

SECTION 1 INTRODUCTION

1.1 INTRODUCTION TO PETITION

K Road Calico Solar, LLC files this Petition For Amendment (Petition) with the California Energy Commission (Commission) to eliminate the use of solar thermal electrical generation technology and replace it with photovoltaic solar technology (PV) for its Calico Solar Project (CSP). For the reasons outlined in Section 1.1.3 below, the Commission has jurisdiction over this Petition. This section describes the procedural background of the CSP and the authority for the Commission to process this Petition For Amendment; outlines the purpose of need of the Petition and outlines the benefits from the CSP after modification.

Section 2 of the Petition describes the modifications proposed to convert the CSP to PV technology as well as the modifications to the project footprint to reduce environmental impacts.

Sections 3, 4, 5 and 6 contain analysis of the proposed modifications comparing the potential environmental impacts from the modified PV configuration to the potential environmental impacts of the original project as approved in the Final Decision. These sections also include an update of laws, ordinances, regulations or standards applicable to the PV configuration. Where appropriate each technical section proposes modifications to the Conditions of Certification contained in the Final Decision.

Section 7 contains an updated Alternative analysis.

Section 8 contains an analysis demonstrating that the modifications do not increase any potential effects on nearby property owners.

Section 9 contains conclusions and recommended findings for Commission consideration.

1.1.1 Final Decision Background

On December 2, 2008 Stirling Energy Systems filed an Application For Certification (AFC) with the Commission for the SES Solar One Project¹. In January 2010, the Applicant merged its subsidiaries into Calico Solar, LLC, and the name of the SES Solar

¹ The project companies were SES Solar One, LLC, SES Solar Three, LLC and SES Solar Six, LLC, wholly owned by Stirling Energy Systems.

One Project was changed to the Calico Solar Project. On December 1, 2010, the California Energy Commission (Commission) issued a decision (Commission Decision) approving and licensing the construction and operation of the CSP. The CSP site is located on 4,613 acres of land in San Bernardino County, California, which is primarily administered by the Bureau of Land Management (BLM). The BLM issued a right-of-way (ROW) grant for the CSP on October 21, 2010. The original CSP had a generating capacity of 663.5 megawatts (MW) that would be produced by solar collectors called “SunCatchers™”. Each SunCatcher consisted of an approximately 38-foot-diameter mirrored dish and a Stirling engine powered by hydrogen generated on site.

1.1.2 First Proposed Amendment

On March 18, 2011, Calico Solar, LLC filed a First Petition To Amend (First Petition) the CSP Final Decision. The First Petition sought approval to convert approximately 563 MW of the SunCatcher technology to PV technology. The Commission assigned a Siting Committee to determine whether or not the Commission had jurisdiction to license the portion of the site that would use PV technology. The Siting Committee ruled that the Commission did not have jurisdiction over the PV technology but was required under the California Environmental Quality Act (CEQA) to review the potential impacts associated with and caused by the conversion to PV. The Siting Committee issued orders to help guide the parties in preparing an appropriate CEQA evaluation consistent with its prior jurisdictional orders.

On August 31, 2011, the Applicant informed the Commission that the name Calico Solar LLC had been changed to K Road Calico Solar LLC.

1.1.3 Legislative Changes to Commission Jurisdiction

On October 4, 2011, the Legislature passed and the Governor signed into law SB 226 (Simitian). SB 226 added Section 25500.1 to the Public Resources Code which authorized the Commission to review and amend a License for a solar thermal power plant to use of PV technology. Section 25500.1 applied to projects that met certain requirements. It was not clear that Section 25500.1 applied to the CSP because the law excluded projects for which a Supreme Court challenge was filed. The author provided a contemporaneous letter to the Senate Journal stating that it was not the author’s intention that this provision “be applicable to a project whose certificate was challenged and subsequently dismissed by the California Supreme Court.” Subsequently, the Legislature passed and Governor signed into law AB 1073 (Fuentes) which removed the restriction for a project that had been the subject of a Supreme Court challenge if

the Supreme Court dismissed the challenge. Although the CSP was challenged at the Supreme Court, the challenge was dismissed. Therefore, it is now clear that the Commission has jurisdiction to process this Petition For Amendment to convert the CSP to entirely PV technology. In accordance with Section (d) of Section 25500.1, the Commission shall process a petition submitted under this section pursuant to Section 1769 of Title 20 of the California Code of Regulations.

1.2 PURPOSE AND NEED FOR AMENDMENT

On December 24, 2010, K Road Sun LLC (K Road) purchased Calico Solar, LLC from Tessera Solar North America. In September 2011 Stirling Energy Systems, LLC, the manufacturer of the SunCatcher technology, declared bankruptcy. K Road Calico Solar LLC determined that the technology would no longer be viable for the Project and proposes to modify the project to eliminate the SunCatcher technology and rather to utilize all Photovoltaic (PV) technology. K Road Calico Solar LLC also determined that the Approved Project phases needed to be modified in order to allow additional time to obtain access over the railroad and to provide an orderly construction schedule.

1.3 PROJECT AMENDMENT BENEFITS

The CSP site has received a Commission Final Decision and a BLM ROW Grant. The Amendments proposed in this Petition provide an opportunity to deliver clean renewable power to Californians without the need to permit a new site. In addition, as described in this Petition, the use of PV technology reduces the visibility of project by reducing the overall height of structures, eliminates the use of hydrogen, and reduces operations noise. The Modified Project will also reduce the original CSP footprint to further avoid environmental impacts. K Road Calico Solar LLC is actively pursuing power purchase agreements with qualified off takers and anticipates bidding the Modified CSP into the new Renewable Request For Offers by public utilities. The use of a fully permitted site as reconfigured to further lessen environmental impacts, with an approved Large Generator Interconnection Agreement, is a responsible approach to helping California achieve its Renewable Portfolio Standards and beyond.

In order to further address environmental concerns raised by environmental groups acting as interveners during the initial Licensing and the First Petition proceedings, K Road Calico Solar, LLC has reconfigured the site and further reduced the footprint. Specifically, the Modified Project reduces the project footprint from 4,613 acres to 3,851 acres and provides the following environmental benefits:

- Highest quality desert tortoise habitat is avoided
- Allows for a wildlife movement corridor through the center of the Project
- Reduces impacts to the White-Margined Beardtongue from four (4) distinct areas to one (1)
- Excludes 69 acres of Mojave Fringe Toed Lizard habitat. This total acreage includes 17 acres of the 21.4 total acres of high quality breeding habitat.
- Excludes the donated lands (Catellus Lands) within Section 17 from the site.

1.4 SCOPE OF ANALYSIS

The First Petition raised several jurisdictional questions that were ultimately decided by the Siting Committee. However, with the recent amendments to PRC Section 25500.1, it is clear that the Siting Committee has full jurisdiction over this Petition For Amendment. Therefore, the issues raised by the jurisdictional questions are moot. The Commission should process this Petition in accordance with Section 1769 of its regulations and the well-established principles of practice the Commission has followed when processing other petitions. This Petition has been prepared in accordance with those principles, focusing on comparing the modifications proposed herein to the original project as described in the Final Decision.