 30.3 27.9 10.6 55.5 88.0 294.0 Grassland 0 Coastal Sage 0 0 0 0 48.3 3.6 0 4.4 0 4.4 51.9 56.3 75.2 Scrub 31.1 0 0 0 0 0 78.1 261.5 Northern Mixed 5.7 96.7 47.0 81.0 183.4 1,977.1 Chaparral 0 Coast Live Oak 0 0 0 4.7 0 0 1.9 0.9 0.3 0.9 6.9 7.8 114.9 Woodland -Southern Willow 0 0 0 0 0 0 0 0 0 0 0 0 0 2.0 Scrub Open Water 0 0 0 0 0 0 0 0 3.8 0 3.8 0 3.8 7.3 0 0 0 0 0 0 0 0 0 0 0 0 0.7 Agriculture 0 0 0 0 0 0 0 0 0 5.2 0 0 5.2 7.6 Ornamental 5.2 Woodland 1.6 0.3 0 0 0.9 3.7 22.0 0.1 12.6 3.5 14.2 30.5 44.7 Disturbed 165.1 0.4 102.3 Total 35.4 6.5 1.9 52.8 38.8 32.3 101.8 95.4 139.1 328.2 467.3 2,643.9

Table 1: Permanent and Temporary Impacts to Natural Communities Co-Applicant's Modified Transmission Alignment (June 12, 2006)

Appendix A

Main Main Transmission Transmission Northern Southern Construction Access Total Total Total Loop-Line Loop-Line Line Line Powerhouse Reservoir Total Natural Community Substation Substation Staging Road Temporary Permanent Survey Impacts Impacts Impacts Permanent Temporary Permanent Temporary Impacts Impacts Areas Impacts Impacts Impacts Area Tower Tower Tower Tower Impacts Impacts Impacts Impacts Non-Native 3.6 0.4 0 11.5 33.4 90.3 0.7 1.9 0.8 13.2 30.3 27.9 56.9 368.5 Grassland Coastal Sage 0.3 0.1 0 0 0 48.3 3.6 0 4.4 0 4.7 52.0 56.7 68.3 Scrub 0 0 0 0 0 43.7 Northern Mixed 18.6 3.5 96.7 47.0 65.6 143.9 209.5 1,950.5 Chaparral Coast Live Oak 0.2 0.1 0 0 4.7 0 0 1.9 0.9 0.8 1.1 7.5 8.6 120.8 Woodland -Southern Willow 0 0 0 0 0 0 0 0 0 0 0 0 0 1.4 Scrub Open Water 0 0 0 0 0 0 0 0 3.8 0 0 0 0 7.3 0 0 0 0 0 0 0 0 0 0 0 0 0.7 Agriculture 0 0 0 0 0 0 0 0 0 5.2 0 5.2 5.2 Ornamental 5.2 0 Woodland 1.5 0.3 0 0 0.9 22.0 0.1 12.6 8.4 49.5 149.2 Disturbed 3.7 14.1 35.4 24.2 0.4 102.3 64.4 Total 4.7 1.9 52.8 38.8 32.3 101.8 124.1 295.7 419.8 2673.5

Table 2: Permanent and Temporary Impacts to Natural Communities FERC Staff's Alternative Transmission Alignment

Appendix A

Appendix A

Natural Community Impacts	Main Transmission Line Temporary Tower Impacts	Main Transmission Line Permanent Tower Impacts	Loop-Line Temporary Tower Impacts	Loop-Line Permanent Tower Impacts	Northern Substation Impacts	Access Road Impacts	Total Impacts	Total Survey Area
California Gnatcatcher Existing	.6	0.1	.6	0.1	0	1.2	2.6	53.2
Quino Checkerspot Butterfly	1.3	0.2	1.3	0.2	0	5.0	8.00	131.7
Stephens' Kangaroo Rat Fee Area	2.3	0.5	1.9	0.4	38.8	6.3	50.2	209.4
Stephens' Kangaroo Rat Core Reserve Area	1.3	0.2	1.3	0.2	0	5.0	8.00	131.7

Table 3: Permanent and Temporary Impacts to Critical Habitat to Both Staff's and Co-Applicant's Transmission Line Alignment Alternatives

Appendix A

	Within th	e Transmission	Line ROW	Outside the Transmission Line ROW			
Natural Community	Existing Roads	Improved Roads	New Roads	Existing Roads	Improved roads	New Roads	
Non-Native Grassland	0.00	0.67	6.69	1.78	1.43	2.14	
Coastal Sage Scrub	0.00	0.00	0.00	0.00	0.00	0.00	
Northern Mixed Chaparral	0.05	4.50	58.29	0.68	6.66	36.05	
Coast Live Oak Woodland	0.00	0.18	0.72	0.00	0.00	0.00	
Southern Willow Scrub	0.00	0.00	0.00	0.00	0.00	0.00	
Open Water	0.00	0.00	0.00	0.00	0.00	0.00	
Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	
Ornamental Woodland	0.00	0.00	0.00	0.00	0.00	0.00	
Disturbed	0.51	1.30	0.87	1.83	2.76	1.50	
Total	0.56	6.65	66.57	4.29	10.85	39.69	

Table 4: Total Impacts Associated with Access Roads for Both Staff's and Co-Applicant's Transmission Line Alignment Alternatives

Appendix B: Plant Community Maps

Plant Communities Index Map

1

Appendix B

List of Appendix B Exhibits

1a	Subarea 1 Plant Communities Map -Topographic Base
1b	Subarea 1 Plant Communities Map -Aerial Base
2a	Subarea 2 Plant Communities Map -Topographic Base
2b	Subarea 2 Plant Communities Map -Aerial Base
3a	Subarea 3 Plant Communities Map -Topographic Base
3b	Subarea 3 Plant Communities Map -Aerial Base
4a	Subarea 4 Plant Communities Map -Topographic Base
4b	Subarea 4 Plant Communities Map -Aerial Base
5a	Subarea 5 Plant Communities Map -Topographic Base
5b	Subarea 5 Plant Communities Map -Aerial Base
6a	Subarea 6 Plant Communities Map -Topographic Base
6b	Subarea 6 Plant Communities Map -Aerial Base
7a	Subarea 7 Plant Communities Map -Topographic Base
7b	Subarea 7 Plant Communities Map -Aerial Base
8 a	Subarea 8 Plant Communities Map -Topographic Base
8b	Subarea 8 Plant Communities Map -Aerial Base
9a	Subarea 9 Plant Communities Map -Topographic Base
9b	Subarea 9 Plant Communities Map -Aerial Base
10a	Subarea 10 Plant Communities Map -Topographic Base
10b	Subarea 10 Plant Communities Map -Aerial Base
11a	Subarea 11 Plant Communities Map -Topographic Base
11b	Subarea 11 Plant Communities Map -Aerial Base
12a	Subarea 12 Plant Communities Map -Topographic Base
12b	Subarea 12 Plant Communities Map -Aerial Base



Source: TOPO! USGS 7.5' DRG, USFWS, RCIP, and MBA Field Surveys.



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Exhibit 1 Plant Communities Map

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FERC Staff's and Co-Applicant Alignments
 FERC Staff's Alternative Transmission Alignment
 Co-Applicant Modified Transmission Alignment
 FERC Staff's and Co-Applicant Alignments Tower Locations
 FERC Staff's and Co-Applicant Alignments Parallel Line Tower Locations
 FERC Staff's Alternative Transmission Alignment Tower Locations
 FERC Staff's Alternative Transmission Alignment Tower Locations
 Existing Roads
 Improved Roads

Prospect

2297



2280

247.7

2400

Estelle Mountain 2767

2400







Exhibit 1a Subarea 1 Plant Communities Map Topographic Base

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	FERC Staff's and Co-Applicant Alignments
	FERC Staff's Alternative Transmission Alignment
	Co-Applicant Modified Transmission Alignment
Sis	FERC Staff's and Co-Applicant Alignments Tower Locations
S.S.	FERC Staffs and Co-Applicant Alignments Parallel Line Tower Locations
SUS	FERC Staff's Alternative Transmission Alignment Tower Locations
*	Co-Applicant Modified Transmission Alignment Tower Locations
772	Existing Roads
	Improved Roads



Source: Riverside County NAIP Imagery and MBA Field Survey.



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Exhibit 1b Subarea 1 Plant Communities Map Aerial Base

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	FERC Staff's and Co-Applicant Alignments
	FERC Staff's Alternative Transmission Alignment
	Co-Applicant Modified Transmission Alignment
S.S.	FERC Staff's and Co-Applicant Alignments Tower Locations
***	FERC Staffs and Co-Applicant Alignments Parallel Line Tower Locations
*	Co-Applicant Modified Transmission Alignment Tower Locations
SUS-	FERC Staff's Alternative Transmission Alignment Tower Locations
7272	Existing Roads
111	Improved Roads
1	New Roads

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Exhibit 2a Subarea 2 Plant Communities Map Topographic Base

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FERC Staff's and Co-Applicant Alignments FERC Staff's Alternative Transmission Alignment Co-Applicant Modified Transmission Alignment FERC Staff's and Co-Applicant Alignments Tower Locations FERC Staffs and Co-Applicant Alignments Parallel Line Tower Locations Co-Applicant Modified Transmission Alignment Tower Locations FERC Staff's Alternative Transmission Alignment Tower Locations Existing Roads Improved Roads

15



Source: Riverside County NAIP Imagery and MBA Field Survey.



Exhibit 2b Subarea 2 Plant Communities Map Aerial Base



Source: TOPO! USGS 7.5' DRG and MBA Field Survey.



Exhibit 3a Subarea 3 Plant Communities Map Topographic Base



Source: Riverside County NAIP Imagery and MBA Field Survey.



Exhibit 3b Subarea 3 Plant Communities Map Aerial Base

Co-Applicant Modified Transmission Alignment Tower Locations

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- FERC Staff's Alternative Transmission Alignment Tower Locations -
- FERC Staff's and Co-Applicant Alignments Tower Locations 25
 - FERC Staff's and Co-Applicant Alignments
 - FERC Staff's Alternative Transmission Alignment
 - Co-Applicant Modified Transmission Alignment
 - **Existing Roads**
- Improved Roads



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Source: TOPO! USGS 7.5' DRG and MBA Field Survey.



Exhibit 4a Subarea 4 Plant Communities Map Topographic Base



Source: Riverside County NAIP Imagery and MBA Field Survey.



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Feet

Exhibit 4b Subarea 4 Plant Communities Map Aerial Base





Feet

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Topographic Base



- Co-Applicant Modified Transmission Alignment Tower Locations
- FERC Staff's Alternative Transmission Alignment Tower Locations
- FERC Staff's and Co-Applicant Alignments Tower Locations **
- FERC Staff's and Co-Applicant Alignments
- FERC Staff's Alternative Transmission Alignment
- Co-Applicant Modified Transmission Alignment
- Existing Roads

1



Source: Riverside County NAIP Imagery and MBA Field Survey.



Exhibit 5b Subarea 5 Plant Communities Map Aerial Base



Source: TOPO! USGS 7.5' DRG and MBA Field Survey.



Exhibit 6a Subarea 6 Plant Communities Map Topographic Base

LAKE ELSINORE ADVANCED PUMP STORAGE TALEGA-ESCONDIDO / VALLEY-SERRANO INTERCONNECT PROJECT

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Source: Riverside County NAIP Imagery and MBA Field Survey.



Exhibit 6b Subarea 6 Plant Communities Map Aerial Base





Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

Exhibit 7a Subarea 7 Plant Communities Map Topographic Base

Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 7b Subarea 7 Plant Communities Map Aerial Base

Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

Exhibit 8a Subarea 8 Plant Communities Map Topographic Base

LAKE ELSINORE ADVANCED PUMP STORAGE TALEGA-ESCONDIDO / VALLEY-SERRANO INTERCONNECT PROJECT

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- * Co-Applicant Modified Transmission Alignment Tower Locations FERC Staff's Alternative Transmission Alignment Tower Locations FERC Staffs and Co-Applicant Alignments Tower Locations FERC Staff's and Co-Applicant Alignments
 - FERC Staff's Alternative Transmission Alignment

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Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 8b Subarea 8 Plant Communities Map Aerial Base

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Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

Exhibit 9a Subarea 9 Plant Communities Map Topographic Base

Ornamental Woodland

Riparian

Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 9b Subarea 9 Plant Communities Map Aerial Base

Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

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Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 10b Subarea 10 Plant Communities Map Aerial Base

Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

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Exhibit 11a Subarea 11 Plant Communities Map Topographic Base

- Co-Applicant Modified Transmission Alignment Tower Locations
 FERC Staff's Alternative Transmission Alignment Tower Locations
 FERC Staff's and Co-Applicant Alignments Tower Locations
 FERC Staff's and Co-Applicant Alignments
 FERC Staff's Alternative Transmission Alignment
 - PERC Stall's Alternative transmission Alignment

Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 11b Subarea 11 Plant Communities Map Aerial Base

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Source: TOPO! USGS 7.5' DRG and MBA Field Survey.

Exhibit 12a Subarea 12 Plant Communities Map Topographic Base

LAKE ELSINORE ADVANCED PUMP STORAGE TALEGA-ESCONDIDO / VALLEY-SERRANO INTERCONNECT PROJECT

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- * Co-Applicant Modified Transmission Alignment Tower Locations
- FERC Staff's Alternative Transmission Alignment Tower Locations
- FERC Staff's and Co-Applicant Alignments Tower Locations
 - FERC Staff's and Co-Applicant Alignments
 - FERC Staff's Alternative Transmission Alignment
 - Co-Applicant Modified Transmission Alignment
 - Substation Location
 - Existing Roads
 - Improved Roads
- New Roads

Plant Communities

Agriculture Coastal Sage Scrub Chaparral Disturbed Non-Native Grassland Oak Woodland Open Water Ornamental Woodland Riparian

Source: Riverside County NAIP Imagery and MBA Field Survey.

Exhibit 12b Subarea 12 Plant Communities Map Aerial Base

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Appendix C: Sensitive Species Maps

Appendix C

List of Appendix C Exhibits

- 1 Sensitive Species Survey Areas
- 2 USFWS Designated Critical Habitat Map

Source: TOPO! USGS 7.5' DRG, USFWS, RCIP, and MBA Field Surveys.

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Exhibit 1 Sensitive Species Survey Areas

Source: TOPO! USGS 7.5' DRG, USFWS, and MBA Field Surveys.

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Exhibit 2 USFWS Designated Critical Habitat Map