STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission

DOCKET 08-AFC-13

DATE JUL 29 2010

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In the Matter of:
The Application for Certification
for the Calico Solar Power Project
Licensing Case

Docket No. 08-AFC-13

INTERVENOR BNSF's POST HEARING BRIEF

1. <u>INTRODUCTION</u>

Intervenor BNSF Railway Company ("BNSF") hereby submits its "Post Hearing Brief" pursuant to the California Energy Commission Calico Solar AFC Committee's (the "CEC") Notice of Continuance of August 18, 2010 Hearing and Revised Briefing Schedule. The purpose of this brief is to provide the CEC with necessary and relevant information and legal citation with which the CEC can make an appropriate decision regarding certification, to include the incorporation of appropriate and necessary Conditions of Certification on the Applicant relating to BNSF's railroad operations.

As set forth in BNSF's Petition to Intervene, filed July 29, 2010 and granted by the CEC on August 3, 2010, while the Calico Solar Project (the "Project") which is the focus of the CEC's certification proceedings in this matter has been ongoing since December 2008, BNSF first became aware of significant environmental and safety issues relating to BNSF's operations in June 2010. Those issues of concern fall into six disparate categories; four of which it appear through testimony received during the previous four days of evidentiary hearings and coordination with Applicant Calico Solar LLC ("Applicant" or "Calico Solar") and the CEC Staff (the "Staff") that BNSF, Applicant, and Staff appear to be in

¹ The title is a misnomer inasmuch as the evidentiary hearings in this matter have not yet concluded and are set to resume on August 25, 2010.

substantial agreement relating to appropriate and necessary Conditions of Certification.

Those categories have been referred to throughout the Record in this proceeding as: (1) Transmission Line Safety & Nuisance (Transmission Lines); (2) Hazardous Materials (Hydrogen); (3) Biological Resources (Desert Tortoise); and (4) Hydrology/Soil & Water (Detention Basins). This brief details those categories and provides the CEC with corresponding references to the Record reflecting the parties' agreement to assist the CEC in incorporating the appropriate and necessary Conditions of Certification into the Presiding Members Proposed Decision.

There remain two categories where the parties have made substantial progress but have not reached agreement. Those both relate to Transportation Traffic. The first category relates to access roads and the construction of an atgrade crossing and a grade separation bridge within the BNSF Right-of-Way (the RoW"). The second relates to glint and glare. This brief sets forth how Applicant has failed to meet its burden of proof to present evidence establishing: (1) that the principal adverse impacts to the environment as a result of the Project can be mitigated or avoided in relation to BNSF's railroad operations; and (2) that the Project can be constructed and operated safely in relation to BNSF's railroad operations. Finally, this brief sets forth how BNSF has made the requisite reasonable showing based on the Record that appropriate Conditions of

Certification mitigating the proposed project's adverse impact on the BNSF railroad must be incorporated by the CEC into the Presiding Member's Proposed Decision if the decision is to certify.

2. FACTS AND PROCEDURAL HISTORY RELEVANT TO BNSF

A. <u>BNSF's Mainline</u>

BNSF is one of two Class 1 railroads operating in California. BNSF's transcontinental mainline, traversed by as many as 80 trains per day, carries interstate commerce from the Ports of Los Angeles and Long Beach to U.S. Midwestern, Southwestern and Eastern markets. BNSF's mainline has operated through the section of the Mojave Desert, where Calico Solar has now proposed its Project, for over one hundred years. Approximately 40 percent of all of the nation's west coast imports and exports transit the railroads in California. The proposed Project, comprised of 34,000 solar dishes (SunCatchers), transmission line upgrades, detention basins, etc., would surround both sides of approximately 5 miles of BNSF's transcontinental mainline tracks. The mainline through the section where the proposed Project plans on emplacing 34,000 SunCatchers has two at-grade crossings, a significant curve, changes elevations, requires engineers to adjust speed through curves and elevation changes, and has six signals with

critical safety features on which the engineers rely to ensure that they do not collide with other trains moving through the section.²

Accordingly, BNSF has significant and legitimate concerns that the safe construction and operation of the Project do not adversely impact BNSF operations or otherwise impose unacceptable safety risks to BNSF personnel and operations. An adverse impact to rail traffic by the Project construction or operations could have a devastating impact on interstate commerce and portions of this nation's economy. BNSF carries transcontinental shipments of, *inter alia* coal, grains, and merchandise for everything from UPS to major retailers. BNSF trains currently run approximately every fifteen minutes in both directions and extend for over a mile in length. Due to the critical role of BNSF's mainline in interstate commerce, BNSF must continue to maintain complete and unimpeded access to and use of its Right-of-Way ("RoW") and sole and independent discretion to ensure that its rail operations are safe and efficient.³ In addition, as a transcontinental railroad impacting interstate commerce, BSNF is subject to federal regulations and oversight.⁴

The consummation of the Project would require the voluntary granting of several licenses and permits by BNSF, which Applicant Calico Solar ("Calico

² Exhibits 1203 (Prepared testimony of Joseph Schnell), 1204 (Prepared Testimony of Dennis Skeels), 1206 (Prepared Testimony of Edward Phillips); Exhibit 3 to Exhibit 1203 (Track Chart); testimony of Joseph Schnell ("Schnell"), Transcript of August 18, 2010 ("8/18/2010 TR") at 94:2-95:2.

³ Exhibits 1203, 1204, 1206; Schnell testimony, 8/18/2010 at 95:3.

⁴ Exhibits 1203, 1204, Schnell testimony, 8/18/2010 TR at 96:21-97:19.

Solar") has requested in a piecemeal fashion over the course of the past year. To date, only preliminary access agreements have been granted, including a permit to survey on the RoW and a permit for Calico Solar to transit over the existing atgrade crossing in the vicinity of Hector Road. Before BNSF can grant further licenses and permits, BNSF must be assured that its significant safety and operational concerns are addressed and that Calico Solar agrees to immediately eliminate any interference with BNSF rail operations, if it were to arise.⁵

B. <u>Brief Procedural History</u>

The Project inception was December 2008. The CEC Staff Assessment and Bureau of Land Management's ("BLM") Draft Environmental Impact Statement ("SA-DEIS") was issued March 30, 2010. The Transportation and Safety section of the SA-DEIS referenced access roads and a grade-separation bridge on BNSF's RoW, but there was no environmental study relating to the impacts of those proposed Project features. See SA-DEIS at C.11-6 and C.11-7. The Transportation and Safety section of the SA-DEIS noted that glare and glint impacts had not been analyzed and the Staff was in the process of obtaining additional information. See SA-DEIS at C.11-15. On July 1, 2010, BNSF provided written comments on the SA-DEIS to the CEC and BLM.⁶ A Supplemental Staff Assessment (the "SSA") was issued on July 21, 2010. The

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⁵ Exhibits 1200, 1201, 1202, 1203, 1204, 1206.

⁶ Attached hereto as Exhibit "A."

Transportation and Safety section was blank with the exception of two figures giving general depictions of the Project and various temporary and permanent roadways, noting that it "will be filed subsequently." See SSA at C.11-1.

On July 29, 2010, BNSF provided written comments on the SSA to the CEC and BLM.⁷ That same day, BNSF filed a Petition to Intervene.⁸ BNSF was granted intervenor status on August 3, 2010. On August 4-6, 2010, the CEC held evidentiary hearings in Barstow, California, in furtherance of the CEC's responsibility to complete a CEQA-equivalent review process in relation to the certification decision-making process. BNSF submitted the Prepared Testimony of Dennis Skeels (Exhibit 1200), Edward Phillips (Exhibit 1201), and Thomas Schmidt (Exhibit 1202), and the witnesses were made available for cross examination. On August 9, 2010, the Staff issued Supplemental Staff Assessment Part II ("SSA Part II"), which contained a narrative Transportation and Safety section with proposed Conditions of Certification. The SSA Part II contained a Glare & Glint Study at Appendix A, which was prepared by Staff because Staff determined that Applicant had not prepared a sufficient Glare & Glint study. 9 On August 18, 2010, the CEC held an evidentiary hearing in Sacramento, California, during which the CEC heard testimony and reviewed evidence regarding

⁷ Attached hereto as Exhibit "B."

⁸ Attached hereto as Exhibit "C."

⁹ Testimony of Staff expert Alan Lindsley ("Lindsley"), 8/18/2010 TR at 29:3-6.

Transportation and Safety issues, including on access roads and other proposed structures on the RoW and glare and glint.¹⁰

During the August 18th hearing, Applicant presented no testimony regarding Glare & Glint, but did offer Exhibit 105, which is the Imperial Valley study that the Staff had already determined was insufficient.¹¹ During the August 18th hearing, Staff confirmed Applicant had not conducted any of the requisite environmental studies and analyses regarding access to and proposed structures within the BNSF RoW.¹² Applicant proposes to negotiate with BNSF regarding access to and proposed structures within BNSF's RoW.¹³

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Do you recall that?

MS. McLEAN: Yes.

MR. LAMB: There have been no studies, no analyses, no environmental review of any roadways within the right of way, correct?

MS. McLEAN: I don't – I'm not sure.

MR. LAMB: Well, are you aware of any, ma'am?

MS. McLEAN: Right at the moment, no.

MS. McLEAN: Yes.

¹⁰ As had been noted on the Record by other intervenors in this action, the CEC proceeded to evidentiary hearing on SSA Part II without the requisite 14 day notice required under 20 CCR 1747.

¹¹ BNSF objects to the admission of this exhibit, the Imperial Valley Solar Glint & Glare Study (the "IVS Study"). There was no accompanying testimony with the IVS Study, it relates exclusively to an entirely different project, and it fails to address glare and glint issues relating to rail operations.

¹² Testimony of CEC Staff Member Marie McLean ("McLean"), 8/18/2010 TR at 239:7-18.

MR. LAMB: Okay. Ms. Bellows had testified just a little while ago about doing proper studies, analyses for the impacts of the roadways that had been studied and analyzed around the project.

¹³ McLean, 8/18/2010 TR at 241:23-242:10.

MR. LAMB: Okay. And one of the assumptions that you're making is that the applicant is going to negotiate with BNSF, right?

At the hearing on August 18, 2010, BNSF submitted Prepared Testimony of Joseph Schnell (Exhibit 1203), Dennis Skeels (Exhibit 1204), Dr. David Krauss (Exhibit 1205) and Edward Phillips (Exhibit 1206) and Mr. Schnell, Mr. Skeels and Dr. Krauss presented direct testimony and were cross-examined. Mr. Phillips' declaration was accepted into the record. The Applicant and Staff declined to cross examine him at that time.

3 STANDARD OF REVIEW

The Calico Solar Project and its related facilities are subject to the CEC's licensing jurisdiction. Cal. Pub. Res. Code §§25500, *et seq.* During licensing proceedings, the CEC acts as lead state agency under the California Environmental Quality Act ("CEQA"). Cal. Pub. Res. Code §§25519(c), 21000 *et seq.* The CEC's regulatory process, to include the evidentiary record (the "Record") and Staff Assessment, is the functional equivalent of an Environmental Impact Report. Cal. Pub. Res. Code §21080.5.

The CEC's evidentiary hearings on the application are used to identify significant adverse impacts of the proposed project on the environment and shall assess the feasibility of measures to mitigate the adverse impacts. 20 CCR

MR. LAMB: And you understand that BNSF, as a private land owner, may not agree to that.

MS. McLEAN: Yes.

MR. LAMB: Okay. So you're assuming that something will happen. Would it be [your] assumption also that if BNSF doesn't grant access then the project won't go forward?

MS. McLEAN: Well, that – yes, I would gather that would be true.

1748(a). The hearings shall consider whether the facilities can be constructed and operated safely and shall assess the need for and feasibility of modification to assure safe and reliable operation. 20 CCR 1748(b). An approval will be set aside if the agency fails to prevent environmental damage by refusing to approve projects if feasible mitigation measures are available which will avoid or substantially lessen significant environmental effects as required by CEQA.

The hearings shall also consider whether the facility can be constructed and operated in compliance with applicable federal, state and local laws ordinances, regulations and statutes ("LORS"). 20 CCR 1748(c). During the entire process, to include the evidentiary hearings, the Applicant has the burden of presenting substantial evidence to support the findings and conclusions required for certification. 20 CCR 1748(d). The proponent of any additional Condition of Certification or modification, such as BNSF here, shall have the burden of making a reasonable showing to support the need for and feasibility of the Condition of Certification. 20 CCR 1748(e). The Presiding Member's Proposed Decision ("PMPD") shall be based exclusively on the hearing record, including the evidentiary record, and shall contain reasons supporting the decision and reference to the bases for each of the findings and conclusions. 20 CCR 1751.

4. AGREED UPON CONDITIONS OF CERTIFICATION

From a review of the Record, it appears that BNSF and Applicant agree on the following Conditions of Certification. Accordingly, subject to approval by the Staff, BNSF requests that the following Conditions of Certification (in boldface) be adopted by the CEC and incorporated into the PMPD:

A. Transmission Line Safety and Nuisance (Transmission Lines)

Calico Solar's transmission lines must be emplaced so that there is a 300 foot setback from the furthest edge of the BNSF RoW to the transmission line and Calico Solar's transmission lines must cross the BNSF mainline at a 90-degree angle, and travel 300' from the far side of the RoW before returning to a parallel configuration.

BASIS IN RECORD: Exhibit 1200 (Dennis Skeels); 8/06/2010 RT at 223:5-225:13 (note Staff Counsel Ms. Holmes agrees to this modification to TSLN-4, see 8/06/2010 TR at 224:21-22).

B. Hazardous Materials (Hydrogen)

No hydrogen will be transported over or under the mainline or within the BNSF RoW and a Risk Analysis will be prepared by Applicant with respect to hydrogen and will consider and evaluate possible derailment scenarios and appropriate mitigation. The hydrogen system will not be activated until all mitigation is fully implemented. Should the centralized pipeline system be selected, the exact location of hydrogen pipelines in relation to the signal cable and the right of way will be evaluated by Applicant to ensure that it takes all necessary steps BNSF determines are necessary to protect rail infrastructure and operations. Finally, Applicant will ensure that sensors are placed to detect hydrogen leaks; that mitigation measures such as automatic shut-off valves along the hydrogen pipeline are established; that the Hazardous Business Materials Plan requires notification of the railroad of hydrogen releases which could impact rail safety and operations; and that an auto-dialer and/or other notification system will be established to promptly notify BNSF of such hydrogen releases.

BASIS IN RECORD: Exhibit 1201 (Edward Phillips); 8/06/2010 RT at 156:23-160:12; 215:5-20 (note Staff Counsel Ms. Holmes had no objection but requested an opportunity to review to ensure that the proposed Condition of Certification relates to LORS conformity or mitigation of CEQA impacts, see 8/06/2010 TR at 157:25-158:9).

C. Biological Resources

In the case of derailment or other emergency, Calico Solar is required to provide BNSF access to the Project site for emergency response as a Condition of Certification. This access may include, among other activities, temporary removal of portions of the desert tortoise exclusionary fencing and the placement of a temporary fence. All Calico Solar contractors and employees will participate in BNSF's environmental sensitivity training program prior to commencing work at the Project site.

BASIS IN RECORD: Exhibit 1201 (Edward Phillips); 8/05/2010 RT at 108:5-109:18.

D. <u>Hydrology/Soil & Water (Detention Basins)</u>

Prior to emplacing any SunCatchers or construction of the detention basins, BNSF will commission a hydrology study at Calico Solar's expense¹⁴ to determine the impact, if any, on rail safety and BNSF operations of Calico Solar's planned emplacement of SunCatchers and detention basins and to ensure appropriate mitigation measures, if necessary, are designed and installed at Calico Solar's expense. Calico Solar will provide BNSF with copies of quarterly groundwater monitoring reports that it supplies to the

¹⁴ Calico Solar has already forwarded the initial funds to BNSF to commence this study.

regional water quality control board. Calico Solar will establish a notification procedure for any noted subsidence, whereby BNSF maintenance teams will be alerted of the issue.

BASIS IN RECORD: Exhibit 1202 (Thomas Schmidt); 8/05/2010 RT at 329:9-332:5.

5. <u>BNSF's REQUESTED CONDITIONS OF CERTIFICATION THAT</u> <u>REMAIN AT ISSUE</u>

A. <u>Traffic & Transportation (Access Roads)</u>

1) Nature Of The Disagreement – SSA Part II at C.11-6, C.11-9-C.11-11, and C.11-32 TRANS-1) specifies that, subject to BNSF's approval of access and use, Applicant will construct temporary and permanent access roads within the BNSF RoW that are all weather, paved, contain culverts over stream beds, and can accommodate two 12-foot travel lanes with 3 foot shoulders. By contrast, during communications between the parties BNSF has consistently advised Calico Solar that BNSF had determined that the access proposal set forth in the SSA Part II at C.11-6 through C.11-18 and TRANS-1 would obstruct the use of the RoW for critical railroad operations and that BNSF would not grant such a license. An alternative approach is under evaluation by BNSF and, if determined feasible, will be subject to future negotiations between the parties. (Exhibit 1206 – Phillips)

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¹⁵ See Exhibit 1206 (Phillips).

The most recent Proposal for access roads and structures (both a new at-grade crossing and a grade separation bridge) on the BNSF RoW is depicted in Figure No. 1-1, Phase 1a Project Features ("Figure No. 1-1"). While there have been discussions regarding the possibility of a class 2 surface coating, there were never any discussions regarding paving. Moreover, there have been no studies or analyses performed to assess the CEQA impacts of the proposed roadways.

Evidence Presented By Applicant - Other than Figure No. 1-1, 2) Calico Solar has not submitted any information regarding its plans for temporary or permanent roadways within the BNSF RoW prior to the August 18th hearing. On August 20, 2010, at 11:40 a.m., CEC Staff Counsel Mr. Adams sent an email to Applicant asking Applicant to provide it with an electronic copy of any maps or other evidence that is "not in the record yet." During the August 18th hearing, Ms. McLean testified that she is not aware of any environmental studies or analyses regarding the proposed roadways within the BNSF RoW. Testimony of Marie McLean, 8/18/2010 RT at 239:7-18. After Ms. McLean confirmed that Staff was not aware of any evidence of conformity with CEQA requirements in relation to environmental studies and analyses relating to the Applicant's proposed roadways within BNSF's RoW as reflected in the SSA Part II, Felicia Bellows testified for Applicant regarding Calico Solar's current plans. See Testimony of Felicia Bellows at 8/18/2010 TR at 244:23-246:6. Ms. Bellows clarified that the current proposal in SSA Part II is not accurate, and notwithstanding the language of SSA Part II that referenced paved roadways and culverts, Applicant merely wanted to apply some form of "temporary sort of soil tack." See 8/18/2010 RT at 244:23-246:6. 16

Edward Phillips via Exhibit 1206. Mr. Phillips was available for cross examination, but the parties declined. See 8/18/2010 TR at 249:24-250:12. Mr. Phillips testified BNSF and Applicant have been discussing various alternatives and that during all discussions, BNSF has made it clear that BNSF must maintain complete and unimpeded access to and use of its RoW and that any grant of access by BNSF to Calico Solar will be predicated first, on Calico Solar addressing

MS. BELLOWS: Can I address the right of way a little bit here?

Once that's in place, we will no longer use that access road, okay? So that right of way in terms of access, any upgrades or anything, nothing will need to be done there, you know, other than temporary sort of soil tack or whatever you want us to do on that. I believe that's the plan.

So then we'll be using our permitted access road and crossing at the at-grade crossing and eventually going over to the bridge.

The other – the other right of way that we will need to go use eventually when we get to Phase 2, we add on 2013, is we will need to go – come out of our entrance gate, head north on Hector Road, in quotes, right, go up to the right below the BNSF at grade crossing, hang a left, and use BNSF's right of way to get over to the little section to the west.

And again, what we have discussed with BNSF, is simply putting soil tack down on that access road, not doing any expansion on that access road, or anything of that nature.

I hope that clarifies the applicant's kind of what our plan is, and out conversations with BNSF to date.

You know, in terms of access to the site, just to clarify, in a little bit, at some point I'm sure we'll get to describing Phase 1A and talking about and laying it out and talking about access a little bit more, but the point is that the BNSF right of way initially is what we will doing [sic] is crossing at the famous Hector crossing right there and hanging a right and going on BNSF's right of way temporarily to do surveys and put up fencing for Phase 1A until BNSF puts a temporary at grade crossing next to where the bridge will be going, okay?

BNSF's safety and operations concerns to BNSF's requirements and second, on Calico Solar obtaining all the appropriate and required permits and compliance with all applicable laws, ordinances, regulations and statutes. Mr. Phillips testified that, to date, significant concerns raised by BNSF have neither been studied nor addressed, e.g. the impact of glint/glare on railroad signals. Similarly, based upon information provided in the SSA Part II, Traffic and Transportation section, CEC Staff has proposed conditions, e.g. a paved roadway on BNSF's RoW, the impact of which has not been evaluated and it is unlikely that all required and appropriate permits in compliance with all applicable laws, ordinances, regulations and statutes can be achieved in the required time frames. Exhibit 1206.

Second, Mr. Phillips noted that while there have been discussions between BNSF and Calico Solar related to Calico Solar having access to the BNSF RoW, only limited access has been granted to date. Significantly, the current access proposal set forth in SSA Part II at C.11-6 through C.11-18 and TRANS-1 is inconsistent with those discussions and, moreover, is inconsistent with Calico Solar's most recent proposal for access roads on the Project site as depicted in Figure No. 1-1. As noted above, Calico Solar's proposed construction activity on the northern side of BNSF's RoW, east of Hector Road, would obstruct the use of BNSF's RoW for critical railroad operations and that BNSF would not grant such a license. Since that time, BNSF and Calico Solar have been engaged in a discussion to determine the feasibility of the proposal reflected in Calico Solar's

design dated August 12, 2010 (Figure No. 1-1). That design proposes a 2-3 month very limited use of the existing Maintenance of Way ("MoW") graded, dirt road on the northern side of BNSF's RoW, east of Hector Road, to permit Calico Solar to commence surveying, relocating tortoises and placing exclusionary fences. Concurrent with this use, Calico Solar would construct the permanent roadway along its property south of the RoW and BNSF would construct a temporary atgrade crossing to connect to the permanent road. The temporary at-grade crossing would be utilized until approximately October 1, 2011, when Calico Solar's proposed bridge-grade crossing over the BNSF RoW would be completed. The feasibility and terms of this approach are still being discussed between the parties. Once the bridge was built, Calico Solar would no longer utilize either of the atgrade crossings. Exhibit 1206.

Third, Mr. Phillips explained that building a permanent, two-lane asphalt road with culverts and gutters along either the north side of the RoW east of Hector Road or the south side of the RoW west of Hector Road, for a distance in excess of several miles, was never discussed. The proposed paved roads would cross several ephemeral streams, and permit the use of the road by over one to two hundred vehicles per day during the construction period. BNSF Railway believes that this proposed use may constitute a project under California's Environmental Quality Act (CEQA), and at a minimum, would require: (1) consultation with the U.S. Army Corps of Engineers to determine the jurisdictional nature of the

ephemeral streams and potential Clean Water Act Section 404 Dredge and Fill permitting authority; (2) similar consultation with the California Department of Fish and Game for potential state jurisdiction and Fish and Game Code Section 1602 Streambed Alteration Agreement authority; and (3) coordination with either the California State Water Resources Control Board or Regional Water Quality Control Board for potential Clean Water Act Section 401 Certification. BNSF Railway also believes that the proposed road project would, due to its size, require a Construction General Permit to adequately cover the construction activities during the build-out of the road as required by California's Porter-Cologne Water Act. BNSF Railway believes that, as the land owner, such a permit would, by its regulatory requirement, encumber BNSF as a responsible party to this permit activity. BNSF has neither fully evaluated nor consented to these requirements. BNSF has discussed the possibility of using a class 2 base on the proposed road on the southern side of the RoW, west of Hector Road. Exhibit 1206.

Fourth, as noted above, Mr. Phillips testified that asphalt roads change the runoff coefficient of the land surface during rain events, change the natural drainage patterns of cross-directional run-on, and may impact BNSF Railway's track infrastructure significantly due to both the road runoff itself and the proposed drainage systems' focused flow patterns. BNSF Railway believes that this proposed road project warrants a hydrology study to determine the potential impacts to the railroad infrastructure. BNSF Railway believes that the proposed

road project may also impact desert tortoise habitat and mobility in the immediate area. BNSF Railway believes that at a minimum, consultation with U.S. Fish and Wildlife and U.S. Bureau of Land Management is warranted on this potential impact. Exhibit 1206.

4) Applicant Has Submitted No Evidence To Support The Plan As Set Forth In SSA Part II; BNSF Has Submitted Substantial Evidence Mandating A Condition Of Certification Precluding Development Without First Performing An Appropriate Environmental Analysis – Applicant has failed to meet its burden of proof and has failed to present any evidence in support of the Traffic and Transportation Plan under SSA Part II to support the paved temporary roadways within the BNSF RoW. 20 CCR 1748(d). No environmental studies or coordination with appropriate agencies has been effected. BNSF has met its burden and has submitted evidence that supports a reasonable showing that, as specified, the proposed roadways would require environmental analysis and coordination with several agencies. 20 CCR 1748(e). Accordingly, the CEC should not certify this Project without ensuring that Applicant has submitted appropriate plans consistent with the discussions as testified to by Mr. Phillips, obtained all of the requisite environmental studies and approvals, obtained approval from BNSF to use the RoW for the limited and specific purposes consistent with those plans, agreed to eliminate any interference with railroad operations and has agreed to address BNSF's safety and operations concerns. 20

CRC 1748, 1751; Cal. Pub. Res. Code §§21080(e), 21082.2(c); Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal., 47 Cal.3d 376, 392 (1988) (The purpose of environmental review is to "alert the public and its responsible officials to environmental changes before they have reached ecological points of no return..., to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action... Because the EIR must be certified or rejected by public officials, it is a document of accountability. If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees.... The EIR process protects not only the environment but also informed self-government." (citations omitted) Final EIR for university's relocation of its biomedical research facilities to a newly acquired building in a residential area overturned for failure to address anticipated future use of the new building and the related environmental effects, and for inadequate discussion of project alternatives.); East Peninsula Educ. Council, Inc. v. Palos Verdes Peninsula Unified Sch. Dist., 210 Cal.App.3d 155, 165 (1989); Resource Defense Fund v. LAFCO, 191 Cal.APp.3d 886, 897 (1987.

B. <u>Traffic & Transportation (Glare & Glint)</u>

1) <u>Nature Of The Disagreement</u> – Presently, it appears that BNSF, Staff and Applicant all agree that, to date, there has not been a sufficient study to

address the impact of glint and glare on BNSF's railroad operations. Applicant has agreed to: (1) pay for the study; (2) allow BNSF to select the expert to conduct the study; and (3) pay for appropriate mitigation measures, if any. Because BNSF alone must continue to maintain sole and independent discretion to ensure that its rail operations are safe and efficient, coupled with the fact that BNSF is a federally regulated industry that must comply with federal LORS, BNSF must reserve approval authority in relation to any recommended mitigation measure.

In essence, BNSF must insist on a global assurance in the form of a Condition of Certification that Calico Solar's proposed Project will not interfere with BNSF's critical rail operations and that Calico Solar will immediately eliminate any interference if it occurs. In addition, the Applicant must agree to this condition (set forth below).

Prior to the first SunCatcher disc being mounted on a pedestal, a site-specific Glare/Glint study shall be performed at Calico Solar's sole cost and expense to address the Glare/Glint issues raised by Staff in its Supplemental Staff Assessment, Part II. The Glare/Glint Study will assess, measure, and quantify the impact of Calico Solar SunCatchers on BNSF rail operations and determine what, if any, mitigation measures may be employed that will adequately ensure the safety of BSNF

rail operations. The Glare/Glint Study will also ascertain and set forth the requisite coordination and approval process with the FRA to ensure compliance with Railroad LORS. Any recommended mitigation measures, once approved by BNSF, shall be implemented by Calico Solar at its sole cost and expense. The site specific study shall commence immediately upon BNSF's selection of the experts to perform the study. Moreover, Calico Solar must warrant and represent that Calico Solar's proposed Project will not interfere with BNSF's critical rail operations and that Calico Solar will immediately eliminate any interference if it occurs.

Evidence Presented By Applicant – To date, Applicant has presented no evidence in relation its CEQA requirement that it measure and analyze the impact of glint and glare on train operations. The SA-DEIS clearly acknowledges that glint and glare are impactful, yet it does not address the issue, noting that it is in the process of obtaining additional information. See SA-DEIS at C.11-15. The SSA (dated July 24, 2010) is also devoid of any analysis of glare and glint as it relates to train operations. The SSA Part II (dated August 9, 2010) contains a Staff analysis in the narrative section and appends a report entitled "Daytime

Intrusive Brightness Analysis for Stirling Engine Solar Energy Systems" as Appendix A (referred to as the "Jewell Report").

Staff had the Jewell Report prepared because Applicant had not prepared a sufficient Glare & Glint study. 8/18/2010 TR at 29:3-6. At the August 18th hearing, Applicant presented no testimony regarding Glare & Glint, but did offer the previously found to be insufficient IVS Study as Exhibit 105.¹⁷

Schnell and Dennis Skeels, and an expert in cognitive neuroscience, David Krauss, Ph.D.¹⁸ Mr. Schnell testified that BNSF runs approximately 80 trains a day on its double mainline, which runs through the area that Applicant plans to locate its solar plant. Testimony of Joseph Schnell ("Schnell"), 8/18/2010 TR at 94:6-14. The mainline has been operating for over one hundred years, and approximately 40% of the United States' exports and imports from and to the west coast transit the railroads in California. Schnell, 8/18/2010 TR at 94:11-95:2.

Mr. Schnell explained that BNSF must maintain sole and absolute discretion to ensure that its train operations are safe and efficient. BNSF's signal system is the safety system that allows so many trains to run through the area. Mr.

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¹⁷ BNSF objects to the admission of this exhibit, the Imperial Valley Solar Glint & Glare Study (the "IVS Study"). There was no accompanying testimony with the IVS Study, it relates exclusively to an entirely different project, and it fails to address glare and glint issues relating to rail operations.

¹⁸ See Exhibits 1203, 1204, and 1205, respectively.

Schnell elaborated that BNSF "cannot afford to have outside entities dictating to us how we're going to signal because they just don't understand how the signal system works and how they can make it safe." Schnell, 8/18/2010 TR at 95:7-18. Mr. Schnell explained how the signal system operates and how critical it is to ensure that there is not a "catastrophic failure," such as a derailment. Schnell, 8/18/2010 TR at 95:19-96:20.

Mr. Schnell further testified that BNSF is in a regulated industry and is subject to federal regulations. Schnell, 8/18/2010 TR at 96:21-97:19. Railway operations, to include but not limited to safety procedures and requirements, are regulated under federal law and regulations adopted by the Federal Railway Administration. (the "FRA"). The FRA operates under a comprehensive scheme of laws and regulations contained in Title 49 of the United States Code, in Title 49 of the Code of Federal Regulations, and through various executive and administrative orders and rules that regulate the operation and safety of the rail system of interstate commerce in the United States (collectively referred to as "Railroad LORS").

As Mr. Schnell explained, BNSF is required to operate in a manner consistent with Railroad LORS, which LORS are filed with the FRA. Railroad LORS, including FRA regulations and federally-regulated operating procedures (General Code of Operating Rules ("GCOR"), the purpose of which is to ensure safety in railroad operations, require BNSF to maintain visual contact with

signals.¹⁹ If a train's contact with a signal is lost and cannot be regained, the engineer is required to stop the train. This often requires an emergency application of the brakes, risking derailment of the train. As Mr. Schnell testified, "the engineer is forced to stop the train, an emergency application, if necessary, which means full application of the brakes, all the wheels will lock up, and that's where we have great potential to derail." Schnell, 8/18/2010 TR at 97:11-14. Again, when describing the potential for a "catastrophic failure" when an engineer misses a signal, Mr. Schnell testified that, "We could run into another train, we could derail on a broken rail, we could run through a switch and derail on the switch, take out both main lines and bottom line is people could get killed." Schnell, 8/18/2010 TR at 96:16-20 (emphasis added).

When a train has been stopped through emergency application of the brakes, BNSF General Code of Operating Rule 6.23 requires the engineer to inspect all cars, units, equipment and track pursuant to BNSF special instructions and rules. Schnell, 8/18/2010 TR at 96:21-97:19. This can cause significant delays to rail operations with ramifications reaching from the Ports of Los Angeles and Long Beach to Chicago and beyond. Schnell, 8/18/2010 TR at 97:23-98:4.

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¹⁹ 49 C.F.R. Part 236. Railroads are required to file their operating rules and any amendments thereto with the FRA. The operating rules are intended to ensure safety in railroad operations (GCOR Section 1.1), and railroads are required to periodically monitor compliance with their operating rules. 49 C.F.R. 217.9. Railroads must periodically instruct their employees on the meaning and application of the operating rules (49 C.F.R. Part 217.11), and must have a program to monitor the conduct of their certified locomotive engineers and their compliance with "provisions of the railroad's operating rules that require response to signals that display less than a "clear" aspect..." 49 C.F.R. Part 240.303(d)(1)(i). A railroad is required to revoke the certificate of an engineer who fails to meet the qualification requirements of Part 240, which may be established by an engineer's failure to control a train in accordance with a signal. 49 C.F.R. Part 240.307. A railroad's failure to comply with the provisions of these regulations subject the railroad to civil penalties.

Railroad LORS include numerous requirements relating to train signals, to include but not limited to the Rail Safety Improvement Act of 2008, which reserves to the FRA the sole and exclusive right, among other things, to control and regulate:

- a. "[P]erformance standards for processor-based signal and train control systems" [49 U.S.C. §20171(7)];
- b. "[The] qualification of new or novel technology at highway-rail grade crossings" [49 U.S.C. §20171(7)];
- c. The duties and responsibilities, to include specifically limiting the duty hours, of railway signal employees [49 U.S.C. § 21104]; and
- d. Federally funded capital projects designed to, among other things, "mitigat[e] environmental impacts [and implement] communication and signalization improvements." [49 U.S.C. §24401(2)].

Mr. Schnell testified that he has reviewed SSA Part II as it relates to glint and glare and that it simply does not appropriately address all of BSNF's significant concerns. In particular, Mr. Schnell explained that putting up the SunCatchers and fixing the problem later would not work. BNSF "can't afford it," because if the engineer misses a signal and derails a train, "it's too late." Schnell, 8/18/2010 TR at 98:5-99:15.

Mr. Schnell testified that the Jewell Report did not address the rail safety and operational issues raised by BNSF. Mr. Shnell explained that BNSF was told that Staff was going to expand the scope of its glare/glint study to address these issues. In a call facilitated by CEC Staff person Marie McLean, Mr. Schnell initially spoke with Cliff Ho of Sandia labs. Dr. Ho explained that he had been asked to perform some calculations to determine what the appropriate safe distance was from the SunCatcher for a motorist. His work was not specific to the Calico Solar facility, did not address rail operations and safety, and measured the impact of a single SunCatcher. Ms. McLean then facilitated a second call, to James Jewell, the consultant retained by Staff to head the study. Mr. Jewell requested information from BNSF that he represented was essential for him to complete his study. Exhibit 1203 and Exhibit A attached thereto (a string of emails that started on July 29, 2010 from Mr. Jewell).

Mr. Shnell testified that, in his July 29th email, Mr. Jewell asked BNSF to provide him with information regarding:

- 1. height of signal poles,
- 2. height of the mid-point of the signal above the track,
- 3. height of the eyes of the average engineer above the track,
- 4. distance from a signal pole at which an engineer is expected to recognize and act upon a signal,

- 5. average width or consistent width of the BNSF ROW, and
- 6. number and location of signal poles within the solar plant area and just before or after the plant boundary.

Mr. Jewell represented that he needed this information to "establish the viewing angles and distances and then to discern just which signals may be seen against the SunCatcher mirrors and at what angular relationships. All of this information will make it possible for me to establish the requirements of a study." Exhibit 1203 and Exhibit A attached thereto.

Mr. Schnell explained that, as can be seen from the string of emails, there is no glare/glint study that addresses the issues raised by BNSF and confirmed as appropriate for a study by CEC's own consultant. BNSF began providing the requested information but received an email from Mr. Jewell on August 3, 2010, stating "the Commission staff (including me) will not work on this further since there is a COC requiring collaboration on a solution. But there will be a 'workshop' and I will, . . . Be Prepared. Thanks for all your help. I think I can help at the workshop." Exhibit 1203 and Exhibit A attached thereto.

As Mr. Schell explained, the SSA Part II could be misread and misinterpreted to read as if BNSF fully participated, there was a study performed to address the specific rail safety and operations concerns raised by BNSF, the parties came to an agreement, and BNSF is satisfied that its safety concerns have

been addressed and will be mitigated. Mr. Schnell testified that this did not happen. BNSF was told that Mr. Jewell was going to prepare a study that analyzed the glare and glint issue in relation to the unique angles and field of vision that an engineer would encounter while traveling along the RoW. BNSF provided information that Mr. Jewell represented he needed to perform his study. That information was not used or referenced in the study. Then Mr. Jewell sent BNSF an email saying no further work would be done and that we would collaborate on a solution. He said there would be a workshop. There was no workshop. Exhibit 1203.

Moreover, as Mr. Schnell further explained, the telephone conversations with the CEC consultants took place without the benefit of a draft report or any supporting information. While BNSF was told it would be available before the issuance of the Supplemental Staff Report, that did not occur. Accordingly, the conversations were very general in nature and did not address BNSF's specific concerns. Because no study had been performed, there was no meaningful discussion regarding mitigation measures. At the time that the CEC decided that it would not perform its own study to address BNSF's rail safety issues and concerns, BNSF was advised that CEC was going to require: (1) a 300 foot setback from the edge of the BNSF RoW for the closest SunCatcher; (2) a site-specific study on the effects of the SunCatcher's glint and glare on BNSF's safety, operations and signals, funded by Calico Solar; and (3) workshops to be held to

resolve BNSF's concerns. The CEC also offered to assist BNSF find a glint/glare expert with appropriate expertise. Moreover, BNSF only had a little over a week between the issuance of the SSA Part II and the hearing. This is not adequate time to address all of the issues raised for the first time in the SSA Part II. When Mr. Schnell actually read TRANS-7, it was clear that BNSF's concerns had not been addressed and that conclusions had been drawn about purported mitigation measures that were not based on any actual scientific study. Exhibit 1203.

BNSF consistently told the Commission Staff and Calico Solar that before BNSF can consider approving any further access to the BNSF RoW, the following Condition of Certification must be incorporated into the Project:

Prior to the first SunCatcher disc being mounted on a pedestal, a site-specific Glare/Glint study shall be performed at Calico Solar's sole cost and expense to address the Glare/Glint issues raised by Staff in its Supplemental Staff Assessment, Part II. The Glare/Glint Study will assess, measure, and quantify the impact of Calico Solar SunCatchers on BNSF rail operations and determine what, if any, mitigation measures may be employed that will adequately ensure the safety of BSNF rail operations. The Glare/Glint Study will also ascertain and set forth the requisite coordination and approval

LORS. Any recommended mitigation measures, once approved by BNSF, shall be implemented by Calico Solar at its sole cost and expense. The site specific study shall commence immediately upon BNSF's selection of the experts to perform the study.

Schnell, 8/18/2010 TR at 105:25-106:15.

Before Mr. Schell testified, Alan Lindsley, one of the authors of the Jewell Report, testified that BNSF's proposed Condition of Certification was reasonable. Lindsley, 8/18/2010 TR at 34:9-36:5. Indeed, Mr. Lindsley acknowledged that only BNSF can determine whether the SunCatcher system, to include any mitigation measures, was going to be safe to train operators. Lindsley, 8/18/2010 TR at 35:2-4. Mr. Schnell agreed, explaining that the proposed Condition of Certification was necessary and BNSF had to maintain control because "we've been safely operating there for many, many years, and we have to able to continue to safely operate trains through this area, and we cannot be dictated to how we're going to operate our signals system and changes that should be made." Schnell, 8/18/2010 TR at 106:22-107:2.

Mr. Skeels provided the CEC with some of the technical explanations regarding the importance of signals in relation to the safe speed within which a

train can travel. He also explained the phenomenon known as a "phantom signal," which is caused by stray light sources entering the signals and either making them looking like they are on when they are off or off when they are on. Skeels, 8/18/2010 TR at 110:13-115:11. Mr. Skeels also provided the CEC with a Track Chart for the portion of track that Applicant seeks to surround with SunCatchers. As Mr. Skeels explained, the Track Chart shows how elevation changes on that portion of the track, speed must be adjusted upward and downward, where there are significant curves in the track (e.g., right before East Pisgah), and the exact locations of the signals along the track, where Calico Solar proposes to emplace 34,0000 SunCatchers. Skeels, 8/18/2010 TR at 115:12-119:21; Exhibit 1204 and Exhibit C attached thereto.

The information sought by Mr. Jewell and the information from the Track Chart is the type of information that would be necessary for an expert such as Dr. Krauss to prepare a site-specific model. Dr. Krauss explained that, as a Ph.D. in cognitive neuroscience, he is versed in the study of human perception, cognition, reaction time, and the effects of lighting and is capable of preparing a site-specific model to measure the effects of glint and glare on train operators in relation to the Project. Krauss Testimony, 8/18/2010 TR at 120:13-122:17.

Dr. Krauss testified that he agreed with the following findings in the SSA Part II at Appendix A page 7 of the Jewell Report: that the SunCatchers could cause temporary flash blindness, veiling reflections, and/or distracting glare, all of

which would pose a significant risk to train engineers being able to see the signals. He found scientific support for the findings regarding flash blindness, veiling reflections, and distracting glare in the Jewell Report. Krauss, 8/18/2010 TR at 123:13-23; SSA Part II at C.11-19. Likewise, Dr. Krauss found support in the form of the testimony of Messrs. Schnell and Skeels for the proposition that train signals are essential for the safety of train engineers and crews. Krauss, 8/18/2010 TR at 123:24-124:13; C.11-19.

In relation to the SSA Part II's finding at C.11-19 that the adverse impacts of the SunCatchers was mitigable through the employment of hoods and shields to signals and/or LED signals, Dr. Krauss reviewed the Jewell Report and found no scientific basis for that finding. Indeed, the Jewell Report makes no mention at all of signals, hooding, shielding, or LED signals. Krauss, 8/18/2010 TR at 123:1-9, 124:14-23; 127:8-25; Exhibit 1205. Mr. Skeels testified that, despite his over 24-years of experience in train signals, he was not aware of any such current approved LED signal technology. Mr. Skeels explained that BNSF is currently conducting testing of LED signal lights, but there presently is no standard LED signal that has been tested and approved for use by BNSF. Moreover, shielding or hooding of signals requires coordination with federal authorities before BNSF makes any changes.²⁰ Exhibit 1204 (Skeels).

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²⁰ See, e.g., the Rail Safety Improvement Act of 2008, which reserves to the FRA the sole and exclusive right, among other things, to control and regulate: (1) "[P]erformance

Dr. Krauss testified that the Jewell report appeared to accurately measure the impact of a single SunCatcher in relation to temporary flash blindness. While Dr. Krauss supported the minimum distance offset for a single SunCatcher of 223 feet, as calculated by Dr. Ho, ²¹ Dr. Krauss noted that this offset does not account for the fact that the Project envisions aligning thousands of SunCatchers, the cumulative impact of which have not been measured. As Dr. Krauss explained, the phenomena of "spatial summation" – the increased and cumulative effect of thousands of sources of light, and "temporal summation" – the impact of looking at thousands of separate light sources over several minutes as the train passes where the eye sees a new source just as it is about to recover from the previous source, has not been and needs to be measured. Krauss, 8/18/2010 TR at 125:18-127:3, Exhibit 1205. Mr. Lindsley, a co-author of the Jewell Report, agreed that there would be a cumulative impact, that cumulative impact had not been measured, and it needs to be measured. Lindsley, 8/18/2010 TR at 30:16. Indeed, in addition to agreeing that a further study needs to be implemented, Mr. Lindsley agreed with BNSF's proposed Conditions of Certification. Lindsley, 8/18/2010 TR at 34:9-36:5.

standards for processor-based signal and train control systems" [49 U.S.C. §20171(7)]; and (2) "[The] qualification of new or novel technology at highway-rail grade crossings." 49 U.S.C. §20171(7).

²¹ Lindsley and Ho Testimony, 8/18/2010 TR at 23:18-26:15 (confirming minimum safe distance from a single SunCatcher is 223 feet).

According to Dr. Krauss, "because this is such a large-scale project, both from a logistic standpoint . . ., but really from a safety standpoint, to go ahead and install all of these SunCatchers prior to understanding what hazards they post is really a potential problem. So the issue of whether they're aligned or not is irrelevant, the point is the SunCatchers themselves are the hazard." Krauss, 8/18/2010 TR at 128:8-15. Dr. Krauss further explained how he would model the Project through a computer simulation and how there are at least twelve separate factors that need to be measured and analyzed which have not been measured and analyzed. Krauss, 8/18/2010 TR at 128:16-136:25.

Furthermore, Dr. Krauss pointed out that, while the Jewell Report measured the impact of a single SunCatcher in relation to temporary flash blindness, the Jewell Report also noted that veiling effects and/or distracting glare are also likely to occur but have not been measured and need to be measured. Krauss, 8/18/2010 TR at 137:1-14; SSA Part II at Appendix A at pages 6-7 (Jewell Report). Dr. Krauss reviewed TRANS-7 and found it to be inadequate. He agreed with Mr. Lindsley's and Dr. Ho's testimony that it would be prudent to do a computer model of the site and is prepared to do so. He also agreed with Dr. Ho's statement that it would be better if, in addition to the computer model, an off-site replication of the site were performed before any SunCatchers were emplaced at the actual site.²²

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²² Ho, 8/18/2010 TR at 40:9-19.

This would allow the Applicant and BNSF to "test" the "fidelity" of the model. Krauss, 8/18/2010 TR at 137:15-140:15.

4) Applicant Has Not Performed A Requisite Glare & Glint Study And Has Presented No Evidence To Support Its Contention That TRANS-7 Ensures Compliance With LORS And Mitigates The Likely Impact Of 34,000 SunCatchers In Relation To BNSF's Train Operations – Applicant has failed to present a glare and glint study. Applicant submitted a glare and glint study in relation to the Imperial Valley Solar Project, so it is irrefutable that such a study is necessary to ensure compliance with CEQA. Indeed, Applicant attempts to meet its CEQA requirements by submitting the IVS Study in the Calico Solar Project. The IVS Study is not site-specific, fails to address rail operations at all, and was "submitted" without any corresponding offer of testimony. It is, therefore, inadmissible in this matter. Regardless, it cannot form the basis for CEQA compliance given that it is for a completely separate project.

While the Jewell Report does address glare and glint, it is still not site specific in relation to rail operations – despite the fact that Mr. Jewell clearly sought site specific information in order to complete the appropriate study and never did so. Moreover, while it does establish that the minimum safe distance from a single SunCatcher is 223 feet, it only measures the impact of a single SunCatcher – notwithstanding the fact that one of its authors, Mr. Lindsley, concedes that multiple light sources will necessarily have an increased impact, that

impact should be measured, and it has not been measured. Without this information it is not possible to ascertain the range of mitigation measures which may be necessary to mitigate these identified hazards and the ability of the solar power plant to operate in a safe manner.

Indeed, there appears to be no question that the impact of glare and glint on BNSF's operations has not been appropriately evaluated and measured and needs to be. All the experts agree on this. Calico Solar agrees. Staff agrees. One of the remaining issues is how the Condition of Certification, with respect to the determination of mitigation, effects BNSF's retention of the ability to control its operations and safety in relation to any proposed mitigation measures. Applicant has failed to meet its burden of proof and has presented no evidence, nor can it, to support its contention that it should have control over BNSF operations and safety. 20 CCR 1748(d). Nor has Staff presented any such evidence on which Applicant could rely. BNSF has met its burden and has presented more than sufficient evidence to compel a finding that BNSF must remain in sole and absolute control of its safety and operations, in conformance with federal regulation and oversight. 20 CCR 1748(e). There is absolutely no legal basis to support a finding that such control can be vested in either a third party, such as Applicant, or a state agency, such as the CEC.

Moreover, without this Condition of Certification, Applicant has failed to meet its burden to present substantial evidence to establish that the project can be constructed and operated safely or that it is feasible to make modification (e.g., signal modifications) to ensure safe and reliable operations. 20 CCR 1748(b). Substantial evidence does not include argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, such as the testimony of Mr. Lindsley where he clearly speculates regarding the feasibility of future, unspecified signal modification. Cal. Pub. Res. Code §§21080(e), 21082.2(c).

Finally, without this Condition of Certification, the CEC cannot ensure compliance with federal LORS, specifically in relation to compliance with the FRA and other federal regulations in relation to signal operations, which are preemptive in nature and preclude state agency interference with the federal regulatory scheme. *See, e.g., National Ass'n of Regulatory Util. Commissioners v. Coleman*, 399 F.Supp. 1275 (1975) (court upheld FRA regulation preempting states from prescribing a railroad accident reporting requirement); *Gauthier v. Union Pacific R.R. Co.*, 644 F.Supp.2d 824 (2009) (preemption of state negligence claim by Federal Railroad Safety Act; "The Federal Railroad Safety Act (FSRA) was enacted in 1970 to promote safety in every area of railroad operations and to reduce railroad-related accidents and incidents. 49 U.S.C. § 20101."); *CSC Transportation v. Easterwood*, 507 U.S. 658 (1993) (Regulations adopted by the Secretary of Transportation under the Federal Railroad Safety Act, regarding

warning requirements at rail crossings and regarding maximum train speeds on certain types of tracks, preempted any contrary requirements under state law).

Accordingly, the CEC should not certify this Project without adopting BNSF's proposed Condition of Certification. 20 CRC 1748, 1751; Cal. Pub. Res. Code §§21080(e), 21082.2(c); *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova*, 40 Cal.4th 412, 426 (2007) ("CEQA's informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to [a] problem.... Decision makers must, under the law, be presented with sufficient facts to evaluate the pros and cons of [the project]." (internal quotations omitted)). In this case, the FEIR for large housing and commercial development project failed to adequately analyze long-term surface water supplies; provided no consistent description of future demand for new water or potential supply, and its explanation of planned water provision was vague and unquantified.)

6. <u>CONCLUSION</u>

For all the foregoing reasons, BNSF respectfully requests that the CEC adopt the Conditions of Certification proposed by BNSF and set forth herein.

August 23, 2010

S. A. Lamb

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July 1, 2010

Mr. Christopher Meyer Energy Commission Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Mr. Jim Stobaugh Project Manager BLM Nevada State Office P.O. Box 12000 Reno NV 89520

Re: Comments on Calico Solar Project SA/DEIS

Dear Sirs:

BNSF Railway (BNSF) appreciates the opportunity to comment on the Staff Assessment and Draft Environmental Impact Statement ("SA/DEIS") for the Calico Solar Project ("Project") proposed by Calico Solar, LLC ("Calico Solar") published March 30, 2010. BNSF is one of the two Class 1 railroads operating in California. Its mainline, traversed by as many as 80 trains per day, carries interstate commerce from the Ports of Los Angeles and Long Beach to U.S. Midwestern, Southwestern and Eastern markets.

The Project proposes to place 34,000 SunCatchers, a 5,000-foot transmission line, substation, and maintenance facilities, along both sides of several miles of BNSF's mainline. Given the importance of this corridor, it is essential that safety along BNSF's mainline be maintained. In light of this, BNSF has several concerns regarding the Project with respect to safety and other issues. BNSF has been working with Calico Solar in a cooperative effort to ensure that measures to address BNSF's concerns are incorporated into the Project, and BNSF will continue to do so. Nonetheless, BNSF is providing the following comments to the SA/DEIS to ensure that its concerns are adequately addressed, through Project design, operation plans, permit conditions, or as mitigation measures as appropriate.

1) Visual Resources – Glint and Glare. The portion of the BNSF mainline along which the Project is proposed to be built is curved, and an essential signal for rail traffic is located in the vicinity near Hector Road. Both daytime glint and glare from Project mirrors, as well as the spill of light from nighttime maintenance activities, either of which may occur on both sides of the track, may significantly impact BNSF engineers' ability to see the signal. The situation would be exacerbated by the site elevations which Calico Solar has proposed. Glint and glare would not be a mere nuisance issue, but rather could present a significant safety issue. While the SA/DEIS has begun to address glint and glare with respect to motorists on nearby roadways (SA/DEIS pp. C.13-13 – C.13-22), and BNSF understands that a Glint and Glare Study is currently being performed, neither currently addresses potential glare impacts to rail. BNSF requests that these concerns be studied and addressed. As the SA/DEIS has not proposed alternate locations for the Project, it is imperative that these issues be addressed at this time.

Exhibit A to BNSF Post Hearing Brief

- 2) Transmission Line Safety and Nuisance Induction Issues. The proposed Project would include over 5,000 feet of new transmission line and a new substation immediately adjacent to BNSF's mainline. BNSF has experienced interference with signals and its employees being shocked in similar situations in other locations, and is concerned that the proposed configuration of these Project elements may raise a safety issue. While the SA/DEIS addresses these transmission safety issues generally (SA/DEIS pp. C.12-5 C.12-7), BNSF requests that they be studied specifically with respect to the proximity of the transmission line and new substation to the mainline, and that appropriate conditions on the locations of these facilities be required.
- 3) Hazardous Materials Management Hydrogen. Calico Solar proposes an extensive underground pipeline system to provide hydrogen to the 34,000 SunCatchers proposed to be constructed on the 8,230 acre site surrounding the existing mainline. This pipeline system raises at least two safety concerns. First, if a derailment were to occur, given the desert sands, train cars could come in contact with the shallow underground pipeline system. Second, it has been determined that the hydrogen pipeline will have uncontrollable leaks. BNSF understands that Calico Solar has tripled the amount of hydrogen the Project will require due to their greater understanding of the potential for hydrogen pipeline leaks.

In addition to the analysis of hydrogen issues presented at pp. C.5-5 – C.5-13 of the SA/DEIS, BNSF requests that the hazards posed by the location, extent and depth of the proposed underground hydrogen pipeline system, and the anticipated hydrogen leaks, be analyzed with respect to rail operations. BNSF requests that the Risk Analysis being prepared with respect to hydrogen consider a possible derailment scenario. Additionally, BNSF requests that the exact location of hydrogen in relation to the signal cable be determined; that sensors be required to be placed to detect hydrogen leaks; that mitigation measures such as automatic shut-off valves along the hydrogen pipeline be considered; that the Spill Prevention, Control, and Countermeasures Plan require notification of the railroad of hydrogen releases; that an autodialer and/or other notification system be established to promptly notify BNSF of hydrogen releases; and that BNSF be granted access to the Project site in the event of an emergency, including derailment.

4) Geology and Paleontology – Water Supply. BNSF is concerned the potential drawdown of the groundwater basin by the newly proposed water well may cause subsidence which might adversely affect rail track alignment, creating a safety issue. While the SA/DEIS briefly addresses the issue of possible subsidence due to groundwater pumping at p. C.4-12 (Geology and Paleontology), BNSF suggests that the analysis be expanded. In addition, BNSF requests that a notification procedure be put in place for any noted subsidence, whereby BNSF maintenance teams would be alerted of the issue. BNSF also intends to preserve the option of replacing its abandoned wells in the Hector Road location.

In addition to the above, BNSF is concerned that security for the proposed vehicle access over the bridge over the mainline be considered, and that the BNSF ROW be demarcated to notify Calico Solar employees and others of their proximity to the tracks. BNSF understands that maintenance will be performed at night.

To the extent that any of the above rail-related issues have not been analyzed in the Project SA/DEIS, BNSF asks that the issues be analyzed and incorporated into the SA/DEIS. BNSF further requests that, where applicable, the issues be addressed, through Project design, operation plans, permit conditions, or as mitigation measures as appropriate.

We will continue to work with Calico Solar and look forward to meeting with CEC and BLM Project teams as soon as possible to provide any information or suggestions that will assist the agencies in their analysis and recommendations.

Thank you for the opportunity to comment on the SA/DEIS. If you have any questions, please contact Mr. Edward Phillips at (909) 386-4082.

Very truly yours,

Edward Phillips

cc: Cynthia L. Burch, Esq.



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July 29, 2010

Mr. Christopher Meyer Energy Commission Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Mr. Jim Stobaugh Project Manager BLM Nevada State Office P.O. Box 12000 Reno NV 89520

Re: BNSF Comments Regarding Prehearing Conference and for Consideration at Evidentiary Hearing

Calico Solar Project (Formerly SES Solar 1) Docket No. 08-AFC-13

Dear Sirs:

BNSF Railway ("BNSF") appreciates the opportunity to present comments for consideration during the Prehearing Conference, during which the Committee will assess the parties' readiness for an evidentiary hearing, identify areas of agreement or dispute, and discuss the remaining schedule and procedures necessary to conclude the certification process, and for consideration during the evidentiary hearing. [Cal. Code Regs., Tit. 20, § 1718.5; Notice of Prehearing Conference and Evidentiary Hearings, p. 3.] BNSF has reviewed the Staff Assessment and Draft Environmental Impact Statement ("SA/DEIS") for the Calico Solar Project ("Project") proposed by the Applicant Calico Solar, LLC ("Applicant" or "Calico Solar") published March 30, 2010, and the Supplemental Staff Assessment ("SSA"), published July 21, 2010. As explained in a previous submission, BNSF is one of the two Class 1 railroads operating in California. BNSF's mainline, which is traversed by as many as 80 trains per day, carries interstate commerce from the Ports of Los Angeles and Long Beach to U.S. Midwestern, Southwestern and Eastern markets. The proposed Project would surround both sides of several miles of BNSF's mainline tracks. Accordingly, BNSF has significant concerns that the construction and operation of the Project do not adversely impact BNSF operations or otherwise impose unacceptable safety risks to BNSF personnel and operations.

Mr. Christopher Meyer Mr. Jim Stobaugh Page 2 July 29, 2010

The consummation of the Project would require the granting of several licenses and permits from BNSF, which Calico Solar has requested in a piecemeal fashion over the course of the past year. To date, none of these requested licenses or permits have been granted. Before BNSF can grant such licenses and permits, BNSF must be assured that the concerns detailed below be addressed. The purpose of this submission is to provide the committee with a summary of the areas of concern, and to identify those concerns that BNSF feels have not been resolved.

1. Transmission Line Safety and Nuisance - Induction

BNSF is concerned the proposed proximity of the transmission line to BNSF's mainline may result in electrical induction on the rail. As has been addressed in previous submissions, the proposed Project would include approximately 1.9 miles of new transmission line immediately adjacent to BNSF's mainline. BNSF has experienced interference with signals, equipment malfunction, and employees being shocked in similar situations in other locations, and is concerned that the proposed configuration of these Project elements may raise a safety issue.

In the absence of any studies addressing induction issues which may be caused by the Project, BNSF has taken a conservative position with respect to the necessary setback of the transmission line to avoid any induction issues, and believes that a 300' setback from the right of way should be maintained. Calico Solar has agreed to set back the proposed transmission line 300' from the BNSF right of way. In addition, per BNSF requirements, in the location where the transmission line is proposed to cross the tracks, it would do so at a 90-degree angle, and would travel 300' from the far side of the right of way before returning to a parallel configuration. Avoiding electrical induction of the rail line is a critical safety requirement. Therefore, BNSF requests that Calico Solar's agreed-upon setback of the transmission line from the right of way be incorporated into the Committee's decision on Calico Solar's application as a Condition of Certification.

2. Hazardous Materials Management - Hydrogen

Due to critical safety concerns, BNSF opposes the transport of hydrogen above or beneath its tracks. BNSF is concerned that hydrogen pipelines passing under or near the mainline track may adversely impact rail operations and create unacceptable safety risks. Calico Solar has proposed two alternate systems to provide hydrogen to the 34,000 SunCatchers proposed to be constructed on the 6,215 acre site within 100' of both sides of approximately five miles of the transcontinental mainline. Under one scenario, the Applicant would construct a single extensive underground pipeline system, 2½ feet below the ground, serving the entire Project. SSA p. C.5-8. This approach would involve boring a hydrogen pipeline under the mainline, which has the potential to compromise the integrity of the track structure. Moreover, BNSF's routine maintenance activities involve digging, trenching, excavating and filling areas of the right of way. A hydrogen pipeline located under or near the right of way could be contacted during these

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activities, posing a safety hazard to employees. Finally, if a derailment were to occur, given the desert sands, train cars could come in contact with the shallow underground pipeline system.

Under the second alternative scenario, hydrogen for the SunCatchers would be generated on-site and would be distributed to the SunCatchers via bottles carried on trucks. SSA p. C.5-8. This would involve individual SunCatchers being supplied from the hydrogen storage tank by trucks. An accident or collision between the hydrogen trucks and another vehicle or train at the at-grade crossing, or an accident on the proposed bridge, could result in significant safety issues.

Calico Solar has represented that it is willing to provide hydrogen to the SunCatchers through two separate hydrogen systems, one on the north side of the right of way and one on the south side, thereby helping to alleviate BNSF's stated concerns. BNSF supports the placement of two separate hydrogen generation facilities, one north and one south of its tracks, and requests that this be incorporated into the Committee's decision on Calico Solar's application as a Condition of Certification. In addition, if Calico Solar opts to use the centralized pipeline system, the appropriate distance of the nearest pipelines to the right of way would need to be determined.

BNSF requests that the Risk Analysis being prepared with respect to hydrogen consider possible derailment scenarios, appropriate mitigation be determined and the system not be activated until all mitigation is fully implemented. BNSF also requests that should the centralized pipeline system be selected, the exact location of hydrogen pipelines in relation to the signal cable and the right of way be evaluated to ensure the protection of rail infrastructure and operations. In addition, BNSF requests that sensors be required to be placed to detect hydrogen leaks; that mitigation measures such as automatic shut-off valves along the hydrogen pipeline be required; that the Spill Prevention, Control, and Countermeasures Plan require notification of the railroad of hydrogen releases which could impact rail safety and operations; and that an auto-dialer and/or other notification system be established to promptly notify BNSF of such hydrogen releases.

3. Biological Resources – Desert Tortoise

In a derailment scenario, BNSF workers and emergency response personnel must have full access to BNSF's right of way and the adjacent lands in order to respond to the emergency. Such access will likely require temporary removal of portions of the desert tortoise exclusionary fence the Applicant is required to install as part of the Project. BNSF requests that, in the case of derailment or other emergency, Calico Solar be required to provide BNSF access to the Project site for emergency response as a Condition of Certification. This access may include, among other activities, temporary removal of portions of the desert tortoise exclusionary fencing and the placement of a temporary fence. BNSF also requests that the Condition of Certification require Calico Solar contractors and employees to participate in BNSF's environmental sensitivity training program prior to commencing work at the Project site.

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4. Soil and Water Resources – Detention Basins

BNSF is concerned that detention basins are not sufficient to protect the tracks and their supporting structures. The Project incorporates detention basins that have been designed for a 100 year flood. SSA. P. C.7-26. Given the gradient of the Project site, BNSF is concerned that the steps being proposed are not adequate to ensure protection of the tracks and their supporting structures or soil. A characteristic of high desert environs such as the Project site is an increased likelihood of flash floods, which over a sustained period of hours or days may cause the detention basins to overflow and cause a high volume of water in a concentrated flow to wash through the area, eroding the terrain around and supporting the tracks. It needs to be determined whether the applicant should be required to fund the reinforcement of rail infrastructure.

5. Hydrology - Subsidence

As has been addressed in previous submissions, BNSF is concerned the potential drawdown of the groundwater basin by the newly proposed water well may cause subsidence which might adversely affect rail track alignment, increasing the risk of derailment. While the SA/DEIS briefly addresses the issue of possible subsidence due to groundwater pumping at p. C.4-12, and the SSA discusses the issue at C.4-13 (Geology and Paleontology), BNSF is concerned that the analysis may not be sufficient. In addition, while Calico Solar represents that it is currently the only water user in the groundwater basin, BNSF notes that it intends to preserve the option of replacing its abandoned wells in the Hector Road location.

BNSF understands that Calico Solar is required to conduct groundwater monitoring on a quarterly basis. BNSF requests that as a Condition of Certification, Calico Solar be required to provide BNSF with such quarterly reports, and that a notification procedure be put in place for any noted subsidence, whereby BNSF maintenance teams would be alerted of the issue.

6. Transportation – Glint and Glare

As has been addressed in previous submissions, the portion of the BNSF mainline along which the Project is proposed to be built is curved. An essential signal for rail traffic is located in the vicinity near Hector Road. Signals are critical safety features. The Applicant proposes to locate the nearest SunCatchers as close as 100' from the right of way, on both sides of the transcontinental mainline track for approximately five miles. Daytime glint and glare from the 34,000 SunCatcher mirrors and associated structures, in particular when the mirrors are in offset tracking position, may significantly impact BNSF engineers' ability to see the signal. The situation would be exacerbated by the site elevations which Calico Solar has proposed.

BNSF is required by federal regulations to maintain visual contact with signals. If a train's contact with a signal is lost and cannot be regained, the engineer is required to stop the train.

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This often requires an emergency application of the brakes, risking derailment of the train. When a train has been stopped through emergency application of the brakes, BNSF General Code of Operating Rule 6.23 requires the engineer to inspect all cars, units, equipment and track pursuant to BNSF special instructions and rules. This can cause significant delays to rail operations with ramifications reaching from the Ports of Los Angeles and Long Beach to Chicago and beyond.

The illuminated background created by the SunCatcher field could result in an engineer perceiving the signal to be dark or to be displaying a white light, both of which, under BNSF General Code of Operating Rule 9.4, require the engineer immediately to stop the train.

Thus, glint and glare are critical safety and operational issues. While the SA/DEIS has begun to address glint and glare with respect to motorists on nearby roadways (SA/DEIS pp. C.13-13 – C.13-22), and BNSF understands that a Glint and Glare Study is currently being performed, neither currently addresses potential glare impacts to rail, nor are these studies specific to the Project site. In addition, the SSA Transportation section has not yet been released, and BNSF is therefore unable to make meaningful comments on the potential Glint and Glare analysis at this time.

BNSF requests that the following Condition of Certification be incorporated into the Project:

Prior to the first SunCatcher disc being mounted on a pedestal, a site-specific Glare/Glint study shall be performed to address the Glare /Glint issues raised by BNSF with respect to the potential impact of the proposed Calico Solar Suncatchers on BNSF rail operations and the recommended mitigation measures, once approved by BNSF, shall be implemented by Calico Solar at its expense. The site specific study shall commence immediately upon BNSF's selection of the experts to perform the study. In the event the CEC's on-going Glare/Glint study resolves BNSF's Glare/Glint issues to BNSF's satisfaction, BNSF will advise the CEC and Calico Solar and the CEC site-specific Glare/Glint study and the implementation of its mitigation measures shall be deemed compliance with the above Condition of Approval.

As information and studies and the section of the SSA responsive to this critical concern, among other vital transportation related concerns, remain to be published in the coming weeks, BNSF intends to submit a petition to intervene in this proceeding. Accordingly, Calico Solar has agreed to support BNSF's petition. BNSF will include the above comments in declarations as soon as possible, some of which will accompany the petition to intervene.

To the extent that any of the above rail-related issues have not been analyzed in the Project SA/DEIS or SSA, BNSF asks that the issues be analyzed and incorporated into any Committee decision regarding the Project. BNSF requests that, where applicable, the issues be addressed, through Project design, operation plans, permit conditions, or as mitigation measures as

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appropriate. We will continue to work with Calico Solar and look forward to meeting with CEC and BLM Project teams as soon as possible to provide any information or suggestions that will assist the agencies in their analysis and recommendations. Thank you for the opportunity to comment on the SA/DEIS and SSA. If you have any questions, please contact Mr. Joseph Schnell at (817) 352-1918.

Very truly yours,

Joseph Schnell

STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission

In the Matter of: The Application for Certification for the Calico Solar Power Project **Licensing Case**

Docket No. 08-AFC-13

PETITION TO INTERVENE BY **BNSF RAILWAY COMPANY**

July 29, 2010

Cynthia Lea Burch Steven A. Lamb Anne Alexander Katten Muchin Rosenman LLP 2029 Century Park East, Suite 2700 Los Angeles, California 90067-3012

Telephone: 310) 788-4400

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Attorneys for Intervenor **BNSF** Railway Company Pursuant to sections 1207 and 712 of Title 20 of the California Code of Regulations, BNSF Railway Company ("BNSF") hereby respectfully petitions to intervene in this proceeding. Section 1207(a) provides that:

Any person may file with the Docket Unit or the presiding committee member a petition to intervene in any proceeding. The petition shall set forth the grounds for the intervention, the position and interest of the petitioner in the proceeding, the extent to which the petitioner desires to participate in the proceedings, and the name, address, and telephone number of the petitioner.

BNSF is one of two Class 1 railroads operating in California. BNSF's mainline, which is traversed by as many as 80 trains per day, carries interstate commerce from the ports of Los Angeles and Long Beach to U.S. Midwestern, Southwestern, and Eastern markets. The Calico Solar Project (the "Project") proposed by Applicant Calico Solar, LLC ("Calico Solar") seeks to emplace 34,000 SunCatcher solar energy dish systems over 6,215 acres and within one hundred feet of both sides of BNSF's mainline.

Accordingly, BNSF has significant concerns that the construction and operation of the Project do not adversely impact BNSF operations or otherwise impose unacceptable safety risks to BNSF operations and the surrounding environs. To address these concerns, BNSF has coordinated very recently with

Calico Solar as well as with the Commission Staff.¹ This coordination has included the exchange of information, expert reports, and several face to face meetings with representatives from Calico Solar.

BNSF first became aware of the issues of concern to its operations in June 2010. The Notice setting forth the actual schedule for the Prehearing Conference and Evidentiary Hearing was published to the Commission's website on July 13, 2010. That Notice sets forth that the deadline for filing a petition to intervene was July 6, 2010 – a week before the posting of the actual Notice. Although the Notice references by footnote that the date for the Evidentiary Hearing was known as early as the June 15th Committee Conference and Revised Committee Schedule issued on June 3, 2010, BNSF did not even begin to become aware of the underlying issues affecting its operation until late June.

The available information on the Commission's website describes the

Project in general terms, but specific plans are not yet available. Indeed, current
available documentation does not call out the specific emplacement of

SunCatchers and other structures and facilities to support the Project, to include
but not limited to transmission lines and hydrogen gas production facilit(ies) and

¹ Although Applicant Calico Solar had made previous piecemeal requests of various employees within BNSF for access to the BNSF Right of Way and to ascertain the potential for obtaining water from BNSF, BNSF was not aware of the nature and scope of this proceeding until June 2010, and the schedule was not posted until July 13th.

transmission line(s).² Moreover, there are several studies that have yet to be produced and are therefore not available for review or comment.

Regardless, BNSF has been working on a cooperative basis in the interim with Applicant Calico Solar and the Commission Staff to address the concerns that BNSF has in relation to the Project. Assuming that these concerns are properly addressed to ensure that BNSF's safety requirements are met through conditions of permit and certification, BNSF anticipates that BNSF and Calico Solar will able to enter into mutually agreeable agreements regarding access to BNSF land. BNSF believes that the dialogue and interaction process has been and will continue to be productive and cooperative in nature. After consulting with both the Commission Staff and Applicant Calico Solar, BNSF believes it would be more appropriate to appear as an intervenor in this proceeding on a going forward basis so that BNSF can provide the Commission with the requisite evidence to ensure that the Commission addresses BNSF's safety and related issues. BNSF understands that it takes the case as it finds it upon grant of this Petition and seeks intervention to address issues solely related to rail safety and BNSF property. Counsel for Calico Solar has been apprised of this Petition and supports this Petition.

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² The SSA called for the construction of one hydrogen gas production facility to be emplaced on an as-yet-to-be-determined site within the Project. (SSA p. C.5-8.) That single hydrogen gas facility would generate hydrogen gas, which would then be transmitted via extensive shallow (approximate 2 ½ foot bgs) subterranean pipelines throughout the Project to the various SunCatchers (the specific emplacement of which was likewise not set forth in the SSA) and would require boring under and hydrogen gas pipeline emplacement under the mainline. This raised significant safety concerns. Applicant Calico Solar recently has represented that it will either: (1) produce hydrogen gas somewhere on site at a location not yet specified and transport the gas via bottles carried on trucks to the respective SunCatchers; or (2) produce hydrogen gas on two separate but as yet unidentified sites on the north and south sides of the BNSF Right of Way and thereafter construct two separate hydrogen gas pipeline systems (one northern and one southern) to transport the hydrogen gas to the respective SunCatchers, without going under the mainline.

Moreover, while the deadline to intervene pursuant to the Notice has passed, the California Code of Regulations specifically provides that the Presiding Member of the Calico Solar AFC Committee "may grant leave to intervene to any petitioner to the extent he deems reasonable and relevant, . . . after the deadline provided . . . upon a showing of good cause by the petitioner." 20 CCR §1207(c). BNSF respectfully requests that the Presiding Member grant this Petition given that BNSF: (1) has a significant interest in the Project; (2) has participated in good faith to date; and (3) Applicant Calico Solar does not object to this Petition.

BNSF wishes to participate fully in all phases of this proceeding on a going forward basis. Specifically, the areas regarding which BNSF requests full participation are set forth in separate correspondence submitted on this date to the Commission and include: (1) transmission line safety and nuisance (induction); (2) hazardous materials management (hydrogen); (3) biological resources (desert tortoise); (4) soil and water resources (detention basins); (5) hydrology (subsidence); and (6) transportation (glint and glare).

Filings should be served on BNSF through counsel. BNSF's client representative is Joseph Schnell, Manager Special Projects – Signal, BNSF Railway Company, 2600 Lou Menk Drive, OOB 3, Fort Worth, Texas 76131-2830, telephone 817.353.1918. The Prehearing Conference is set for July 30, 2010 and the Evidentiary Hearing will commence on August 4, 2010.

Accordingly, BNSF submits evidentiary declarations in support of this Petition for consideration at the Prehearing Conference and Evidentiary Hearing. BNSF

understands that, under the current Schedule, the Transportation and Cultural Resources SSA Sections will not be published until sometime next week, at the earliest, and that a further Evidentiary Hearing is set for August 18, 2010 to receive the FEIS, Biological Opinion, and any further evidence. In that vein, as set forth in BNSF's correspondence of July 29, 2010, BNSF understands that further studies, to include but not limited to a further study in relation to glint and glare, will be submitted by the Commission Staff after the Prehearing Conference. BNSF respectfully requests the opportunity to comment on and, if appropriate, provide further evidence relating to any such additional studies.

Dated: July 29, 2010 Respectfully submitted,

S. A. Lamb

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BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – www.energy.ca.gov

APPLICATION FOR CERTIFICATION

For the CALICO SOLAR (Formerly SES Solar One)

Docket No. 08-AFC-13

PROOF OF SERVICE

(Revised 7/12/10)

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$\underline{\text{DECLARATION OF SERVICE}}$

I, <u>Ani Seferyan</u>, declare that on July 29, 2010, I served and filed copies of the attached

PET	ITION TO INTERVENE BY BNSF RAILWAY COMPANY	
the mo	July 29, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of ost recent Proof of Service list, located on the web page for this project at: energy.ca.gov/sitingcases/solarone].	
to the	locuments have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and Commission's Docket Unit, in the following manner:	
(Cnec	ck all that Apply)	
	FOR SERVICE TO ALL OTHER PARTIES:	
_XX	sent electronically to all email addresses on the Proof of Service list; by personal delivery;	
	by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "email preferred."	
AND		
	FOR FILING WITH THE ENERGY COMMISSION:	
XX	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (<i>preferred method</i>);	
OR		
	depositing in the mail an original and 12 paper copies, as follows:	
	CALIFORNIA ENERGY COMMISSION Attn: Docket No. <u>08-AFC-13</u> 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us	
I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.		
	Ani Seferyan	
	*indicates change 2	



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – www.energy.ca.gov

APPLICATION FOR CERTIFICATION

For the CALICO SOLAR (Formerly SES Solar One)

Docket No. 08-AFC-13

PROOF OF SERVICE (Revised 8/9/10)

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DECLARATION OF SERVICE

I, <u>Harriet Vletas</u>, declare that on <u>August 23, 2010</u>, I served and filed copies of the attached <u>Intervenor BNSF's Post Hearing Brief</u> dated <u>August 23, 2010</u>. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[www.energy.ca.govlsitingcasesIsolarone]**.

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

	FOR SERVICE TO ALL OTHER PARTIES:
_x	sent electronically to all email addresses on the Proof of Service list;
	by personal delivery;
	by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "email preferred."
AND	
	FOR FILING WITH THE ENERGY COMMISSION:
_x	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (<i>preferred method</i>);
OR	
	depositing in the mail an original and 12 paper copies, as follows:
	CALIFORNIA ENERGY COMMISSION Attn: Docket No. <u>08-AFC-13</u> 1516 Ninth Street, MS-4

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Sacramento, CA 95814-5512 docket@energy.state.ca.us

HARRIET VIETAS

*indicates change