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Project Title:	Palmdale Energy Project (Formerly Palmdale Hybrid Power Plant) - Compliance
TN #:	216492
<b>Document Title:</b>	Palmdale Energy LLC's Proposed Changes to Staff〙s Condition of Certification BIO-24
<b>Description:</b>	N/A
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## AVIAN AND BAT PROTECTION PLAN / MONITORING BIRD AND BAT IMPACTS FROM SOLAR TECHNOLOGY

## **WILLOW FLYCATCHER MONITORING**

BIO-24 The project owner shall prepare and implement an Willow Flycatcher Monitoring Avian and Bat Protection Plan to monitor bird and bat Willow Flycatcher collisions with- project transmission lines facility features (study described below). The Project owner shall use the monitoring data to inform and develop an adaptive management program that would avoid and minimize Project-related avian and bat impacts. Transmission line pProject-related Willow Flycatcher bird and bat deaths or injuries shall be reported to the CPM, CDFW and USFWS. The CPM, in consultation with CDFW and USFWS, shall determine if the Transmission pProject-related Willow Flycatcher bird or bat deaths or injuries warrant implementation oare in excess of one Willow Flycatcher death or injury warrantsf imposing additional mitigation in the form of project owner provision of additional funding of 5 acres of Willow Flycatcher nesting habitat acquisition for each Transmission line project-related Willow Flycatcher death or injsury pursuant to Condition of Certification BIO-26.adaptive management measures contained in the Avian and Bat Protection Plan. The study design for the Avian and Bat Protection Plan shall be approved by the CPM in consultation with CDFW and USFWS. and, once approved, shall be incorporated into the project's BRMIMP and implemented. The Plan shall include adaptive management strategies that include the placement of bird flight diverters, aerial markers, or other strategies to minimize collisions with the solar arrays transmission lines and project buildings. The Avian and Bat Protection Plan shall include a Bird and Bat Monitoring Study to monitor the death and injury of birds from collisions with the transmission lines and project buildings facility features such as reflective mirror-like surfaces. The -Planstudy design shall be approved by the CPM in consultation with CDFW and USFWS, and shall be incorporated into the project's BRMIMP and implemented. The Willow Flycatcher Bird Monitoring PlanStudy shall be based upon recent avian monitoring studies conducted at energy facilities prior studies by McCrary et al. (1986) or other applicable literature, and shall include detailed specifications on data and carcass collection protocol and a rationale justifying the proposed schedule of carcass searches. The Planstudy shall also include seasonal trials to assess bias -from carcass removal by scavengers as well as searcher bias and proposed disposition of dead or injured birds.

<u>Verification:</u> No more than 60 days prior to ground disturbance the project owner shall submit to the CPM, USFWS and CDFW a <u>Willow Flycatcher Monitoring Planfinal Avian and Bat Protection Plan</u>. Modifications to the <u>Willow Flycatcher Avian Protection Plan</u> shall be made only after approval from the CPM. For one year following the beginning of power plant operation, the Designated Biologist shall submit quarterly reports to the CPM, CDFW, and USFWS describing the methods, dates, durations, and results of

Willow Flycatcher monitoring. The quarterly reports shall provide a detailed description of any Transmission Line project-related Willow Flycatcher bird or wildlife deaths or injuries detected during the monitoring study or at any other time. Following the completion of the fourth quarter of monitoring the Designated Biologist shall prepare an Annual Report that summarizes the year's data, analyzes any Transmission line project-related Willow Flycatcher bird fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive management actions needed. The Annual Report shall be provided to the CPM, CDFW, and USFWS. Quarterly reporting shall continue until the CPM, in consultation with CDFW and USFWS determine whether more years of monitoring are needed, and whether mitigation and adaptive management measures are necessary. After the Bird and Bat Monitoring Study is determined by the CPM to be complete, the project owner or contractor shall prepare a paper that describes the study design and monitoring results to be submitted to the CPM, USFWS, and a peer-reviewed scientific journal. Proof of submittal shall be provided to the CPM within one year of concluding the monitoring study.