Appendix A
NOP and Scoping Documents

ORD MOUNTAIN SOLAR AND
ENERGY STORAGE PROJECT
ENVIRONMENTAL IMPACT REPORT

Notice of Preparation

County of San Bernardino

NOTICE OF PREPARATION OF A DRAFT EIR AND SCOPING MEETING

DATE: May 31, 2017

TO: Responsible Agencies and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report and Scoping Meeting

Pursuant to the California Environmental Quality Act (CEQA), the County of San Bernardino (County) must conduct a review of the environmental impacts of the Ord Mountain Solar Energy Storage Project (project). Implementation of the Project will require discretionary approvals from state and local agencies, and therefore the project is subject to the environmental review requirements of CEQA. As the lead agency under CEQA, and due to the involvement of potentially significant impacts to the environment, the County is therefore issuing this Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the project.

PROJECT TITLE: Ord Mountain Solar Energy Project

PROJECT APPLICANT: Ord Mountain Solar, LLC

ASSESSOR'S PARCEL NUMBERS: 0453-091-11, 12, 24, 29, 31, 48, 51, 72, & 0453-041-07

PROJECT LOCATION

The Project site is located in unincorporated San Bernardino County; east of State Route 247, north of Haynes Road, and west of Meridian Road, approximately 8 miles north of Lucerne Valle. The project's overhead power line would extend southwest from the solar and energy storage site to the proposed Calcite Substation, west of SR-247. See exhibits in the Initial Study for project location maps and preliminary site design.

PROJECT DESCRIPTION

Ord Mountain Solar, LLC proposes a Conditional Use Permit to construct and operate a solar energy generation and storage project on approximately 484 acres to produce approximately 160,000 megawatt-hours of renewable energy annually. The project would be a 60-Megawatt (MW) alternating current (AC) photovoltaic solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The project would include a 60 MW AC maximum capacity, 4-hour energy storage battery system, and a 220-kilovolt overhead power line, referred to as a generation tie line (gen-tie line), which would extend approximately 0.6 mile southwest to SCE's proposed Calcite Substation (also part of the project), in close proximity to the existing high-voltage transmission corridor. The project includes a Major Variance to modify the maximum structure height to permit the construction of onsite transmission poles and related structures up to 94 ft. in height. See the Initial Study for a

detailed description of the project components, construction program, and other information.

EIR SCOPE

An Initial Study addressing the potential environmental impacts associated with the project has been prepared. This Initial Study was prepared in compliance with CEQA of 1970 (as amended), codified in California Public Resources Code Sections 21000 et seq., and the CEQA Guidelines, codified in the California Code of Regulations, Title 14, Section 15000 et seq. The purpose of an Initial Study is to provide a preliminary analysis of a project to determine whether a negative declaration, a mitigated negative declaration, or an environmental impact report should be prepared. Since the County Land Use Services Department, as the CEQA lead agency, identified the need for an EIR, an Initial Study was prepared to refine the scope of the EIR, identify resource areas that will be eliminated from further analysis, and to solicit public input on the scope of the EIR.

The Initial Study is available to view or download at:
http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx.

The lead agency has initially identified the following environmental considerations as potentially significant effects of the project:

- Aesthetics
- Air Quality
- Biology
- Cultural Resources
- Geology and Soils
- Greenhouse Gas
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Traffic/Circulation
- Tribal Cultural Resources
- Mandatory Findings of Significance

The EIR will assess the effects of the project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the Project that may accomplish basic project objectives while lessening or eliminating any potentially significant project impacts.

RESPONSIBLE AGENCIES

A responsible agency means a public agency other than the lead agency, which has permitting authority or approval power over some aspect of the overall project. This Notice provides a description of the Project and solicits comments from responsible agencies, trustee agencies, federal, state and local agencies, and other interested parties on the scope and content of the environmental document to be prepared to analyze the environmental impacts of the project. Comments received in response to this Notice will be reviewed and considered by the lead agency in determining the scope of the EIR. Due to time limits, as defined by CEQA, your response should be sent at the earliest possible date, but no later than thirty (30) days after publication of this notice. We need to know the views of your agency as to the scope and content of the environmental information that is germane to you or to your agency's statutory responsibilities in connection with the project. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval for the project.

OPPORTUNITY FOR PUBLIC REVIEW AND COMMENT

The NOP and Initial Study are available for public review on the County's website: http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx.

Additionally, copies of the NOP and Initial Study are available for public review at the following locations:

San Bernardino County High Desert Government Center
15900 Smoke Tree Street, Suite 1331
Hesperia, CA 92345

Lucerne Valley Janice Horst Branch Library
33103 Old Woman Springs Rd.
Lucerne Valley, CA 92356

San Bernardino County Government Center
385 North Arrowhead Avenue, Second Floor
San Bernardino, CA 92415

We would like to hear what you think. Comments and questions should be directed as follows, **before 4:30 p.m. on June 30, 2017:**

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Please include the name, phone number, and address of your agency's contact person in your response.

PUBLIC SCOPING MEETING

The CEQA process encourages comments and questions from the public throughout the planning process. Consistent with Section 21083.9 of the CEQA statute, a Public Scoping Meeting will be held to solicit public comments on the scope and content of the EIR. The Public Scoping Meeting will be held on:

Date and Time: June 13, 2017, from 5:00 to 7:00 pm

Place: Lucerne Valley Community Center at 33187 Highway 247 East, Lucerne Valley, CA 92356.

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Scoping Meeting Summary

Ord Mountain Solar Energy Project EIR
Scoping Meeting Summary
June 13, 2017

The County of San Bernardino (County) held a Project Scoping Meeting on June 13, 2017 from 5:00 pm to 7:00 pm at the Lucerne Valley Community Center at 33187 Highway 247 East, Lucerne Valley, CA 92356. The meeting gave the community the opportunity to provide input on the range of environmental issues to be addressed in the Draft Environmental Impact Report being prepared to address California Environmental Quality Act requirements for the County's consideration of the proposed Project. Approximately 50 members of the public were in attendance, as well as County staff, Michael Baker staff, SCE representatives, and applicant representatives.

Attendees were asked to sign-in and were provided a comment sheet, and speaker card. A presentation was provided, followed by an opportunity for attendees to make oral comments. Attendees were also encouraged to provide written comments, either via comment sheet, or by submitting comments during the scoping review period.

This document summarizes oral and written comments relevant to the scope of the EIR that were provided at the meeting and are generally organized by topic. Comments voiced in general opposition to the project were received, as were comments related to other non-CEQA issues (e.g. effect on property values). Such comments are not incorporated into this document as they do not relate to the scope and content of the EIR.

Biological Resources

- References to the site being "disturbed" are inaccurate. There are other local areas that are truly disturbed, unlike this one, and are more suitable for solar development.
- The project is in a critical area to desert tortoise.
- The area is a nesting site for golden eagles.
- The project would be located near or in special status species areas.
- The initial study omitted findings and stated incorrectly that no special status species were found on-site.
- The initial study has omitted some very important/critical biological resources.
- The site is in a narrow gap between two areas of critical environmental concern (ACEC). Habitat connectivity needs to be analyzed with regard to American badger, bighorn sheep, desert tortoise and golden eagle.
- Need discussion of relationship to the Desert Renewable Energy Conservation Plan (DRECP).
- The project conflicts with the Apple Valley/County's Multiple Species Habitat Conservation Plan (MSHCP).
- The critical species directly affected are bighorn sheep, badgers, golden eagle, thrashers, among others.
- The project would demolish/disturb habitat that is currently adequate for residents and the habitat that is currently adequate for residents.
- Mountain lion tracks seen onsite (cell phone photo presented).

- Not practical to say ground cover would be left alone; panels 18-24" off ground and saltbrush is 3 ft high.
- Snakes and rodents will be driven from the site into neighboring homes.

Aesthetics/Community Character

- A seven-foot fence will be placed around the home of a resident who would be located right next to the sub-station.
- Fences, proposed buildings, and certain structures would completely block neighbors' scenic views.
- Impacts to scenic Hwy 247 would occur with the implementation of the project.
- Rural character is treasured. Project would impact community character.
- Viewshed analysis is needed; need to see views from drivers on Hwy 247.

Land Use and Planning

- This project should wait to begin the environmental review process until after the County's Renewable Energy Element is adopted.
- The initial study finding: "project doesn't conflict with county land use" is not a correct finding.
- The project definitely conflicts with the county land use policies; zoning.
- County resolutions state no solar to be located in Lucerne Valley.
- There are other, previously mentioned areas, where this project can be located and be successful; 160,000 acres available in more suitable areas.
- This industrial project should not be located in residential areas (i.e., the project site) which is surrounded by residential properties.
- Kramer Junction is a non-populated area where the project can be better located.
- Project better sited next to Hwy 40; no one living in that area.
- Cumulative buildout of DRECP all around Lucerne Valley needs to be addressed.
- Project will induce growth; substation component will spawn more projects.

Air Quality

- Air quality will become a problem; there are already dust storms that will become worse.
- The bushes that are currently in place serve to mitigate dust. Removing them would trigger dust storms and would exacerbate dust problems.
- Two Beta Attenuation Monitoring units (BAM) should be placed on the project property to monitor PM10 and PM2.5.
- From previous experiences on much smaller solar projects, it doesn't matter how much water is used, dust will be a problem.
- Cumulative effects should be addressed because of the dust clouds created by such projects.
- The project would trigger homes to be vacated due to dust storms.
- Health hazards related to dust should be addressed.

Noise and Vibration

- Noise is already a problem from Southern California Edison (SCE) trucks doing maintenance to electricity poles.
- Vibration and noise from transmission lines will be a problem.
- “Hum” noise is terrible.
- Noise from construction/maintenance trucks in and out of project site would be a problem.

Traffic and Circulation

- How will ingress and egress to a neighbor's property be affected?

Water Resources

- What is the draw down on the wells on the property?
- Water supply/groundwater/drought concerns.

Attachments:

Sign-in Sheets
Completed Comment Forms

Public Scoping Meeting
Ord Mountain Solar Energy Project

Sign-In Sheet

SAN BERNARDINO COUNTY

Name/Organization	Address	Phone	E-mail
John Zemanek		310 674 9226	jzeemanek@landmills.com
Roger Peters MAC CHAIR		760-490-8817	
Patti Riddle	PO Bx 640 L.V 92354	760 248-7062	pk.riddle@yahoo.com
MARK Riddle	PO BX 682 L.V Ca 92356	760-9649306	MGLOUGAR67-73@HOTMAIL.COM
John ARMSTRONG	Apple Valley Ca 14290 CHINOOK Rd 92307	760 9549494	the47jpit@aol.com
SANDRA THOMASON	17420 MERIDIAN R.	818 424-4605	
BRAD HICKS	P.O. BOX 1011 L.V. 92356	760-954-0946	AT DEADEYE@GMAIL.COM
Lee RISLER	35788 RABBIT SPRINGS	7608816203	RISLER123@GMAIL.COM
Rom Damaso	15902 ATOKA Rd.	760-946-5114	
Dolores Damaso	15902 Atoka Rd	760-946-5114	
LINDA PARKER			KWEAParker@sbcglobal.net
OWEN MYERS	LUCERNE VALLEY 10029 ESTRADA AVE.	(760) 981-9148	OWENS4479@HOTMAIL.COM.
J. SMITH	APPLE VALLEY		jzmyth@msn.com
BRYAN MEDER	PO BOX 1611 L.V. CA 92356	—	—
STEVE BARDWELL	PO BOX 644 PIONEERTOWN 92268	760 365 7291	steve@infinityranch.net
PAULA O'BRIEN			

Public Scoping Meeting
Ord Mountain Solar Energy Project

Sign-In Sheet

SAN BERNARDINO COUNTY

Name/Organization	Address	Phone	E-mail
Bill Peterson	P.O. Box 388		bill.Peterson@expertAppliancehd.com
RENÉE LYNN	PO BOX 1249 16821 MERIDIAN LV		broker@lvre.net
Dennis Morrison	PO Box 216 LV		~~[illegible]~~
Bob HUNTSMAN	P.O.Box 1157		bob2@NEWS2DAY.com
Neville Slade	20258 Hwy 18		
Tamara Slade	Suite 430-171 Apple Valley, CA 92307		
Debbie Schultz	PO Box 130. LV		
STEVE BETTENCOURT	700 UNIVERSE, JOHN B.		
LYNN Myers	10039 ESTRADA L.V. CA 92356		dlblicksmith@yahoo.com
Bill Lembright	PO Box 749 LV, CA 92356		billlembright@gmail.com
Jan Lembright	" " "		JanLembright@thenewlight.net
Chuck Bell	P.O. Box 193 L.V 92356		chuckb@sisp.net
H Marie Bushea	10508 CHRISTEN Dr 92356		hmarieBushea@gmail.com
JOSEPH KNUDSON	P.O. BOX 1266 LV 92356		JOSEPHKNUDSON@ymail.com
BETTY MUNSON	4880 BONANZA Johnson Valley 92285		ranchotaj@gmail.com

Public Scoping Meeting
Ord Mountain Solar Energy Project

Sign-In Sheet

SAN BERNARDINO COUNTY

Name/Organization	Address	Phone	E-mail
NEIL NADLER	4697 HIGH RD LUCERNE	(818) 517 9833	2NADLER@GMAIL.COM
STEVE MILLS			
Bert & Sharon Christensen	Hayes Rd LV		
JOHN & FAY HUFF	30125 Exeter L.V.	(760) 669-5524	fayhuff@hotmail.com
Michael Cavasos	19070 Bay Meadows AV	760-559-8223	Cavasos3@Yahoo.com
Sabra Chili		310 993 0058	sabra.chili@me.com
David Rib	22018 Pacific St. Apple Valley	760 961 2181	Davidrib@aol.com
Kathryn Aneno	P.O. Box 1151 Lucerne Valley	760 628 2077	bluerockroad@rocketmail.com
LORRIE STEELY	POB 1136 Lucerne Valley	760-985-8744	2saveourskyline@gmail.com
Linda Gommel	POB 749 Lucerne Vly	760 694 3749	lvstorelg@lucernevalleymarket.com
Pat Flanagan	PO Box 1313 29 Palms 92277	760-362-4156	patflanagan29@gmail.com
Noelle Ronan	Palm Springs, CA	760-322-2070	noelle_ronan@fws.gov
Tony Malone	36140 Olive St.	760 248-6592	—
Joanna Wright	5"	760 364-2207	HENRYSPIANO@AOL.COM
GEORGE STONE	9567 BELLVIEW AVE		fmg21646@msn.com
GARY WILLIAMS	9115 Bowen Ranch Rd	762-240-1357	garyl0000@yahoo.com

(No Environmental Related Comments Provided) RS

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

SAN BERNARDINO COUNTY

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

I DO NOT RESIDE NEAR THIS PROPOSED PROJECT. I'M AT THE WEST END OF LUCERNE VLY. I MOVED HERE IN 1999, AFTER MUCH RESEARCH, FROM A CONDO IN SOUTH ORANGE COUNTY. I HAVE COME TO OBSERVE THE COUNTY OF SAN BERDO IS THE ENEMY OF THIS COMMUNITY, AND YOU'RE ALWAYS ATTEMPTING TO START A WAR WITH HOME OWNERS & VOTERS HERE. IF YOU WANT ANOTHER WAR, YOU'VE GOT ANOTHER ONE. I LIKE SOLAR POWER, BUT NOT THE WAY YOU ALL KEEP PROPOSING IT IN AREAS OF RURAL RESIDENTS.

BRYAN MEDER, RETIRED O.C. POLICE OFFICER
Name (please print)

LUCERNE VALLEY DISASTER READINESS COUNCIL (LVDRC) A 501 C
Organization

PO BOX 1611 LUCERNE VLY, CA 92356-1611
Mailing Address

760-248-2915
Telephone No. (daytime)

BRYANM760@YAHOO.COM
E-mail address

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

WHY DID YOU LIST YOUR EMAIL ADDRESS ON SCREEN AS JOHNOQUENDO@SBCOUNTY.GOV (NOT THE SAME) ???

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

YES, WE HAVE 30 DAYS FOR COMMENTS.... 6/13/17 TO 6/30/17
LIAR!!!

To mail: fold, seal, and affix stamp

YOU ARE OUR ENEMY... WE ARE AT WAR WITH YOU!

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

THERE IS AN UNDERLYING CONTEMPT FOR OUR WAY OF LIFE IN THE DESERT. THE INDUSTRIALIZATION OF OUR RURAL WAY OF LIFE IS ALL ABOUT DESTROYING THE DESERT AND MAKING MONEY BY SHIPPING ALL OF THIS ELECTRICAL GENERATION TO SOMEWHERE ELSE AND OF NO BENEFIT TO OUR COMMUNITY. WE LOVE OUR LIFE AND DO NOT WANT IT DESTROYED

Name (please print)
JOSEPH KNUDSON

Organization

Mailing Address
P.O. BOX 1266

Telephone No. (daytime)
442-229-3949

E-mail address
JOSEPHKNUDSON@YMAIL.COM

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

(1) Rural Lifestyle Preservation

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

SAN BERNARDINO COUNTY

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

Water Shortage Dust Pollution Animals, Native Habitat

Lucerne Valley is an environmentally sensitive region. This project (1) would create an uncontrollable blowing sand & dust (2) Our water is in short supply & must not be wasted on this project (3) This will upset the critters in the project area & drive them onto neighboring properties. (4) The destruction of pristine desert scenery from our home & from Scenic Hwy 247. (5) More pollution will also come from more high capacity transmission lines & an additional substation. (6) Loss of value for neighboring properties of up to 50%, plus the properties become unwanted by buyers. Many seniors will lose much of their life savings.

Destruction of Scenic views

Pollution/Air

Property Values

Name (please print)
Bill Lembright

Organization
Lucerne Valley Market & Hardware, resident

Mailing Address
PO Box 749 Lucerne Valley, CA 92356

Telephone No. (daytime)
N/A

E-mail address
billlembright@gmail.com

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following: LV residents are planning a well camoflaged community solar microgrid to provide mostly for our own electrical needs. All other industrial sized projects should be constructed in areas already ~~zoned~~ unsuitable for home construction and commercial land development in the future that will generate taxes to fund local infrastructure. Those areas not suitable for homes & businessed include large parts of Hinkley, Harper Dry Lake energy production lands, Kramer Junction. These areas are no longer pristine desert, whereas Lucerne Valley is pristine. DON'T ruin ~~our~~ the quality of ~~our~~ environment.

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

Please do not allow this or any other destructive, unacceptable, unwanted industrial renewables in our community.

To mail: fold, seal, and affix stamp

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:
See attached

Name (please print)
JOHN & FAY HUFF
Organization

Mailing Address
30125 Exeter L.V.
Telephone No. (daytime)
(760) 669-5524
E-mail address
fayhuff@hotmail.com

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

Fw: Renewable Energy Projects

y huff

Thu 6/1/2017 10:02 PM

To: Molly.Wiltshire@bos.sbcounty.gov <Molly.Wiltshire@bos.sbcounty.gov>;

From: fay huff <fayhuff@hotmail.com>
Sent: Thursday, June 1, 2017 9:52 PM
To: Linda Mawby
Subject: Renewable Energy Projects

The Lucerne Valley Economic Development Association has solicited comments from its participants regarding Renewable Energy (specifically solar) and recommended that any comments be forwarded to you. Here we go:

1.We seem to be inundated with completed, approved or proposed solar projects in the Lucerne Valley, Johnson Valley, Barstow area. We like our beautiful desert the way it is. There are loads of places to construct new solar that can't even be seen.

2. Local residents are not a part of the location evaluation or approval process any more. Various municipal ganizations have recommended several acceptable solar farm sites - none of which seem to be acceptable to anyone else. Sun is sun - doesn't much matter where you find it.

3. Property values in the high desert are not wonderful, but the sure way to make them go even lower is to erect a new solar farm in close proximity.

4. Credibility of the planners, developers and construction entities is pretty low considering the proposed/approved project and the finished article are seldom close to being similar.

5. Solar projects are allowed to surround/intrude/encroach and closely border inhabited dwellings making the property worthless, unsalable and practically uninhabitable. In some cases, solar panels surround a residence on 3 sides and become the only view the resident has. — Aesthetics

Health Risks

6. When solar projects up here are being constructed, the ecosystem is seriously disturbed. The small animal populations are displaced and we're not talking about the dreaded desert tortoise. Their new habitats often become the homes nearest the solar project under construction. Imagine waking up to mice on your pillow and having your cars electrical system devoured by larger rodents. These have both happened to us. } ecosystem Native Habitat

7. Human diseases, especially lung diseases, increase exponentially when a solar project is underway. Valley Fever, Emphysema, COPD, Pneumonia and others all go on the rise when a solar project starts up. Bacteria and viruses that have been buried and dormant are now reactivated and airborne for miles affecting those who moved here for the great air quality and are now victims of the great solar invasion.

8. Investors who bought property here 20 or 30 years ago for retirement are now pretty disappointed to find a solar farm as their new neighbor. It might mitigate the disappointment if we were sharing in this wonderful new technology and lighting our homes with solar. But, alas, it's all going down the hill to keep the lights bright at Disneyland and keep everything running at SCE.

IF

. LA and Orange County need solar energy, put the panels on top of every parking structure, shopping mall, school, hospital, factory, airport, etc. **IN LA and ORANGE COUNTY.** Let those of us who enjoy the pristine and tranquil High Desert and came here to live determine its destiny the way it looks today.

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Scoping Meeting Presentation

Ord Mountain Solar Energy Project EIR

PUBLIC SCOPING MEETING
JUNE 13, 2017

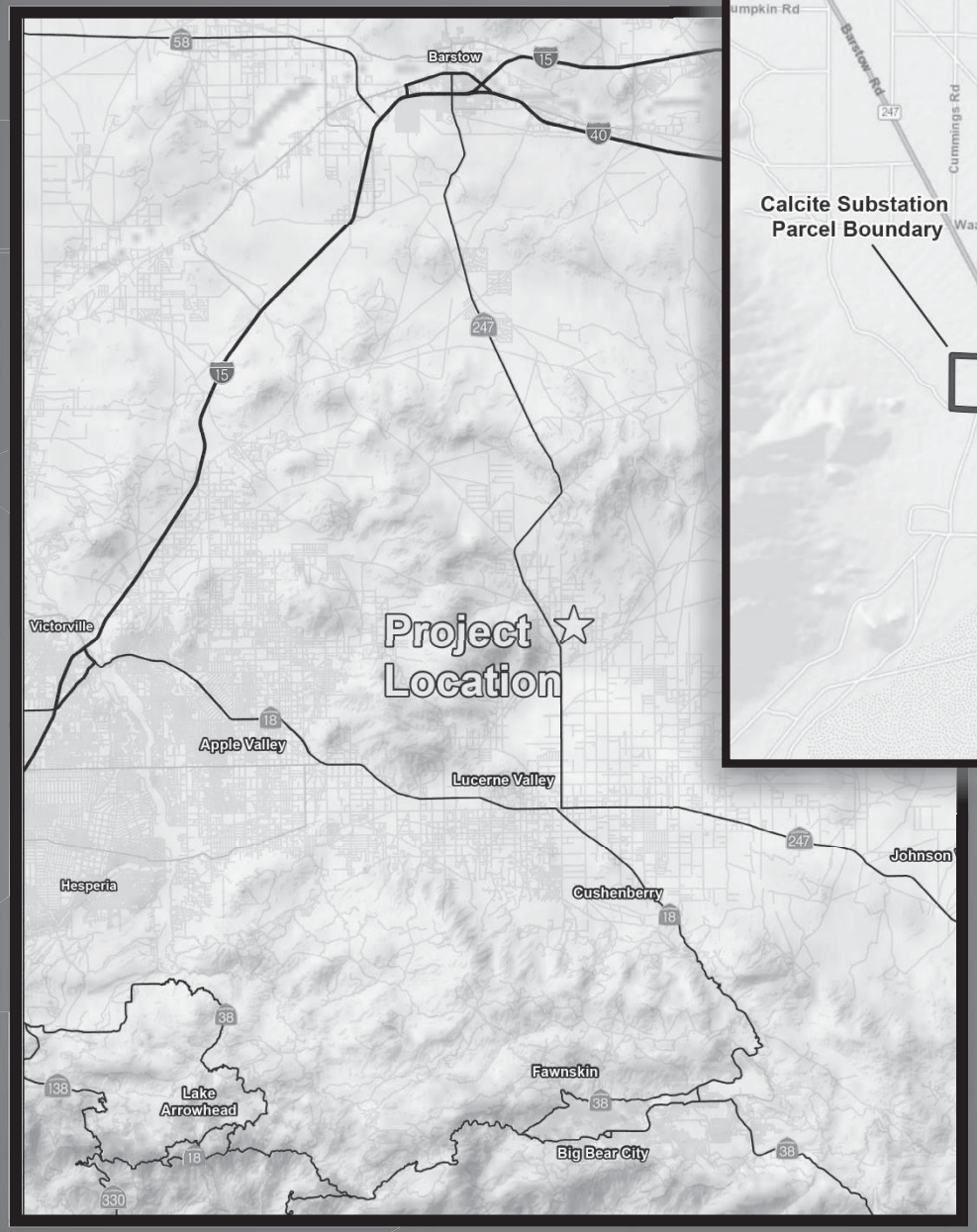
Tonight's Agenda

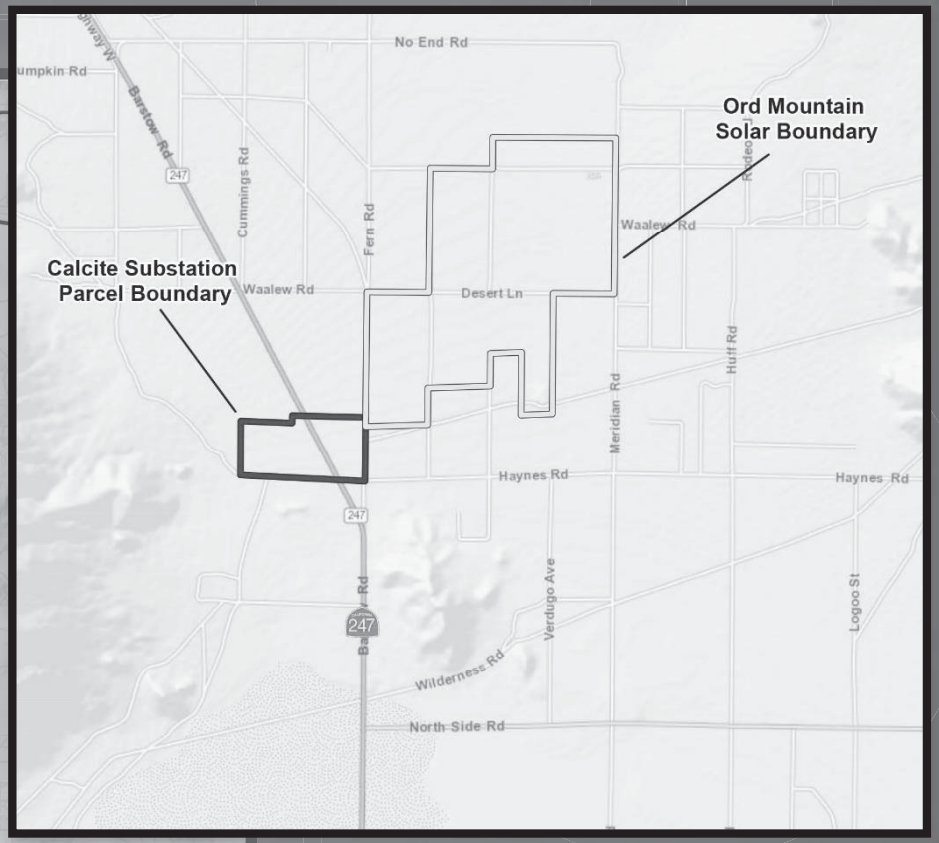
- What is a Public Scoping Meeting?
- Proposed Project Overview
- Content of an EIR
- EIR Process Overview
- Next Steps
- Public Comments

What is a Public Scoping Meeting?

- **Inform the public** of the County's intent to prepare an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA)
- **Introduce** the Project
- **Present an overview** of the environmental process
- **Obtain public input** on the environmental scope and content of the EIR

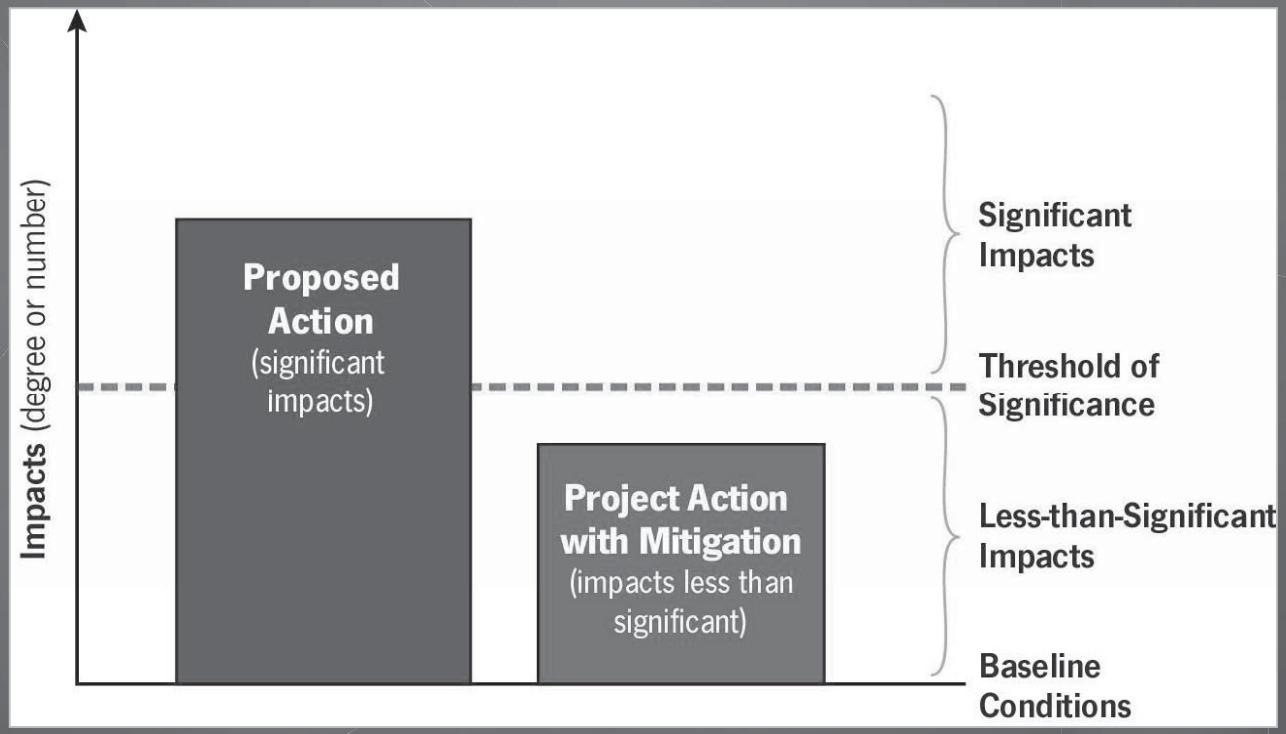
PROPOSED PROJECT





Contents of an EIR

- Short-term and long-term impacts (e.g., construction and operation)
- Project alternatives and cumulative impacts
- Mitigation measures to reduce or avoid impacts



Environmental Study Areas

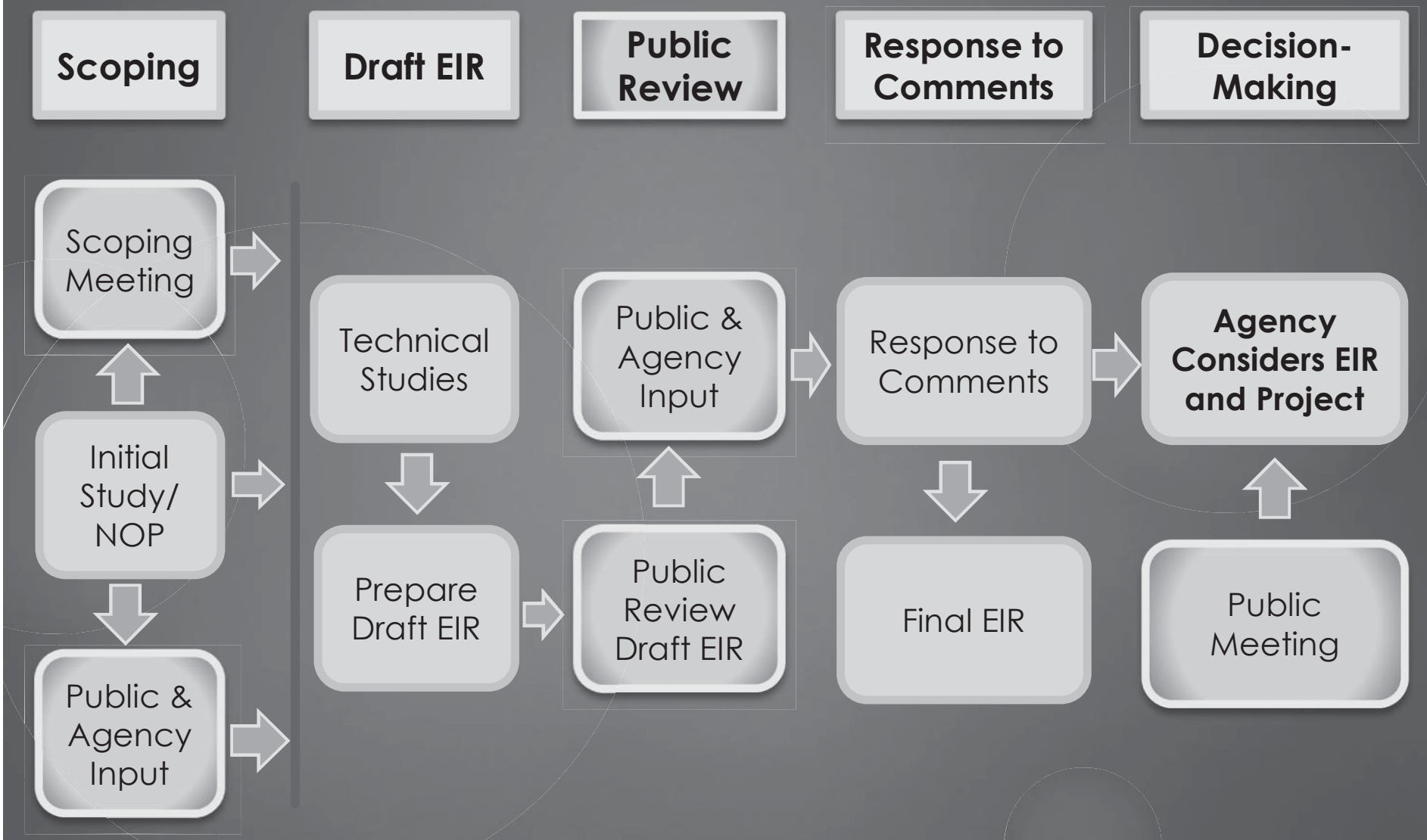
- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas
- Hazards, Hazardous Materials
- Hydrology and Water Quality
- Noise
- Traffic and Circulation
- Tribal Cultural Resources

Initial Study circulated with Notice of Preparation:

http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx

Or search *SB County environmental notices*, and select *Desert Region*

EIR Process


Scoping
Draft EIR
Public Review
Response to Comments
Decision-Making
Scoping Meeting
Initial Study/ NOP
Public & Agency Input
Technical Studies
Prepare Draft EIR
Public & Agency Input
Public Review Draft EIR
Response to Comments
Final EIR
Agency Considers EIR and Project
Public Meeting

Next Steps

- Scoping Comments due . . . . June 30, 2017
- Technical Studies
- Draft EIR Preparation
- Draft EIR Available (45-day Public Review). Q1 2018
- Response to Comments and Final EIR Preparation
- Public Hearings to consider Project Q4 2018

Leave your email on the sign-in sheet and we'll keep you posted!

Public Comments

Submit comments by: June 30, 2017

Send comments to:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
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John.Oquendo@lus.sbcounty.gov

Oral Comments

- Complete a speaker card
- Three minutes per speaker
- Comments are being summarized and will be made available at: **http://cms.sbcounty.gov/lus/Planning/Environmental/Desert.aspx**

Thank you for participating!

Initial Study MND

SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

Project Label:

APN: 0453-091-11, 12, 24, 29, 31, 48, 51, 72, & 0453-041-07
Applicant: Ord Mountain Solar, LLC
700 Universe Boulevard
Juno Beach, FL 33408
Community: Kramer Junction
Location: East of State Route 247; North of Haynes Road; West of Meridian Road; approximately 8 miles north of Lucerne Valley
Project No: P201600510/CUP
Staff: John Oquendo, AICP
Rep: Matt Valerio
Dudek
605 Third Street
Encinitas, CA 92024
Proposal: A Conditional Use Permit to establish a 60-Megawatt Solar Photovoltaic Energy Facility and 60-Megawatt Energy Storage Facility on 484-acres, and a 0.6-mile 220-kiloVolt overhead transmission line, with a Major Variance to modify the maximum structure height to permit the construction of onsite transmission poles and related structures up to 94 ft. in height.

USGS Quad: White Horse Mountain
Lat/Long: 34°33'36.74"N/116°56'0.97"W

T, R, Section: T05N R1W Sec. 1
T05N R1W Sec. 2
T06N R1W Sec. 36
Thomas Bros P4120/ GRID: A & B-7
P 4120 / GRID: A & B-1

Community Plan: Lucerne Valley Community Plan
LUZD: LV/AG-40, LV/AG
Overlays: Biotic Resources,
AR-4, Lucerne Valley Local Fee Area

Project Contact Information:

Lead agency: County of San Bernardino
Land Use Services Department
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Contact person: John Oquendo, AICP, Planner
Phone No: (760) 995-8153 ***Fax No:*** (760) 995-8167

Summary

The initial evaluation herein addresses the potential impacts of the proposed Ord Mountain Solar and Energy Storage Project and the Calcite Substation Project; together they represent the “proposed project” for environmental evaluation purposes under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). The Ord Mountain Solar and Energy Storage Project is proposed by Ord Mountain Solar LLC (Applicant) and the Calcite Substation Project is proposed by Southern California Edison (SCE). The Ord Mountain Solar and Energy Storage Project is both practically located to be close to SCE’s proposed Calcite Substation and the first trigger need for that substation. The location of both projects is in close proximity to the existing SCE transmission corridor. Because it is a necessary infrastructure improvement to allow the proposed solar and energy storage project to connect to the grid, the Calcite Substation is a connected project. The Calcite Substation has not been approved

or reviewed by an agency and will necessarily need to be included in the analysis in the Environmental Impact Report (EIR) as part of the whole of the action (proposed project). The Calcite Substation project is not subject to any discretionary County approvals and is not a part of the conditional use permit application for the proposed Ord Mountain Solar and Energy Storage project. To conduct adequate review under CEQA, the EIR will include detailed description and analysis of the Ord Mountain Solar and Energy Storage Project and the Calcite Substation Project, including alternatives. Approvals by the California Public Utilities Commission (CPUC) are necessary for the Calcite Substation and the CPUC is a responsible agency for the purposes of environmental evaluation. In the analysis herein the proposed project means both the Ord Mountain Solar and Energy Storage Project and the Calcite Substation Project, which may be individually identified as a connected project, each being a connected project to the other, or simply by their distinct names.

Proposed Solar and Energy Storage Project Description

Ord Mountain Solar LLC (Applicant) proposes to construct and operate the Ord Mountain Solar and Energy Storage Project (proposed solar and energy storage project) on approximately 484 acres to produce approximately 160,000 megawatt-hours (MWhs) of renewable energy annually. The proposed solar and energy storage project would be a 60-Megawatt (MW) alternating current (AC) photovoltaic (PV) solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The proposed solar and energy storage project would include a 60 MW AC maximum capacity, 4-hour energy storage (battery) system. The proposed solar and energy storage project also would include a 220-kilovolt (kV) overhead generation tie line (gen-tie line), which would extend approximately 0.6 mile southwest to Southern California Edison's (SCE) proposed Calcite Substation, in close proximity to the existing high-voltage transmission corridor.

Proposed Solar and Energy Storage Project Location

The proposed solar and energy storage project site is situated roughly in the southern portion of Section 36, Township 6 North, Range 1 West, the northern portion of Section 1, Township 5 North, Range 1 West, and the southern portion of Section 2, Township 5 North, Ranch 1 West, S.B.B. & M. of the White Horse Mountain, CA U.S. Geological Survey (USGS) 7.5-topographic quadrangle at approximately Latitude/Longitude 34°33'36.74"N/116°56'0.97"W (Figure 2, Vicinity Map). The proposed solar and energy storage project site is located east of State Route (SR) 247; north of Haynes Road; and west of Meridian Road, approximately 8 miles north of Lucerne Valley, in unincorporated San Bernardino County (County). The gen-tie line would extend southwest from the proposed solar and energy storage project site to the proposed SCE Calcite Substation, west of SR-247.

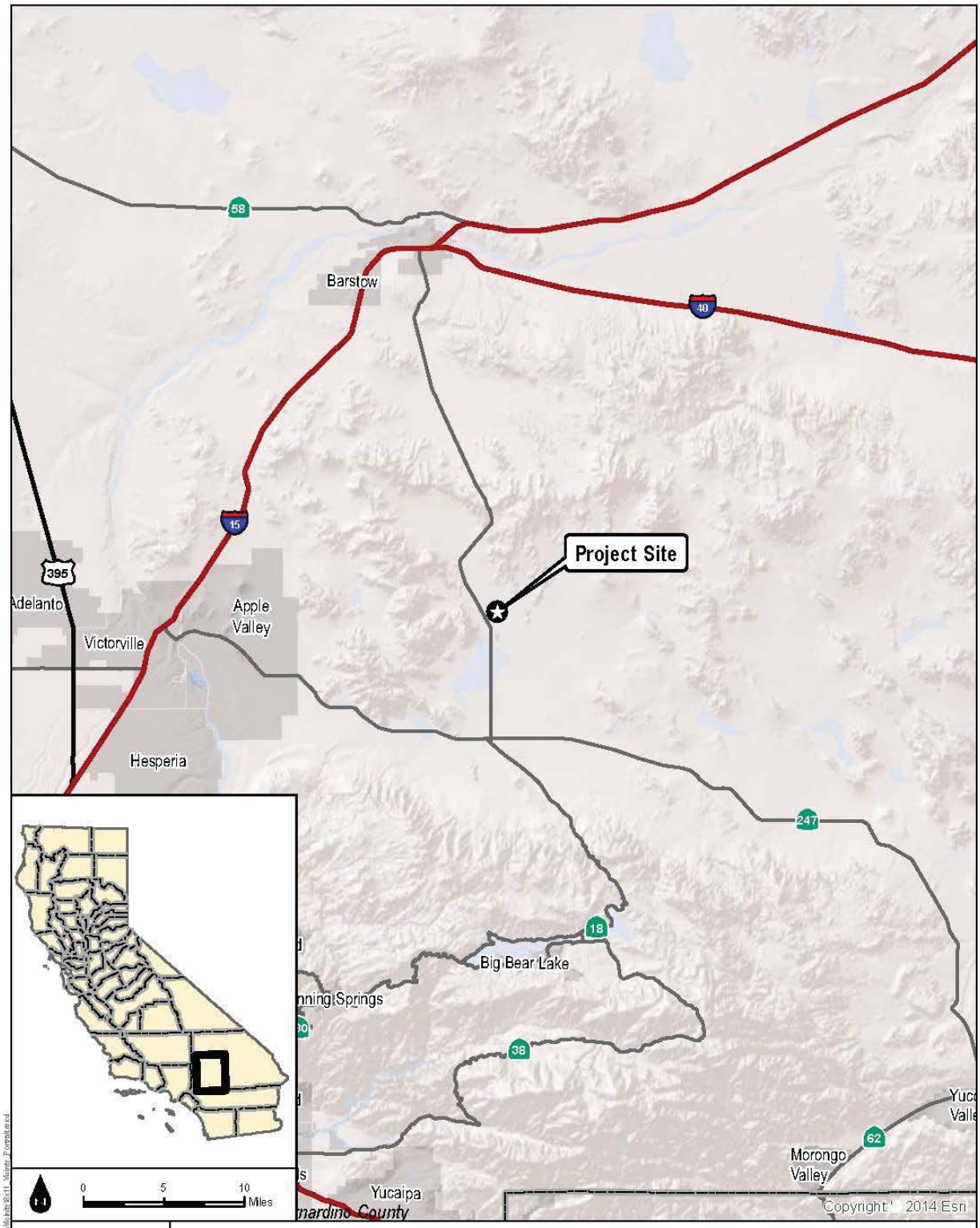

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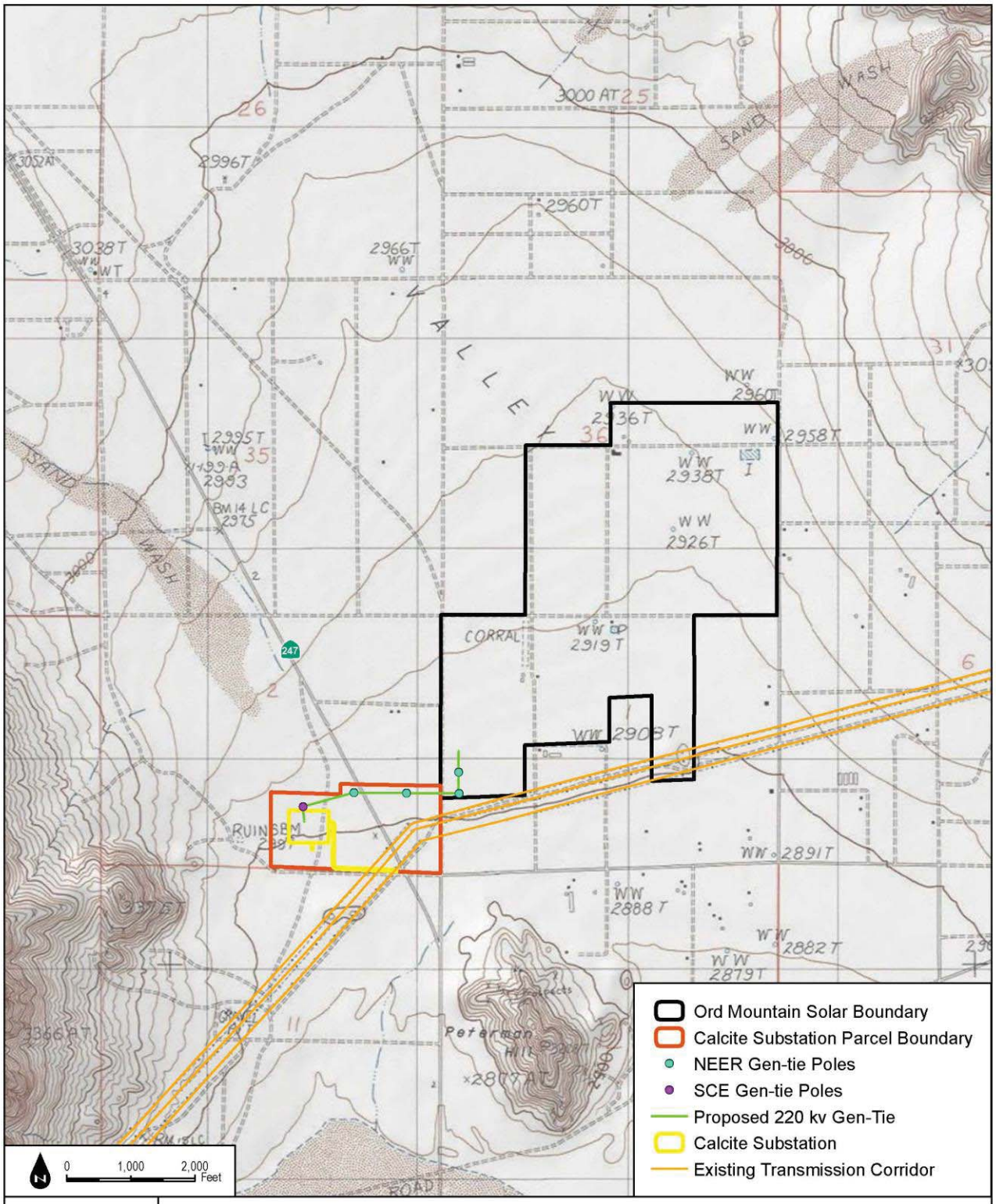
FIGURE 1
Regional Map

Ord Mountain Solar and Energy Storage Project



SOURCE: USGS 7.5-Minute Series White Horse Mountain Quadrangle

FIGURE 2
Vicinity Map

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Ord Mountain Solar Energy Storage Project and Calcite Substation Project

Proposed Solar and Energy Storage Project Setting

The location of the proposed solar and energy storage project has been selected because of its proximity to the existing high-voltage transmission corridor and a SCE proposed Calcite Substation; the fact that the land was previously used for agriculture and is now fallow; the site has nearby access to existing roads reducing the need for new roads; and the site is in an area with excellent solar irradiance. The proposed solar and energy storage project site is essentially flat with only an approximate 1.5% gradient overall. The site generally slopes from northwest to southeast, with elevations of approximately 2,980 to 2,900 feet above mean sea level. Locally, the proposed solar and energy storage project would be accessed via SR-247 and an internally constructed road system. The project area would include the approximately 0.6 mile gen-tie overhead transmission line from the proposed solar and energy storage project's on-site substation to the SCE proposed Calcite Substation.

The proposed solar and energy storage project site is composed of fallow agricultural fields with some early succession saltbush scrub vegetation in isolated patches, which for the most part, has been degraded due to the agricultural use and livestock grazing on site. The transmission line would traverse undeveloped Mojave creosote bush scrub and desert saltbush scrub.

According to the UC Davis Soil Resource Laboratory and the Natural Resources Conservation Service (NRCS), five types of soil have been mapped on the proposed solar and energy storage project area: Helendale loamy sand, 0 to 2% slopes; Helendale loamy sand, 2 to 5% slopes; Cajon sand, 0 to 2% slopes; Cajon-Arizo complex, 2 to 15% slopes; and Wasco sandy loam, cool, 0 to 2% slopes. All of the mapped soil types are moderately well-drained with high infiltration (RCC 2016) and are suitable for a PV solar development project.

The geology of the proposed solar and energy storage project property and surrounding vicinity is characterized as a veneer of quaternary alluvium overlying mesozioc-age granite and quartz monzonite intruded into Paleozoic metasedimentary rocks. Historically, agricultural irrigation wells have been completed in the alluvium overlying basement granitic and metasedimentary rock. The 1996 Mojave Basin area adjudication created the Este subarea, which includes the Lucerne Valley groundwater basin and the Fifteen mile Valley groundwater basin. The proposed solar and energy storage project is located within Lucerne Valley groundwater basin, encompassed by the Este subarea of the Mojave Basin judgement area. The most prolific aquifer material of the Lucerne Valley groundwater basin is the quaternary alluvium, comprised of unconsolidated to semi-consolidated boulders, gravel, sand, silt and clay. Based on well completion reports provided by the Department of Water Resources (DWR), the alluvium of the proposed solar and energy storage project boundary ranges from 165 feet to 330 feet in thickness.

The proposed solar and energy storage project site has 19 identified groundwater wells on-site in various conditions from prior agricultural activities. Of the existing 19 groundwater wells, six have production potential and two have been identified as potentially ideal for use as a water source(s) for proposed solar and energy storage project construction and operation. Improvements to the wells, such as new pumps, or drilling of replacement wells, may be necessary. Several of the pumps are provided electrical power via existing distribution lines, but distribution power may need to be extended in the event that the preferred well is not currently being serviced.

Existing land uses and Land Use Zoning Districts on and adjacent to the proposed solar and energy storage project site are listed in Table 1.

Table 1
Proposed Solar and Energy Storage Project Existing Land Use and Land Use Zoning Districts

Location	Existing Land Use	Land Use Zoning District
Proposed Solar Site	Agriculture (fallow)	LV/AG (Lucerne Valley/Agriculture) LV/AG-40
Gen-Tie	Agriculture (fallow)/SCE Transmission	LV/AG; LV/AG-40
On-Site Substation	Vacant	LV/AG-40
North	Agriculture (fallow)	LV/AG-20/-40
South	Agriculture (fallow)	LV/AG-
East	Agriculture (fallow)	LV/RL/RC (Rural Living/Resource Conservation)
West	Agriculture (fallow)	LV/AG-20/-40; LV/RC

Source: San Bernardino County Land Use Services Department, 2016.

Project Characteristics

The proposed solar and energy storage project consists of the following components:

- Solar Energy Generation System
- On-site Substation
- Energy Storage System
- Generation Tie Line
- Ancillary Facilities

Solar Energy Generation System

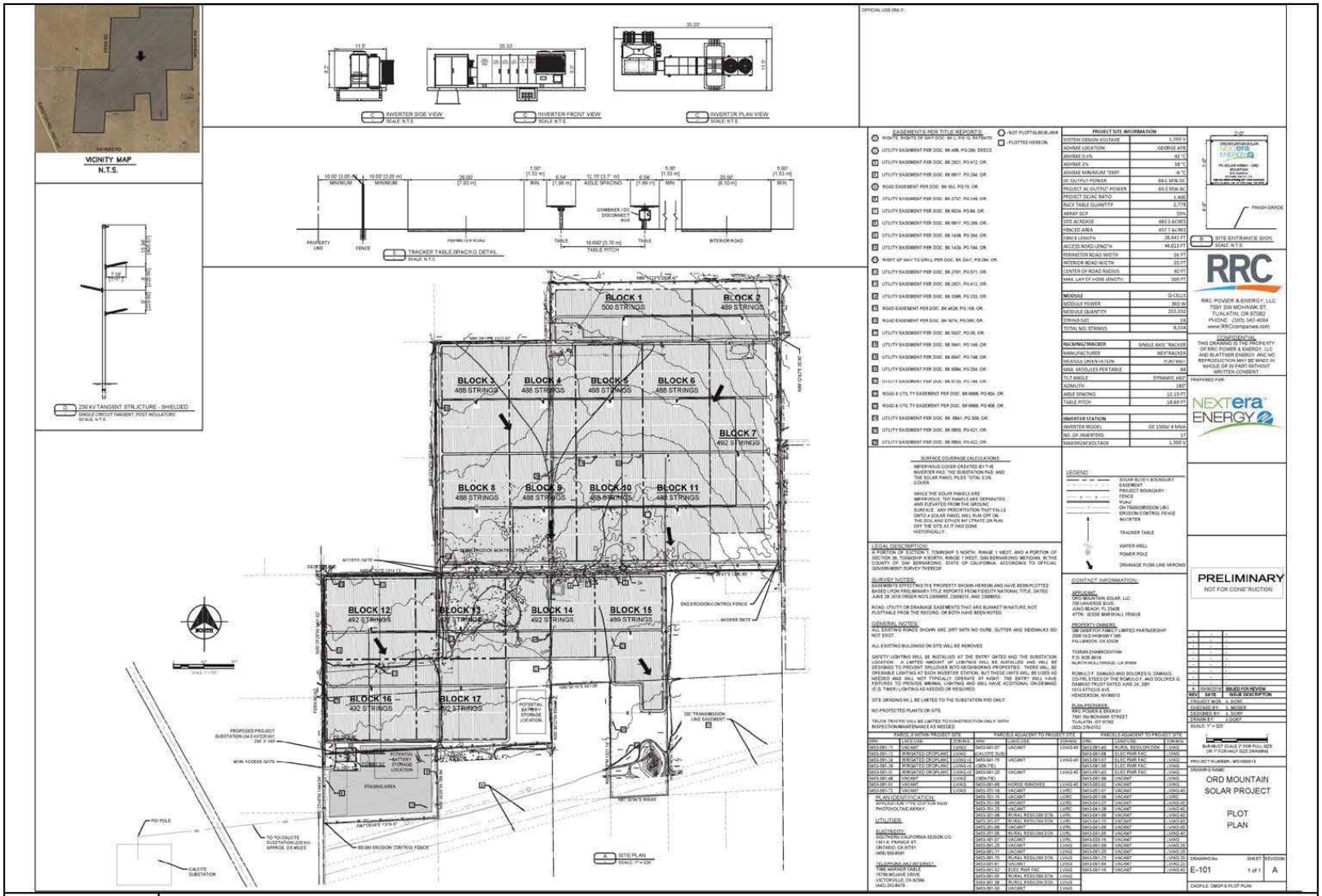
The proposed solar and energy storage project includes a 60 MW solar power generating installation built over a 10-month period. The 484-acre site would house all structures including solar panels, tracking/support structures, inverters, SCADA, and interconnection facilities (on-site substation) all of which would be enclosed by a perimeter security fence. The proposed site plan is shown in Figure 2

Site Plan. Solar energy would be captured by an array of approximately 250,000 photovoltaic (PV) panels mounted to a single-axis tracking system. The high-efficiency commercially available PV panels convert incoming sunlight to direct current (DC) electrical energy. The panels are arranged in series to effectively increase output voltage to approximately 1,500 volts. These series chains of panels are called “strings” in industry terms, and provide the basic building block of power conversion in the solar array. The strings are combined in the solar field via an above- or below-ground DC collection system, and then further ganged together at the inverter stations, where the energy is converted to AC and then stepped to an intermediate voltage, typically 34.5 kV. The chosen PV panel would either be crystalline silicon or thin film and would be well suited for the desert environment due to their durability and reliability.

The tracking system would be supported, when practical, by driven piers (piles) directly embedded into the ground and would be parallel to the ground. The system would rotate slowly throughout the day at a range of +/- 60 degrees facing east to west to stay perpendicular to the incoming solar rays so that production can be optimized.

Each tracker would hold approximately 80 to 90 panels (depending on final configuration) and at its highest rotated edge would have a maximum height of approximately 12 feet above grade, depending on the dimensions of the chosen panel. The minimum clearance from the lower edge of the panel to ground level is approximately 18 to 24 inches, pending final design.

The inverter stations would be up to 12 feet in height and perform three critical functions for the solar plant: (1) collect DC power in a central location, (2) convert the DC power into AC power, and, (3) convert low-voltage AC power to medium-voltage AC power. The inverter stations are typically open-air and well suited for the desert environments. The stations consist of DC collection equipment, utility-scale inverters, and a low-to medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system via an above- or below-ground collection system. This AC collection system would deliver the electricity to the on-site substation, where the voltage would be stepped up to the interconnection voltage.



SOURCE: RRC Power & Energy 2016

FIGURE 3
Site Plan

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Ord Mountain Solar and Energy Storage Project

On-site Substation

The proposed solar and energy storage project on-site substation is the termination point of the collection system of 34.5 kV electricity. The output of the entire field is passed through a final interconnection step-up transformer to convert it to the grid tie voltage at 220 kV. Additionally the proposed solar and energy storage project on-site substation would host the grid intertie safety equipment and switches required to interconnect to the high-voltage transmission system. The open air on-site substation would be constructed on the southern border of the solar array nearest the proposed SCE Calcite Substation. The footprint of the on-site substation would be approximately 150 feet by 230 feet. The proposed solar and energy storage project on-site substation would consist of components of approximately 25 feet tall with lightning protection masts up to 70 feet tall and a deadend “H” frame structure up to 65 feet in height with masts to 70 feet. Feeders would be overhead lines constructed with 45-foot- and 60-foot-tall poles for the single and double circuits, respectively.

Energy Storage System

Adjacent to the on-site substation an energy storage system is proposed to provide a maximum capacity of 60 MW over a 4-hour period (240MWhs). The energy storage batteries would be housed in a structure of approximately 35,000 square feet. The structures height would be approximately 20 feet. The batteries would be housed in an open air style racking (similar to computer racking) 7 to 9 feet high. The associated inverters, transformers, and switchgear would be located immediately adjacent to the structure on concrete pads.

The energy storage equipment would be enclosed in a structure that would also have a fire rating in conformance with County standards and have specialized fire suppression systems installed for the battery compartments. All non-battery compartments would have County approved standard sprinkler systems. The structure would also have HVAC cooling in areas with batteries to maintain energy efficiency. Power to the HVAC, lighting, etc. would be provided via a connection to the on-site station service transformer with connection lines installed above and/or below ground. The energy storage system would be un-staffed and would have remote operational control and periodic inspections/maintenance performed as necessary.

Generation Tie-Line

The energy is transported from the on-site substation to SCE’s proposed Calcite Substation via a generation tie transmission line (gen-tie line). The transmission line would extend approximately 0.6 mile to the southwest, from the facility’s on-site substation to SCE’s proposed Calcite Substation (see Figure 4). The 220kV gen-tie transmission line would consist of approximately seven single circuits, up to 150-foot-tall concrete or steel poles, spaced on an average of every 500 feet. The poles would carry 336 ACSR conductors, one conductor per phase, and would allow the line to maintain a minimum 30

foot vertical clearance to ground. The number of and height of the poles as well as the type of conductor would be finalized during detailed design. At the Ord Mountain Project site, the height of onsite poles will be 94 feet maximum. Except for the pole or lattice steel tower (LST) closest to the connected Calcite Substation, all poles would be constructed as part of the proposed Ord Mountain Solar and Energy Storage Project by the applicant. The right-of-way is expected to consist of a width of up to 50 feet for the maintenance road and gen-tie line. Less width may be required for portions of the right-of-way where access to the transmission line is facilitated by existing roads, such as those associated with the existing SCE high-voltage transmission lines.

Ancillary Facilities

Access Road

The solar and energy storage project access road would be 24 feet wide and composed of asphalt concrete. This road would connect to Highway 247 (Barstow Road) and would require the construction of approximately 1,200 feet of new road. Permanent land disturbance would be approximately 1 acre for the solar and energy storage project access road and gen-tie components on the Calcite Substation property.

Signage

A small sign at the site main entry to the proposed solar and energy storage project would be installed. The sign would be no larger than 8 feet by 4 feet, and read “Ord Mountain Solar Energy Center XXXX Fern Road”. In addition, required safety signs would be installed identifying high voltage within the facility on the fence near the entrance and at the gates either end of Desert Lane, as well as information for emergency services.

Perimeter Fence

The perimeter of the proposed solar and energy storage project site would be enclosed by a 6-foot-tall chain-link fence topped with a foot of three-strand barbed wire. Natural colored privacy/wind slats will be added to the fence where the fence encroaches within 0.25 mile of a primary residence (San Bernardino County Development Code §84.29.035 (c) (22)). Access into the proposed solar and energy storage project site would be provided through drive-through gates. The main purpose of the fence is to prevent unauthorized access to the site. The total height, above grade, of the fence would be approximately 7 feet. Desert tortoise exclusion mesh would be attached to the fence fabric that would extend from approximately 12 inches below grade to approximately 24 inches above grade.

Lighting

Low-elevation (<14 foot) controlled security lighting would be installed at primary access gates and the on-site substation, and entrance to energy storage structure. The lighting is only switched on when

personnel enter the area (either motion-sensor or manual activation (switch)). All safety and emergency services signs would be lighted when the lights are on. The lighting would be shielded so that the light is directed downwards. Electrical power to supply the access gate and lighting would be obtained from SCE. Lighting would be only in areas where it is required for safety, security, or operations. All lighting would be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

Construction

Schedule

This proposed solar and energy storage project is anticipated to be built over an approximately 10-month timeframe from the onset of perimeter fence installation through testing and commissioning of the facility. It is anticipated that the work would be completed in 8- to 10-hour shifts, with a total of five shifts per week (Monday–Friday). Overtime and weekend work would be used only as necessary to meet scheduled milestones or accelerate schedule and would comply with all applicable California labor laws. Primary construction activities and durations are presented in Table 2. The activities shown in Table 2 would be overlapping in certain phases, and all are expected to occur within the estimated 10-month construction duration.

Table 2
Proposed Solar and Energy Storage Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Daily Workers
Perimeter Fence Installation	2 Months			Maximum = 250 Average = 150
		Skid Loader with Auger Attachment	1	
		Pick-up Truck	1	
		Flatbed Truck	1	
Site Preparation and Clearing/Grading	1.5 Months	Water Truck-3 Axles	3	
		Grader	2	
		Bulldozer	1	
		Scraper	1	
		10-Ton Roller	1	
		Sheepsfoot Roller	1	
		Tractor (with Mower Attachment)	1	
Demolition of existing structures	2 Weeks	Backhoe	1	
		Bulldozer	1	
		5 Cubic Yard Dump Truck	4	
		Front End Loader	1	
Underground Work (Trenching)	3 Months	Excavator	2	
		Sheepsfoot Roller	1	
		Water Truck-3 Axles	1	

Table 2
Proposed Solar and Energy Storage Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Daily Workers
		5kW Generator	1	
		Aussie Padder (Screening Machine)	1	
		4x4 Forklift	1	
System Installation	4 Months	4x4 Forklift	8	
		Small Crane (80 Ton)	1	
		ATV Vehicle	20	
		Pile Driver	4	
		Pick-up Truck	4	
		5kW Generator	2	
Gen-Tie Installation	1 Month	Line Truck (with Spool Trailer)	1	
		Boom Truck (with Bucket)	1	
Energy Storage System	7 Months	Foundation	1	
		Building Construction	1	
		Batteries Installation	1	
		4x4 Forklift	1	
Testing & Commissioning	3 Months	Pick-up Truck	4	
Site Clean-Up & Restoration	1 Month	Grader	1	
		Skid Loader	1	

Traffic

Peak daily construction employees would be approximately 250 with an average of 150 workers daily. As shown in Table 3, below, in addition to the 250 maximum daily workers traveling to the site there would be up to 19 truck trips per day at peak construction activity (trenching and system installation phases overlap). A total of up to 279 trips per day are anticipated during peak construction activities, assuming a worst-case whereby no car-pooling occurs though it is likely that car-pooling would occur.

Table 3
Proposed Solar and Energy Storage Project Construction Estimated Truck Activity

Truck Type	Average On-Site	Gross Weight (pounds)	Trips/Day	Duration
8,000 Gallon Water Truck—will stay on site	2	80,000 pounds loaded	0	7 Months
20 Cubic Yard Dump/Bottom Dump Truck	3	80,000 pounds loaded	4+	2 Months
Pick-up Trucks	20	8,000	2	10 Months
Pile Driver	4	15,000	1	4 Months
Grader	2	54,000	1	3 Months
Boom Truck with Bucket	1	42,000	1	2 Months
Component Delivery Trucks	1	42,000	19	2 Months
Utility Line Service Truck	3	30,000	1	3 Months

Delivery of material and supplies would reach the site via on-road truck delivery via SR-247. The majority of the truck deliveries would be for the PV system installation, as well as any aggregate material that may be required for road base. It is estimated that a total of up to 2,500 truck trips are required to complete the proposed solar and energy storage project, with the aggregate trucks accounting for approximately 30% of this number. It is estimated that there would be an average of 268 truck deliveries per month (about 13 per work day) with a peak number of truck deliveries of 383 deliveries per month (about 18 per work day) plus one other miscellaneous delivery equates to a peak truck trip of 19 per work day. These truck trips would be intentionally spread out throughout the construction day to optimize construction efficiency as is practical by scheduling deliveries at predetermined times.

The heaviest delivery loads to the site would also consist of the tracker structures, rock truck deliveries, and the delivery of the generator step up (GSU). These loads would typically be limited to total weight of 80,000 pounds, with a cargo load of approximately 25 tons or 50,000 pounds of rock or tracker structures. The GSU could be up to 160,000 pounds. Typically, the rock is delivered in “bottom dump trucks” or ”transfer trucks” with six axles and the tracker structures would be delivered on traditional flatbed trucks with a minimum of five axles. Low bed transport trucks would transport the construction equipment to the site as needed. The size of the low bed truck (axles for weight distribution) would depend on the equipment transported.

Construction Activities

Because the proposed solar and energy storage site is fairly level grading is expected to be minor in most instances. However, grading would occur throughout the site especially for the construction of roads and inverter pads. This would be accomplished with scrapers, motor graders, water trucks, dozers, and compaction equipment. The PV modules would be off-loaded and installed using small cranes, boom trucks, forklifts, rubber tired loaders, rubber tired backhoes, and other small to medium sized construction equipment as needed. Construction equipment would be delivered to the site on “low bed” trucks unless the equipment can be driven to the site (for example the boom trucks). It is estimated that there would be approximately 35 pieces of construction equipment on site each month (see Table 3).

Vegetation on the site would be modified only where necessary. Vegetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed, and where transmission pole and tracker foundations would be installed (if necessary). At locations where transmission pole and tracker foundations would be installed, minor cuts may be required where the foundations would be driven. Minor earth work would also occur to install aggregate base access roads and transmission line maintenance roads. The surface of the roads would be at-grade to allow any water to sheet flow across the site as it currently does. Throughout the remainder of the developed area on the solar and energy storage site, the vegetation root mass would

generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible.

Water Use

Water consumption during construction is estimated to be approximately 75 acre-feet (AF) for dust suppression and earthwork over an approximately 10-month period. Panel rinsing is expected to be conducted up to four times annually as performance testing and as weather and site conditions dictate. Construction as well as operational water for panel rinsing would be provided by on-site groundwater through an improved existing well or a new well permitted and drilled (if necessary). An on-site diesel generator may be used to power pumps for well water use during construction. During construction water would be pumped directly into 2,000- to 4,000-gallon tanked water trucks. Water may be stored in up to three overhead temporary approximately 12,000-gallon water storage tower/tanks (up to 16 feet tall), to assist in the availability of water for trucks and expedient filling thereof. The existing wells on-site that would not be used would be capped in place in accordance with County requirements.

On-Site Electrical Distribution

Existing electrical power distribution lines on site that serve existing facilities including well pumps would be removed to allow for the solar and energy storage project development. New distribution lines would be needed to provide backup power to the solar and energy storage facilities for lighting and communications purposes, as well as to the groundwater well pump(s).

Operation

The proposed solar and energy project component would be unmanned and no operation and maintenance building would be constructed. The operations would be monitored remotely via the Supervisory Control and Data Acquisition (SCADA) system and periodic inspections and maintenance activities would occur. During operations, solar panel washing is expected to occur one to four times per year and general labor (up to 10 individuals) may assist in the panel cleaning. Panel washing for a project of this size would require 15 days to complete per wash cycle. Water consumption is expected to be around 0.28 gallons per square yard of panel based on other similar operations. Given a 60 MW AC plant, with four cycles per year, the annual water usage is expected to consume up to approximately 6 AF of water. While the Applicant only expects to actually wash the PV panels once per year, the panels may need to be washed more frequently (up to four times per year) based on site conditions. Conditions that may necessitate increased wash requirements include unusual weather occurrences, forest fires, local air pollutants, and other similar conditions. Therefore, the proposed solar and energy storage project is requesting the use of up to 6 AF per year for the explicit use of washing panels. This amount

is in addition to the amount of water necessary for the operations, fire suppression, and site landscape maintenance, which is a small amount of groundwater (i.e., approximately 0.6 AF) to be used for this purpose. In the event that electrical power distribution cannot be delivered to the groundwater pump, a generator would be located adjacent to the well pump to provide power. If groundwater proves unsuitable for washing, water trucks would be used to deliver water from a local purveyor.

Decommissioning

The PV system and energy storage system (including structure) would be recycled when the solar and energy storage project's life is over. Most parts of the proposed system are recyclable. Panels typically consist of silicon, glass, and a metal frame. Tracking systems (not counting the motors and control systems) typically consist of aluminum and steel. Batteries include lithium-ion, which degrades but can be recycled and/or repurposed. Site structures would include steel or wood and concrete. All of these materials can be recycled. Concrete from deconstruction is to be recycled. Local recyclers are available. Metal and scrap equipment and parts that do not have free flowing oil may be sent for salvage.

Fuel, hydraulic fluids and oils would be transferred directly to a tanker truck from the respective tanks and vessels. Storage tanks/vessels would be rinsed and transferred to tanker trucks. Other items that are not feasible to remove at the point of generation, such as smaller containers lubricants, paints, thinners, solvents, cleaners, batteries and sealants would be kept in a locked utility building with integral secondary containment that meets Certified Unified Program Agencies (CUPA) and Resource Conservation and Recovery Act (RCRA) requirements for hazardous waste storage until removal for proper disposal and recycling. It is anticipated that all oils and batteries would be recycled at an appropriate facility. Site personnel involved in handling these materials would be trained to properly handle them. Containers used to store hazardous materials would be inspected regularly for any signs of failure or leakage. Additional procedures would be specified in the Hazardous Materials Business Plan (HMBP) closure plan submitted to the CUPA. Transportation of the removed hazardous materials would comply with regulations for transporting hazardous materials, including those set by the Department of Transportation (DOT), EPA, California Department of Toxic Substances Control (DTSC), California Highway Patrol (CHP), and California State Fire Marshal.

Upon removal of the proposed solar and energy storage project components the site would be left as disturbed dirt generally consistent with the existing (pre-development) conditions, subject to a Closure Plan in accordance with SBCC 84.29.60.

Other public agencies whose approval is potentially required (e.g., permits, financing approval, or participation agreement.):

The proposed solar and energy storage project may require permits or approvals from additional agencies,

including the following:

- Mohave Desert Air Quality Management District (MDAQMD)
- Regional Water Quality Control Board (RWQCB)—Lahontan
- California Department of Transportation (Caltrans) District 8
- California Department of Fish and Wildlife (CDFW)
- State Water Resources Control Board (SWRCB)
- In addition, the connected proposed Calcite Substation project is subject to California Public Utilities Commission (CPUC) jurisdiction as described below

Connected Project: Calcite Substation

As previously described, the proposed solar and energy storage project is both practically located to be close to SCE's proposed Calcite Substation and the first trigger necessitating that substation. Because it is a necessary infrastructure improvement to allow the proposed solar and energy storage project to connect to the grid, the Calcite Substation is a connected project and together they represent the "proposed project" for environmental evaluation purposes under CEQA. Approvals by the California Public Utilities Commission (CPUC) are necessary for the Calcite Substation and the CPUC is a responsible agency for the purposes of environmental evaluation.

Calcite Substation Summary

SCE proposes to construct and operate the Calcite Substation project on approximately 13 acres to facilitate the connections of renewable energy generation to the SCE electrical grid. The Calcite Substation project would also include loop-in transmission lines from the existing Lugo-Pisgah No.1 220 kV transmission lines approximately 2,500 feet in length. The Calcite Substation project also includes two new fiber-optic cables to provide telecommunications and 12 kV distribution lines to provide power for lighting at the substation along the same approximately 1 mile route. The Calcite Substation project would also develop access roads to facilitate construction and maintenance for the substation and transmission connections.

Calcite Substation Location

The proposed Calcite Substation project would be located on an approximately 75-acre parcel of land that extends on the west and east sides of SR-247, directly north of Haynes Road, in the County of San Bernardino (Vicinity Map (See Figure 2)).

Two new 220 kV transmission lines to loop the Calcite Substation into the existing Lugo-Pisgah No.1 220 kV transmission line would extend approximately 2,500 feet south of Calcite Substation,

cross under SCE's Eldorado-Lugo and Lugo-Mohave 500 kV lines, and enter Calcite Substation from the south. The existing 12 kV distribution circuit would be extended to provide temporary power and permanent Calcite Substation light and power westward overhead on Haynes Road, for approximately 2,000 feet. The circuit would then continue underground for approximately 2,100 feet heading westward under the existing transmission right-of-way (ROW) along Haynes Road and then north along the new Calcite Substation access road into the light and power rack within Calcite Substation.

The telecommunication fiber-optic cables would connect the proposed Calcite Substation to SCE's Barstow Repeater Communication Site (CS) and to a splice box on tower M29-T3 on SCE's Lugo Mohave 500 kV transmission line.

Calcite Substation Setting

The location of the proposed Calcite Substation is selected based on numerous engineering factors including proximity to the existing Lugo-Pisgah 220 kV transmission line and the transmission corridor. The site also has access to existing roads. The proposed Calcite Substation project site is relatively flat with elevations of approximately 2,980 feet to 2,900 feet above mean sea level. Locally, the proposed Calcite Substation project would be accessed via SR-247 and constructed road system. The proposed Calcite Substation project area would include approximately 1-mile loop-in transmission line from the existing Lugo-Pisgah 220 kV transmission line to the proposed Calcite Substation.

The geology of the proposed Calcite Substation project property and surrounding vicinity is consistent with that described for the proposed solar and energy storage project site.

Existing Land Uses and Land Use Zoning Districts on and adjacent to the proposed Calcite Substation project site is Vacant with portions of the existing transmission corridor recognized as electrical power facilities.

Calcite Substation Project Characteristics

The proposed Calcite Substation project consists of the following components (See Figure 4):

- Calcite Substation
- Loop-In Transmission Line
- Telecommunication Facilities
- Ancillary Facilities

Calcite Substation

The proposed Calcite Substation project would be a new regional 220kV collector station initially needed to support the proposed Ord Mountain Solar and Energy Storage project, measuring approximately 620 feet by 480 feet. The Calcite Substation would be an unattended collector station (no power transformation) surrounded by a prefabricated concrete wall with a visible loop of razor wire along the top and with two gates. The proposed Calcite Substation project would be designed to accommodate a total of eight 220 kV positions, with four positions initially constructed. Two positions would be used in the initial design: one position shared between the Ord Mountain Solar and Energy Storage project gen-tie and the Pisgah 220 kV transmission line, and one position for the Lugo 220 kV transmission line. The remaining two positions would be available for future network or generation tie-lines.

Calcite Substation would be initially equipped with the following:

- Two overhead 220 kV buses
- Five circuit breakers
- Ten group-operated disconnect switches
- One Mechanical Electrical Equipment Room (MEER)
- Light and power transformers and associated equipment
- Station lighting
- Permanent wall
- Microwave tower

The proposed Calcite Substation design includes terminating the Ord Mountain Solar 220 kV gen-tie line into the switchrack. There would be two double-circuit lattice or Tubular Steel Poles (TSPs) dead-end structures with heights ranging from approximately 130 feet to approximately 180 feet on the Calcite Substation property for the connection of Ord Mountain's gen-tie line to a 220 kV position inside Calcite Substation.

Loop-In Transmission Line

The proposed Calcite Substation would connect to the Lugo-Pisgah No. 1 220 kV Transmission Line transmission source line via a loop-in that would modify the Lugo-Pisgah No. 1 220 kV Transmission Line. That modification would create two new line segments: the Calcite-Lugo 220 kV transmission line and the Calcite-Pisgah 220 kV transmission line. Each new transmission line segment entering into the Calcite Substation would be approximately 2,500 feet long.

The proposed routes for these new transmission lines would require crossing under SCE's Eldorado-Lugo and Lugo-Mohave 500 kV lines. Crossing under the 500 kV lines would require the addition of one 500 kV interset tower for each of the Eldorado-Lugo and Lugo-Mohave 500 kV lines to comply with the safe clearance requirements of G0 95.

The new 220 kV transmission lines would require approximately seven transmission structures, consisting of six single-circuit structures and one double-circuit structure. Four single-circuit structures with heights ranging from approximately 50 feet to approximately 100 feet would be used to cross underneath the Eldorado-Lugo 500 kV and Lugo-Mohave 500 kV transmission lines. The path would then continue north to two single-circuit structures with approximate heights between 110 feet and 160 feet. From there, the alignment turns northeast to one 220 kV double-circuit structure with a height ranging from approximately 130 feet to approximately 180 feet. The 220 kV double-circuit TSP or Lattice Steel Tower (LST) would be located just outside of the substation wall (but still within the proposed Calcite Substation Property boundaries). The conductor used would be 2B-1590 kcmil "Lapwing" Aluminum Conductor Steel Reinforced (ACSR) conductor or similar.

Additionally, one existing 220 kV lattice steel tower in the existing ROW would be removed. The final combination of poles and towers will be determined during detailed engineering.

The seven new structures would require a new ROW ranging between approximately 250 and 400 feet wide (depending on structure types and line crossings) from SCE's existing ROW to the Calcite Substation Property.

DUDEK

SOURCE: BING 2016

Ord Mountain Solar

FIGURE 4
Calcite Substation Project Components

At the point of the proposed 220 kV line undercrossing, the existing Lugo-Mohave and Eldorado-Lugo 500 kV transmission lines would require the addition of one 500 kV interset tower per line to comply with applicable engineering standards and specifications (including GO 95). The preferred approach at this time would be to determine the appropriate crossing structures and position the interset towers within the 500 kV ROW. The current structures are slightly less than 150 feet tall. It should be assumed that the interset tower would be approximately 15-30 feet taller to facilitate the proposed undercrossing.

Loop-In Transmission Line Access and Spur Roads

Existing public roads and existing transmission line roads would be used as much as possible during construction. However, the Calcite Substation project would require new transmission line roads to access the new 220 kV transmission line segments and structure locations between the Calcite Substation and existing SCE ROW.

The graded road would have a minimum drivable width of between 14 feet and 22 feet with 2 feet of shoulder on each side as required by the existing land terrain, but may be wider depending on final engineering requirements and field conditions. The minimum center line turning radius required along a curve is 50 feet (the minimum turning radius required to meet construction and maintenance vehicle requirements) and berm and swale drainage improvements may be required for erosion control along the road.

Distribution System for Station Light and Power

An extension of an existing 12 kV distribution circuit would be required to provide the temporary power for construction and permanent station light and power for Calcite Substation. The Calcite Substation project calls for extending the existing 12 kV distribution circuit overhead westward on Haynes Road for approximately 2,000 feet by installing approximately 12 wood poles.

The 12 kV distribution circuit would then extend underground heading west along Haynes Road under the existing California Highway 247 and transmission ROW and then turn north along the Calcite Substation driveway and into Calcite Substation. The total underground circuit extension length would be approximately 1,700 feet, of which 1,400 feet is forecasted to have surface disturbance. These new facilities would also be used for installation of the required telecommunication fiber-optic cables into Calcite Substation (described below Telecommunication Facilities).

Telecommunication Facilities

A telecommunication system would be required to provide monitoring and remote operation capabilities of the electrical equipment at Calcite Substation, transmission line protection, and Remedial Action Scheme (RAS).

The SCE telecommunication facilities expected to be constructed as part of the Calcite Substation project would include two approximately 1-mile-long fiber-optic cables to the nearest splice points on an optical ground wire (OPGW) that is expected to already be in place on the 500 kV Lugo-Mohave T/L by the time any work associated with the Calcite Substation project commences.[1]

The first proposed fiber-optic cable would start from Calcite Substation and would be installed along the new 12 kV distribution path previously described. The proposed line would turn north along an un-named dirt road for approximately 1,100 feet attaching to existing wood poles and arriving at the Barstow Repeater Communication Site (CS). The line would drop down in a new riser and continue underground for approximately 150 feet into an existing communication room within the CS.

The second proposed fiber-optic cable would start from Calcite Substation and exit the substation to the south for approximately 400 feet in new underground conduit and then turn east onto Haynes Road for approximately 1,200 feet. The conduit would turn southwest on an existing access road for approximately 4,000 feet and then turn northwest to get to tower M29-T3 on the Lugo-Mohave transmission line where the existing splice box is located. This underground conduit route would be built exclusively for telecommunications use.

Ancillary Facilities

Access Road

The Calcite Substation access road would be 24 feet wide and composed of asphalt concrete. This road would connect to Highway 247 (Barstow Road) and would require the improvement of approximately 1,100 feet of the existing Haynes Road and the establishment of approximately 800 feet of new road. Permanent land disturbance would be approximately 2 acres on the Calcite Substation property.

Perimeter Fence

The Calcite Substation would be an unattended collector station (no power transformation) surrounded by a prefabricated concrete wall with a visible loop of razor wire along the top and with

[1] That OPGW is expected to be in place as a result of the anticipated completion of SCE's anticipated Eldorado Lugo Mohave (ELM) Series Capacitors project. The ELM Series Capacitors project is a distinct and independent project being separately undertaken by SCE that has independent utility from the Calcite Substation Project. Completion and operation of the ELM Series Capacitors project would include OPGW, which would be tapped to connect to the proposed Calcite Substation. Similarly, SCE also has another distinct and independent project with telecommunications equipment that, if constructed, would obviate the need to construct any other telecommunication facilities to support the Calcite Substation, namely, the Lugo-Victorville 500 kV Transmission Line Special Protection Scheme (SPS) Project. In fact, SCE has already submitted a Standard Form 299 application to the U.S. Bureau of Land Management for authorization to complete the Lugo-Victorville 500 kV Transmission Line SPS Project, which also has independent utility from the Calcite Substation Project. In light of the fact that both the ELM Series Capacitors Project and the Lugo-Victorville 500 kV Transmission Line SPS Project, currently planned by SCE, would be constructed and placed into operation prior to the operation of Calcite Substation, SCE would not need to construct any further telecommunication facilities to support the Calcite Substation (other than the two 1-mile taps described above).

two gates.

Lighting

Low-elevation (<14 foot) controlled security lighting would be installed within the substation. The lighting is only switched on when personnel enter the area (either motion-sensor or manual activation (switch)). All safety and emergency services signs would be lighted when the lights are on. The lighting would be shielded so that the light is directed downwards. Lighting would be only in areas where it is required for safety, security, or operations. All lighting would be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

Construction

Schedule

The Calcite Substation and associated transmission and telecommunications connections are anticipated to be constructed over a period of approximately 10 months.

Substation

The approximate area of land disturbance (cleared and graded) at the Calcite Substation property, is approximately 18 acres, approximately 13 acres of which would be permanent and the other approximately 5 acres would be temporarily disturbed for construction. The Calcite Substation access road would be 24 feet wide and composed of asphalt concrete. This road would connect to Highway 247 (Barstow Road) and would require the improvement of approximately 1,100 feet of the existing Haynes Road and the establishment of approximately 800 feet of new road. Permanent land disturbance would be approximately 2 acres on the Calcite Substation property.

The volume and type of earth materials proposed to be used is approximately 26,000 cubic yards (cy) of soil and approximately 3,000 cy of surface material (rock), which would be imported as part of construction. Existing material not suitable for use would be exported and disposed of off-site, is estimated at approximately 3,000 cy.

Loop-In Transmission Structures

The new structure pad locations and laydown/work areas would first be graded and/or cleared of vegetation as required to provide a reasonably level and vegetation-free surface for structure installation. Erection of the structures may also require establishment of a permanent equipment pad of approximately 50 feet by 50 feet located adjacent to each applicable structure within the laydown/work area used for structure assembly. The pad may be cleared of vegetation and/or graded as necessary to provide a level surface for equipment operation. Typical structure foundations for each LST would consist of four poured-in-place concrete footings; TSPs would require a single drilled poured-in-place concrete

footing; and TSP H-Frames would require a two drilled poured-in-place concrete footings. Actual footing diameters and depths for each of the structure foundations would depend on the soil conditions and topography at each property and would be determined during final engineering.

Wire stringing activities would be in accordance with SCE common practices and are similar to process methods detailed in the IEEE Standard 524-2003 (Guide to the Installation of Overhead Transmission Line Conductors). Typical wire stringing activities may or may not include the use of a helicopter.

The total land disturbance associated with the loop-in and the dead ends for the gen-tie that SCE would install is estimated approximately 42.2 acres. The majority of the disturbance would be temporary, approximately 39.3 acres, and approximately 2.9 acres permanently disturbed.

Telecommunication Facilities

For the locations that require overhead construction, the permanent ground disturbance for each pole installation would be approximately 4.9 square feet per pole and 0.1 square feet per pole anchor. At some structure locations, vegetation may be removed and/or trimmed to accommodate the installation of overhead and/or underground distribution facilities. For the locations that require the construction of a trench or underground structure, excavation activities would generally be done using a backhoe. The anticipated dimensions for the trench would be approximately 24 inches wide by approximately 51 inches deep resulting in approximately 0.38 acre of disturbance.

Laydown Areas and Access Roads

Laydown areas may include the following existing SCE facilities:

- Victorville Service Center - Hesperia Road, Victorville
- Apple Valley Sub – Deep Creek Road, Apple Valley
- Calcite Substation Property – Barstow Road (SR-247), Lucerne Valley
- Barstow Service Center – Rimrok Road, Barstow

Traffic

Construction would be performed by SCE Crews or its contract personnel, which would range from 4 to 28 personnel for any given activity. Multiple crews and activities may be ongoing on any given day. SCE estimates approximately 257 workers would be required to construct the proposed Calcite Substation project with up to 90 on-site(s) during peak days where activities overlap. In addition to the 90 maximum daily workers traveling to the site there would be up to 19 truck trips per day at peak construction activity (trenching and system installation phases overlap). A total of up to 109 trips per day are anticipated during peak construction activities. The estimated number of persons and types of equipment required for each phase of transmission line construction is provided in Table 4.

Construction Activities

SCE anticipates a total of approximately 257 workers, with approximately 90 construction personnel working on any given day. SCE anticipates that crews would work concurrently whenever possible; however, the estimated deployment and number of crew members would be dependent upon county permitting, material availability and construction scheduling. For example, installation of electrical equipment (such as the MEER, wiring, and circuit breaker) installation may occur while the transmission line construction proceeds.

Table 4
Proposed Calcite Substation Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Workers
Survey and Grading	2 months	Pick-up Truck	8	Maximum = 257 Average = 90
		Dozer	1	
		Loader	2	
		Scraper	2	
		Grader	1	
		Dump Truck	2	
		Backhoe	3	
		Tamper	1	
		Tool Truck	1	
		Utility Cart	2	
		Water Truck	7	
		Forklift	1	
		Ranger	1	
		Generator	1	
		Tracked Dozer	1	
		Motor Grader	1	
		Drum Compactor	1	
		Excavator	1	

Table 4
Proposed Calcite Substation Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Workers
		Lowboy Truck/Trailer	1	
Fencing	1 month	Pick-up Truck	1	
		Bobcat	1	
		Flatbed ruck	1	
		Utility Cart	1	
		Water Truck	1	
Civil	3 months	Pick-up Truck	1	
		Excavator	1	
		Lo-Drill/Auger	1	
		Backhoe	2	
		Bobcat	1	
		Dump Truck	2	
		Skip Loader	1	
		Forklift	1	
		Concrete Truck	2	
		Generator	1	
		Tool Truck	1	
		Utility Cart	2	
		Water Truck	2	
Installation	1 month	Pick-up Truck	4	
		Bucket Truck	6	
		Stake Truck	1	
		Crane	2	
		Forklift	1	
		Tool Truck	1	
		Compressor Trailer	1	
		Boom/Crane Truck	1	
		Auger Truck	1	
		Flatbed Truck	3	
Electrical	3 months	Pick-up truck	2	
		Scissor Lift	1	
		Bucket Truck	2	
		Reach Manlift	1	
		Crane	1	
		Forklift	1	
		Generator	1	
		Utility Cart	2	
		Tool Truck	1	
Wiring and Towers	3 months	Pick-up Truck	47	

Table 4
Proposed Calcite Substation Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Workers
		Bucket Truck	14	
		Utility Cart	1	
		Double Bucket Truck	3	
		Boom/Crane Truck	10	
		Puller	1	
		Static Truck/ Tensioner	2	
		Dump/Stake Bed Truck	6	
		Compressor Trailer	7	
		R/T Crane (L)	5	
		R/T Crane (M)	3	
		Flatbed Truck	6	
		Backhoe/Front Loader	7	
		Excavator	1	
		Drill Rig	2	
		Concrete Truck	7	
		R/T Forklift	3	
		Crane	2	
		Sag Cat w/ Winches	4	
		Lowboy Truck/trailer	4	
		Wire Truck/Trailer	2	
		Sock Line puller	1	
		Bullwheel Puller	1	
		Spacing Cart	3	
		Hydraulic Rewind Puller	1	
		Excavation and Boring Equipment	1	
		Water Truck	4	
Maintenance and Testing	4 months	Pick-up Truck	1	
		Test Truck	2	
Paving	1.5 months	Pick-up Truck	2	
		Stake Truck	1	
		Dump Truck	1	
		Asphalt Paver	1	
		Tractor	1	
		Paving Roller	2	
		Asphalt Curb Machine	1	
		Utility Cart	1	
Telecommunications	2 months	Pick-up Truck	10	
		Flatbed Truck	4	
		Bucket Truck	7	

Table 4
Proposed Calcite Substation Project Construction Duration, Equipment and Workers by Activity

Activity	Duration	Equipment	Pieces	Workers
		Splicing Lab	4	
		Backhoe/Front Loader	2	
		Water Truck	4	
		Concrete Truck	2	
Site Clean-Up & Restoration	.5 month	Pick-up Truck	2	
		Backhoe/Front Loader	1	
		Motor Grader	1	
		Water Truck	1	
		Drum Compactor	1	
		Lowboy Truck/Trailer	1	

Construction of the transmission lines would require the establishment of an approximately 5-acre staging yard within the Calcite Substation property. This staging yard would be used as a reporting location for workers, vehicle and equipment parking, and material storage. The yard would also have construction trailers for supervisory and clerical personnel. The staging yard may be lit for staging and security.

Water Use

The total anticipated water demand for construction of the proposed Calcite Substation project is approximately 37 acre-feet. No water is expected to be necessary for operations with nominal amounts potentially necessary for maintenance in the event of repairs. Water would be provided either from the groundwater wells on the proposed solar and energy storage project site, or from the local water provider.

Operations

The proposed Calcite Substation would be unstaffed, and electrical equipment within the substation would be remotely monitored and controlled by an automated system from SCE's Lugo Substation Switching Center. Operations and Maintenance (O&M) activities are necessary to ensure reliable service, as well as the safety of the utility worker and the general public, as mandated by the CPUC. SCE facilities are subject to Federal Energy Regulatory Commission jurisdiction. SCE transmission facilities are under operational control of the California Independent System Operator (CAISO). SCE personnel would typically visit for electrical switching and routine maintenance purposes. Routine maintenance would include equipment testing, monitoring and repair.

Following the completion of project construction, operation of the new telecommunication facilities would commence. Inspection and maintenance activities would occur at least once per year. The frequency of

inspection and maintenance activities would be on an as-needed basis.

California Native Tribes

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? The required notification of affected tribes has occurred.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Evaluation Format

This initial study is prepared in compliance with CEQA pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on 17 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact**: No impacts are identified or anticipated and no mitigation measures are required.
2. **Less than Significant Impact**: No significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. **Less than Significant Impact with Mitigation Incorporated**: Possible significant adverse

impacts have been identified or anticipated, and mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant.

4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts.

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☒	Geology and Soils
☒	Greenhouse Gas Emissions	☒	Hazards and Hazardous Materials	☒	Hydrology/ Water Quality
☐	Land Use and Planning	☐	Mineral Resources	☒	Noise
☐	Population/ Housing	☐	Public Services	☐	Recreation
☒	Transportation and Traffic	☒	Tribal Cultural Resources	☐	Utilities and Service Systems
☒	Mandatory Findings of Significance				

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

☐	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
☐	Although the proposed project could have a significant effect on the environment, there shall not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
☒	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature (prepared by John Oquendo, AICP, Planner) — Date: 5/24/2017

Signature: Heidi Duron, Supervising Planner — Date: 5/25/2017

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
I.	**AESTHETICS -** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

SUBSTANTIATION: *(Check if project is located within the view-shed of any Scenic Route listed in the General Plan):*

a) Would the Project have a substantial adverse effect on a scenic vista? Potentially Significant Impact. The solar and energy storage project site and surrounding area are not considered an undisturbed natural area. The solar and energy storage project site has been previously farmed and has been fallow for over a decade. In addition, the project site is generally flat and contains no significant geologic features or vegetation that is particularly unique for the area, or vegetation that would be considered scenic. The gen-tie line, Calcite Substation, loop-in transmission line, and telecommunications traverse areas that are disturbed with existing infrastructure (roads and/or transmission facilities) and undisturbed (vegetated). Although the sparse, existing development in the area includes scattered rural residences; abandoned residential structures, trailers, and vehicles; paved SR-247 and several unpaved local roads; electrical distribution lines supported by wooden poles; and three high-voltage transmission power lines supported by tall steel lattice towers. As such, the proposed project site and the surrounding North Lucerne Valley area are not considered an undisturbed natural area.

Although there are no designated scenic vistas in the proposed project area (the County does not formally designate or identify scenic vistas, though scenic routes are designated by the County General Plan), County General Plan policies contain criteria for evaluating whether scenic vistas occur in a particular area. More specifically, General Plan Open Space Element, Policy OS 5.1, states that a feature or vista can be considered scenic if it provides a vista of undisturbed natural areas, includes a unique or unusual feature that comprises an important or dominant portion of the viewshed, or offers a distant vista that provides relief from less attractive views of nearby features (such as views of mountain backdrops from urban areas).

While primarily characterized as a broad, flat alluvial plain, the project area landscape is also marked by mountainous terrain to the north, west, and east and three high-voltage transmission power lines supported by tall steel lattice towers extending east-west through the region. Due to the presence of rugged terrain, the landscape is enclosed on three sides, yet the lack of prominent local terrain to the south and southeast affords receptors views to the distant San Bernardino Mountains. Although the project would alter the existing character of the site, the introduction of project components would not substantially obstruct or interrupt views of surrounding mountainous terrain. The majority of the proposed solar and energy storage project equipment would maintain a relatively low vertical profile and would display a height of approximately 12 feet. However, panels may obstruct distant mountainous terrain in views available at residences located immediately adjacent to the project boundary and impacts would be potentially significant. Visual simulations would be created and further analyzed in the EIR.

Equipment within the on-site substation would range from 16 to 60 feet in height; however, these components would be close to existing tall vertical features (i.e., steel lattice towers) and there are no receptors (either residents or motorists) in the immediate vicinity of the on-site substation. The applicant is seeking a Major Variance to modify the maximum structure height to permit the construction of onsite transmission poles and related structures up to 94 feet in height. Pole heights for offsite transmission are described in the project description as approximately 150 feet. SR-247 is located approximately 0.3 mile east of the on-site substation; however, due to distance and because tall equipment within the substation facility would not form a continuous wall, the introduction of substation equipment would not substantially obstruct or interrupt views of mountainous terrain available in easterly views from SR-247.

As proposed, the project's gen-tie transmission line would span SR-247 and interconnect to SCE's proposed Calcite Substation. The gen-tie transmission line would generally parallel existing high-voltage transmission lines present in the project area. Under existing conditions, the three high-voltage transmission lines span SR-247 approximately 900 feet northwest of the Fern Road/Haynes Road intersection and then proceed in a southwesterly alignment towards existing large and geometric steel lattice towers. To minimize the potential for visual impacts and adverse effects to existing views, support monopoles for the proposed gen-tie transmission line would be installed near existing steel lattice structures and as such, new structures would be viewed alongside existing structures. However, unlike existing transmission lines that are supported by steel lattice towers, the proposed gen-tie transmission line would be supported by five steel or concrete monopoles that would display a solid form and regular, straight line. As such, monopoles would not replicate the existing form and line of utility infrastructure in the

immediate area. Further, monopoles would be more visible than steel lattice towers and would not display the same capability as steel lattice to blend in with the surrounding landscape. Still, the close proximity of existing steel lattice and steel or concrete monopoles would reduce the potential for the gen-tie line to significantly detract from the existing visual setting and significantly obstruct existing views. Lastly, the visual effects of grading activities associated with the installation of gen-tie transmission line support structures would be similar to the line and texture contrasts produced by existing electrical infrastructure dirt access roads. Due to the presence of low, mounded shrubs in the landscape, the removal of existing vegetation and resulting patch of cleared, smooth textured soils at the base of new support structures would largely be screened from view of passing motorists.

Because the majority of solar facility components would display a vertical profile that would largely maintain existing available views to mountainous terrain in the surrounding area, project impacts to scenic vistas would not be substantial. Where view blockage at a particular vantage point is anticipated, views of the local mountainous terrain would remain available to receptors elsewhere in their field of vision and would be largely unencumbered by project components. The placement of the proposed gen-tie transmission line and five support monopoles along an existing transmission corridor and in close proximity to existing high voltage transmission lines and tall steel lattice towers would minimize potential visual effects on existing views available to SR-247 motorists as they pass through the project area.

The majority of equipment and structures within the Calcite Substation fenceline would be between 10 and 80 feet in height, and loop-in transmission line structures (tubular steel pole or lattice steel towers; tubular steel poles are reflected in visual simulations) would display a height of between 50 and 180 feet. Equipment and structures within the substation fenceline would generally display thin vertical and horizontal lines that when viewed in the context of the surrounding landscape, would not substantially detract from existing views of mountainous terrain and the flat valley landscape, in proximity to the existing three regional transmission lines. Although they would display a thin line and tall form, proposed loop-in transmission line structures would be backscreened by mountainous terrain and would replicate the height displayed by existing steel lattice towers in the landscape. However, potential impacts from nearby residences would be analyzed further in the EIR. Both the proposed solar and energy storage project and proposed Calcite Substation project would have potentially significant impacts on a scenic vista and will be analyzed further in the EIR.

b) **Would the Project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? Potentially Significant Impact.** The proposed project includes elements on the west and east of SR-247, an eligible state scenic highway and an officially designated County scenic route.

The closest officially designated state scenic highway is SR-38, located approximately 23 miles south of the project site in the San Bernardino Mountains. While SR-247 currently only possesses a local scenic route classification, an effort is underway by a local interest group, to designate SR-247 as a state scenic highway. Development of the proposed project would not entail the removal of trees, rock outcroppings, and/or historic buildings (these features do not occur on the project site) within the viewshed of an officially designated state scenic highway. The solar and energy storage project site has been previously farmed and has been fallow for over a decade. The project site is generally flat and contains no significant geologic features or vegetation that is particularly unique for the area, or vegetation that would be considered scenic. Vertical elements at the Calcite Substation (e.g., switchracks, A-frames, and the prefabricated concrete perimeter wall) would be visible to passing motorists. The substation is setback approximately 650 feet from SR-247. The above-described improvements could potentially affect views from SR-247 to offsite geological features and terrain, such as the Ord Mountains to the north east of the project site. The proposed gen-tie transmission line northwest of the Fern Road/Hayne Road intersection would span SR-247. As previously discussed under question I. a) above, the placement of the proposed gen-tie transmission line and support poles along an existing transmission corridor and in close proximity to existing high voltage transmission lines and tall steel lattice towers would minimize potential visual effects on existing views available to SR-247 motorists as they pass through the project area. The majority of project components would display a relatively low vertical profile and when viewed from SR-247. While these elements are not anticipated to result in substantial obstruction or interruption of existing available views to mountainous terrain in the area, further analysis is warranted within the EIR, as potentially significant impacts upon locally classified scenic resources may occur.

c) **Would the Project substantially degrade the existing visual character or quality of the site and its surroundings? Potentially Significant Impact.** The existing project site is generally flat and consists of fallow agricultural lands dotted with low, mounded shrubs, expanses of short, golden grasses, and large areas of exposed tan colored soils, In addition, the southern edge of the project site is punctuated by three regional transmission lines that are supported by large and geometric steel lattice towers. The surrounding area displays similar features and is sparsely developed with rural residential structures, abandoned residences, and electrical distribution and transmission infrastructure. While SR-247 traverses the project area landscape and provides motorists generally indistinct views to the project site, approximately 20 active residences are located within 0.5 mile of the project site.

The visual change associated with development of the proposed project would be most noticeable to residents located on properties situated immediately adjacent to the proposed project site and those situated at an elevation greater than the proposed project. While

project components would be set back from a perimeter slat and chain-link fence, repeating rows of solar arrays would be visible through gaps in the slatted fence and dark colors and regular, repeating lines atypical of the desert landscape may be experienced. Also, from this particular vantage point, the prevalent visual pattern of the low valley floor juxtaposed with the high vertical relief of mountainous terrain may be broken and otherwise interrupted by the introduction of thousands of solar panels to the landscape. Moderate visual contrast is also anticipated where SR-247 motorists would be afforded views to Calcite Substation components. Therefore, potentially significant impacts to the existing visual quality from the proposed project may result, and these impacts will be analyzed further in the EIR.

d) **Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? Potentially Significant Impact.** Due to the remote desert setting, the project site and the surrounding area are presently devoid of significant nighttime lighting sources or daytime glare. Existing light sources in the project area consist of vehicle headlights during the night hours on SR-247 and local roadways, as well as lighting associated with the scattered rural residences. There are no existing structures in the project area that create a substantial source of daytime glare.

Construction of the proposed project is anticipated to occur during hours permitted by the County; therefore, nighttime lighting to accommodate construction activities would not normally be required. Five residences are located within 100 feet of the project boundaries, and proposed operational nighttime lighting would potentially affect existing views in the surrounding area, which is generally devoid of significant nighttime lighting sources. As proposed, lighting would be installed at primary access gates to the solar and energy storage project site and around the on-site substation and energy storage structure. All proposed lighting would be shielded and directed downwards to minimize skyglow and occurrences of light trespass onto surrounding properties. Furthermore, installed lighting would be mounted on support poles less than 14 feet in height and would be motion activated. The lighting would be installed only in areas where it is required for safety, security, or operations and would normally be off unless activated by project personnel.

In addition, all nighttime lighting associated with the proposed project would be subject to County approval and compliance with County requirements (County Ordinance No. 3900 and County Development Code Chapter 83.07, Glare and Outdoor Lighting). County Ordinance No. 3900 regulates glare, outdoor lighting, and night sky protection, and County Development Code Chapter 83.07 regulates outdoor lighting practices geared toward minimizing light pollution, glare, and light trespass; conserving energy and resources while maintaining nighttime safety, visibility, utility, and productivity; and curtailing the degradation of the nighttime visual environment. Because all proposed lighting would be shielded and directed downwards and

motion-activated lighting would normally be turned off unless needed for nighttime emergency work, project lighting would be consistent with County requirements. SCE's Calcite Substation is not subject to County approval and requirements however, installed lighting would also be shielded, directed downwards, and normally turned off unless needed for nighttime emergency work or motion activated. Compliance with County lighting regulations, submittal of an approval of exterior lighting plans as required by General Plan Conservation Element policy D/CO 3.1(b), and compliance with General Plan Conservation Element policy D/CO 3.2 would ensure that impacts associated with new sources of nighttime lighting and glare would be less than significant.

As proposed, the project would utilize dark PV solar panels featuring a non-reflective coating. PV solar panels are designed to be highly absorptive of all light that strikes the glass surfaces, generating electricity rather than reflecting light. Further, the PV solar panels are designed to track the sun to maximize panel exposure to the sun. In addition, the solar facility would be designed ensure consistency with Section 84.29.004 of the San Bernardino County Code that requires solar energy facility to be designed to preclude daytime glare on abutting residential land uses/parcels. Despite the high absorption intent of dark PV solar panels and required compliance with San Bernardino County Code, some glare may be generated by the panels throughout the day and may be received on non-abutting residential properties to the east of the facility as the tracking systems follows the sun. This is more likely to occur at the break of day as panels would be angled towards the eastern horizon. The presence of the slatted perimeter fence would help cutoff glare at the facility boundary but due to variations in elevation, receptors at higher vantage points than the proposed facility in the surrounding area may be exposed. However, as previously stated, glare generated by PV solar panels may be received by a limited number of residences located east of solar facility for a relatively brief duration near the break of day. Considering the proposed scope of work, the operational condition of the project does have the potential to create a new source of light or glare. Due to these potentially significant effects, additional analysis is warranted within the EIR.

	Issue	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

SUBSTANTIATION: *(Check if project is located in the Important Farmlands Overlay):*

a) **Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? No Impact.** The proposed project would not convert prime farmland, unique farmland, or farmland of Statewide Importance (Farmland), as shown on the San Bernardino County Important Farmland Map 2014, to non- agricultural use, since the proposed project is not designated as such. No

significant adverse impacts are identified or anticipated and no mitigation measures are required. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in impacts related to converting important Farmland. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract? Less Than Significant Impact**. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. None of the properties associated with the proposed project is under a Williamson Act contract. The current General Plan land use designation for the proposed solar and energy storage project area is LV/AG (Lucerne Valley/Agriculture), which allows the development of renewable energy generation facility with a Conditional Use Permit (CUP) (Development Code Section 85.06). While the proposed solar and energy project site is designated for agriculture, the site has been fallowed for more than a decade and the landowner has not been able to secure viable agricultural operations. The connected proposed Calcite Substation Project is located on vacant land parcels designated as 'vacant undifferentiated' and LV/AG. Infrastructure components for utilities are not subject to the County land use designations. The land is not subject to a Williamson Act contract. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in impact related to conflicting with agriculture zoning or a Williamson Act contract. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

c) **Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? No Impact**. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). The proposed project area is currently fallowed agricultural land, or undeveloped land, which has never been designated as forest land or timberland. No rezoning of the proposed project site would be required. Therefore, Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would have any impact regarding forest land or timberland. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the Project result in the loss of forest land or conversion of forest land to non-forest use? No Impact**. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. The proposed project site includes lands that have historically been under agricultural use, is currently fallowed agricultural land, or is undeveloped lands, none of

which is forest land. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in the loss or conversion of forest land. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

e) **Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? Less Than Significant Impact.** The proposed solar and energy storage project site was previously used for agriculture but has been fallow for several years. The site landowner has not been able to secure viable agricultural operations on the site during this time. While the proposed solar and energy storage project would convert designated agricultural land to non-agricultural uses, those lands do not include any mapped Farmland of Statewide Importance. As no other surrounding lands are Farmland of Statewide Importance or forest land, the proposed solar and energy storage project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. The current General Plan land use designation for the proposed solar and energy storage project area is LV/AG (Lucerne Valley/Agriculture), which allows the development of renewable energy generation facility with a CUP (Development Code Section 85.06). The connected proposed Calcite Substation Project is located on vacant land parcels designated as 'vacant undifferentiated' and LV/AG. Infrastructure components for utilities are not subject to the County land use designations. The proposed project site and vicinity does not contain any forest land or forest use. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would have significant impacts related to converting Farmland to non-agricultural uses or forest lands to non-forest use. The proposed project would have less than significant impacts related to the conversion of Farmland and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
III.	**AIR QUALITY -** Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SUBSTANTIATION: *(Discuss conformity with the Mojave Air Quality Management Plan, if applicable):*

a) **Would the Project conflict with or obstruct implementation of the applicable air quality plan? Potentially Significant Impact.** The project site is located within the Mojave Desert Air Basin (MDAB) and is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The Air Quality Management Plan (AQMP) provides a program for obtaining attainment status for key monitored air pollution standards, based on existing and future air pollution emissions resulting from employment and residential growth projections. The AQMP is developed using input from various agencies' General Plans and other projections for population and employment growth. While the proposed project is not identified specifically in the County General Plan, it would not generate new homes or employment opportunities that would change the County's projections. Though the proposed project would not alter the population or employment projections considered during the development of the AQMP, and the emissions attributable to the proposed project during operation are minor (refer to discussion in item III(b) below), potential exceedances of air quality emissions thresholds during the construction phase of the project may create an issue with AQMP consistency . Accordingly, additional discussion of this threshold is warranted in the EIR.

To limit the production of fugitive dust during implementation of the proposed project,

construction activities will be conducted in accordance with MDAQMD Rules 401 (*Visible Emissions*) and 403.2 (*Fugitive Dust Control for the Mojave Desert Planning Area)*. This includes using water trucks to minimize the production of visible dust emissions to 20% opacity in areas of where grading or vegetation removal occurs, within the staging areas, and on any unpaved roads used during project construction. Chemical stabilizers will be applied to graded areas where construction would not begin for more than 60 days after grading. In addition, the proposed project would not result in a long-term increase in the number of trips or increase the overall vehicle miles traveled in the area. Haul truck, vendor truck, and worker vehicle trips would be generated during the proposed construction activities, but would cease after construction is completed. In regards to long-term operations, the proposed project would have routine inspection and maintenance which would result in a net increase in emissions.

Over its lifetime, the proposed project will not violate the regulations set forth by the MDAQMD *Rule Book* or *CEQA and Federal Conformity Guidelines*. Electricity generation via the use of photovoltaic systems does not generate chemical emissions that would negatively contribute to air quality. The proposed project is designed to limit the amount of vegetation that would be removed and grading required for access and foundations. Throughout the remainder of the developed area on the solar and energy storage site, the vegetation root mass would generally be left in place to help maintain existing drainage patterns on a micro level, and to assist in erosion control. During construction of the solar and energy storage facility, it is expected that most of the vegetation would be cut, trimmed, or flattened as necessary, but otherwise undisturbed so that reestablishment is possible. Restraint on the disturbance of vegetation root mass would limit fugitive dust generated during the life of the project. The Calcite Substation project would involve grading for the foundations of the substation and for access and maintenance roads for the substation and associated loop-in transmission line. Grading is estimated to occur on approximately 2-acres of the 75-acre parcel for the Calcite Substation. Potential exceedances of air quality emissions thresholds during the construction phase of the project could create an issue associated with AQMP consistency. Accordingly, additional discussion of this threshold is warranted in the EIR.

b) **Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Potentially Significant Impact.**

Construction Emissions

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

Implementation of the project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project would comply with MDAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of MDAQMD's Rule 1113 (Architectural Coatings).

Maximum daily emissions of NO_x, CO, SO_x, and $PM_{2.5}$ emissions would occur during the construction phase in 2019 and 2020 as a result of off-road equipment operation and on-road vendor trucks and haul trucks. The overlap of the building construction phase and the architectural coatings phases in 2019 has the possibility of producing substantial daily VOC and PM_{10} emissions. Therefore, impacts would be potentially significant and will be analyzed further in the EIR.

The project would comply with MDAQMD Rule 403.2 to control fugitive dust emissions generated during grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include:

- Short-term dust control by a water truck and/or available water source on or near the drilling rig;
- Minimize and cleanup trackout onto paved roads;
- Cover haul trucks;

- Stabilize (chemical or vegetation) site upon completion of grading when subsequent development is delayed;
- Rapid cleanup of project-related trackout or spills on paved roads; and
- Minimize grading and soil movement when winds exceed 30 miles per hour.

Operational Emissions

Operation of the project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips from maintenance vehicles.

The combined daily area, energy, and mobile source emissions are not likely to exceed the MDAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$, however, this will be analyzed further in the EIR to determine potential impacts associated with project-generated operational criteria air pollutant emissions.

c) **Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Potentially Significant Impact.** Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the MDAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As previously described, the project would have potentially significant impacts for construction and operations, therefore, potentially significant cumulative impacts will be further analyzed in the EIR.

d) **Would the Project expose sensitive receptors to substantial pollutant concentrations? Potentially Significant Impact .** The MDAQMD considers residences, schools, daycare centers, playgrounds and medical facilities to be sensitive receptor land uses (MDAQMD 2016). Land uses surrounding the proposed work areas consists primarily of undeveloped open space areas in the Mojave Desert. There is some development within the vicinity, generally consisting of scattered rural residences. Construction of the proposed project would result in the temporary (16 months) generation of emissions associated with on-site equipment operation and off-site trucks and worker vehicles; however, emissions would be below the MDAQMD thresholds and would not result in substantial criteria air pollutant emissions. In addition, the construction activities would move along the site and transmission line corridor and would not result in extended exposure of individual residences to criteria air pollutants or toxic air contaminants (such as diesel particulate matter). Rural residential land uses are located in the vicinity of the proposed project, and residents could be exposed to air pollutants or toxic air contaminants. Therefore, this topic will be analyzed further

in the EIR.

e) **Would the Project create objectionable odors affecting a substantial number of people? Less than Significant Impact.** Odors are a form of air pollution that is most obvious to the general public and can present problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern. Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. In regards to long-term operations, the project would not change the routine inspection and maintenance of the existing transmission lines and would not result in any sources of substantial odors. Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would result in impacts related to creation of objectionable odors affecting a substantial number of people. A less than significant impact from objectionable odors would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IV.	**BIOLOGICAL RESOURCES -** Would the project:				
a)	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☒	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database): Category «CAT»*

a) **Would the Project have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Potentially Significant Impact**. There is potential for direct and indirect impacts to special-status plant and wildlife species if they occur within the project site. Additionally, short-term or temporary indirect impacts to special-status wildlife species would primarily result from vegetation removal activities during grading/filling activities associated with construction. Potential short-term indirect impacts to special-status wildlife, including fugitive dust, chemical pollutants (including herbicides), increased human activity, and non-native animal species would be potentially significant. Potential long-term indirect impacts to special-status wildlife, including the invasion of non-native, invasive plant species, would be potentially significant. Therefore, this

topic will be further analyzed in the EIR.

Short-Term Indirect Impacts

b) **Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? Potentially Significant Impact**. While the project site is devoid of native riparian vegetation or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. An assessment of the proposed solar and energy storage project site and the Calcite Substation project site and areas of disturbance for habitat value will be conducted and this topic will be analyzed further in the EIR.

c) **Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? No Impact.** No jurisdictional wetlands or non-wetland waters, based on ACOE, RWQCB, and CDFW definitions, occur within the proposed project site. No jurisdictional wetlands or non-wetland waters were identified during previous surveys within the project site conducted by SWCA Environmental Consultants in 2010. Additionally, no USGS National Hydrography Dataset flow lines were found to occur on site or in the adjacent vicinity (USGS 2016). Thus, no wetlands potentially subject to ACOE, RWQCB, or CDFW are present within the proposed project site and no impacts would result. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse impacts to federally protected wetlands. No impacts would result from the proposed project and this topic will not be analyzed further in the EIR.

d) **Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? Potentially Significant Impact**. Historical agricultural practices have removed the natural vegetation communities, limiting the quality and availability of habitat for wildlife. The land use (transportation, residential, and agricultural) of areas adjacent to the project site also limit the value to wildlife of the habitat in the vicinity. While some native wildlife species, especially those particularly tolerant of human disturbances, may occasionally breed on the site, no native wildlife have established nursery or breeding colonies on the site. Although unlikely, naturally occurring native fish populations that may be present within the project site due to standing water or significant hydrological drainages where water could be present for an extended period of time would need to be analyzed further.

The project site is located within the Pacific Flyway, an avian migratory route that stretches along the

Pacific Coast from South America to the Arctic tundra. Migratory birds use this major migratory route in the spring and fall because of stopover areas where species rest, feed, and regain their strength before continuing their migration to breeding or wintering grounds. In general, bird migration occurs during the months of March through April and August through November. The project site is located between two significant stopover areas: the Salton Sea (90 miles southeast) and Mono Lake (262 miles northwest). These stopover areas are identified as California Important Bird Areas by the National Audubon Society, and guide birds over the project area. However, the project area does not support any bodies of water or wetlands that attract large migration stopovers or attractants for avian species. Furthermore, the project is proposed on lands that are low quality, disturbed habitats surrounded by open, undisturbed lands as well as similarly disturbed rural residential lands. However, biological observations would be conducted to determine if the project site and adjacent off-site areas act as significant linkage areas. Therefore, this topic will be analyzed further in the EIR.

e) **Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Potentially Significant Impact.** The proposed project has the potential to conflict with adopted local plans such as the *San Bernardino County General Plan* (County of San Bernardino 2007) as they relate to biological resources found on the project site. Therefore, this topic will be analyzed further in the EIR.

f) **Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? No Impact.** The project area is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no take of critical habitat and, therefore, no land use conflict with existing management plans would occur and no impact would result. Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. No impacts would result from the proposed project and this topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
V.	**CULTURAL RESOURCES** - Would the project				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

SUBSTANTIATION: *(Check if the project is located in the Cultural or Paleontologic Resources overlays or cite results of cultural resource review):*

a) **Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? Potentially Significant Impact**. The proposed project has the potential to cause an adverse impact to a historical resources present on or around the project site. Therefore, potentially significant impacts to historical resources would occur and will be further analyzed in the EIR.

b) **Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? Potentially Significant Impact**. The potential for archaeological resources within the project area exists and a survey and technical report will be prepared to evaluate potential impacts of the proposed project. Therefore, this topic will be further analyzed in the EIR.

c) **Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Less than Significant Impact.** The proposed project site is mapped as younger alluvium overlying igneous and metamorphic bedrock (Dibblee 1964; Dibblee and Minch 2008). Younger alluvium has low paleontological resource sensitivity while igneous and metamorphic bedrock has no paleontological resource sensitivity. Because the site is fairly level, grading is expected to be minor in most instances and as a result, any disturbance to paleontological resources or natural formations would be too small to be considered significant. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse impacts to paleontological resources. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the Project disturb any human remains, including those interred outside of formal cemeteries? Less than Significant Impact.** The proposed project site is not located on a

known cemetery, and no human remains are anticipated to be disturbed during the construction phase. However, the procedures for consulting with Native American tribes are outlined in AB 52, as described in Tribal Cultural Resources, with the treatment of Native American human remains contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097. In accordance with Section 7050.5 of the California Health and Safety Code, which maintains if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with the above-referenced requirements will ensure a less than significant impact is identified for this issue area. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be anticipated to disturb human remains. Less than signficant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VI. GEOLOGY AND SOILS - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if project is located in the Geologic Hazards Overlay District):*

a) **i) Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? Less than Significant Impact**. The entire San Bernardino County area is particularly susceptible to strong ground shaking and other geologic hazards. However, the proposed project site is not located within an Alquist-Priolo Earthquake fault zone. While the potential for on-site ground rupture cannot be totally discounted (e.g., unmapped faults could conceivably underlie the project corridor), the likelihood of such an occurrence is considered low due to the absence of known faults

within or adjacent to the site. The Helendale Fault and the Lenwood Fault are the nearest mapped faults; approximately 7 and 8 miles from the project area, respectively. Accordingly, no significant impacts related to seismic ground rupture (and related effects) are anticipated from implementation of the proposed project. Therefore, the proposed solar and energy storage project and the Calcite Substation project would result in less than significant impacts related to seismic ground rupture. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

ii) **Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? Less than Significant Impact**. The proposed project site is within a seismically active region and is potentially subject to strong ground acceleration from earthquake events along major regional faults. According to the Geologic map of California: San Bernardino sheet: California Division of Mines and Geology, scale 1:250000 (Rogers 1967), the continental transform San Andreas Fault is located approximately 35 miles to the southwest of the proposed project area. The San Andreas Fault as a whole is capable of generating significant seismic activity, but it has not been particularly active along the southern segment. The Helendale Fault, located approximately 7 miles from the project area, is a right-lateral strike-slip fault 56 miles in length, with unknown rupture intervals and probable magnitudes between 6.5 and 7.3. The Lenwood Fault is also a right-lateral strike-slip fault, with rupture intervals of 4,000 to 5,000 years and probable magnitudes of 6.5 to 7.4.

The project design would incorporate measures to accommodate projected seismic loading, pursuant to existing guidelines such as the “Greenbook” Standard Specifications for Public Works Construction (2015) and the International Code Council’s (ICC) 2013 California Building Code (CBC). Specific measures that may be used for the proposed project include proper fill composition and compaction; anchoring (or other means of for securing applicable structures); and use of appropriate pipeline materials, dimensions and flexible joints. Based on the incorporation of applicable measures into project design and construction, potential project impacts associated with strong seismic ground shaking would be less than significant. Therefore, the proposed solar and energy storage project and the Calcite Substation project would result in less than significant impacts related to exposing people or structures to seismic ground shaking. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

iii) **Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction? Less than Significant Impact**. Liquefaction is the phenomenon whereby soils lose shear strength and exhibit fluid-like flow behavior. Loose granular soils are most susceptible to these effects, with liquefaction generally restricted to saturated or near-saturated soils at depths of less than 50 feet. Other types of seismic-related ground failure include ground rupture (as discussed in Section VI.a.i), landslides (as discussed in Section VI.a.iv), dynamic ground subsidence (or settlement) and lateral spreading. According to the UC Davis Soil Resource Laboratory, the soils in the proposed project area are well-drained and are not susceptible to liquefaction. Furthermore, the proposed project design and construction would incorporate a number of standard measures to address potential seismic-related liquefaction and related effects such as settlement and lateral spreading, including similar types of measures form the CBC and Greenbook standards as noted above in Section VI.a.ii. Based on the incorporation of applicable measures into project design and construction, potential project impacts associated with seismic-related liquefaction and settlement would be less than significant. Therefore, the proposed solar and energy storage project and the Calcite Substation project would result in less than significant impacts related to seismic-related ground failure or liquefaction. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

iv) **Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? No Impact.** The proposed project would not have any risks associated with landslides. Landslides are the downslope movement of geologic materials. The stability of slopes is related to a variety of factors, including the slope's steepness, the strength of geologic materials, and the characteristics of bedding planes, joints, faults, vegetation, surface water, and groundwater conditions. The California Geologic Survey has not released the seismic hazards zones for the project area. However, since the project area is relatively flat terrain where landslides have not historically been an issue, no significant impacts are anticipated with respect to seismic-related (or other) landslide hazards. The nearest areas of slopes possible capable of producing landslides or rock-fall is approximately 1 mile to the northeast of the project area.

The geologic conditions present on the proposed project site would not expose the project to landslide and impacts would be less than significant. In combination, the proposed project would have less than significant impacts related to landslides. Therefore, the proposed solar and energy storage project and the Calcite Substation project would result in less than significant impacts related to landslides. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project result in substantial soil erosion or the loss of topsoil? Potentially Significant Impact.** No substantial vegetation removal would occur for the installation of the proposed project. It is expected that vegetation would be cleared for the footprints of the individual tracker units, but those would be situated above the ground at a maximum height of approximately 6 feet. This allows the retention of some of the vegetation on site, which would reduce wind speeds near ground level and result in less erosion. Ground disturbance and foundation placement would be required for each transmission line pole, including vegetation removal in the immediate area. While minimized, grading activities will occur throughout the project site. Though best practices and anticipated conditions of approval associated with the project will ensure minimization of windblown dust and soil erosion, reevaluation of the previously prepared Geotechnical Report for the Lucerne Valley Solar Energy Center in 2010 (Krazan and Associates Inc. 2010) is warranted. Additional analysis will occur for this issue in the EIR.

The connected proposed Calcite Substation project would include the installation of concrete pads to minimize exposed soil areas to erosion. The proposed substation would primarily be vertical in scale and would therefore have a smaller footprint compared to the proposed project. The ground disturbance for both projects in combination would be minimal in relation to the surrounding desert area. Therefore, potentially significant impacts to soil erosion would occur and will be further analyzed in the EIR.

c) **Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse? Less than Significant Impact.** A Geotechnical Report was previously prepared for the Lucerne Valley Solar Energy Center in 2010 (Krazan and Associates Inc. 2010). As the proposed solar and energy storage project would introduce similar development and land use changes, an updated geotechnical report is not required. According to the Geotechnical Report, the surface soils consist of 6 to 12 inches of very loose silty sand add silty sand with trace clay and gravel. Approximately 6 to 12 inches of fill material consisting of silty san, sandy silt, and silty sand with gravel was encountered along the edges of the site. Below the loose surface soils and fill material, approximately 1 to 3 feet of loose to very dense silty sand, silty sand with trace clay and sandy silt with gravel or sand, were encountered. Below 3 to 4 feet, approximately 4 to 12 feet of dense to very dense silty sand, sand, clayey sand, and sandy clayey silt, sandy silt and sandy gravel were encountered. Below 8 to 16 feet, alternating layers of predominately very dense silty sand, sandy silt, silty sand/sandy silt, sandy clayey silt and sand were encountered.

All of the mapped soil types, with the exception of the fill material, moderately compressible and/or collapsible upper native soils, appear to be conducive to the development of the proposed solar and energy storage project (Krazan and Associates Inc. 2010). The surface soils are disturbed, have low strength characteristics and are highly compressible when

saturated. The proposed project design and construction methods, including recompacting surface soils in the area of structure would stabilize the surface soils; thereby, reducing potential impacts of the mapped soils to a less than significant level.

The proposed project area is relatively flat terrain where landslides have not historically been an issue. Furthermore, excavation associated with the proposed project would extend to maximum depths of approximately 5 feet, and would thus be limited to existing fill materials and alluvial deposits. Potential liquefaction (and related settlement and lateral spreading effects) and landslide impacts are discussed above in Sections VI.a.iii and VI.a.iv, respectively. Based on the described conditions and proposed project design and construction methods, no significant impacts related to geologic instability are anticipated as a result of proposed project implementation.

The connected proposed Calcite Substation project would be located within proximity to the proposed solar and energy storage project and therefore would located on similarly stable soil types. The relatively flat terrain has not been historically susceptible to instability, landslides, or liquefaction events. Because both the proposed solar and energy storage project and the proposed Calcite Substation project are not likely to have soil instability, the proposed project would have less than significant impacts. Therefore, his topic will not be analyzed further in the EIR.

d) **Would the Project be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property? Potentially Significant Impact.** Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals and can adversely affect the structural integrity of facilities including underground pipelines. The surface and near surface soils observed on the site consist of sandy silts, silty sands, relatively clean sands and clayey sands (Krazan and Associates Inc. 2010). The clayey soils are considered to be slightly expansive, which could present a significant geologic hazard to the proposed project. Surficial materials within the proposed project site would be limited predominantly to fill deposits and alluvium. These materials exhibit a low potential for expansion, based on their general lack of significant clay content.

Because the connected proposed Calcite Substation project would be located on surface soils with similar characteristics as the proposed solar and energy storage project, there would be a potential for expansion during a seismic event. Therefore, potentially significant impacts may occur, and additional analysis in the EIR is warranted.

e) **Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? No Impact.** The proposed project would be unmanned and does not propose to use

septic tanks or alternative wastewater disposal systems. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in impacts to wastewater. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VII GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

SUBSTANTIATION:

a) **Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Potentially Significant Impact.**

Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor trucks, and worker vehicles. The County's GHG Reduction Plan recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. The proposed project has the potential to cause an adverse impact from GHG construction emissions. Therefore, this topic will be further analyzed in the EIR.

Operational Emissions

Operation of the project would generate GHG emissions through motor vehicle trips to and from the project site; energy use (natural gas and generation of electricity consumed by the project); solid waste disposal; and generation of electricity associated with water supply, treatment, and distribution and wastewater treatment. The proposed project has the potential to cause an adverse impact from operational GHG emissions. Therefore, this topic will be further analyzed in the EIR.

b) **Would the Project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? Potentially Significant Impact.**

As discussed in Section VII(a) and as stated in the San Bernardino County Final GHG Reduction Plan (2011), with the application of the GHG performance standards, small projects that do not exceed 3,000 MT CO_2E per year are considered to be consistent with the GHG Plan. As previously

discussed in Section VII(a), the proposed project has the potential to cause an adverse impact from operational and construction GHG emissions. Therefore, this topic will be further analyzed in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VIII	**HAZARDS AND HAZARDOUS MATERIALS –** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☒	☐	☐	☐

SUBSTANTIATION:

a) **Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Potentially Significant Impact.** Implementation of the proposed project would not entail the routine transport, use or disposal of hazardous materials, with the potential exception of short-term construction-related substances such as fuels, lubricants, adhesives, solvents and asphalt wastes. The potential risk associated with the accidental discharge during use and storage of such construction-related hazardous materials during project construction is considered low because the handling of any such materials would be addressed through the implementation of Best Management Practices (BMPs) pursuant to the intent of the NPDES General

Construction Permit. Operation of the proposed project would include chemical use such as mineral oil in the substations and Lithium ion in the battery structures. The proposed project is designed to comply with the requirement of Chapter 6.95 of the H&SC, including containment provisions for potential spills by containing the materials within boxed components and mounting these on concrete foundations. All materials would be used in stable applications and contained in accordance with applicable regulatory requirements, which include RCRA, CERCLA, the Hazardous Materials Transportation Act, the International Fire Code, and Title 22 and Title 27 of the California Code of Regulations. Potentially significant impacts from hazardous materials may occur. Therefore, further analysis in the EIR is warranted.

b) **Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Potentially Significant Impact.** Construction-related hazards such as fuels, lubricants, adhesives, solvents, and asphalt wastes, would be employed during construction of the proposed project. The photovoltaic panels proposed are environmentally sealed collections of photovoltaic cells that require no chemicals and produce no waste materials. The substations would host equipment and associated mineral oils. The project is designed to comply with the requirement of Chapter 6.95 of the H&SC, including containment provisions for potential spills by containing the materials within boxed components and mounting these on concrete foundations. The energy storage system however, would house batteries in a steel structure of approximately 35,000 square feet. The energy storage structure would have a fire rating in conformance with County standards and have specialized fire suppression systems installed for the battery areas. All non-battery areas would have County approved standard sprinkler systems.. The security and fire prevention measures proposed by the project applicant would minimize the potential for power disruptions or hazardous materials release caused by outside parties.

The risk to workers or the public from damage to the project as a result of intentionally destructive acts would be low because public access would be controlled by security fencing. A 6-foot-tall chain-link fence topped with 1 foot of three-strand barbed wire would be installed around the project site perimeter, including the energy storage system, on-site substation, and Calcite Substation. Potentially significant impacts may occur, therefore further analysis in the EIR is warranted.

c) **Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? No Impact.** There are no existing or proposed schools within one-quarter mile of the proposed project site. The nearest school is located approximately 6.5 miles to the southwest of the proposed project site in Lucerne Valley. Additionally, operation and maintenance of the

proposed project would not produce hazardous emissions. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in impacts related to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? No Impact.** The proposed project site is not located on a known site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed project shall not create a significant hazard to the public or the environment. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be located on a site which is listed on a list of hazardous materials sites pursuant to government code Section 65962.5 and would not, as a result, create a significant hazard to the public or the environment. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? No Impact.** The proposed project area is not located within an airport land use plan and it is not within 2 miles of a public airport or public use airport. The nearest airport is the privately owned Holiday Ranch Airport, which is located approximately 7.5 miles to the west of the proposed project area. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be located within an airport land use plan or within two miles of a working airport and would not result in a safety hazard for people residing or working in the project area. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

f) **For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the project area? No Impact.** The proposed project area is not located within the vicinity of a private airstrip; therefore, it would not result in a safety hazard for people residing or working in the proposed project area. The nearest airport is the privately owned Holiday Ranch Airport, which is located approximately 7.5 miles to the west of the project area. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be located within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the project area. No impacts would result from

the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

g) **Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? No Impact.** Activities associated with the proposed project would not impede existing emergency response plans for the project site and/or other land uses in the project vicinity. The project would not result in any closures of SR-247 that might have an effect on emergency response or evacuation plans in the vicinity of the project site, and Desert Lane, running east-west through the solar and energy storage project site, would be kept open for public use during construction and operation. The proposed project would improve road conditions by paving access and access points to SR-247 and would not obstruct any existing accesses or roadways. In addition, all vehicles and stationary equipment would be staged off public roads and would not block emergency access routes. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

h) **Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? Potentially Significant Impact** Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires in the region. While the majority of the solar and energy project site has been previously disturbed for agricultural purposes, there are areas of scattered vegetation and the gen-tie and Calcite Substation are in undeveloped areas that consist of native vegetation. The vegetation in the area is very low and non-contiguous scrub typical of the high desert. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the proposed project and would minimize the occurrences of fire due to project activities during construction and for the life of the project. Additional analysis on this topic in the EIR is warranted.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IX	**HYDROLOGY AND WATER QUALITY -** Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?	☒	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☒	☐	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☒	☐	☐	☐
g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structure which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the Project violate any water quality standards or waste discharge requirements? Less than Significant Impact.** No waters or habitats that fall under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), California Regional Water Quality Control Board (RWQCB), or the California Department of Fish and Wildlife (CDFW) are found on the proposed project area.

Potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. As described above in Section VIII.b, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared for the proposed solar and energy storage project or the Calcite Substation project. The SWPPPs would provide detailed descriptions of the various structural and nonstructural water quality management measures to be used, and may include: construction BMPs; downstream water quality monitoring, use of permanent source control BMPs; and treatment control BMPs, which may include installation of filters, straw bale barriers, silt fences, stock pile coverings, and sediment basins. Maintenance of the proposed solar and energy storage project would include cleaning, inspections drive motor repair, tracker repair, electrical connection repair, and panel replacement. Cleaning is expected to be conducted annually and water used would not contain any cleaning agents or other additives. Maintenance of the proposed Calcite Substation would involve substation and line inspections, electrical connection repair, and communications repair. No on-site operations and maintenance buildings are proposed and all facilities would be unmanned. Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would violate any water quality standards or waste discharge requirements. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)? Potentially Significant Impact**. All water for the proposed project, apart from drinking water, would be sourced from an on-site well or wells and would be procured and produced through a transfer of a portion of the Gabrych Base Annual Production (BAP) rights as per the Mojave Basin Area Judgment (City of Barstow v. City of Adelanto, Riverside County Superior Court Case No. 208568, January 10, 1996 (Judgement 1996)). The Judgment established a decreasing Free Production Allowance (FPA) in each Subarea of the Lucerne Valley Groundwater Basin. The FPA is allocated among the Producers in the Subarea based on each Producer's percentage share of the FPA. All water produced in excess of any Producer's share of the FPA must be replaced by the Producer, either by payment to the Watermaster of funds sufficient to purchase Replacement Water, or by transfer of unused FPA from another Producer (Judgement 1996; Judgment 2008). Each Producer's percentage share of FPA in a Subarea was determined by first verifying the maximum annual water production (termed Base Annual Production (BAP)) for each Producer during the 5-year, 1986–1990, Base Period and

then calculating each Producer's percentage share of the total of all such BAP in the Subarea. All such percentage allocations are of equal priority (Judgement 1996). Water for the construction phase of the proposed project would be acquired pursuant to a temporary transfer from Gabrych of sufficient BAP/FPA to produce approximately 75 acre-feet (AF) for the 10-month construction period and 6.6 AF per year during operation. Additionally, approximately 38 acre-feet would be needed to be acquired for the Calcite Substation. The availability and reliability of the adjudicated groundwater supplies in the Basin are secured through the diverse water supply portfolio held by the MWA and through the myriad water supply management and demand reduction policies, programs, projects and laws being implemented throughout MWA. Tests of well pumping will be conducted to determine whether groundwater availability is sufficient for the proposed project construction and operation. Therefore, this topic will be further analyzed in the EIR.

c) **Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite? Potentially Significant Impact.** The existing drainage patterns may be altered to install the selected technology for the proposed solar and energy storage project. Minor grading shall occur to allow the installation of PV panels, transmission line poles, and aggregate base access roads. Minor grading shall occur to allow the installation of PV panels, transmission line poles, and aggregate base access roads. A road will be installed generally around the perimeter of the site. Additionally, several interior roads shall be constructed to enhance access within the PV field. An unimproved maintenance road would be constructed within the right- of-way of the transmission line.

At locations where foundations are installed, it is expected that minor cuts would be required to place the foundations on a level pad. It is expected that the cut material will be placed around the pre-cast foundation to divert small localized flows away from the foundation and prevent undermining.

There will be a slight increase in imperviousness of the soil on site due to grading and construction activities. The root mass of the existing vegetation on site is proposed to be left as-is to assist in erosion control and to maintain the existing soil characteristics (i.e. infiltration rates). Minor vegetation removal shall take place at the areas where the concrete pads for the trackers shall be placed and for gravel road installation. The addition of the foundations and inverter pads shall create a very slight increase in area that can be considered impervious. However, these foundations are small in size and located throughout the site. Additionally, the gravel roads are expected to increase the imperviousness of the area where roads are constructed, but again, the total area of the gravel roads is small in comparison with the entire site and the gravel roads do allow some level of infiltration. Though grading will be kept to a minimum, additional formal analysis within the EIR is warranted to determine the extent of the impacts upon

drainage patterns and the potential for erosion.

The connected proposed Calcite Substation project would include concrete foundations and improved roads increasing impervious surface area on a relatively small portion (approximately 2 acres) of the approximately 75-acre parcel. As with the proposed solar and energy project the drainage alterations would not be significant and implementation of BMPs pursuant to the NPDES General Construction Permit would be required. The proposed project would require minimal alterations to existing drainage and would comply with NPDES requirements. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite. Though grading will be kept to a minimum, additional formal analysis within the EIR is warranted to determine the extent of the impacts upon drainage patterns and the potential for erosion.

d) **Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? Potentially Significant Impact.** As previously discussed in Section IX(c), the existing drainage patterns would not be significantly altered to install the proposed project components. Although there shall be a slight increase in imperviousness of the soil on site due to grading and construction activities, the root mass of the existing vegetation on site would be left as-is to assist in erosion control and to maintain the existing soil characteristics (i.e. infiltration rates). Vegetation removal would take place at the areas where the concrete pads for the trackers would be placed, foundations for the on-site substation, energy storage structure, and for gravel road installation. The addition of the foundations and inverter pads shall create a slight increase in area that can be considered impervious. However, the foundations and roads area is relatively small in size in proportion of the approximately 480-acre site. The connected proposed Calcite Substation project would include concrete foundations and an improved access road increasing impervious surface area. The majority of the site would be covered with a 4-inch-thick layer of gravel base and thus would remain pervious. Only approximately 1.7 acres would be impervious cover, most of which would be attributed to the 20-foot-wide asphalt paved driveway traversing through the interior of the substation. While alteration will be minimal, additional analysis in the EIR to determine the extent of the drainage related impacts to flooding is warranted.

e) **Would the Project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? Less than Significant Impact.** As discussed previously in Section IX.a, potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. Also

described above in Sections VIII.b and IX.a, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements SWPPPs would be prepared for the proposed solar and energy storage project or the Calcite Substation project. The SWPPPs would provide detailed descriptions of the various structural and nonstructural water quality management measures to be used, and may include: construction BMPs; downstream water quality monitoring, use of permanent source control BMPs; and treatment control BMPs, which may include installation of filters, straw bale barriers, silt fences, stock pile coverings, and sediment basins. Maintenance of the proposed solar and energy storage project would include cleaning, drive motor repair, tracker repair, electrical connection repair, and panel replacement. Cleaning is expected to be conducted annually and water used would not contain any cleaning agents or other additives.

The connected proposed Calcite Substation project would include concrete foundations and improved roads increasing impervious surface area. As with the proposed solar and energy storage project and discussed previously in IX(d), the drainage alterations would not be significant and implementation of BMPs pursuant to the NPDES General Construction Permit would be required. Therefore, impacts to runoff would be less than significant. Both the proposed solar and energy storage project and the proposed Calcite Substation project would require minimal alterations to existing drainage and would comply with NPDES requirements. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

f) **Would the Project otherwise substantially degrade water quality? Potentially Significant Impact.** As discussed previously in Section IX.a, potential water quality impacts from the proposed project are associated with short-term (construction-related) erosion/sedimentation and hazardous material use/discharge. Also described above in Sections VIII.b, IX.a, and IX.e, potential erosion/sedimentation and hazardous materials impacts would be avoided or reduced below a level of significance through conformance with applicable elements of the NPDES Municipal Stormwater General Construction Permit. As part of the permit requirements, SWPPPs would be prepared for the project. The SWPPP would provide detailed descriptions of the various structural and nonstructural water quality management measures to be used, and may include: construction BMPs; downstream water quality monitoring, use of permanent source control BMPs; and treatment control BMPs, which may include installation of filters, straw bale barriers, silt fences, stock pile coverings, and sediment basins. Maintenance of the proposed solar and energy storage

project would include cleaning of PV panels that would potentially result in water draining on the site and percolating or evaporating. Cleaning is expected to be conducted one to four times annually and water used would not contain any cleaning agents or other additives. During the operational phase of the project, as discussed in Section VIII, hazardous materials will be handled on the site. Further analysis regarding the potential impacts associated with the degradation of water quality and the handling of hazardous materials is warranted in the EIR.

g) **Would the Project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? No Impact.** The proposed project does not involve the development of any housing and would not create or result in housing within a 100-year flood hazard area. Furthermore, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (0607IC5900H, dated August 28, 2008) indicates that the proposed project area is within Zone D - an Undetermined Risk Area (FEMA 2016). In addition, a review of the San Bernardino County Dam Inundation mapping for the Desert Region indicates that the site is not located within any areas susceptible to inundation from flooding caused by dam failure, lake flooding or river flooding. The nearest area of potential flooding is approximately 1 mile south of the site associated with the Lucerne Dry Lake. No indicators of hydrologic activity (topographical or geological), hydric soils, or hydrophytic vegetation were observed on site. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would involving placing housing within a 100-year flood hazard area. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

h) **Would the Project place within a 100-year flood hazard area structure which would impede or redirect flood flows? No Impact.** As previously discussed in Section IX.g, the proposed project is not witin a 100-year flood hazard area and would not place within a 100-year flood hazard area any structures that would impede or redirect flood flows. Furthermore, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (0607IC5900H, dated August 28, 2008) indicates that the proposed project area is within Zone D - an Undetermined Risk Area (FEMA 2016). In addition, a review of the San Bernardino County Dam Inundation mapping for the Desert Region indicates that the site is not located within any areas susceptible to inundation from flooding caused by dam failure, lake flooding or river flooding. The nearest area of potential flooding is approximately 1 mile south of the site associated with the Lucerne Dry Lake. No indicators of hydrologic activity (topographical or geological), hydric soils, or hydrophytic vegetation were observed on site. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would place within a 100-year flood hazard area structure which would impede or redirect flood flows. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

i) **Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? No Impact.** The proposed project shall not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, because the proposed project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake or sheet flow situation. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

j) **Would the Project be exposed to inundation by seiche, tsunami, or mudflow? No Impact.** A tsunami is a series of ocean waves generated in the ocean by an impulsive disturbance. Due to the inland location of the proposed project, tsunamis are not considered a threat (California Department of Conservation 2016). A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. However, because the proposed project is not adjacent to any marine or inland water bodies, impacts from seiche are not expected to occur. In addition, the soils in the proposed project area are moderately well-drained, the terrain is relatively flat, and mudflows have not historically been an issue in the proposed project area. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be exposed to inundation by seiche, tsunami, or mudflow. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
X.	**LAND USE AND PLANNING** - Would the project:				
a)	Physically divide an established community?	☐	☐	☒	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the Project physically divide an established community? Less than Significant Impact.** The area surrounding the proposed project site is characterized by rural desert terrain modified by power lines, roads, fallow agricultural fields, and scattered residences located throughout. The surrounding area is also dominated by the SR-247 transportation corridor running north-south just to the west of the proposed solar and energy storage project site and east of the proposed Calcite Substation project. In addition to electrical and transportation infrastructure, there are 32 modest single-family rural residential structures located within 0.5 mile of the proposed project boundary, 22 of which were determined to show signs of inhabitation. These residences are scattered throughout the area, are generally undeveloped, and many of the parcels are currently used as storage space for vehicles and/or machinery. Based on its general sparsely developed and rural character, the surrounding area would not be considered an established community (County of San Bernardino 2007). The proposed project would maintain all existing access routes. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would physically divide an established community. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? Less than Significant Impact**. The current General Plan Land Use Element designation for the proposed solar and energy storage project area is Agriculture (AG), which allows development of electrical power generation with a CUP (Development Code Section 85.06). The County of San Bernardino

passed an ordinance amending the development code relating to the regulation of commercial solar energy generation facilities in 2013 (County of San Bernardino 2013). This ordinance requires that the County make findings for solar renewable energy projects to approve such projects. The findings require that before approval of a commercial solar facility, it must be determined that the location of the proposed commercial facility is appropriate in relation to the desirability and future development of communities, neighborhoods, and rural residential uses (County of San Bernardino 2013). Additionally, the ordinance would require that the Planning Commission shall consider (1) the characteristics of the commercial solar energy facility development site and its physical and environmental setting, as well as the physical layout and design of the proposed development in relation to nearby communities, neighborhoods, and rural residential uses; and (2) the location of other commercial solar energy generation facilities that have been constructed, approved, or applied for in the vicinity, whether within a city or unincorporated territory, or on state or federal land (County of San Bernardino 2013). The proposed solar and energy storage project would be subject to these and additional findings requirements as a part of the 2013 Ordinance during the review and CUP application process.

Additionally, a Draft Renewable Energy and Conservation Element was prepared for the General Plan in July 2016 and updated in November 2016 and April 2017. The Draft Renewable Energy and Conservation Element is intended to establish goals and policies to manage renewable energy development and conservation. Under the Draft Renewable Energy and Conservation Element (2017), a newly proposed policy, **Policy 4.10.02** states that the County will "(prohibit) development of utility-oriented RE projects within the boundaries of existing community plans, which at the time of adoption of this Element are the Bloomington, Muscoy, Bear Valley, Crest Forest, Hilltop, Lake Arrowhead, Lytle Creek, Oak Glen, Homestead Valley, Joshua Tree, Lucerne Valley, Morongo Valley, Oak Hills and Phelan/Pinon Hills Community Plans." Due to the time the application was accepted as complete for review, the proposed policies are not applicable to the project, and will not be applied to the environmental review nor considered during the preparation of the Land Use Services staff recommendation for the Ord Mountain Solar Project (P201600510). The policies in effect at the time the application was accepted as complete will be applied to this project.

The land use regulations of the County are not applicable to the proposed Calcite Substation project because it would be conducted by the local utility SCE. Neither the proposed solar and energy storage project or the Calcite Substation project would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant and no mitigation is required. This topic will not be analyzed further in the EIR.

c) **Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan? No Impact**. The project site is not within 2 miles of Joshua Tree National Park, Mojave National Preserve, Death Valley National Park, or any County, State or Federal agency designated wilderness area. Similarly, the proposed project does not conflict with any applicable habitat conservation plans or natural community conservation plans. Specifically, the Santa Ana Watershed Planning Authority (2002) has identified several "Essential Resource Conservation Areas" within San Bernardino County (County of San Bernardino 2007). The proposed project is not located within these watershed conservation areas. Additional areas under varying levels of conservation management include the 11 Desert Region areas designated by the BLM as "Areas of Critical Environmental Concern" (ACEC) and Special Areas, as well as the Big Morongo Canyon Preserve recognized by The Nature Conservancy. Although these conservation and preservation planning areas are co-located in the Desert Region of San Bernardino County with the project site, the proposed project would not impact these areas. Of these conservation planning areas, Johnson Valley and Soggy Dry Lake are located closest to the proposed project site, at 22.5 miles and 16.5 miles respectively. The proposed project would not impact these or any of the other conservation and preservation planning areas throughout the Valley Region of San Bernardino County. Currently, there is not a regional Multiple Species Habitat Conservation Program in place within San Bernardino County. The proposed project site is not located on or near any conservation areas. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would conflict with any applicable habitat conservation plan or natural community conservation plan. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XI.	**MINERAL RESOURCES** - Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if project is located within the Mineral Resource Zone Overlay):*

a) **Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? No Impact.** The USGS Mineral Resources Spatial Data Mapper was used to determine that no metallic or nonmetallic mineral resources have been mapped on the proposed project area. In addition, although mining claims have been registered for much of the region surrounding the proposed project area, no active mines or mining claims are located on or in the immediate vicinity of the proposed project site and the site is not within a Mineral Resource Zone Overlay. Resources that have been extracted in the region include tungsten, silver, dolomite, and limestone. According to the California Soil Resource Lab, soils on the site are a good source for road fill, fair source for topsoil and sand, but a poor source for gravel for construction purposes. Implementation of the proposed project would not result in the loss of any known mineral resources on the proposed site. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? No Impact.** Neither the proposed solar and energy storage project or the Calcite Substation project would have any impacts regarding the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan (see XI (a)). Therefore, no impacts would result from the proposed project and no mitigation would be required. This topic will not be analyzed further in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XII. NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if the project is located in the Noise Hazard Overlay District or is subject to severe noise levels according to the General Plan Noise Element*

a) **Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Potentially Significant Impact.** The proposed project is adjacent to rural residences, undeveloped and/or vacant land; therefore, noise generated from the proposed project could potentially expose persons to or generate noise levels in excess of standards established in the County General Plan or Noise Ordinance, or applicable standards of other agencies. The proposed project has the potential to expose persons to elevated levels of noise during construction and operation. Therefore, this topic will be further analyzed in the EIR.

b) **Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? Potentially Significant Impact.** Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground that diminishes (attenuates) fairly rapidly over distance. The proposed project has the potential to cause an increase in groundborne vibration or noise during construction. Therefore, this topic will be further analyzed in the EIR.

Operation of the proposed project would not generate audible levels of noise or perceptible levels

of vibration in the surrounding community. On-site noises would be limited to the one- half (0.5) horse power drive motors that rotate the photovoltaic panels on the single-axis tracking system, noise generated by the transmission equipment, and maintenance activities (including cleaning, drive motor repair, tracker repair, electrical connection repair, transmission line repair, and panel replacement). Further, the project would not include additional dwellings or other development, nor would it have the potential to generate any additional vibration after construction is completed. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels during operation. Less than significant impacts would result from the proposed project's groundbourne operational vibration or groundbourne noise generation and this topic will not be further analyzed in the EIR.

c) **Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Potentially Significant Impact.** The proposed project has the potential to increase ambient noise levels. Therefore, this will be further analyzed in the EIR.

d) **Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Potentially Significant Impact.** The proposed project has the potential to cause a temporary or periodic increase in ambient noise levels. Therefore, this topic will be further analyzed in the EIR.

e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? No Impact.** The proposed project area is not located within an airport land use plan and it is not within 2 miles of a public airport or public use airport. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in exposure of people residing or working in the project area to excessive noise levels. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? No Impact.** The proposed project area is not located within the vicinity of a private airstrip. The nearest airport is the privately owned Holiday Ranch Airport, which is located approximately 7.5 miles to the west of the project area. Aircraft using this airport are limited to a single engine, which limits the noise produced during takeoffs and approaches to the airport that may include the airspace over the proposed project area. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would be

within the vicinity of a private airstrip, such that the project would expose people residing or working in the project area to excessive noise levels. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIII.	**POPULATION AND HOUSING** - Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Less than Significant Impact.** The proposed project does not include development of residents or infrastructure that would facilitate the construction of new homes or business. Infrastructure improvements to the electrical system proposed would enable generated electricity to be delivered to the grid to serve existing electrical demand. Local infrastructure improvements would be limited to access roads for the proposed project and ensuring existing access routes are not impeded. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project are anticipated to result in an increase in new residential homes nor directly or indirectly induce population growth. Impacts would be less than significant and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? No Impact.** No occupied houses or other residences would be removed or otherwise displaced by the proposed project. Accordingly, the proposed project would not result in any impacts to housing or related infrastructure, nor require construction of additional housing. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

c) **Would the Project displace substantial number of people, necessitating the**

construction of replacement housing elsewhere? No Impact. As previously discussed in Section XII.b, no inhabited houses or other residences would be removed or otherwise displaced by the proposed project. Accordingly, the proposed project would not result in any impacts to housing or related infrastructure, nor require construction of additional housing. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would displace a substantial number of people necessitating the construction of replacement housing elsewhere. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any Fire Protection services? Less than Significant Impact.** The proposed project area is serviced by the North Desert Division of the San Bernardino County Fire Department. Lucerne Valley Stations 111 and 112 are located approximately 7.5 miles to the south of the proposed project site. During construction some public services may be required, such as fire protection, but these would be short-term requirements and would not require increases in the level of public service offered or affect these agencies' response times.

Any development, along with the associated human activity, in previously undeveloped areas increases the potential of the occurrence of wildfires. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the proposed project that would minimize the occurrences of fire due to proposed project activities during construction and for the life of the proposed project. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would not result in associated significant impacts. During

operations and maintenance the proposed project would introduce potential ignition sources that do not currently exist on the site. The equipment on the site that may be ignition sources during operation and maintenance includes transformers, capacitors, electric transmission lines (including the gen-tie line), substations, vehicles, and gas- or electric-powered small hand tools. Depending on the type of lithium ion battery selected for the energy storage component, the potential hazards are primarily associated with the possibility of thermal runaway (similar to overheating) occurring from a malfunctioning or damaged battery. Newer battery technologies have minimized the occurrence of thermal runaway through a system of protections including internal cell monitoring and partitioning; use of non-flammable chemicals; container design and features; ventilation, and air-conditioning (HVAC) systems; and inert gas fire suppression systems. The site's inverters and solar panels represent potential ignition sources that have a low likelihood of causing fires. All of this equipment represents a risk of sparking or igniting nearby off-site flammable vegetation. However, all battery components would be on concrete, within an enclosed structure, avoiding contact with ignition sources and would not include liquids that could spill. The enclosed structure would be equipped with a fire suppression system. However, the proposed project would be constructed in compliance with requirements from San Bernardino County Fire (conditions of approval) and the proposed solar and energy storage project will be subject to the public safety services impact fee of the County's Solar Ordinance (§ 84.29.040(c)) to ensure that the proposed project will not affect fire performance objectives.

Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any Fire Protection services. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Police Protection services? Less than Significant Impact.** The proposed project area and other unincorporated portions of the County are served by the San Bernardino County Sheriff's Department. The Barstow Sheriff's Station is located approximately 7.5 miles to the south of the proposed project site. Due to the large expanse that the deputies cover, they regularly assist and are assisted by the California Highway Patrol, Barstow Police Department, and the BLM Rangers. The proposed project would not impact

service ratios, response times, or other performance objectives related to police protection. However, during construction, some public services may be required, such as police protection, but these would be short-term requirements and would not require increases in the level of public service offered or affect these agencies' response times. The proposed solar and energy storage project will be subject to the public safety services impact fee of the County's Solar Ordinance (§ 84.29.040(c)) to ensure that the proposed project will not affect police performance objectives.

Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any Police Protection services. Less than significant impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

c) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for School services? No Impact.** The proposed project would be unmanned and would not increase demand on school facilities. Construction of the proposed project would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction as the workers would be sourced from San Bernardino, surrounding counties and/or be active for only a few months. As such the proposed project would not result an increase in population into the area that would necessitate additional schooling services. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any School services. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for Park services? No Impact**. The proposed project would be unmanned and would not increase demand on park facilities. Construction of the proposed project would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction as the workers would be sourced from San Bernardino, surrounding counties and/or be active for only a few months. As such the proposed project would not result an increase in population into the area that would necessitate additional park services. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any Park services. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

e) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities? No Impact.** The proposed project would be unmanned and would not increase demand on other public facilities (such as libraries). Construction of the proposed project would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction as the workers would be sourced from San Bernardino, surrounding counties and/or be active for only a few months. As such the proposed project would not result an increase in population into the area that would necessitate additional other public facilities (such as libraries). Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any other facilities (such as libraries). No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XV.	**RECREATION**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? No Impact.** The proposed project would be unmanned and would not increase demand on recreational facilities. Construction of the proposed project would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction as the workers would be sourced from San Bernardino, surrounding counties and/or be active for only a few months. As such the proposed project would not result an increase in population into the area that would increase the use of recreational facilities. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? No Impact.** The proposed project would not include any recreational facilities and would be unmanned thereby not increasing demand on recreational facilities such that their construction or expansion would be necessitated. Construction of the proposed project would introduce a temporary increase in workers, but they would not be anticipated to relocate to the area or bring their families for the construction as the workers would be sourced from San Bernardino, surrounding counties and/or be active for only a few months. As such the proposed project would not result an increase in population into the area that would increase the use of recreational facilities. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XVI.	**TRANSPORTATION/TRAFFIC -** Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and greenways, pedestrian and bicycle paths, and mass transit.	☒	☐	☐	☐
b)	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	☒	☐	☐	☐
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e)	Result in inadequate emergency access?	☐	☐	☒	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and greenways, pedestrian and bicycle paths, and mass transit? Potentially Significant Impact.** Construction activities would not require closure of SR-247, but would likely require short-term traffic control to minimize traffic disruption during the crossing. To further ease potential traffic congestion as a result of the proposed project, designated ingress and egress routes would be used. No other transportation modes exist in the area other than SR-247 and rural surface roadways. Because construction activities would be temporary, no permanent alterations to the circulation system would result. However, the construction activities would result in up to 500 worker trips and additional trips associated with deliveries (components, material, etc). This would result in a potentially significant impact on the local road ways including SR 247 and Old Woman Springs Road. To ensure that the construction activities do not conflict with the performance of the existing circulation system , review and approval of a construction management plan will be required. Impacts to the local circulation system will be analyzed further in the EIR.

b) **Would the Project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? Potentially Significant Impact.** At the initiation of the proposed project construction, equipment that may include water trucks, backhoes, trenchers, plows, and trackhoes, would be mobilized to the proposed project site using SR-247. This equipment would then be stored on site for the duration of construction and used as construction progresses. Additional vehicles delivering the machinery that would be used during the lifetime of proposed project would also be necessary. As a result, impacts to local traffic on SR- 247 due to mobilizing construction equipment and delivery of machinery would be extremely short-term.

Access to the proposed project area would be made primarily via Fern Road and Desert Lane, and a new access road from SR-247. Construction of the proposed project may require the short-term closure of these two unpaved existing roadways. Once construction has been completed, any closed roads would be reopened and returned to preconstruction conditions. Therefore, closure of these roadways during construction would not significantly impact traffic levels. The San Bernardino County Department of Public Works maintains paved and unpaved roadways in the county's unincorporated areas. These roads typically experience minimal use since there are no homes or businesses to the immediate west of the project site. Daily increases to traffic volumes during construction would primarily result from project personnel commuting to and from the work site. Based on the number of construction personnel anticipated for the proposed project, the volume increase would be equivalent to less than the 15% of the lowest volume segment of typical traffic volume on SR-247 (Table XVI-1). The numbers of construction workers and associated construction trips for the proposed project would potentially affect the levels of service along SR-247 and Old Woman Springs Road, which would be adverse. In addition, installation of the transmission line would require crossing SR-247. At this time, construction activities would not require closure of SR-247, but would likely require short-term traffic control to minimize traffic disruption during the crossing. To further ease potential traffic congestion as a result of the proposed project, designated ingress and egress routes will be used. Due to these potential impacts, additional analysis in the EIR is warranted.

Table XVI-1
Traffic Volume in the Vicinity of the Project

Road	Interchange/Location	Average Daily Traffic Volume – Both Directions (2008)
State Route 247	Junction with St. Rte. 18	4,600
State Route 247	Rabbit Spring Rd.	3,550
State Route 247	Lucerne Valley Cutoff Rd.	3,700
State Route 247	Stoddard Wells Rd.	3,650
State Route 247	Junction with U.S. Rte. 15	18,000

Source: Caltrans 2014

c) **Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? Less than Significant Impact.** The nearest airport is the Holiday Ranch Airport, which is located approximately 7.5 miles to the west of the proposed project area. The tallest components of the proposed project would be the seven transmission support structures, which would be up to 150 feet. The support structures would be either lattice steel towers or tubular monopoles made of steel or concrete, and would be spaced approximately 500 feet apart for approximately 0.6 mile. The proposed solar and energy storage project would be surrounded by a fence that would consist of 6-foot-high chain-link topped with three-strand barb wire. The on-site substation would consist

of a 55-foot-tall A-frame, a 16-foot-tall 220-kV disconnect switch, 16-foot-tall metering units, a 16-foot-tall 230-kV circuit breaker, a 28-foot-tall step-up transformer, and a 15-foot-tall power distribution center (25 feet x 60 feet), all of which will have at least a 15-foot clearance from the fence. The 34.5-kV feeders connecting to the substation would consist of 45-foot and 60-foot tall poles, for single and double circuits, respectively.

The energy storage structure would be approximately 20-feet tall with associated inverters, transformers, and switchgear located immediately adjacent to the structure on concrete pads. Connecting the proposed solar and energy storage project and the Calcite Substation project, the 220-kV gen-tie transmission line would consist of approximately seven structures, up to 150 foot tall concrete or steel poles, spaced on an average of approximately every 500 feet. The Calcite Substation would measure approximately 629 feet by 480 feet.

Because the proposed transmission line would be constructed in close proximity to existing larger transmission support structures associated with the existing SCE transmission corridor, over 7 miles from the nearest airport, and constructed consistent with FAA requirements to ensure avoidance of potential air traffic collisions or hazards, the height of vertical components of proposed project would not affect air traffic patterns.

While the solar arrays height would be less than many of the other components of the proposed project, at approximately 12 feet tall, solar panels common preconceptions of solar panels associate solar panels with glare. The solar reflectivity of the PV panels used would be low and include an anti-glare coating, because the material used to manufacture solar panels is designed to absorb rather than reflect sunlight. As described in Section I(a), the proposed project's contribution to the reflectivity within the area and the resultant potential negative effect on air traffic patterns would be less than significant.

Therefore, neither the proposed solar and energy storage project or the Calcite Substation project operation would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Impacts would be less than significant and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Less than Significant Impact.** The proposed project would include use of existing exits (Fern Road and Desert Lane) off SR-247 during construction activities as well as construction of a new exit and paved access road directly off SR-247. The angles of the existing exits in relation to SR-247 are not ideal from a turn angle and sight distance perspective, which is why the proposed project includes construction of a new exit and access road from SR-247 for the proposed solar and

energy storage project. The new exit intersection would be constructed to achieve County standards intended to avoid design features that would affect traffic safety, and allow use by construction and maintenance vehicles. The proposed Calcite Substation project would use Fern Road and Desert Lane as ingress and egress routes that would be improved to reach County standards. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project operation would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be less than significant and no mitigation is required. This topic will not be analyzed further in the EIR.

e) **Would the Project result in inadequate emergency access? Less than Significant Impact**. The project includes paved access off SR-247 suitable for emergency vehicles access and perimeter roads within the facility would be suitable for emergency vehicular use. In addition, overrides of access gates for emergency access to the facility would be installed. Impacts would be less than significant this topic will not be analyzed further in the EIR.

The proposed project would not result in any closures of SR-247 that might have an effect on emergency access in the vicinity of the proposed project site. During project construction, all vehicles would be parked off public roads and would not block emergency access routes. The short-term closure of two unpaved roadways (Fern Road and Desert Lane) across the site could limit emergency access to areas east of the project site. These roads typically experience minimal use since there are a limited number of homes and businesses to the immediate east of the project site. Traffic control would be required during construction of the transmission line crossing of SR-247. Should an emergency arise requiring access during closures of these roads, project personnel shall open the roads. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project operation would result in inadequate emergency access to the project area. Impacts would be less than significant and no mitigation is required. This topic will not be analyzed further in the EIR.

f) **Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? No Impact.** No alternative transportation policies, plans, or programs have been designated for the proposed project area. The nearest public transit provider is the Victor Valley Transit Authority, which provides bus service to the cities of Victorville, Hesperia, Apple Valley, Adelanto, Lucerne Valley, and Helendale. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project operation would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No impacts would result and no mitigation is required. This topic will not be analyzed further in the EIR.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVII. Tribal Cultural Resources -Would the project cause a substantial adverse change in the significance of a tribal cultural resources, as defined in the Public Resources Code section 21074 as either a site, featu cultural landscape that is geographically defined in terms the siz of the landscape, sacred place, or object with cultural value to a California Native American tribe and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☒	☐	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

SUBSTANTIATION:

a) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Potentially Significant Impact.** Assembly Bill (AB) 52 took effect on July 1, 2015. AB 52 requires a lead agency to make best efforts to avoid, preserve, and protect tribal cultural resources. The bill states that tribal cultural resources are:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (i) included or determined to be eligible for inclusion in the California Register of Historical Resources; or included in a local register of historical resources;
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c);
3. A cultural landscape that meets one of the criteria of 1), above, and is geographically defined in terms of the size and scope of the landscape; and/or
4. A historical resource described in PRC 21084.1, a unique archaeological resource described in PRC 21083.2(g), or a non-unique archaeological resource as defined in PRC 21083(h) if it conforms with the criteria of 1), above.

Prior to the release of the CEQA document for a project, AB 52 requires the lead agency to initiate

consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested the lead agency, in writing, to be informed by the lead agency through formal notification of proposed project in the geographic area that is traditionally and through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

As the lead agency under CEQA, the County is responsible for and will be performing formal government-to-government consultation with Native American Tribes under California Assembly Bill 52. The County will conduct formal consultation, and any information obtained through those processes may be included in the EIR. Therefore, this topic will be further analyzed in the EIR.

b) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? Potentially Significant Impact.** As discussed above in Section XVII (a), the proposed project would be compliant with AB 52. However, the proposed project has the potential to affect tribal cultural resources determined by the lead agency and a California Native American tribe. Therefore, this topic will be further analyzed in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVIII.	**UTILITIES AND SERVICE SYSTEMS -** Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?	☐	☐	☒	☐
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

SUBSTANTIATION:

a) **Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? No Impact**. The proposed project would not exceed wastewater treatment requirements of the Colorado River RWQCB. Construction of the proposed project would result in the generation of various waste materials including soil, vegetation, and sanitation waste (portable toilets). Soil excavated for the proposed project site would either be used as fill or disposed of off-site at an appropriately licensed waste facility. Sanitation waste (*i.e.*, human generated waste) would be disposed of according to sanitation waste management practices. The proposed solar and energy storage project would discharge uncontaminated water that is used to clean the solar panels, with no toxicants or cleaning agents used. The County General Plan defers to applicable Regional water control requirements, and neither of the proposed project's water discharge requires treatment or permitting according to the regulations of the Colorado River RWQCB. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

b) **Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? No Impact.** The proposed solar and energy storage project and Calcite Substation project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environment effects. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

c) **Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? No Impact**. A Hydrology and Hydraulics Report (RRC 2016) was prepared for the proposed solar and energy storage project and a Drainage Report was prepared for the proposed Calcite Substation project (CASC 2016). The report evaluated the potential on- and off-site storm water that might impact the proposed project site. The proposed solar and energy storage project would discharge uncontaminated water that is used to clean the solar panels, with no toxicants or cleaning agents used. It is assumed that the insubstantial quantity of discharged water generated by cleaning would be absorbed into the soils on site. Most of the ground within the proposed project area would not be covered with impermeable material. The report determined that due to the various factors including high infiltration rates on site, essentially no off-site water would reach the proposed project site and would not impact development at the site. Additionally, report results indicate that storm water not only would not reach the site, but no storm water from precipitation falling directly on the site would leave the site due to infiltration of the storm water into the ground before it can exit the site.

The proposed Calcite Substation project would be anticipated to use approximately 37 acre-feet of water during construction and no water would be expected to be necessary for operations. Like the proposed solar and energy storage project, the quantity of discharged water would be minimal and would likely be absorbed into the 4-inch thick layer of gravel base and underlying on-site soils (CASC 2016). Construction of the concrete pad underlying the proposed Calcite Substation may increase impermeable surfaces on site, however, due to the minimal volume of water anticipated to be used or generated on the project site, no impacts to storm water drainage would result. Therefore, neither the proposed solar and energy storage project or the Calcite Substation project would require or result in the construction of new storm water drainage facilities or expansion of

existing facilities, the construction of which could cause significant environmental effects. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

d) **Would the Project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed? Less than Significant Impact**. The water demand for the proposed project would consist of short-term construction water demand and the long-term operational water demand for the proposed project.

Table XVII-1
Projected Water Demand

Project Phase	Duration (Years)	Average Annual Water Demand (AF)
Solar and Energy Storage Project Construction	1.33 (16 mo.)	75
Solar and Energy Storage Project Operation	30	6.6
Calcite Substation Project Construction	30	38

Total water consumption during construction is estimated to be approximately 113 AF for the purpose of dust suppression and earthwork. This water use is spread out over an estimated 16-month construction period and would be provided by groundwater. Operational water, irrigation, and panel rinsing would be provided by groundwater. The solar and energy storage project proposes the use of up to 6.6 AF of groundwater per year during operation. The majority of this water demand is for routine panel washing (approximately 6.0 AF per year). A very minor amount of groundwater (i.e., approximately 0.6 AF) would be used for maintenance and repair dust suppression, and for the specialized fire suppression system installed for the energy storage building. It is assumed that this water demand is the consumptive use for the proposed project as there would likely be negligible return flow to the groundwater supply underlying the proposed project site from the proposed uses.

Panel washing for a solar and energy storage project of this size would require approximately 15 days to complete per wash cycle. Water consumption is expected to be around 0.28 gallons per square yard of panel, based on other similar operations. Given a 60 MW AC plant, with four cycles per year, the annual water usage is expected to consume up to approximately 6.0 AF of water. In the event the flow rate of the on-site well(s) is insufficient to support rinsing panels, a small temporary tank would be set up to store pumped groundwater to support the rinsing activity. The tank would be stored upon completion of the rinse event. During construction, if the flow rate of the on-site well or wells is insufficient to support peak water demands groundwater

may be pumped to a large or several large temporary above ground storage tanks for storage and use during peak water demand periods. Untreated well water is expected to be used for the on-site portable lavatories. Potable water would be supplied via filtered well water or bottled water for drinking purposes.

The water supply to be used in serving the proposed project's demands are adjudicated production rights to be transferred from Gabrych, the current owner of the proposed solar and energy storage project site, to the project Applicant. Gabrych is a Party to the Judgment and holds a total BAP right of 2,201 acre-feet per year (AFY) in the Este Subarea. Under the 80% ramp down currently in effect for the Este Subarea, Gabrych's FPA is approximately 1,761 AFY (Judgement 2015). The proposed project would acquire temporary transfer of sufficient BAP/FPA (which may include carryover water) from Gabrych to produce approximately 113 AFY for construction: 75 acre-feet for the 1-year construction period of the proposed solar and energy storage project; and approximately 38 AFY would be required for the Calcite Substation. Additionally, permanent transfer of sufficient BAP from Gabrych to allow the production of up to 10 AFY of water for operation of the proposed solar and energy storage project.

Therefore, the proposed solar and energy storage project or the Calcite Substation project have sufficient water supplies available from existing entitlements, and no new, or expanded, entitlements are needed. Less than significant impacts would result from the proposed project and no mitigation is required. The degree to which existing groundwater supply is sufficient for the project will be addressed in the EIR under Hydrology and Water Quality as identified in IX.b).

e) **Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? No Impact**. The proposed project would be unmanned and would not require wastewater service. Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

f) **Would the Project be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Less than Significant Impact**. The proposed project would be unmanned and solid waste would largely result from short-term construction activities (with short-term waste generation limited to minor quantities of construction debris) and would not result in long-term solid waste generation. Solid wastes associated with the proposed project would be disposed as appropriate in local landfill or at a recycling facility.

The proposed solar and energy storage project components, including panels and tracking system shall eventually need to be decommissioned and disposed. Panels typically consist of silicon, glass, and a metal frame. Tracking systems (not counting the motors and control systems) typically consist of aluminum and concrete. All of these materials can be recycled. Concrete from deconstruction shall be recycled through local recyclers. Metal and scrap equipment and parts that do not have free flowing oil would be sent for salvage. There are currently three industrial recycling facilities within a 30-mile radius of the proposed project site that would accept deconstructed, recyclable wastes. Equipment containing any free flowing oil shall be managed as hazardous waste and shall be evaluated before disposal at a properly permitted and licensed disposal facility. Oil and lubricants removed from equipment shall be managed as used oil and disposed in accordance with applicable State hazardous waste disposal requirements.

The proposed Calcite Substation project would include similar materials as the proposed solar telecommunication facilities and related construction activities and waste materials. The proposed Calcite Substation would not be decommissioned. Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would result in impacts related to landfill capacity. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

g) **Would the Project comply with federal, state, and local statutes and regulations related to solid waste? No Impact**. The proposed project would comply with all federal, state, and local statutes and regulation related to solid waste. The proposed project would be unmanned and thus waste generation would consist of short- term construction activities (with short-term waste generation limited to minor quantities of construction debris) and thus would not result in long-term solid waste generation. Solid wastes produced during the construction phase of the proposed project, or during future decommission activity of the proposed solar and energy storage, would be disposed of in accordance with all applicable statutes and regulations.

Therefore, neither the proposed solar and energy storage project or the Calcite Substation Project would result in impacts related to solid waste. No impacts would result from the proposed project and no mitigation is required. This topic will not be analyzed further in the EIR.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIX.	**MANDATORY FINDINGS OF SIGNIFICANCE:**				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c)	Does the project have environmental effects, which shall cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

SUBSTANTIATION:

a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? Potentially Significant Impact.** The proposed project has the potential to substantially degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, and eliminate important examples of the major periods of California history or prehistory. The proposed project, as described throughout the various sections of this checklist, has the potential to impact these resources and these topics will be analyzed further in the EIR.

b) **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects? Potentially Significant Impact.** Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the

incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period.

The *CEQA Guidelines*, Section 15130 (a) and (b), states:

a. Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

b. The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Impacts considered cumulatively considerable from the proposed project and other projects in the surrounding area will be analyzed further in the EIR for the resources most likely to be cumulatively affected by the proposed project These include aesthetics, air quality, biological resources, and noise.

c) **Does the project have environmental effects, which shall cause substantial adverse effects on human beings, either directly or indirectly? Potentially Significant Impact**. The proposed project has the potential to directly or indirectly cause substantial adverse effects on human beings or resource categories involving effects to human beings, including aesthetics, air quality and noise. Therefore, these topics will be further analyzed in the EIR.

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Agency Comments

State of California – Natural Resources Agency
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

June 27, 2017

John Oquendo
San Bernardino County
15900 Smoke Tree St. Suite 131
Hesperia, CA 92345

RE: Notice of Preparation of a Draft Environmental Impact Report for Ord Mountain Solar, LLC. (State Clearinghouse Number: 2017051082)

Dear Mr. Oquendo:

The California Department of Fish and Wildlife (Department) has reviewed the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for Ord Mountain Solar, LLC. (Project). The Department appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources.

The proposed Project is situated roughly in the southern portion of Section 36, Township 6 North, Range 1 West, the northern portion of Section 1, Township 5 North, Range 1 West, and the southern portion of Section 2, Township 5 North, Ranch 1 West, S.B.B. & M. of the White Horse Mountain, CA U.S. Geological Survey (USGS) 7.5-topographic quadrangle at approximately Latitude/Longitude 34°33'36.74"N/116°56'0.97"W (Figure 2, Vicinity Map). The proposed Project is located in Lucerne Valley California, east of State Route (SR) 247; north of Haynes Road; and west of Meridian Road, approximately 8 miles north of Lucerne Valley, in unincorporated San Bernardino County (County). The gen-tie line would extend southwest from the proposed Project to the proposed SCE Calcite Substation, west of SR-247.

The Ord Mountain Solar, LLC (Applicant) proposes to construct and operate the Project on approximately 484 acres to produce approximately 160,000 megawatt-hours (MWhs) of renewable energy annually. The proposed solar and energy storage project would be 60-Megawatt (MW) alternating current (AC) photovoltaic(PV) solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The proposed Project would include a 60 MW AC maximum capacity, 4-hour energy storage (battery) system. The Project also would include a 220-kiovolt (kV) overhead generation tie line (gen-tie line), which would extend approximately 0.6 miles southwest to Southern California Edison's (SCE) proposed Calcite Substation, in close proximity to the existing high-voltage transmission corridor.

The Department is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA). A Trustee Agency has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA

documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (CEQA Guidelines, Section 15386). As the trustee agency for fish and wildlife resources, the Department provides requisite biological expertise to review and comment upon CEQA documents, and makes recommendations regarding those resources held in trust for the people of California.

The Department may also assume the role of Responsible Agency. A Responsible Agency is an agency other than the lead agency that has a legal responsibility for carrying out or approving a project. A Responsible Agency actively participates in the Lead Agency's CEQA process, reviews the Lead Agency's CEQA document and uses that document when making a decision on the project. The Responsible Agency must rely on the Lead Agency's environmental document to prepare and issue its own findings regarding the project (CEQA Guidelines, Sections 15096 and 15381). The Department most often becomes a responsible agency when a 1600 Streambed Alteration Agreement or a 2081(b) California Endangered Species Act Incidental Take Permit is needed for a project. The Department relies on the environmental document prepared by the Lead Agency to make a finding and decide whether or not to issue the permit or agreement. It is important that the Lead Agency's EIR considers the Department's responsible agency requirements. For example, CEQA requires the Department to include additional feasible alternatives or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment (CEQA Guidelines, section 15096 (g) (2). In rare cases, the Department as Responsible Agency may be required to assume the role of the Lead Agency under certain conditions (CEQA Guidelines, section 15052).

Pursuant to California Fish and Game Code section 711.4, the Department collects a filing fee for all projects subject to CEQA. These filing fees are collected to defray the costs of managing and protecting fish and wildlife resources including, but not limited to, consulting with public agencies, reviewing environmental documents, recommending mitigation measures, and developing monitoring programs. Project applicants need not pay a filing fee in cases where a project will have no effect on fish and wildlife, as determined by the Department, or where their project is statutorily or categorically exempt from CEQA. To enable Department staff to adequately review and comment on the proposed project, we recommend the following information be included in the DEIR, as applicable:

1. A complete assessment of the flora and fauna within and adjacent to the project area should be conducted, with particular emphasis upon identifying special status species including rare, threatened, and endangered species. This assessment should also address locally unique species, rare natural communities, and wetlands. The assessment area should be large enough to encompass areas potentially subject to both direct and indirect project affects.

a. The Department's California Natural Diversity Data Base (CNDDB) should be searched to obtain current information on previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. In order to provide an adequate assessment of special-status species potentially occurring within the project vicinity, the search area for CNDDB occurrences should include all U.S.G.S 7.5-minute topographic quadrangles with project activities, and all adjoining 7.5-minute topographic quadrangles. The EIR should discuss how and when the CNDDB search was conducted, including the names of each quadrangle queried.

b. The DEIR should include survey methods, dates, and results; and should list all plant and animal species detected within the project study area. Special emphasis should be directed toward describing the status of rare, threatened, and endangered species in all areas potentially affected by the project. All necessary biological surveys should be conducted in advance of DEIR circulation, and should not be deferred until after project approval.

c. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, § 15380).

d. Species of Special Concern (SSC) status applies to animals generally not listed under the federal Endangered Species Act or the California Endangered Species Act, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. SSCs should be considered during the environmental review process.

e. A thorough assessment of rare plants and rare natural communities, following the Department's November 2009 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*.

f. A detailed vegetation map should be prepared, preferably overlaid on an aerial photograph. The map should be of sufficient resolution to depict the locations of the project site's major vegetation communities, and view project impacts relative to each community type. The vegetation classification system used to name the polygons should be described.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, should be included.

   a. The EIR should present clear thresholds of significance to be used by the Lead Agency in its determination of the significance of environmental effects on biological resources. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect.

   b. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

   c. Impacts associated with initial project implementation as well as long-term operation and maintenance of a project should be addressed in the EIR.

   d. In evaluating the significance of the environmental effect of a project, the Lead Agency should consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project. Expected impacts should be quantified (e.g., acres, linear feet, number of individuals taken, volume or rate of water extracted, etc. to the extent feasible).

   e. Project impacts should be analyzed relative to their effects on off-site habitats. Specifically, this may include public lands, open space, downstream aquatic habitats, areas of groundwater depletion, or any other natural habitat that could be affected by the project.

   f. Impacts to and maintenance of wildlife movement and other key seasonal use areas should be fully evaluated and provided. The DEIR should address the potential for the project to present barriers to wildlife movement. Project components with the highest potential to impede wildlife movement should be identified. This analysis should encompass all life stages of all animal species potentially entering the solar ranch area. Impact analysis should consider the proximity of project elements to all habitat types found at in the area (e.g., seeps and springs, open playa, shallow flood, etc.).

g. A discussion of impacts associated with increased lighting, noise, human activity, changes in drainage patterns, changes in water volume, velocity, quantity, and quality, soil erosion, and/or sedimentation in streams and water courses on or near the project site, with mitigation measures proposed to alleviate such impacts should be included. Special considerations applicable to linear projects include ground disturbance that may facilitate infestations by exotic and invasive species over a great distance.

h. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, as it pertains to biological resources.

3. A range of project alternatives should be analyzed to ensure that the full spectrum of alternatives to the proposed project are fully considered and evaluated. Alternatives which avoid or otherwise minimize impacts to sensitive biological resources should be identified.

   a. If the project will result in any impacts described under the Mandatory Findings of Significance (CEQA Guidelines, § 15065) the impacts must be analyzed in depth in the DEIR, and the Lead Agency is required to make detailed findings on the feasibility of alternatives or mitigation measures to substantially lessen or avoid the significant effects on the environment. When mitigation measures or project changes are found to be feasible, the project should be changed to substantially lessen or avoid the significant effects.

4. Mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats should be thoroughly discussed. Mitigation measures should first emphasize avoidance and reduction of project impacts. For unavoidable impacts, the feasibility of on-site habitat restoration or enhancement should be discussed. If on-site mitigation is not feasible, off-site mitigation through habitat creation, enhancement, acquisition and preservation in perpetuity should be addressed.

   a. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

   b. Areas reserved as mitigation for project impacts should be legally protected from future direct and indirect impacts. Potential issues to be

considered include limitation of access, conservation easements, monitoring and management programs, water pollution, and fire.

c. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and/or seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for long-term conservation of the mitigation site.

5. The Department has discretionary authority over activities that could result in the "take" of any species listed as candidate, threatened, or endangered, pursuant to the California Endangered Species Act (CESA; Fish and Game Code, § 2050 *et seq.*). The Department considers adverse impacts to CESA-listed species, for the purposes of CEQA, to be significant without mitigation. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, the Department recommends that the Project proponent seek appropriate authorization prior to Project implementation. This may include an incidental take permit (ITP) or a consistency determination in certain circumstances (Fish and Game Code, §§ 2080.1 & 2081). Please note that the Department must comply with CEQA prior to issuance of an ITP for a Project. As such, the Department may consider the lead agency's CEQA documentation for the Project. To minimize additional requirements by the Department and/or under CEQA, the CEQA avoidance, minimization, mitigation, monitoring and reporting measures for issuance of the ITP.

6. The Department has responsibility for wetland and riparian habitats. It is the policy of the Department to strongly discourage development in wetlands or conversion of wetlands to uplands. The Department opposes any development or conversion which would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. The DEIR should demonstrate that the project will not result in a net loss of wetland habitat values or acreage or describe how such a loss will be mitigated.

a. If the project site has the potential to support aquatic, riparian, or wetland habitat, a jurisdictional delineation of lakes, streams, and associated riparian habitats potentially affected by the project should be provided for agency and public review. This report should include a jurisdictional delineation that includes wetlands identification pursuant to the U. S. Fish and Wildlife Service wetland definition[1] as adopted by the Department[2]. Please note that some wetland and riparian habitats subject to the Department's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers. The jurisdictional delineation should also include mapping of ephemeral, intermittent, and perennial stream courses potentially impacted by the project. In addition to federally protected wetlands, the Department considers impacts to wetlands (as defined by the Department) potentially significant.

b. The Department's jurisdiction includes any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the environmental document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to http://www.dfg.ca.gov/habcon/1600/forms.html.

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[1] Cowardin, Lewis M., et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

[2] California Fish and Game Commission Policies: Wetlands Resources Policy; Wetland Definition, Mitigation Strategies, and Habitat Value Assessment Strategy; Amended 1994

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Wendy Campbell at wendy.campbell@widlife.ca.gov or by phone at 760-258-6921.

Sincerely,

for Leslie MacNair
Regional Manager
Inland Deserts Region

cc: Wendy Campbell
Chron

Mojave Desert Air Quality Management District
14306 Park Avenue, Victorville, CA 92392-2310
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Brad Poiriez, Executive Director

May 31, 2017

County of San Bernardino, Land Use Services Department
John Oquendo, AICP, Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Project: Ord Mountain Solar and Energy Storage Project Initial Study

Dear Mr. Oquendo:

The Mojave Desert Air Quality Management District (District) has received the Initial Study for a Conditional Use Permit to establish a 60-megawatt solar photovoltaic energy generation facility with associated on-site energy storage component (60 MW AC maximum capacity, 4-hour battery system) on 484 acres, and a 0.6-mile 220-kiloVolt overhead transmission line, with a major variance to modify the maximum structure height to permit the construction of onsite transmission poles and related structures up to 94 feet in height. The project is located east of State Route 247, west of Meridian Road approximately 8 miles north of Lucerne Valley. The Project coincides with California Public Utilities Commission proposal for the construction of the Calcite Substation at an offsite location, west of the project site and State Route 247.

The District has reviewed the Initial Study. In addition to the requirements of existing Mojave Desert Air Quality Management District (District) Rules 401, 402, 403, 403.1 and 403.2 as applicable, the District recommends that the following dust mitigation measures be required for the construction of the solar photovoltaic project (enforceable by the District AND by the land use agency):

- Prepare and submit to the MDAQMD, prior to commencing earth-moving activity, a dust control plan that describes all applicable dust control measures that will be implemented at the project;

- The following signage shall be erected not later than the commencement of construction: A minimum 48 inch high by 96 inch wide sign containing the following shall be located within 50 feet of each project site entrance, meeting the specified minimum text height, black text on white background, on one inch A/C laminated plywood board, with the lower edge between six and seven feet above grade, with the contact name of a responsible official for the site and a local or toll-free number that is accessible 24 hours per day:

  "[Site Name] {four inch text}
  [Project Name/Project Number] {four inch text}
  IF YOU SEE DUST COMING FROM {four inch text}
  THIS PROJECT CALL: {four inch text}
  [Contact Name], PHONE NUMBER XXX-XXXX {six inch text}
  If you do not receive a response, Please Call {three inch text}
  The MDAQMD at 1-800-635-4617 {three inch text}"

- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. Reduce non-essential earth-moving activity under high wind conditions (when wind gust exceed 25 miles per hour). For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.

- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of four feet of height or the top of all perimeter fencing. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.

- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.

The District concurs with the analysis and findings of "Potentially Significant Impact" and "Less than Significant" contained in the Initial Study, and that further discussion is warranted in the EIR.

The District supports the development of renewable energy sources; such development is expected to produce cumulative and regional environmental benefits.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726, or Tracy Walters at extension 6122.

Sincerely,

Alan J. De Salvio
Deputy Director – Mojave Desert Operations

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710

Edmund G. Brown Jr., Governor

June 2, 2017

John Oquendo
San Bernardino County
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

RE: SCH# 2017051082; Ord Mountain Solar and Energy Storage Project, near the Community of Lucerne Valle; San Bernardino County, California

Dear Mr. Oquendo:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a **separate category of cultural resources**, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code § 21084.2). Please reference California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends **lead agencies consult with all California Native American tribes** that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws**.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
    a. A brief description of the project.
    b. The lead agency contact information.
    c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
    d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
    a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
    a. Alternatives to the project.
    b. Recommended mitigation measures.
    c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
    a. Type of environmental review necessary.
    b. Significance of the tribal cultural resources.
    c. Significance of the project's impacts on tribal cultural resources.
    d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources In the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
    a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
    b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
   a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
   b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

    This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have been already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

cc: State Clearinghouse

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

Notice of Preparation

May 30, 2017

To: Reviewing Agencies

Re: Ord Mountain Solar and Energy Storage Project
SCH# 2017051082

Attached for your review and comment is the Notice of Preparation (NOP) for the Ord Mountain Solar and Energy Storage Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

John Oquendo
San Bernardino County
15900 Smoke Tree St, suite 131
Hesperia, CA 92345

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2017051082
Project Title Ord Mountain Solar and Energy Storage Project
Lead Agency San Bernardino County

Type NOP Notice of Preparation

Description Ord Mountain Solar, LLC proposes a CUP to construct and operate a solar energy generation and storage project on approx 484 acres to produce approx 160,000 megawatt-hours of renewable energy annually. The project would be a 60-MW alternating current PV solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition system. The project would include a 60 MW AC max capacity, 4-hr energy storage battery system, and a 220-kilovolt overhead power line, referred to as a generation tie line, which would extend approx 0.6 mile southwest to SCE's proposed Calcite Substation. The project includes a major variance to modify the max structure height to 94 ft.

Lead Agency Contact

Name John Oquendo
Agency San Bernardino County
Phone 760-995-8153 **Fax**
email
Address 15900 Smoke Tree St, suite 131
City Hesperia **State** CA **Zip** 92345

Project Location

County San Bernardino
City
Region
Cross Streets SR 247, Fern Rd and Haynes Rd
Lat / Long 34° 33' 36.7" N / 116° 56' 0.97" W
Parcel No. 0453-041-07, -091-11, -12, -24, etc
Township 6N **Range** 1W **Section** 36 **Base**

Proximity to:

Highways SR 247
Airports
Railways
Waterways
Schools
Land Use LV/AG, LV/AG-40

Project Issues Aesthetic/Visual; Air Quality; Biological Resources; Geologic/Seismic; Noise; Public Services; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Water Quality; Landuse

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Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 6; California Energy Commission; Native American Heritage Commission; Public Utilities Commission; California Highway Patrol; Caltrans, District 8; Air Resources Board, Major Industrial Projects; Regional Water Quality Control Bd., Region 6 (Victorville)

Date Received 05/30/2017 **Start of Review** 05/30/2017 **End of Review** 06/28/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2017051082

Project Title: Ord Mountain Solar and Energy Storage Project

Lead Agency: County of San Bernardino — Contact Person: John Oguendo

Mailing Address: 15900 Smoke Tree St, Suite 131 — Phone: 760-995-8153

City: Hesperia — Zip: 92345 — County: San Bernardino

Project Location: County: San Bernardino — City/Nearest Community: Lucerne Valley

Cross Streets: State Route 247, Fern Road and Haynes Road — Zip Code: 92356

Longitude/Latitude (degrees, minutes and seconds): 34 ° 33 ′ 36.7 ″ N / 116 ° 56 ′ 0.97 ″ W — Total Acres: 484

Assessor's Parcel No.: 0453-041-07,0453-091-11,-12,-24,- — Section: 36 — Twp.: 6N — Range: 1W — Base:

Within 2 Miles: State Hwy #: State Route 247 — Waterways: NA

Airports: NA — Railways: NA — Schools: NA

Document Type:

CEQA: [x] NOP [ ] Draft EIR
[ ] Early Cons [ ] Supplement/Subsequent EIR
[ ] Neg Dec (Prior SCH No.)
[ ] Mit Neg Dec Other:

NEPA: [ ] NOI [ ] EA [ ] Draft EIS [ ] FONSI

Other: [ ] Joint Document [ ] Final Document [ ] Other:

Local Action Type:

Governor's Office of Planning & Research
MAY 30 2017
STATE CLEARINGHOUSE

[ ] General Plan Update [ ] Specific Plan [ ] Rezone [ ] Annexation
[ ] General Plan Amendment [ ] Master Plan [ ] Prezone [ ] Redevelopment
[ ] General Plan Element [ ] Planned Unit Development [x] Use Permit [ ] Coastal Permit
[ ] Community Plan [ ] Site Plan [ ] Land Division (Subdivision, etc.) [ ] Other:

Development Type:

[ ] Residential: Units Acres
[ ] Office: Sq.ft. Acres Employees
[ ] Commercial: Sq.ft. Acres Employees
[ ] Industrial: Sq.ft. Acres Employees
[ ] Educational:
[ ] Recreational:
[ ] Water Facilities: Type MGD

[ ] Transportation: Type
[ ] Mining: Mineral
[x] Power: Type Solar MW60
[ ] Waste Treatment: Type MGD
[ ] Hazardous Waste: Type
[ ] Other:

Project Issues Discussed in Document:

[x] Aesthetic/Visual
[ ] Agricultural Land
[x] Air Quality
[ ] Archeological/Historical
[x] Biological Resources
[ ] Coastal Zone
[ ] Drainage/Absorption
[ ] Economic/Jobs
[ ] Fiscal
[ ] Flood Plain/Flooding
[ ] Forest Land/Fire Hazard
[x] Geologic/Seismic
[ ] Minerals
[x] Noise
[ ] Population/Housing Balance
[x] Public Services/Facilities
[ ] Recreation/Parks
[ ] Schools/Universities
[ ] Septic Systems
[ ] Sewer Capacity
[x] Soil Erosion/Compaction/Grading
[ ] Solid Waste
[x] Toxic/Hazardous
[x] Traffic/Circulation
[ ] Vegetation
[x] Water Quality
[ ] Water Supply/Groundwater
[ ] Wetland/Riparian
[ ] Growth Inducement
[x] Land Use
[ ] Cumulative Effects
[ ] Other:

Present Land Use/Zoning/General Plan Designation:

LV/AG (Lucerne Valley/Agriculture), LV/AG-40

Project Description: *(please use a separate page if necessary)*

Ord Mountain Solar, LLC proposes a Conditional Use Permit to construct and operate a solar energy generation and storage project on approximately 484 acres to produce approximately 160,000 megawatt-hours of renewable energy annually. The project would be a 60-Megawatt (MW) alternating current (AC) photovoltaic solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The project would include a 60 MW AC maximum capacity, 4-hour energy storage battery system, and a 220-kilovolt overhead power line, referred to as a generation tie line (gen-tie line), which would extend approximately 0.6 mile southwest to SCE's proposed Calcite Substation (also part of the project). The project includes a Major Variance to modify the maximum structure height to 94 feet.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

NOP Distribution List

JP

County: San Bernardino

SCH# 2017051082

Resources Agency

- [x] Resources Agency
  Nadell Gayou
- [ ] Dept. of Boating & Waterways
  Denise Peterson
- [ ] California Coastal Commission
  Elizabeth A. Fuchs
- [ ] Colorado River Board
  Lisa Johansen
- [ ] Dept. of Conservation
  Crina Chan
- [ ] Cal Fire
  Dan Foster
- [ ] Central Valley Flood Protection Board
  James Herota
- [ ] Office of Historic Preservation
  Ron Parsons
- [x] Dept of Parks & Recreation
  Environmental Stewardship Section
- [ ] S.F. Bay Conservation & Dev't. Comm.
  Steve Goldbeck
- [x] Dept. of Water Resources
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] Depart. of Fish & Wildlife
  Scott Flint
  Environmental Services Division
- [ ] Fish & Wildlife Region 1
  Curt Babcock
- [ ] Fish & Wildlife Region 1E
  Laurie Harnsberger
- [ ] Fish & Wildlife Region 2
  Jeff Drongesen
- [ ] Fish & Wildlife Region 3
  Craig Weightman
- [ ] Fish & Wildlife Region 4
  Julie Vance
- [ ] Fish & Wildlife Region 5
  Leslie Newton-Reed
  Habitat Conservation Program
- [x] Fish & Wildlife Region 6
  Tiffany Ellis
  Habitat Conservation Program
- [ ] Fish & Wildlife Region 6 I/M
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] Dept. of Fish & Wildlife M
  William Paznokas
  Marine Region

Other Departments

- [ ] California Department of Education
  Lesley Taylor
- [ ] OES (Office of Emergency Services)
  Monique Wilber
- [ ] Food & Agriculture
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] Dept. of General Services
  Cathy Buck
  Environmental Services Section
- [ ] Housing & Comm. Dev.
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] Delta Protection Commission
  Erik Vink
- [ ] Delta Stewardship Council
  Kevan Samsam
- [x] California Energy Commission
  Eric Knight
- [x] Native American Heritage Comm.
  Debbie Treadway
- [x] Public Utilities Commission
  Supervisor
- [ ] Santa Monica Bay Restoration
  Guangyu Wang
- [ ] State Lands Commission
  Jennifer Deleong
- [ ] Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] Caltrans - Division of Aeronautics
  Philip Crimmins
- [ ] Caltrans – Planning HQ LD-IGR
  Christian Bushong
- [x] California Highway Patrol
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] Caltrans, District 1
  Rex Jackman
- [ ] Caltrans, District 2
  Marcelino Gonzalez
- [ ] Caltrans, District 3
  Eric Federicks – South
  Susan Zanchi - North
- [ ] Caltrans, District 4
  Patricia Maurice
- [ ] Caltrans, District 5
  Larry Newland
- [ ] Caltrans, District 6
  Michael Navarro
- [ ] Caltrans, District 7
  Dianna Watson
- [x] Caltrans, District 8
  Mark Roberts
- [ ] Caltrans, District 9
  Gayle Rosander
- [ ] Caltrans, District 10
  Tom Dumas
- [ ] Caltrans, District 11
  Jacob Armstrong
- [ ] Caltrans, District 12
  Maureen El Harake

Cal EPA

Air Resources Board

- [ ] Airport & Freight
  Jack Wursten
  - [ ] Transportation Projects
    Nesamani Kalandiyur
  - [x] Industrial/Energy Projects
    Mike Tollstrup
- [ ] California Department of Resources, Recycling & Recovery
  Sue O'Leary
- [ ] State Water Resources Control Board
  Regional Programs Unit
  Division of Financial Assistance
- [ ] State Water Resources Control Board
  Cindy Forbes – Asst Deputy
  Division of Drinking Water
- [ ] State Water Resources Control Board
  Div. Drinking Water #_____
- [ ] State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] State Water Resouces Control Board
  Phil Crader
  Division of Water Rights
- [ ] Dept. of Toxic Substances Control
  CEQA Tracking Center
- [ ] Department of Pesticide Regulation
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- [ ] RWQCB 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] RWQCB 3
  Central Coast Region (3)
- [ ] RWQCB 4
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] RWQCB 5S
  Central Valley Region (5)
  - [ ] RWQCB 5F
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] RWQCB 5R
    Central Valley Region (5)
    Redding Branch Office
- [x] RWQCB 6
  Lahontan Region (6)
  - [ ] RWQCB 6V
    Lahontan Region (6)
    Victorville Branch Office
- [ ] RWQCB 7
  Colorado River Basin Region (7)
- [ ] RWQCB 8
  Santa Ana Region (8)
- [ ] RWQCB 9
  San Diego Region (9)

- [ ] Other _____
  _____
  _____

- [ ] _____
  Conservancy

Last Updated 4/28/17

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Margaret E. Finlay, Duarte

Community, Economic & Human Development
Rex Richardson, Long Beach

Energy & Environment
Carmen Ramirez, Oxnard

Transportation
Curt Hagman, San Bernardino County

June 30, 2017

Mr. John Oquendo, AICP, Senior Planner
County of San Bernardino, Land Use Services Department
15900 Smoke Tree Street, Suite 131
Hesperia, California 92345
Phone: (760) 995-8153
E-mail: John.Oquendo@lus.sbcounty.gov

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Ord Mountain Solar Energy Project [SCAG NO. IGR9288]

Dear Mr. Oquendo,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Ord Mountain Solar Energy Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies such as local jurisdictions and project proponents to take actions that help contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Ord Mountain Solar Energy Project in San Bernardino County. The proposed project includes the construction and operation of a solar energy generation and storage project that produces approximately 160,000 megawatt-hours of renewable energy annually on an approximately 484 acre site.

When available, please send environmental documentation to *SCAG's office in Los Angeles or by email to au@scag.ca.gov* providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Assistant Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang
Acting Manager, Compliance and Performance Monitoring

[1] Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

The Regional Council consists of 86 elected officials representing 191 cities, six counties, six County Transportation Commissions, one representative from the Transportation Corridor Agencies, one Tribal Government representative and one representative for the Air Districts within Southern California.

2016.05.09 printed on recycled paper

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE ORD MOUNTAIN SOLAR ENERGY PROJECT [SCAG NO. IGR9288]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and active transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies**
	**SCAG does not yet have an agreed-upon security performance measure.*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS		
	Goal	Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted County of San Bernardino Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	2,197,400	2,637,400	2,731,300
Households	6,458,000	7,325,000	7,412,300	687,100	824,600	854,300
Employment	8,414,000	9,441,000	9,871,500	789,500	998,000	1,028,100

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

Town of Apple Valley

A Better Way of Life

June 20, 2017

County of San Bernardino
Land Use Services Department
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Attention: John Oquendo, AICP Senior Planner

Subject: Ord Mountain Solar Energy Project (APN: 053-091-11,12, 24, 29, 31, 48, 51, 72 & 0453-041-07)

Dear Mr. Oquendo:

This letter is in response to the Notice of Preparation for the Ord Mountain Solar, LLC project.

Due to the proximity of the project to the proposed Apple Valley and County MSCHP/NCCP and the known location of Golden Eagle nests, please provide information in the CEQA analysis that addresses the impact to Golden Eagle nests and forging areas and any impacts to Desert Tortoise.

The Town of Apple Valley would like to thank you for the opportunity to comment on this project. If you have any questions, please contact me at 760-240-7000 x 7208.

Sincerely,

Lori Lamson
Assistant Town Manager
Community and Development Services
Town of Apple Valley

Organization Comments

Basin and Range Watch

June 30h, 2017

To: County of San Bernardino Land Use Services Department
John Oquendo, AICP Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
John.Oquendo@lus.sbcounty.gov

Subject: Please accept these comments on the **proposed Ord Mountain Solar Project**

Basin and Range Watch is a nonprofit 501(c)(3) conservation organization working to protect the California Deserts. We are a group of volunteers who live in the deserts of Nevada and California, working to stop the destruction of our desert homeland. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems and open spaces. We have visited the Lucerne Valley on numerous occasions for recreational purposes, and are concerned about the direct and cumulative impacts that large-scale solar energy development would have on the region. Our network includes local residents who have voiced their concern to us about this proposed utility-scale solar project in a rural area.

The Ord Mountain Solar Project would be located on 485 acres of land just north of Lucerne Valley, California. It would remove Mojave Desert natural communities and be constructed within 50 feet of some homes. The project would produce 60 MW and would have a 35,000 square foot battery storage building. Because temperatures get so hot in Lucerne Valley in the summer, the building will require air conditioning. The question is, how much power will be used up to cool the building with the batteries? Why not use rooftops instead, especially rooftops in coastal cities and load centers? Individual batteries can stay cool in homes.

Wildlife Connectivity

The project is proposed to be placed right in part of the linkage from the San Bernardino Mountains north to the Granite Mountains and Ord Mountains, as well as to the Superior-Cronese tortoise critical habitat, part of the network of West Mojave Desert connectivity corridors. Basin & Range Watch has talked with several residents and local biologists who have seen desert bighorn sheep crossing Fifteen Mile Valley and in other nearby areas. The Ord Mountains has a good population of bighorn. SCE wants a new large substation to serve this solar project (thus opening up a scenario of cumulative impacts by drawing in more utility-scale solar projects to this rural region): the Calcite Substation to this project would be 165 acres located along the scenic 247 highway. This again would clutter a connectivity corridor for bighorn sheep and desert tortoise.

Desert tortoise move through this area from the south into the Ord-Rodman Desert Wildlife management Area--critical habitat for the federally Threatened reptile. Bendire's Thrasher Area of Critical Environmental Concern lies adjacent to the project sites, in the Granite Mountains. Golden eagles nest in the Granite Mountains, and need these surrounding flat deserts to hunt and forage for jackrabbits and other prey.

San Emigdio Blue Butterfly

There is a rare butterfly, the San Emigdio blue (*Plebejus emigdionis)* that requires saltbush (*Atriplex*) as its host plant. It has a special relationship with the mound ant (*Formica francoeuri*). The butterfly lays a single egg on four-wing saltbush leaves (*Atriplex canescens*). Caterpillars eat the saltbush leaves and are tended to by the ants which harvest honeydew from the larvae. Older caterpillars overwinter in the soil. Building industrial solar projects in Atriplex habitats in this area could destroy this delicate ecology.

The San Emigdio blue is very rare and local in southern California from Inyo County south through the Mojave Desert, San Joaquin Valley, Bouquet and Mint Canyons, and Los Angeles County. Its NatureServe Global Status is G3 - Very rare or local throughout its range or found locally in a restricted range (21 to 100 occurrences), and therefore considered threatened throughout its range. The US Fish and Wildlife Service has considered it as a candidate species for listing under the Endangered Species Act.

The area should be surveyed for the butterfly, and if it is present, a compensatory mitigation plan should be decided on. Better yet, this project should not be built here, but better alternatives of Community Choice Aggregate and community solar projects in places where the local community chooses, should be the preferred alternative.

Conclusion

This is a poor site for a large-scale solar project and substation, since the area is a rural desert residential community. There are wildlife connectivity issues and concerns with the potential for the San Emigdio blue to exist in saltbush habitat here. Please consider a rooftop solar option of CCA in another area, which is agreed upon by the local community.

Thank you,

Laura Cunningham
Kevin Emmerich
Basin and Range Watch
P.O. Box 70
Beatty, NV 89003

Defenders of Wildlife

The Nature Conservancy

Audubon California

Sierra Club

San Bernardino Valley Audubon Society

Natural Resources Defense Council

June 29, 2017

County of San Bernardino
Land Use Services Department
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Attn: John Oquendo, Senior Planner

Via Email: John.Oquendo@lus.sbcounty.gov

Re: Notice of Preparation of a Draft EIR and Scoping Meeting for the Ord Mountain Solar Project (#P2016005610/CUP)

Mr. Oquendo;
Thank you for the opportunity to submit scoping comments on the proposed Ord Mountain Solar Project (Project). Scoping comments included in this letter are submitted on behalf of members and supporters of Defenders of Wildlife, The Nature Conservancy, Audubon California, Sierra Club, San Bernardino Valley Audubon Society and Natural Resources Defense Council. These scoping comments are intended to identify issues to be analyzed in a forthcoming Draft Environmental Impact Report (DEIR) as required under provisions of the California Environmental Quality Act (CEQA).

Project Description

The Project is a 60 MW solar photovoltaic generation facility located on 484 acres of fallow agricultural land approximately eight miles north of the community of Lucerne Valley and adjacent to State Highway 247. The Project includes electricity storage using battery technology. There are 19 groundwater wells on the Project site, two of which are considered suitable for providing water during construction and operation of the facility. Estimated water consumption during construction is 75 acre-feet for the generation facility, 37 acre-feet for construction of the substation, and 6 acre-feet per year for photovoltaic panel washing. An electrical substation would be constructed approximately 0.6 mile southwest of the solar facility and connect to the existing high voltage transmission system operated by the Southern California Edison company. An overhead electrical gen-tie line would

connect the generation facility with the substation. The proposed Calcite substation would occupy approximately 13 acres within a parcel of private land located immediately west of State Highway 247. The Project area would be fenced for security purposes and standard desert tortoise barrier fence would be attached to the security fence.

Comments

We have carefully read both the Notice of Preparation and the Initial Study and Environmental Checklist Form for the Project. The potential impacts of the Project have been adequately identified and will be analyzed in detail in the DEIR. The Initial Study also identifies additional authorizations or permits that will be required from other agencies. Below we provide additional comments regarding Project site investigations we consider necessary in support of the analysis of the effects of the project.

1. **Biological resources**: The Project is located within the range of Agassiz's desert tortoise (*Gopherus agassizii*), listed as a threatened species by the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS). Although the site is unlikely occupied by the tortoise, the species could be present and we recommend that a protocol survey for the species be conducted that conforms to the most recent survey guidelines[1]. If the survey finds this species in present in the project area, appropriate impact avoidance, minimization and mitigation measures should be identified.

The Project is also located within the range of the burrowing owl (*Athene cunicularia*) and kit fox (*Vulpes macrotis*), which are protected under the California Fish and Game Code. We recommend that protocol surveys for these species[2,3] be conducted and associated reports be included in the DEIR. If surveys find these species present on the project site, appropriate impact avoidance, minimization and mitigation measures should be identified.

2. **Project site characteristics**: In 2009, various conservation organizations developed recommendations for the siting of solar energy generation projects within the California Desert Conservation Area based on criteria intended to identify sites with the least environmental conflicts. Based on our review of the Project as described in the Initial Study, we find it conforms with many of the siting criteria we recommended in 2009 and which we consider applicable at this time. Among the criteria that apply to the Project are the following:

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[1] U.S. Fish and Wildlife Service. 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, Nevada.

[2] California Department of Fish and Game. 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. California Natural Resources Agency, Department of Fish and Wildlife, 24 November 2009. Sacramento, California.

[3] California Department of Fish and Wildlife. 2012. Staff report on burrowing owl mitigation. The 7 March 2012 memo replacing 1995 staff report, State of California Natural resources Agency, Department of Fish and Wildlife. Sacramento, California.

- Lands that have been "type-converted" from native vegetation through plowing, bulldozing or other mechanical impact, often in support of agriculture or other land use activities;
- Locations that minimize the need to build new roads; and
- Locations adjacent to federally designated corridors with existing major transmission lines.

The 2009 recommended siting criteria paper is attached for reference. As the Project is consistent with the above siting criteria, our preliminary conclusion is that it is located in an area of low environmental conflict and, based on our collective experience in reviewing many proposed solar generation projects since 2009, is among the most appropriately sited projects we have encountered to date.

This concludes our comment letter on the Notice of Preparation and Initial Study for the Project. Please contact us if you would like to discuss our letter or need additional information.

Sincerely,

Jeff Aardahl
California Representative
Defenders of Wildlife
jaardahl@defenders.org

Thomas B. Egan
California Desert Representative
Defenders of Wildlife
Tegan@defenders.org

Stephanie Dashiell
Energy Associate Project Director
The Nature Conservancy in California
stephanie.dashiell@tnc.org

Garry George
Chapter Network Director/Renewable Energy Director
Audubon California
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Sarah K. Friedman
Senior Campaign Representative Beyond Coal Campaign
Sierra Club
Los Angeles, CA
sarah.friedman@sierraclub.org

Drew Feldmann
San Bernardino Valley Audubon Society
drewf3@verizon.net

Helen O'Shea
Director, Western Renewable Energy Project
Natural Resources Defense Council
San Francisco, CA
hoshea@nrdc.org

Attachment: 2009 solar energy siting criteria from conservation organizations

Audubon California
California Native Plant Society * California Wilderness Coalition
Center for Biological Diversity * Defenders of Wildlife
Desert Protective Council * Mojave Desert Land Trust
National Parks Conservation Association
Natural Resources Defense Council * Sierra Club * The Nature Conservancy
The Wilderness Society * The Wildlands Conservancy

Renewable Siting Criteria for California Desert Conservation Area

Environmental stakeholders have been asked by land management agencies, elected officials, other decision-makers, and renewable energy proponents to provide criteria for use in identifying potential renewable energy sites in the California Desert Conservation Area (CDCA). Large parts of the California desert ecosystem have survived despite pressures from mining, grazing, ORV, real estate development and military uses over the last century. Now, utility scale renewable energy development presents the challenge of new land consumptive activities on a potentially unprecedented scale. Without careful planning, the surviving desert ecosystems may be further fragmented, degraded and lost.

The criteria below primarily address the siting of solar energy projects and would need to be further refined to address factors that are specific to the siting of wind and geothermal facilities. While the criteria listed below are not ranked, they are intended to inform planning processes and were designed to provide ecosystem level protection to the CDCA (including public, private and military lands) by giving preference to disturbed lands, steering development away from lands with high environmental values, and avoiding the deserts' undeveloped cores. They were developed with input from field scientists, land managers, and conservation professionals and fall into two categories: 1) areas to prioritize for siting and 2) high conflict areas. The criteria are intended to guide solar development to areas with comparatively low potential for conflict and controversy in an effort to help California meet its ambitious renewable energy goals in a timely manner.

Areas to Prioritize for Siting

- Lands that have been mechanically disturbed, i.e., locations that are degraded and disturbed by mechanical disturbance:
    - Lands that have been "type-converted" from native vegetation through plowing, bulldozing or other mechanical impact often in support of agriculture or other land cover change activities (mining, clearance for development, heavy off-road vehicle use).[1]
- Public lands of comparatively low resource value located adjacent to degraded and impacted private lands on the fringes of the CDCA:[2]
    - Allow for the expansion of renewable energy development onto private lands.
    - Private lands development offers tax benefits to local government.
- Brownfields:
    - Revitalize idle or underutilized industrialized sites.
    - Existing transmission capacity and infrastructure are typically in place.

- Locations adjacent to urbanized areas:[3]
    - Provide jobs for local residents often in underserved communities;
    - Minimize growth-inducing impacts;
    - Provide homes and services for the workforce that will be required at new energy facilities;
    - Minimize workforce commute and associated greenhouse gas emissions.
- Locations that minimize the need to build new roads.
- Locations that could be served by existing substations.
- Areas proximate to sources of municipal wastewater for use in cleaning.
- Locations proximate to load centers.
- Locations adjacent to federally designated corridors with existing major transmission lines.[4]

High Conflict Areas

In an effort to flag areas that will generate significant controversy the environmental community has developed the following list of criteria for areas to avoid in siting renewable projects. These criteria are fairly broad. They are intended to minimize resource conflicts and thereby help California meet its ambitious renewable goals. The criteria are not intended to serve as a substitute for project specific review. They do not include the categories of lands within the California desert that are off limits to all development by statute or policy.[5]

- Locations that support sensitive biological resources, including: federally designated and proposed critical habitat; significant[6] populations of federal or state threatened and endangered species,[7] significant populations of sensitive, rare and special status species,[8] and rare or unique plant communities.[9]
- Areas of Critical Environmental Concern, Wildlife Habitat Management Areas, proposed HCP and NCCP Conservation Reserves.[10]
- Lands purchased for conservation including those conveyed to the BLM.[11]
- Landscape-level biological linkage areas required for the continued functioning of biological and ecological processes.[12]
- Proposed Wilderness Areas, proposed National Monuments, and Citizens' Wilderness Inventory Areas.[13]
- Wetlands and riparian areas, including the upland habitat and groundwater resources required to protect the integrity of seeps, springs, streams or wetlands.[14]
- National Historic Register eligible sites and other known cultural resources.
- Locations directly adjacent to National or State Park units.[15]

EXPLANATIONS

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[1] Some of these lands may be currently abandoned from those prior activities, allowing some natural vegetation to be sparsely re-established. However, because the desert is slow to heal, these lands do not support the high level of ecological functioning that undisturbed natural lands do.

[2] Based on currently available data.

[3] Urbanized areas include desert communities that welcome local industrial development but do not include communities that are dependent on tourism for their economic survival.

[4] The term "federally designated corridors" does not include contingent corridors.

[5] Lands where development is prohibited by statute or policy include but are not limited to:

National Park Service units; designated Wilderness Areas; Wilderness Study Areas; BLM National Conservation Areas; National Recreation Areas; National Monuments; private preserves and reserves; Inventoried Roadless Areas on USFS lands; National Historic and National Scenic Trails; National Wild, Scenic and Recreational Rivers; HCP and NCCP lands precluded from development; conservation mitigation banks under conservation easements approved by the state Department of Fish and Game, U.S. Fish and Wildlife Service or Army Corps of Engineers a; California State Wetlands; California State Parks; Department of Fish and Game Wildlife Areas and Ecological Reserves; National Historic Register sites.

[6] Determining "significance" requires consideration of factors that include population size and characteristics, linkage, and feasibility of mitigation.

[7] Some listed species have no designated critical habitat or occupy habitat outside of designated critical habitat. Locations with significant occurrences of federal or state threatened and endangered species should be avoided even if these locations are outside of designated critical habitat or conservation areas in order to minimize take and provide connectivity between critical habitat units.

[8] Significant populations/occurrences of sensitive, rare and special status species including CNPS list 1B and list 2 plants, and federal or state agency species of concern.

[9] Rare plant communities/assemblages include those defined by the California Native Plant Society's Rare Plant Communities Initiative and by federal, state and county agencies.

[10] ACECs include Desert Tortoise Desert Wildlife Management Areas (DWMAs). The CDCA Plan has designated specific Wildlife Habitat Management Areas (HMAs) to conserve habitat for species such as the Mohave ground squirrel and bighorn sheep. Some of these designated areas are subject to development caps which apply to renewable energy projects (as well as other activities).

[11] These lands include compensation lands purchased for mitigation by other parties and transferred to the BLM and compensation lands purchased directly by the BLM.

[12] Landscape-level linkages provide connectivity between species populations, wildlife movement corridors, ecological process corridors (e.g., sand movement corridors), and climate change adaptation corridors. They also provide connections between protected ecological reserves such as National Park units and Wilderness Areas. The long-term viability of existing populations within such reserves may be dependent upon habitat, populations or processes that extend outside of their boundaries. While it is possible to describe current wildlife movement corridors, the problem of forecasting the future locations of such corridors is confounded by the lack of certainty inherent in global climate change. Hence the need to maintain broad, landscape-level connections. To maintain ecological functions and natural history values inherent in parks, wilderness and other biological reserves, trans-boundary ecological processes must be identified and protected. Specific and cumulative impacts that may threaten vital corridors and trans-boundary processes should be avoided.

[13] Proposed Wilderness Areas: lands proposed by a member of Congress to be set aside to preserve wilderness values. The proposal must be: 1) introduced as legislation, or 2) announced by a member of Congress with publicly available maps. Proposed National Monuments: areas proposed by the President or a member of Congress to protect objects of historic or scientific interest. The proposal must be: 1) introduced as legislation or 2) announced by a member of Congress with publicly available maps. Citizens' Wilderness Inventory Areas: lands that have been inventoried by citizens groups, conservationists, and agencies and found to have defined "wilderness characteristics." The proposal has been publicly announced.

[14] The extent of upland habitat that needs to be protected is sensitive to site-specific resources. For example: the NECO Amendment to the CDCA Plan protects streams within a 5-mile radius of Townsend big-eared bat maternity roosts; aquatic and riparian species may be highly sensitive to changes in groundwater levels.

[15] Adjacent: lying contiguous, adjoining or within 2 miles of park or state boundaries. (Note: lands more than 2 miles from a park boundary should be evaluated for importance from a landscape-level linkage perspective, as further defined in footnote 12).

HOMESTEAD VALLEY
COMMUNITY COUNCIL
One Voice for the People of Homestead Valley

P.O. Box 3694 Landers, CA 92285 www.hvccsite.org

Mr. John Oquendo, AICP
Senior Planner
San Bernardino County Land Use Services Dept

June 28, 2017

RE: Scoping for EIR for Ord Mountain Solar Project and Edison Calcite Substation.

The Homestead Valley Community Council is a coalition of the four Homestead Valley communities of Johnson Valley, Landers, Flamingo Heights and Yucca Mesa. These high desert settlements share a common history, economy, and common goals as established in the Homestead Valley General Plan of 2007.

Scenic 247 The Homestead Valley Community Council seeks California Scenic Highway status for State Route 247, which ties the four communities with Yucca Valley, Lucerne Valley, and Barstow. Industrializing the desert in the view of the highway will devastate valuable scenic attributes and our largely visitor-dependent economy.

Cumulative Effects Parcels within the RL Zones bought or leased to industrial solar enterprises in Lucerne Valley and Morongo Basin depressed the value of neighboring properties. These deviations from Community and County Plans now have a track record – dismal by any standard:

-catastrophic alteration of the desert soils
-deterioration of air quality
-ignoring drainage
-underestimating water usage
-the wholesale destruction of vegetation, wildlife habitat, viewshed and community character
-cumulative effects: how many utility-scale projects will Calcite enable? You know better than we do.

Notifying the Stakeholders Inadequate publicity left many nearby property owners ignorant of the projects until they woke to construction noise. In at least one instance Edison was trenching for underground transmission before a project was even approved.

Siting Industrial land use within or near RL Zones creates a Public Nuisance in violation of Cal. Civil Code §3480, San Bernardino County Ordinance §33.034, and the 2007 County General Plan; these violations negatively impact the rights and privileges of a considerable number of residents and property owners. Planning such projects in an Agricultural Zone bordering private properties must not exempt them from any standards that maintain and enhance property values and benefit the economy of any area, much less an area described as "disadvantaged." The County's recently-expressed priorities for establishing the Renewable Energy and Conservation Element in the County General Plan, if followed, will disallow Ord Mountain Solar and Edison's Calcite Substation, indeed will tightly limit any industrialization of the desert to conform to the wishes of the citizens most affected.

Point of Use The Homestead Valley Community Council always urges the benefits of alternative solar energy generation on the roofs of governmental and commercial buildings, schools, parking lots and housetops in already-built areas of the County, allowing the County to create permanent local jobs, improve property values and enhance County revenues.

Thank you,

J. Wright

Joanna Wright,
HVCC President

p.s. Please see statement from NextEra on the next page

From the NextEra Energy Resources website
http://www.nexteraenergyresources.com

While publicizing the widespread projects of this company this candid statement appears in the FAQs:

WHY CAN'T SOLAR ENERGY BE USED TO SUPPLY ALL OUR ENERGY NEEDS?
"The initial cost of constructing solar energy facilities is high, so the overall cost of solar energy is also high compared to more traditional forms of power generation. In addition, energy from the sun is intermittent and varies from region to region. Solar energy also requires quite a large area of land for installation to achieve a good level of efficiency. This would not be practical in providing for the energy needs of large numbers of consumers. Finally, no solar energy can be produced during nighttime, although some relatively small applications may have battery backup systems."

Cost. Variability. Acreage. Nighttime.
We get it.

MBCA

morongo basin conservation association

P.O. Box 24, Joshua Tree California 92254
www.mbconservation.org

June 30, 2017

Mr. John Oquendo, Planner
County of San Bernardino
Land Use Services Department
Hesperia, California

Sent by Email to John.Oquendo@lus.sbcounty.gov

Subject: Scoping comments on the Ord Mountain Solar and Energy Storage Project (Project) in Lucerne Valley P201600510/CUP

Dear John Oquendo;
We appreciate this opportunity to participate in the planning process for the Ord Mountain Solar Project DEIR. A project of this size needs to be analyzed, critically and scientifically, for the many significant and cumulative impacts it will have on the Community, the scenic vistas that support the residents' quality-of-life and drive the economy, the air quality, and the biological environment. This letter specifically addresses the issues of Aesthetics, Air Quality, Biological Resources, and Geology and Soils, which all overlap.

The MBCA is a signatory on, and includes within its comments, the 35-page scoping letter, dated June 30, 2017, from a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.

1. Aesthetics – Scenic Vistas

The Initial Study (IS) concludes that the location of the Ord Mountain utility scale solar project, adjacent to SR 247, could have significant impacts that cannot be mitigated. It could

1) adversely effect the scenic vista;
2) damage the scenic resources; and
3) substantially degrade the existing visual character and quality of the site and its surroundings. .

We are in agreement with these conclusions although we find that the IS rambles without focus to create the impression that the Project site is not scenic. The aesthetic appreciation of an area is an emotional response, a point-of-view (POV) registered by the viewers. The Community's POV is found in the Lucerne Valley Community Plan (CP). The CP was adopted into the General Plan in 2007 and carries the weight of official policy. It speaks clearly and often to the existence and values of the area's open spaces and scenic vistas. All bolds are for emphasis throughout this letter.

Community Plan

LV1.3.2 Preservation of Community Character (Page 12)

*"The community's natural beauty is characterized by an abundance of open space and **scenic vistas…"***

LV2.1 Land Use A. Community Character and Land Use Issues/Concerns (Page 19)

"The rural desert character of the Lucerne Valley community is defined in part by the geographic location, desert environment and very low density residential development. Residential land use predominates with single-family residences on large parcels ranging in size from 2.5 acres to 40 acres. These large parcels preserve much of the desert landscape and provide for privacy and a range of lifestyle choices. Small agricultural uses, animal-raising and equestrian uses are important elements of the rural lifestyle. ***The character of the community is further defined by the large open spaces, the natural environment and by the limited commercial and industrial uses."***

3. Circulation and Infrastructure (Page 32)

C. Scenic Routes

"Lucerne Valley has some very outstanding desert scenery. ***Scenic Routes*** *play an important role in the preservation and protection of environmental assets. Scenic Route designations recognize the value of protecting scenic resources for future generations and place restrictions on adjacent development including specific sign standards regarding sign placement and dimensions, utility placement, architectural design, grading, landscaping characteristics and vegetation removal. SR-18 and SR-247 are* ***designated as scenic routes by the General Plan*** *and are subject to the provisions of the Open Space Overlay. However, both highways, which are eligible for designation as scenic routes by the State, have not been officially designated. The advantages of official designation are a positive image for the communities involved, preservation and protection of environmental assets and a potential increase in tourism."*

LV/CI 1.6 (Page 33)

"Preserve the status of SR-18 and SR-247 as County Scenic Routes, except within the Rural Commercial Land Use Zoning District between Custer Avenue and Ladera Avenue, and ensure protection of the views through compliance with the provisions of the Open Space Overlay."

5. Conservation (Page 45)

Goal LV/CO 1. *"Conserve and protect the unique environmental features of Lucerne Valley, including native wildlife, vegetation and* ***scenic vistas****."*

The County has recently assumed the lead role in implementation of the Scenic Highway designation. At the June Scoping meeting in Lucerne Valley many spoke passionately on the impact this project would have on their views from SR 247. Residents mourned the loss of their 360 degree landscape wide vistas. Please see Fugure 1 which visualizes the SR 247 Scenic Vista/Route and viewshed.

Figure 1. The **Scenic Vista** (Route) traveling **south on SR 247** begins in the basin bound by the Ord and Granite Mountains, it opens to include Lucerne Dry Lake, the dispersed rural desert ranches, the Community buildings and trees, and the sweep up to the high peaks in the San Bernardino Mountains.

Viewsheds and visual obstructions

CEQA instructions for substantiation direct the reviewer to "*Check if a project is located within the viewshed of any Scenic Route listed in the General Plan*". (Page 32) The Scenic Route is discussed above and the listing process is in the works. The evaluation of the Project utterly fails to gauge the visual distraction of this utility scale solar project in the middle of the viewshed. A standard definition of 'viewshed' provides clarity.

Wikipedia Definition

> *A **viewshed** is the geographical area that is visible from a location. It includes **all surrounding points that are in line-of-sight** with that location and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., buildings, trees).*

In contrast, the IS states (Page 33)

> "*Although the project would alter the existing character of the site, the introduction of **project components would not substantially obstruct or interrupt views of surrounding mountain terrain***".

The IS analysis eliminates the foreground. This slight-of-words justifies the placement of the Project on the site. The viewers will be so captivated by the distant mountains they will overlook the project components. Additionally, the DEIR analysis must reference the County Solar Ordinance 4213 84.29.036

> 3.*"The siting and design of the proposed commercial solar energy generation facility will be either:* (A) *unobstructive and not detract from the natual features, open space and visual qalities of the area as viewed from communities, rural residential uses, and major roadways and highways…"*

What are the non-obstructive "project components"? These components are substantial and found by combing through the project descriptions of the systems. They are listed below.

The Ord Mountain Solar Project and Calcite Substation Project Components:

- The area of the project – **484 acres to the west of SR 247 and contiguous with property boundaries of nearby residents.**
- **250,000 photovoltaic panels** mounted on a single-axis tracking system arranged in series
- Each tracker holds approcimately **80-90 panels** requiring approximately **3,000 trackers parallel** to the ground supported by **vertical piles directly embedded** into the ground
- Panel height's extendiing up **12 feet above ground** and down to **18-24 inches above grade**
- The system **rotates at a range of +/- 60 degrees facing east and west;** toward or away from SR 247
- The inverter stations are up to **12 feet high piles directly embedded** into the ground
- On-site substation is **150 feet by 230 feet** and contains **components 25 feet tall** with lightening protection up to **70 feet tall**
- A deadend "H" frame structure up to **65 feet tall with masts to 70 feet**
- Project is surrounded by a **6 feet high chain link** security fence topped by **a foot of triple strand barbed-wire.** Project components will extend a minimum of 6 feet above the fence
- Natural colored privacy/wind slats added to the fence within **0.25 mile** of primary residence.
- The gen-tie line from te on-site substation to the Calcite substation would extend **0.6 miles to the southwest, crossing Hwy 247,** and contain **7 single circuits up to 150–feet-tall** concrete or steel poles **spaced every 500 feet**. On-site poles would be **94 feet tall**
- Calcite substation will be **620 feet by 480 feet** surrounded by a concrete wall topped with a visible loop of razor wire.

Construction materials are generally metal or concrete and the surface of the PV panels is dark and glasslike. The cumulative impact of the components and the INDUSTRIAL LOOK is not described anywhere in the IS. The loss of the scenic vista and viewshed, and the distraction the Project would be for motorists or residents in the surrounding homes is ignored by "*views of project components are indistinct to most residents and*

motorists;" and the "*juxtaposition of project elements against existing power poles and transmission lines obscures them*". Given the two solar projects approved and built on Camp Rock Road and the resulting complaints, we credit this slight-of-hand as an unsuccessful attempted obfuscation.

Before moving on from the issue of aesthetics we address the IS conclusion that "*The project site is generally flat and contains no significant geologic features or vegetation that Is particularly unique for the area*." The site – which consists of an an alkali desert (the inlet at the northern end of an impressive dry lake) in a narrow valley framed by nearby mountain ranges – is quite visually dramatic and appealing and does indeed constitute a significant geologic feature. The area is within the vast Basin and Range Province (as will be discussed below) which gives it added grandeur. Towering forests or Ship Rock sized geological formations are not required in order to establish that a site has significant geologic features. The saltbush plant community is significant for its ability to thrive at the lowest inhabitable edges of dry lakes. It is the indicator plant community for areas previously under water.

Basin and Range Province

Solar energy projects are best placed in low lying flat areas. These areas in the Mojave Desert are within the grand geology of the Basin and Range Province. Each range with its basin, playa - or dry lake, is a geologic feature within the Province. See Figure 1 for the location of the Project in the basin between two ranges.

Figure 2: USGS Basin and Range subprovince index map

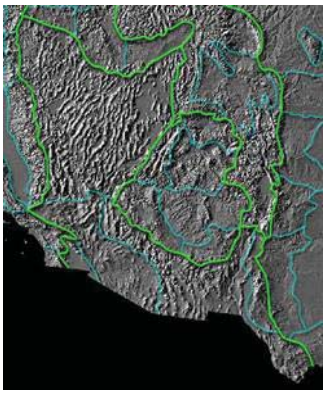


Figure 3: USGS shaded relief map with subprovinces

"*The Basin and Range Province has a characteristic topography that is familiar to anyone who is lucky enough to venture across it. Steep climbs up elongate mountain ranges alternate with long treks across flat, dry deserts, over and over and over again! This basic topographic pattern extends from eastern California to central Utah, and from southern Idaho into the state of Sonora in Mexico. The forces which created this distinct topography lie deep beneath the surface*."
https://geomaps.wr.usgs.gov/parks/province/basinrange.html

Aesthetics 1 d) - Glare

The Lake effect and glare will be discussed under Biological Resources.

We request that the DEIR Aesthetics analysis

1. Reference all County policies, regulations, and ordnances
2. Locate the project correctly within Basin and Range topography
3. Provide realistic photo simulations of the project as it would appear to a passing motorist (height 5.5 feet above ground), from residences at different distances, from the community, and from several places along SR 18 as it climbs from the valley, and as viewed from Ord Mountain to Granite Mountain and Granite Mountain to Ord Mountain.

2. Air Quality Monitoring

The IS finds that the Project will have significant impacts on pollutants that cannot be mitigated. It could

a) Conflict with or obstruct implementation of the applicable air quality plan
b) Violate an air quality standard or contribute substantially to an existing or projected air quality violation

c) Result in a cumulative considerable net increase of pollutants for which the project region is non-attainable under an applicable federal or state ambient air quality standard, and
d) Expose sensitive receptors to substantial pollutant concentrations.

The Mojave Desert is out of compliance with federal and state PM 10 fugitive dust standards and all of the above will be outcomes should the proposed Project be constructed. Lucerne Valley has a severe dust problem which was made worse with the construction of the two solar facilities on Camp Rock Road.

CEQA assumes (IS Page 41) that the Mojave Desert Air Quality Management District (The District) will make the determinations on a) – d) above. In fact, this assumption is incorrect because **the District lacks monitoring equipment in the vicinity of the Project.**[1] **(**See Map 11**)** At this time, there is no local agency approved meteorological data to provide at least one year of baseline data. Without this data, the DEIR is unable to assess if the proposed project can be built without substantially disturbing on-site vegetation (discussed later) or determining the amount of fugitive dust currently plaguing local sensitive receptors. Lacking monitoring the District cannot reasonably approve a Fugitive Dust Control Plan (Rule 403.2).

3. Soils and Vegetation

Construction Disturbance

Fugitive dust or particulate matter emissions (PM 10) depend on project area soils and the presence of soil stabilizing plant communities. The IS finds that the project would result in substantial soil erosion or the loss of topsoil (b. Page 51) while later declaring the vegetation will substantially remain in place. (Page 54) The DEIR must investigate how 1) the construction activities for installing 250,000 panels mounted on 3,000 trackers with support piles will leave a functioning saltbush scrub vegetation community with its soil stabilizing root systems substantially intact; 2) how the panel clearance above ground will be managed during the facility's 30 year life time operations with vegetation exceeding 24" in height (this assumes the vegetation will thrive – which also must be demonstrated); and, 3) how the disturbance invites invasive species, such as Russian thistle (*Kali salsola*) or tumbleweed to take up residence on the 484 acres diminishing not only the natural plant community but also the rich communities of animal organisms (micro to macro) that specialize in this alkali habitat. (Construction Activities Page 13-14)

Soil Conditions and Plant Community

The IS misdescribes the setting: "*The proposed solar energy project is composed of fallow agricultural fields with some early succession saltbush scrub vegetation in isolated patches, which for the most part has been degraded due to the agricultural use and livestock grazing on site. The transmission line would traverse undeveloped Mojave creosote bush scrub and desert saltbush scrub*." (Page 5) This description says: 1) the site is degraded agricultural land, and 2) that this site has degraded saltbush scrub. The truth can be sussed out with a site visit to Google Earth which shows that most of the site and surrounding community is functioning undisturbed saltbush scrub.

[1] The go-to PM 10 monitoring station for all solar projects in the east Mojave Desert has been Victorville. The Victorville station, which is located on asphalt and is 300 feet from a road that has an average annual daily traffic count of 1,000 vehicles, monitors a 0.3 to 3.5 square mile area with a relatively uniform land use. Additionally, the Lucerne Valley station isn't working and even if it were the wind and soil conditions there differ markedly from the ones existing at the proposed Project site.

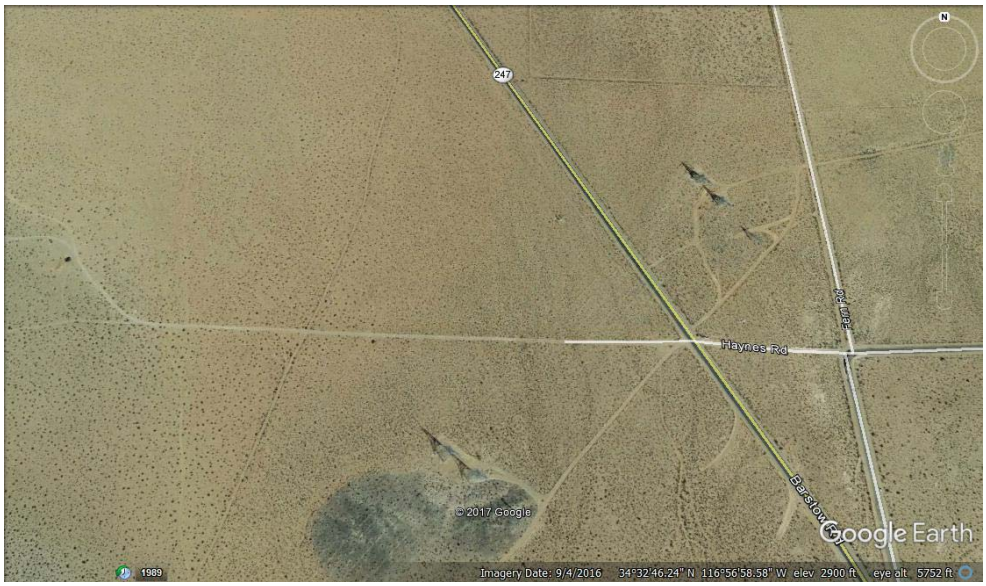


Figure 4: The undisturbed salt bush scrub community surrounding the current transmission line as it crosses SR 247. The image includes the future location of the Calcite Substation.

Figure 5: Close up of undisturbed saltbush scrub community from Google Earth.

Note the plants appear to be sprinkled across the landscape rather than in rows indicating fallow fields.

Figure 6: Undisturbed saltbush scrub community from within the proposed Project site boundaries. The Hammer residence is located at bottom center. The project is flush with their north and east fence lines.

There is no evidence of furrow lines indicating former agricultural practice.

Google Earth is an excellent tool for a first verification of the project proponent's description of setting before the site visit.

Land Use History
Google Earth History can verify if there was ever agriculture within the boundary of the project.

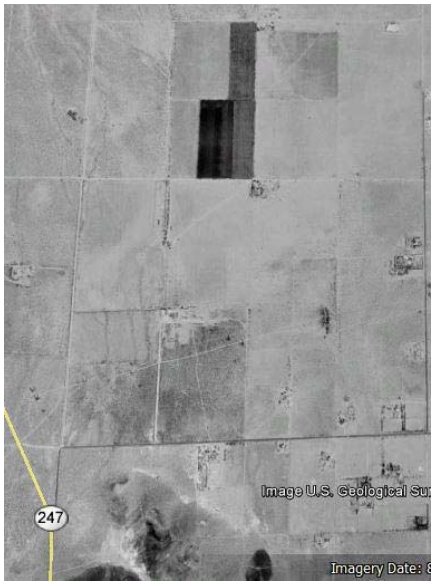


Figure 7: 1989 Project site -Google Earth

Figure 9: 2013 Project Site - Google Earth

It is clear that the majority of the area has not been farmed. The bend in the SR247 shows that the images are from the same Google Earth view. It also shows that by 2013 the evidence for the agricultural past is not visible. The past has not branded the future of this landscape. Therefore, the DEIR must incorporate field surveys that confirm that the area is intact as a scenic vista and as functionally viable live-in and pass-through habitat for the middle strand of the Twentynine Palms/Newberry Rodman- - San Bernardino Mountains wildlife linkage connecting the Ord Mountain with Granite Mountain,[2]and where Protected and Special Status and Covered Species are present.[3]

Soil Types
The IS **does** identify the soil types on the Project site and states that they are moderately well drained and suitable for a PV solar development project (Page 5). The IS **does not** report that the dominant soil type, Helendale loamy sand 0-2% slope, has a high hazard for blowing soil. This is what we need to know for the air quality analysis given the existing issue with fugitive dust as discussed above. The IS **does not** provide key soils information for 1) the air quality analysis (Pages 41-45), or 2) the analyses of the biological resources (Page 46 a) short and long term effects), or 3) geology and soils issues (Page 54 b), or 4) water availability and quality (Page 64 b and 67 f). Soils are the structural basis for any ecosystem and must be considered during analyses. This omission of relevant soils data is what prompted our request for this GIS mapping of soil types on the project site and within the USDA-RCD Soil Survey Boundary[4]. Soil types and their characteristics must be analyzed within all relevant issues of the DEIR

[2] Penrod, Beier, Garding, and Cabanero. 2012. A Linkage Network for the California Desert. www.scwildlands.org
[3] See Item 2, pages 8—12, in the 35-page scoping letter, dated June 30, 2017, from a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.
[4] The shape files used to make the maps are itemized in the attached spreadsheet and available on request to MBCA.

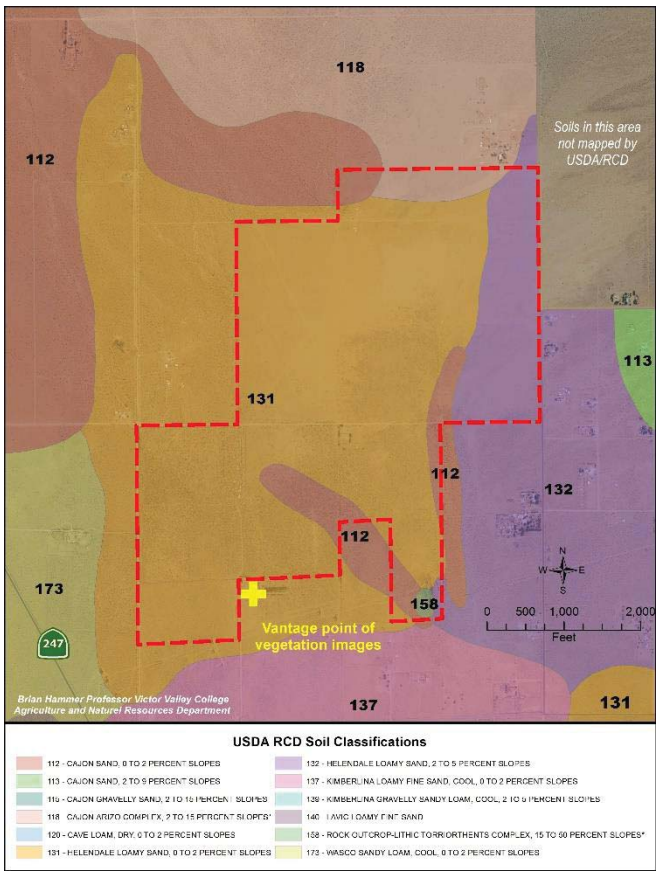


Figure 10: Soil Types on the Ord Mountain Solar Site

Project Setting (Page 5)
5 soil types were identified for the project site. Based on the NRCS description, these types are characterized as moderately well drained with high infiltration and suitable for a PV solar development. **The characteristic hazard for blowing soil is not given** although it is a companion character in the description.

Consulting the USDA SCS of the Mojave River Area (1989) we provide the hazard of blowing soil:
131 Helendale Loamy Sand 0-2% Slope – High
132 Helendale Loamy Sand 2-5% Slope – High
112 Cajon Sand 0-2% Slope – High
118 Cajon-Arrizo Complex 2-14% slope – slight
173 Wasco Sandy Loam, cool, 0-2% - Moderate

The DEIR analysis will conclude that the soil types on the Project site are subject to a high hazard of blowing soil. This hazard has a cumulative effect on air quality, biological resources, soils, and water availablility and use over the lifetime of the project.

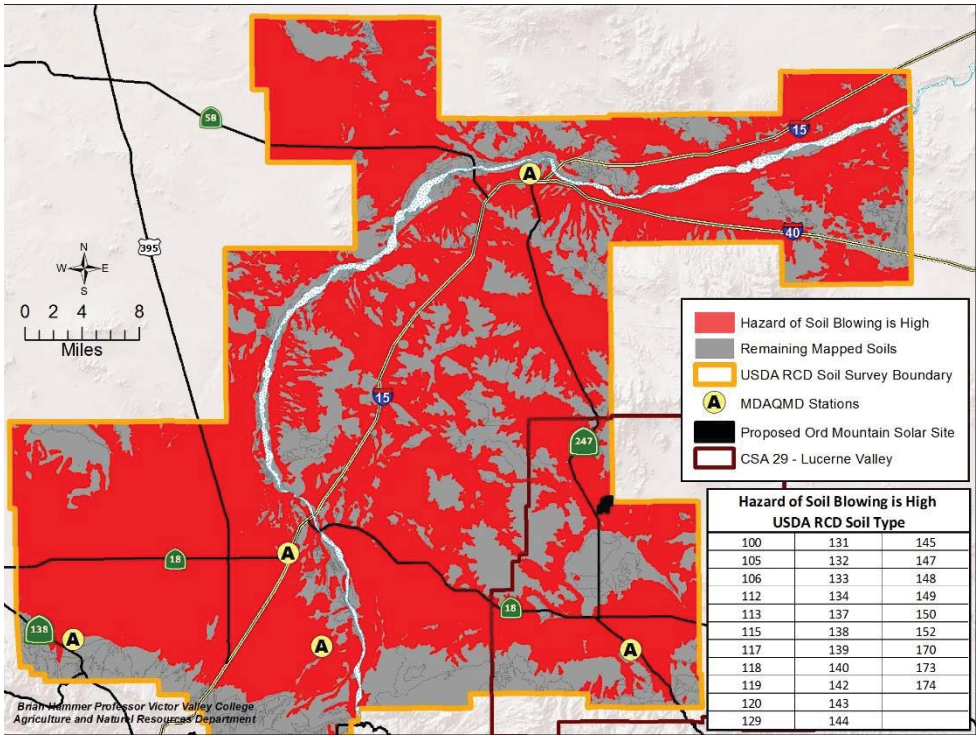


Figure 11: Map shows the Hazard of Soil Blowing is high in basin areas of the USDA RCD Soil Survey Boundary.

The location of the proposed Ord Mountain Solar site is located and shown within the boundary of CSA 29 – Lucerne Valley.

The location of the MDAQMD monitoring stations are shown to be outside the Project area.

The DEIR can confirm and use this information wherever applicable.

4. Biological Resources: The Pacific Flyway and migratory birds

The Project area is within the Pacific Flyway. The Pacific Flyway extends from the Arctic Tundra to South America along the Pacific Coast and inland.

Figure 12: The Pacific Flyway - USFWS

The IS describes the Flyway. "*Migratory birds **use** this major migratory route in the **spring and fall** because of stopover areas where species rest, feed, and regain their strength before continuing their migration to breeding or wintering grounds. In general, bird migration occurs during the months of **March through April and August through November**. The project site is located between **two significant stopover areas: the Salton Sea (90 miles southeast) and Mono Lake (262 miles northwest).** These stopover areas are identified as **California Important Bird Areas by the National Audubon Society**, and guide birds over the project area. However, the **project area** does **not support any bodies of water or wetlands that attract large migration stopovers or attractants for avian species.** Furthermore, the project is proposed on **lands that are low quality, disturbed habitats surrounded by open, undisturbed lands as well as similarly disturbed rural residential lands."***

This description is deceptively right and therefore misleadingly wrong. As seen on the USFWS poster the Pacific Flyway extends well inland through the arid west. Birds are sighted using the flyway in all months of the year although the major migrations do occur during the spring and fall. The Salton Sea and Mono Lake are *bodies of water or wet lands that attract large migration stopovers* and qualify as Audubon California Important Bird Areas (IBA). But in between these two IBAs there are hundreds, if not thousands, of stopover points that attract individuals of the migrating avian species; both species and individual birds are protected under the International Migratory Bird Treaty Act. In addition, some avian species are not just rushing through but over-winter and/or breed in the desert region. Backyards – what the IS labels *disturbed rural residential lands* – water and sewage treatment facilities, golf courses, agricultural fields and orchards, and even *the low quality, disturbed habitats surrounded by open, undisturbed lands* of the Project site can be seductive depending on the need for rest, water, food, or all three.

The Lake Effect

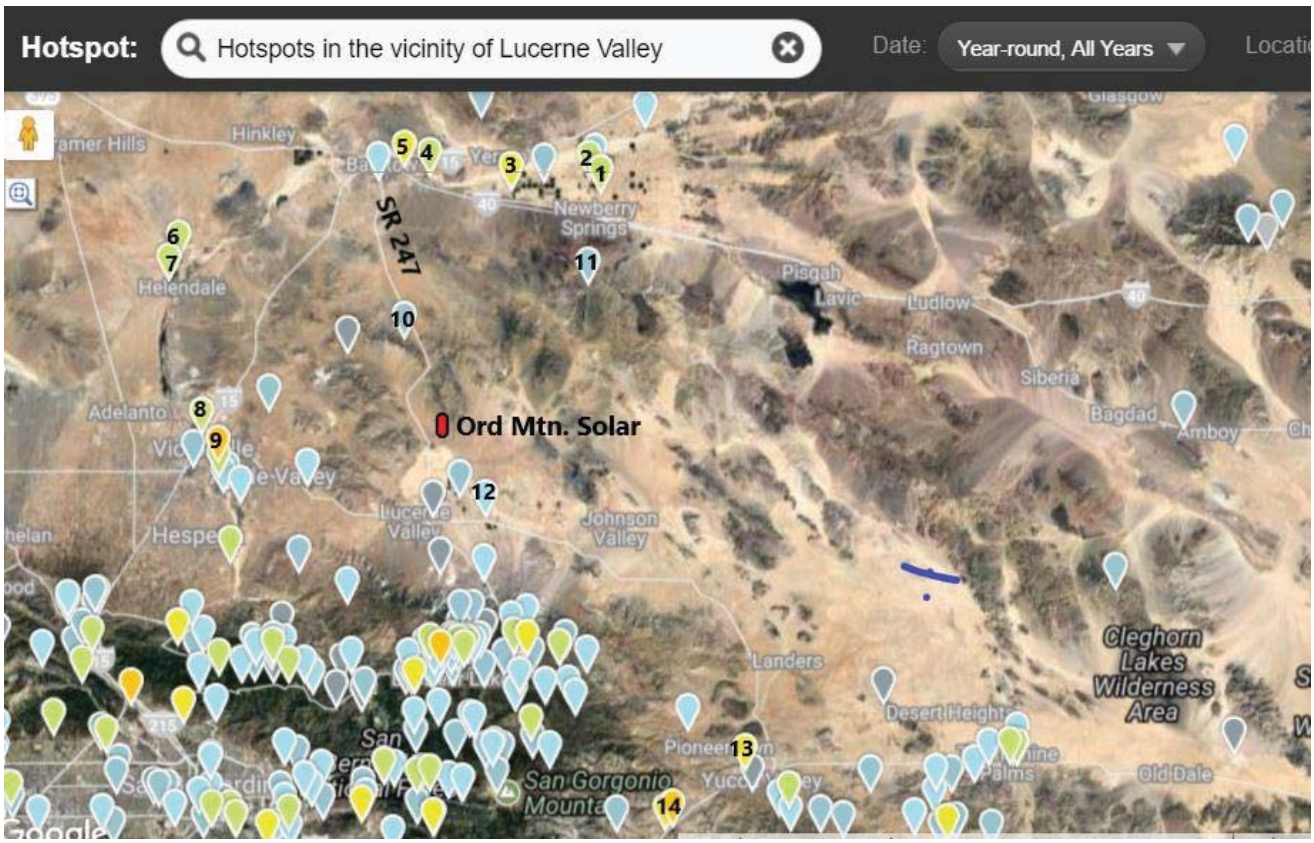
A new danger for migrating birds crossing the inland desert region is solar energy facilities that, to a bird flying overhead looking for a rest stop, resemble bodies of water. This is called the Lake Effect because birds are apparently attracted to the solar fields which during parts of the day and, at night when stowed face up and the moon is bright, resemble water.

Figure 13: The Lake Effect - Cascade Solar Energy Plant in Joshua Tree, California

How is a planner to account for avian use of an area? It can be done without stepping away from the desk.

eBird --the online data base tool for evaluating regional avian activity www.eBird.org

The eBird database provides the most accurate picture of year-round avian use of the region surrounding the proposed Ord Mountain Solar. eBird is the Cornell University citizen science worldwide database of bird sightings. Below is a screen shot of the region circling the proposed solar project beginning in the Barstow area 25 air miles north of the site and ending 40 air miles south at the Big Morongo Canyon Preserve. Selected hotspots (balloons) are numbered and the species number data retrieved. For long distance migrants it is 90 air miles to the north shore of the Salton Sea and 150 air miles to the Colorado River wetlands and agricultural fields. The intervening hotspots are small bodies of water and green spaces that attract birds and the data base provides not only the species individuals and number seen by date but also contains a bar chart showing the months birds were recorded and their relative abundance by species. One can see which birds arrive seasonally and which are seen year round. The Ord Mountain Solar Project site is not a hotspot, which doesn't mean that birds are not seen and visiting at the surrounding homesteads, it just means no one is reporting them. If built, the 484 acre project will be the largest "body of water" in the region and, for birds flying high, a major attraction to explore for food and rest.



eBird - species recorded at selected hotspots (numbered) .

1.	Newberry Springs Vicinity	130 species	8.	Mojave River I-15	100 species
2.	Piute Rd. Dairy	105	9.	Mojave Narrows Regional Park	233
3.	Daggett Evaporation Ponds	152	10.	Sawtooth Campground	45
4.	Tees & Trees Barstow Ponds	137	11.	Kane Springs	40
5.	Barstow WTP	155	12.	LV Camp Rock Road	54
6.	Helendale WTP	101	13.	Yucca Valley Golf Course	154
7.	Silver Lakes	140	14.	Big Morongo Canyon Preserve	233

5. Biological Resources and Wildlife Linkages

The IS completely ignores the values of the proposed Project site as an important component of several Mojave Desert Connectivity projects. The information is referenced above, but again:

1. Penrod, Beier, Garding, and Cabanero. 2012. A Linkage Network for the California Desert. www.scwildlands.org
2. See Item 2, pages 8—12, in the 35-page scoping letter, dated June 30, 2017, from a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.

6. Conclusion

MBCA welcomes the opportunity to comment on the scope of the DEIR for the Proposed Power and Substation and looks forward to continuing participation in the process.

Sincerely,

Pat Flanagan, Board Member
Morongo Basin Conservation Association

Board Members
Sarah Kennington, President
Steve Bardwell
Lauraine Turk
Ruth Rieman
Claudia Sall
Meg Foley
Marina West
David Fick

Attachments:
Map – Proposed Lucerne Valley NextEra site Soils
Map – Regional Soils MDAQMD stations
Spreadsheet - USDA RCD Map data sources
Spreadsheet - Soils in USDA RCD Soil Survey Boundary

Cc: James Ramos (Chairperson and Third District Supervisor; SupervisorRamos@sbcounty.gov)

Robert Lovingood (Vice-Chairperson and First District Supervisor; SupervisorLovingood@sbcounty.gov)
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Public Comments

LUCERNE VALLEY ECONOMIC DEVELOMENT ASSOCIATION (LVEDA)

To: John Oquendo
County Planning

From: Chuck Bell, Pres.
P. O. Box 193
Lucerne Valley, CA 92356
chuckb@sisp.net 760 964 3118

Date: 6/30/17

RE: ORD MT. SOLAR SCOPING – (Supplemental to LVEDA's participating comments in the 'North Slope Community' letter)

John:

Some of these comments will duplicate what's in our communal letter. Been busy and not much time left to comment further.

The Initial Study does a fairly good job in assessing impacts and significance – but misses important ones too.

Following are our summary notes:

GENERAL:

(As we discussed before) – the 'Community' is Lucerne Valley – not Kramer Junction.

The site is within the jurisdiction of the Colorado WQCB – not Lahontan.

Any fencing with slats for 'visual buffering' needs to be engineered to withstand high wind shear – otherwise will just blow over.

SCENIC: We appreciate the IS' recognition of the 'scenic value' of Barstow Rd. and its environs – and our on-going effort to get it designated as a "State Scenic

Highway" – but it doesn't reflect total (solar and Calcite) intrusions/disruptions – especially with all the high-rise structures. They are not "low vertical profile".

WATER: Wells/pumps need to be functional before any ground disturbance. The Agincourt/Marathon (now Lone Valley Solar) projects used 50 acre' – and the const. supt. told us it needed an additional 20 ac' in order to deal with the flying dirt problem – so that would be @ 70 ac' and that was only on about 200 acres. Ord Mt. will likely need more than 75 ac' of construction water – even with less grading requirements. One mitigation to reduce fugitive dust would be limiting construction to the less-windy summer and fall months. Even though more distant from the site – certain amounts of construction water can be obtained from the Mojave Water Agency's Morongo Pipeline that traverses s. Lucerne Valley – non potable State Water – in lieu of semi-potable groundwater on site. Even on-site groundwater would have to be treated for panel washing due to its high dissolved solids. Just because the owner has available water rights to rent or sell to the project – impacts to the already stressed aquifer need to be assessed – along with any adverse affects on residential wells in the region.

AIR QUALITY: Not one solar project to date in the desert portion of the County has complied with County Dev. Code or MDAQMD regulations – and neither entity has done an acceptable job in responding to complaints of blowing dirt. This project will be in violation from time to time – with especially PM10 (and smaller particles) affecting residents.

BIOLOGY: Salt bush in that area is a climax plant community – not just 'in succession' to climax. There will be more displacement of rodents, etc. than expressed in the IS. What about the panels' "lake effect" on waterfowl, etc. – especially within the flyway? Need more analysis of affect on the nearby Ord Mt. ACEC/DWMA.

GLARE/AESTHETICS: Solar panel glare is not thoroughly addressed. It will be visible from most of Lucerne Valley – as it is from the two projects on Camprock Rd. Said glare commands the view shed and thus a major scenic/aesthetic adverse impact.

HYDROLOGY: I might have missed it – but didn't see any analysis of runoff/ponding/flooding from the panels' impervious surfaces – just reference of other structures, roads, etc. Where are those concentrated flows going to go?

TRAFFIC: Traffic analyses need to include Bear Valley Rd. and Hwy 18 where most workers and equipment will traverse – not just Hwy 247. And of course construction traffic coming through the town of Lucerne Valley (Hwy 18 to Barstow Rd.) – especially impacts to the 4 way stop. Or alternate routes? How much of the traffic would come from the LA ports (southwest) – from the I-15 or I-40 then south on Barstow Rd.?

For the solar plant – need to work with Caltrans to install (even if just temporary) northbound right-turn lanes – and even a left-turn lane depending on how much traffic comes from the north. For the Calcite Substation construction – northbound left-turn lanes should be considered – and even a right-turn pocket depending on volume of southbound construction-related traffic.

LAND USE/PLANNING: How did "Land Use/Planning" get shined on? This affected community might not be considered "community" in the typical urban-oriented perspective (where all the consultants come from) – but it sure as hell is for those that live there. Land-use issues – what's best to go where – have been front and center in all these renewable energy comments and fights over past years. That's what the Solar Ordinance, RECE, DRECP, etc. etc. are supposed to be all about. THIS MUST BE ASSESSED IN THE EIR – AND DEFINITELY CONSIDERED 'SIGNIFICANT'. Especially with our Lucerne Valley Community Plan about to be finalized.

ALTERNATIVES: An alternative land-use to solar could feasibly be low water-use tree crops – more in line with the goals and land-use character of our community.

POPULATION GROWTH: Based on what has occurred near every other solar project: No need to worry about "inducing population growth". This project (solar and Calcite) will only 'induce' displacement of existing residents – moving the heck out of there – assuming of course their property values haven't devalued to the point of not even being able to sell.

CUMULATIVE IMPACTS (all of which have to be included): We got 20 MW Agincourt/Marathon – 2 separate locations currently in operation on over 200 acres – which are now called Lone Valley Solar on the west side of Camprock Rd. Two currently being processed: Solar One's EIR pending for a 20 MW (200 acre) project on the east side of Camprock Rd. - and the 60 MW, 484 acre NextEra (Ord Mt. Solar) recently filed for the north valley area. 8 Minute Energy's potential 200 MW PV project recently filed on 640 acres+ – with more application work required – north of Lucerne Dry Lake and west of Barstow Rd. (applicants of which we recently met with). The Aurora/Sorrel 2000 acre (200MW) project off Lucerne Cutoff currently filed with and being processed by the State Lands Commission staff as lead agency (which doesn't much care about local concerns – with those parcels likely going to BLM per the DRECP exchanges). And now it looks like the old Chevron Solar on BLM east of town might be revived as Celtic Solar? And we all know Lucerne Valley is in the sights of DRECP's target for DFA's. Plus we have numerous State Lands sections specified in the DRECP for solar development to help fund the State Teacher's Fund.

All this and SCE is actively working on its proposed Calcite Substation within our existing Community Plan area – apparently signing up prospects for PPAs – some of which we are aware of and at least two that SCE cannot yet divulge. These are all certain to be more local projects to be connected to Calcite whether on private, BLM or State Lands. **These potential projects and the Calcite Substation itself would generate major cumulative, significant, negative impacts**. Plus SCE is upgrading its northern Pisgah/Lugo transmission line through Lucerne Valley to accommodate more MWs – thus more potential options for more local PPAs.

Donoghue, Christine

From: Ken Brock <kgbrock1@hotmail.com>
Sent: Tuesday, June 27, 2017 6:04 PM
To: Oquendo, John
Cc: BETTY MUNSON; henryspiano@aol.com; dorothydonbeasley@yahoo.com; Nancy Sammons
Subject: Ken Brock - Ord Mountain Solar Project

Dear John,

As the Flamingo Heights Community Association (FHCA) delegate to the Homestead Valley Community Council (HVCC) I relate to you our opposition to the Ord Mountain Solar Project in Lucerne Valley.

The FHCA represents approximately 468 property/homeowners in this unincorporated portion of San Bernardino County north of Yucca Valley.

Additionally, I personally oppose the Ord Mountain Solar Project.

I believe that other entities have sufficiently represented the reasons why this project should be shelved, but as a member of the HVCC Scenic Highway 247 Committee I am particularly chagrined by the prospect of his project.

Regards,

Ken Brock
Director, FHCA & FHCA Delegate to HVCC
56476 Hondo Street
Yucca Valley, CA 92284
951-201-2211

cc: Joanna Wright, President, HVCC
Betty Munson, Secretary/Treasurer HVCC
Dorothy Beasley, President, FHCA
Nancy Sammons, Secretary, FHCA

My name is Sabra Chili, I am a long-time visitor to Lucerne Valley, and I am a member of the Alliance for Desert Preservation.

The Initial Study does concede that there will be potentially significant impacts on biological resources. That's good as far as it goes. But there's a big problem: it reads as though the DRECP had never been done. It is extremely tone-deaf to the principles of habitat connectivity. Just because the location once served agricultural needs, does not make it a "disturbed" site. If you want to see "Disturbed" go to Trona or Hinkley. This area does play a part in keeping biomes whole and healthy and does not look much different from the rest of the valley.

Here are some facts about the location of this project that DIDN'T get even a MENTION in the Initial Study:

1. The project is located in a very narrow gap between two Areas of Critical Environmental Concern: the Granite Mountain ACEC to the west, and the Ord Mountain ACEC to the East. This project is so close to the Ord Mountain ACEC that even the developer calls it Ord Mountain Solar.

2. The project is in critical wildlife corridors for the desert tortoise American badger and bighorn sheep. The important and recognized linkage called "Corridor for Desert Tortoise" needs to be well-considered in the EIR.

3. It's in the midst of a concentrated group of nesting sites for golden eagles – perhaps the richest breeding and nesting sites for golden eagles in southern California.

4. The “Covered Species Stack’ report on DataBasin shows that the project is located in and right next to “Moderate” to “High-Value” areas, covering more that ten special status species.

All of this information comes straight from the DRECP, supplemented by further studies submitted by SC Wildlands.

The Initial Study makes some shockingly ignorant statements, such as that the “site is devoid of … sensitive natural community identified by CDFW or USFWS. “ In fact, the CDFW says that the two ACEC’s adjacent to the site constitute “Very High” to “Moderately High” habitat for desert bighorn sheep. Also, US Fish and Wildlife has done an extensive study of desert tortoise linkages in the Ord-Rodman area, and identified the valley area as vitally important to maintain intact linkages.

The location of this proposed project, and the fact that the Calcite substation would invite a parade of additional nearby projects, create a number of extremely troubling consequences for Biological Resources. If the dismissive attitude toward these issues displayed in the Initial Study is carried over into the EIR, then the EIR is going to be seriously flawed.

Donoghue, Christine

From: Gary Creveling <g.creveling@att.net>
Sent: Thursday, June 29, 2017 1:55 PM
To: Oquendo, John
Subject: Ord Mountain Solar

Dear Mr. Oquendo,

We wish to express our concern regarding the Ord Mountain Solar project that is being considered for location near Highway 247 in Lucerne Valley. A large solar farm would detract greatly from the unique environment of that area. Residents and tourists driving Scenic 247 will lose so much of what the desert offers if massive solar panels are looming throughout the landscape. We do not object to solar as such (in fact we are currently installing solar on our own property in Landers and will operate off the grid from Edison) but think point of use panels on top of businesses, schools, homes, etc. are far superior to destroying the desert views and quality of life for the people who live, work and travel there. Even placing solar farms in areas that are not in the public eye would be a better option over panels in highly visible areas. The Lucerne Valley Market is a great example of how solar energy can be achieved without destroying the community. Thank you for your time in considering the requests of desert dwellers.
Sincerely,
Gary and Floy Creveling
P.O. Box 3788 (2120 Kuna Ave)
Landers, CA 92285
714-309-8177

June 29, 2017

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Dear Mr. Oquendo

I am the owner of 60 acres of property located in Lucerne Valley (APNs: 0453-091-51 and 0453-091-17). I am writing to express my support for the **Ord Mountain Solar Energy Project**, which will utilize a portion of my property. The project is the best use of this property and one that will bring opportunities for economic benefits to the area and County as a whole.

This area is an excellent place to build a solar project, given the disturbed nature of the lands and the great solar resource. And it should be noted that the proposed solar project is an allowed use of the land under existing zoning, and is consistent with County land use regulations. While most every project faces some level of opposition, this solar project is the right project in the right location. Also, the project would result in more than 250 construction workers whose presence will result in immediate and significant benefits to local businesses in Lucerne Valley. This development would see considerable improvements to the land, components of which would be taxable by the County, and substantial increased tax revenues from such development are beneficial to the County.

The benefits to the area and County would be real and, for this site in particular, a highest and best use of the property as continued farming of the land has become unviable. Thank you for consideration of my views and comments regarding this project.

Sincerely,

Romulo F. Damaso

Romulo F. Damaso

Date: 6/29/2017

Donoghue, Christine

From: Laura Emerick <lauraemerick@ymail.com>
Sent: Friday, June 30, 2017 1:00 PM
To: Oquendo, John
Subject: Ord Mountain Solar Energy Project - DENY this bad idea! Please!

Dear Mr. Oquendo -
At this time I sincerely ask that the proposed project, "Ord Mountain Solar Energy" be DENIED.

I'm going to share with you, and San Bernardino County, a recent article in the Los Angeles Times which begs the question, "why scrape more desert off the face of this Earth if California is producing too much solar energy right now???"

The article is here:

http://www.latimes.com/projects/la-fi-electricity-solar/

California invested heavily in solar power. Now there's so much that other states are sometimes paid to take it

By Ivan Penn, June 22, 2017

Here is one direct paragraph from this article:

"When there isn't demand for all the power the state is producing, CAISO needs to quickly sell the excess to avoid overloading the electricity grid, which can cause blackouts. Basic economics kick in. Oversupply causes prices to fall, even below zero. That's because Arizona has to curtail its own sources of electricity to take California's power when it doesn't really need it, which can cost money. So Arizona will use power from California at times like this only if it has an economic incentive — which means being paid."

The Mojave ecosystem is irreplaceable, and therefore the "cost" to rehabilitate bulldozed habitat is very high, and rarely successful. Yes, energy investors would like to PROFIT from this bad idea, the Ord Mountain Solar Energy Project, but San Bernardino needs to look at the long-term well-being of the living things that are here, right now, both human, animal and plant life.

I strongly ask those at the San Bernardino County to weigh the value of existing desert habitat, and respect those who currently live in it, and those who visit this place. Once the habitat is scraped off the face of the Earth, all you have left is a dustbowl, and no life at all. No tourism revenue. Nada. Zip. Just dust.

Solar and wind project should be sited CLOSE to where the energy will be consumed - NOT way out in the desert, far away from energy consumers. The INFRASTRUCTURE for these energy project are where energy investors make their profits, so solar and wind projects way out in the desert are great for investors - but more expensive (and lousy) for energy consumers.

Those energy investors need to look elsewhere to invest their money. Leave the habitat in place. Please DENY the proposed Ord Mountain Solar Energy Project. Thank you!

Laura Emerick
POB 1222
Yucca Valley, CA 92286

Donoghue, Christine

From: Jane Fawke <laragna.web@gmail.com>
Sent: Tuesday, June 27, 2017 6:34 PM
To: Oquendo, John
Subject: Jane Fawke - Ord Mountain Solar project

Sir,
I want to record my protest to the Ord Mountain Solar project.
Our high desert community has been duped before by NextEra, their abandonement of the Joshua Tree airport site is an absolute disgrace, leaving the County board of supervisors with mud on their faces after vociferous dissaproval from the community about this project. NextEra came in, ruined what should have been designated an historic site, and then cancelled the project.
Now they want to rape and pillage Ord Mountain, a pristine high desert area, an important wildlife corridor with beautiful views, clean air and dark skies. Our magnificent desert must not become a spoiling ground for badly designed and poorly imagined get rich quick schemes, which will decimate wildlife and the environment, and benefit no-one in the high desert.
It is imperative that this project is shelved, never to be approved.
I trust my comments and disapproval of the Ord Mountain Solar project will be duly noted by you.
Thank you.
Jane "Spider" Fawke

June 29, 2017

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Dear Mr. Oquendo

I am the owner of 439 acres of property located in Lucerne Valley (APNs: 0453-091-12, 0453-091-24, 0453-091-29, 0453-091-31, 0453-091-48 and 0453-091-72). I write to express my support for the **Ord Mountain Solar Energy Project**, which will utilize all of my property. The project is the best use of this property and one that will bring opportunities for economic benefits to the area and County as a whole.

This area is an excellent place to build a solar project, given the disturbed nature of the lands and the great solar resource. And it should be noted that the proposed solar project is an allowed use of the land under existing zoning, and is consistent with County land use regulations. While most every project faces some level of opposition, this solar project is the right project in the right location. Also, the project would result in more than 250 construction workers whose presence will result in immediate and significant benefits to local businesses in Lucerne Valley. The development would see considerable improvements to the land, components of which would be taxable by the County, and substantial increased tax revenues from such development are beneficial to the County.

The benefits to the area and County would be real and, for this site in particular, a highest and best use of the property as continued farming of the land has become unviable. Thank you for consideration of my views and comments in regards to this project.

Sincerely,

Eugene Gabrych

Date: 6-27-17

GM Gabrych Family Limited Partnership

Donoghue, Christine

From: Linda Gommel <lvstorelg@lucernevalleymarket.com>
Sent: Monday, June 26, 2017 3:59 PM
To: Oquendo, John
Cc: Chuck Bell
Subject: Linda Gommel - Ord Mountain solar project
Attachments: IMAG0396.JPG; IMAG0489.JPG

Hi, John,
I just sent you my scoping meeting comments, and then it occurred to me to show you how we recommend solar be done.

The rooftops are out of sight, and actually protect the roof and keep the store a little cooler.
The parking lot panels provide comfortable shade for customers and are a benefit to the community, not a detriment nor an invasion of beautiful scenery.
Also, the power produced is being used 100% locally, and not travelling wastefully, over ugly power lines, through even uglier substations, to clueless and ungrateful users "down the hill".

This is how we want to do it in our beautiful desert!

Linda Gommel
Lucerne Valley Market/Hardware
32946 Hwy 18; P.O. Box 749
Lucerne Valley, CA 92356
760 2487311
Fax 760 2486324
Email: **lvstorelg@lucernevalleymarket.com**

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http://patriotpost.us/subscribe.php

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

Those who would use our desert for their own purposes, often for their own profit, tend to view it as a wasteland. They have little or no understanding of, or sympathy for, those of us who live here and love it.

They spoil the beauty of this valley with ugly installations of solar panels substations chain link fences and power lines

They create the health hazard of blowing dust by scraping the land of vegetation

They use scarce water resources.

They interfere with the lives of desert critters, human critters included.

Name (please print)
Linda Gommel

Organization
Lucerne Valley Market + Hardware

Mailing Address
PO Box 749 Lucerne Valley Ca 92356

Telephone No. (daytime)
760 248 7311

E-mail address
lvstore lg@lucernevalleymarket.com

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

Wash n Shop COIN LAUNDRY
ASHOK MELWANI, M.D.
Family Practice
HARDWARE
WOOD STOVES
COOLERS
LOTS OF STUFF
Lucerne Valley
1:34:29

Lucerne Valley Market
SUPER MARKET
SUPER MARKET
THE DELI CAFE
GENERAL STORE

John.Oquendo@lus.sbcounty.gov
Mr. John Oquendo, AICP
Senior Planner
San Bernardino County Land Use Services Dept.
15900 Smoke Tree Street Hesperia, California 92345

Re: Scoping Comments Regarding Ord Mountain Solar Project

Dear Mr. Oquendo:

My wife Sue and I have a home at 33261 Haynes Road Lucerne Valley, CA. For several years, we have been lovingly restoring this home with our own hands with the intention of making it our full-time residence. We purchased this home for the 360º view of mountains and desert, the quite, the wildlife, and the solitude. The proposed project would destroy each and every reason we purchased and have restored our home.

I am an Analyst for a State Agency and an Adjunct Professor in the Natural Resources Department of a Local College. (My observations and comments expressed here do not necessarily represent those of my employers.) I have professionally as part of a team helped prepare EIRs and conduct Public Meetings for those EIRs and have, in my individual capacity, successfully challenged other EIRs.

I was disappointed with the quality and accuracy of the narratives in the "San Bernardino County Initial Study Environmental Checklist Form". Although the many of the sections correctly indicated that "additional analysis" is needed, others that should have required additional analysis stated that no further study would be performed. I strongly disagree with the Initial Study's conclusion that the DEIR need not analyze impacts that the proposed project would have on my North Lucerne Valley community – which is the community that would be most directly impacted by the project -- based on the Initial Study's erroneous assertion that there is simply no community there. We are indeed a Community. We are rural citizens by choice, not by chance or some perceived misfortune or moral failing.
We are proud citizens of San Bernardino County, we pay taxes here, we vote here and for the most part myself, my wife and neighbors work here.

Valley fever potential

The proposed site has the potential to contain Coccidioides fungus that causes valley fever (coccidioidomycosis). There is no vaccine to prevent infection[1]. There is a known association of cases coccidioidomycosis during PV solar construction in desert environments[2]. As part of this EIR, sampling should be performed to examine the possibility of coccidioidomycosis. If spores are detected, the short and long term risks to constructions workers, travelers on State Route 247 and the citizens of Lucerne Valley should be reported.

Dust palliatives and fugitive dust

The Notice of Preparation indicates that dust palliatives may be used on the proposed site. As part of this EIR a comprehensive dust management plan should be stated that specifies exactly which palliatives would be applied, the amounts of the palliatives and the conditions under which they'd be applied. Do these yet unnamed dust palliatives have the potential to degrade groundwater quality in the short or long term? If water quality is degraded who is the environmentally and financially responsible party, Edison, NextEra, San Bernardino County? This dust management plan should include plans to manage fugitive dust in an environment that consistently exceeds hourly sustained 30 mph winds.[3] Any increase in particulate matter has been linked to severe health issues and higher mortality rates. Even if these PM levels are below currently acceptable limits.[4] The North Lucerne Valley community would be subject to a catastrophic increase in particulate matter with the soil disturbance inherent in this proposed project. The bottom line is that, given the prevailing winds, the type of soils here and the huge volumes of water that would have to be involved, the preparers of the EIR will, if they do a real and honest analysis, discover that no viable dust management plan can be proposed with respect to the proposed project.

Power disruption

The Notice of Preparation indicates that power poles will be removed as a part of the proposed project. As part of this EIR a comprehensive plan should be prepared. It seems as if the applicant is unaware that our home and other residences rely on those power poles for everyday use, security, water, and fire suppression. If damage to residences electrical equipment including wells occurs as a result of power interruption

[1] Valley Fever Awareness Center for Disease Control (CDC) https://www.cdc.gov/features/valleyfever/index.html
[2] Coccidioidomycosis among Workers Constructing Solar Power Farms, California, USA, 2011–2014 Jason A. Wilken et al Nov 2015 CDC Emerging Infectious Diseases Volume 21, Number 11—November 2015
[3] CA Department of Water Resources Station GAM http://cdec.water.ca.gov/cgi-progs/queryF?GAM Query 01/2000 to present.
[4] Shi L, Zanobetti A, Kloog I, Coull BA, Koutrakis P, Melly SJ, Schwartz JD. 2016. Low-concentration PM2.5 and mortality: estimating acute and chronic effects in a population-based study. Environ Health Perspect 124:46–52; http://dx.doi.org/10.1289/ehp.1409111

and we have a loss, who is the financially responsible party, Edison, NextEra, San Bernardino County? The plan should not disrupt power to residences.

Earthquake fault

Based on my observations, there is likely an earthquake fault bisecting the proposed project site. We have two wells on our property. These wells are located on the eastern and western ends of our parcel. They are separated by approximately 1,000 feet. The wells have significantly different water levels. Water quality (TDS) between our drinking water well and our neighbors drinking water well to the east is significantly different. Given that earthquake faults act as groundwater impediments or barriers, and the proposed projects location is in the California Eastern Sheer Zone there is a strong probability that there is a northwest-southeast trending fault. That fault bisects our property and the proposed project site. I have had two conversations with a geologist (California registered Professional Geologist.) He looked at our data and analyzed aerial photography and he concurs.[5] As part of this EIR, a fault investigation of the proposed project site should be performed consistent with the Alquist-Priolo Earthquake Fault Zoning Act of 1972(1993). Although the proposed site does not contain structures intended for human occupancy, any battery storage buildings, inverter structures, or transformer enclosures could suffer catastrophic failure in the event of an earthquake along this fault. These facilities should be considered critical or sensitive structures.[6]

Property values

In terms of assessing environmental justice concerns, the EIR should address the effect of the project on property values. The community and I have heard from multiple local realtors, stories of citizens attempting to sell their homes in southern Lucerne Valley and Newberry springs[7]. These homes adjacent to industrial solar sites have been severely devalued and have failed to sell. As the North Valley community of Lucerne Valley we would be impacted by these phenomena. The community of Lucerne Valley as a whole is a Severely Disadvantaged Community (SDAC)[8]. Any loss of valuation to a resident in this SDAC would have a greater impact than the impact to a typical San Bernardino County resident. Financial stress causes physical and emotional health issues.[9] For most of us our homes are our largest asset and biggest investment. The sudden loss of equity would leave us unable to secure loans at pre-project values and would affect our ability (should we choose) to sell our homes thereby induce financial stress and potential health issues. As part of this EIR a comprehensive study should be performed

[5] Brian Hammer: Two personal conversations in person 06/07/2017 and 06/26/2017
[6] Guidelines for Evaluating the Hazard of Surface Fault Rupture, California Geologic Survey Note 49
[7] Brian and Sue Hammer, LVEDA Community meeting 2016 and personal conversations with a Realtor 05/2017 and 06/2017
[8] CA Department of Water Resources Disadvantaged Communities Mapping Tool (2011-15 ACS dataset)
[9] Predictors of responses to stress among families coping with poverty-related stress Journal
Anxiety, Stress, & Coping An International Journal Volume 25, 2012 - Issue 3

on the potential for loss of home equity and the financial effects on the site area residents.

Wildlife linkage

Every spring and fall since we have owned our home, my wife and I have observed, among other things, mountain lion paw prints along our home on Haynes Road. Some years including this year the lioness had cubs with her. (Lioness assumed due to cub prints). The proposed site would obstruct the path of this Mountain Lion and many other species. The EIR must review and incorporate the many published wildlife corridor studies verifying that the proposed project area would block important wildlife linkages.

Personal impacts to Sue and Brian

If this proposed project is built it will have severe irreversible impacts on our home and life.

Currently we have multiple four-foot by six-foot windows to look out and see the beautiful desert and mountains. If this proposed project is built, from our dining room, living room, bedroom, bathroom, and office, we would see a seven-foot fence with razor wire **thirty feet from our home on two sides**. Beyond and above the view of the seven-foot fence with razor wire we would see twelve foot tall solar panels, project structures, transmission infrastructure, and power poles of various heights.

Currently it is quiet, very quiet. I have personally measured ambient noise levels of 19 to 22 db. If this proposed project is built we will hear inverter noise, transformer eddy-current noise, and under certain weather conditions 60 hz hum and discharges from the planned high-voltage transmission lines[10]. We live in a valley. Any increase in ambient noise is amplified and easily conveys across that valley. The addition of these noises of the proposed project would travel great distances. According to the National Institute for Occupational Safety and Health, ambient noise also affects people's health by increasing general stress levels and aggravating stress-related conditions such as high blood pressure, coronary disease, peptic ulcers and migraine headaches.[11] We face the all too real possibility of health issues from this proposed project.

Currently we experience occasional windborne dust at our home. Winds here can be extreme (we personally have lost a 70 mph rated roof). Any disturbance of the soil will generate dust. The proposed site is currently a thriving saltbush scrub habitat (despite the inaccurate description the applicant provided for the Notice of Preparation). Any disturbance of the soil will create significant quantities of dust (particulate matter). This would include simply driving across the proposed site. If planned grading is performed there will be extreme dust. If support piles are driven, concreate pads are poured, and

[10] We currently under some weather conditions hear the SCE transmission lines to our immediate south.
[11] How does background noise affect our concentration? Scientific American By Michael Rugg, Mark A. W. Andrews on January 1, 2010

existing brush is cut or flattened this will only serve to exacerbate the dust problem created by merely driving on the proposed site to do these operations.

In conclusion, as we stated in the beginning of this letter; we purchased this home for the 360^0 view of mountains and desert, the quite, the wildlife, and the solitude. The proposed project would destroy each and every reason we purchased and have restored our home.

Sincerely,

Brian G. Hammer Sr

Sue E. Hammer

Sent via email 06/30/2017

John Oquendo
Senior Planner
Land Use Services Department
John.Oquendo@lus.sbcounty.gov

CC:
James Ramos (Chairperson and Third District Supervisor;
SupervisorRamos@sbcounty.gov)

Robert Lovingood (Vice-Chairperson and First District Supervisor;
SupervisorLovingood@sbcounty.gov)

Janice Rutherford (Second District Supervisor;
SupervisorRutherford@sbcounty.gov)

Curt Hagman (Fourth District Supervisor;
SupervisorHagman@sbcounty.gov)

Josie Gonzales (Fifth District Supervisor;
SupervisorGonzales@sbcounty.gov)

Ms. Terri Rahhal (Terri.Rahhal@lus.sbcounty.gov)

Mr. Tom Hudson (Tom.Hudson@lus.sbcounty.gov)

Donoghue, Christine

From: Elaine Harris <harristradingpost@gmail.com>
Sent: Friday, June 30, 2017 10:57 AM
To: Oquendo, John; Supervisor Ramos; Supervisor Rutherford; Supervisor Hagman; Supervisor Gonzales; Rahhal, Terri; Hudson, Tom; broker@lvre.net
Subject: Re: scoping comment the Ord Mountain Solar Project (#P2016005610/CUP)

This email is for the purpose of protesting the application to allow a solar power plant in what is a rural residential area. The destruction of migratory habitat will be severe. It will also be very destructive to the residents in the area, causing a serious deficit to our property values. Just the threat of it has already impacted our values as prospective buyers must be advised of the possibility of the solar plant and nobody (in their right mind) would buy with that hanging over their heads.

There are locations where DFA's are allowed, away from populated areas, where their use of the ground water will not cause a hardship for the community around them.
Three of these sights do not even have potable water, so are only good for industrial use. Please heed our protests and do not allow this travesty to take place in our community.

My husband and I are probably effected the most or are one of the most effected property's, as we are directly across the street from the proposed site. Our house and front porch face directly towards the site location. One of the main reasons for purchasing this property was the view, which will definetly be destroyed if a solar plant is installed there. The desert habitats of many animals will also be ruined. I know we have kit foxes that live there. Also of course many rabbits, ground squirrels, birds, snakes (many of which are benificial to the ecological balance), lizards, desert tortoise, and many others .

Please hear our community and deny this proposal!

Thank You,
Jack and Elaine Harris
16731 Meridian Rd., Lucerne Valley, Ca 92356
Ph # 562-500-4378. Cell

Sent from my iPad

Donoghue, Christine

From: Brad Hicks <47deadeye@gmail.com>
Sent: Saturday, June 17, 2017 10:09 AM
To: Oquendo, John
Subject: Ord Mountain Solar

This is another example of poorly sited "green power" at the expense of those of us who live here. The only place for these enormous projects is in industrial areas, such as parking lots and warehouses where no impacts would be felt by home/property owners. If our Lucerne Valley Market can cover their parking lot with solar why not the vast parking lots of Target, Walmart, etc and leave our deserts alone. Sincerely: B.R Hicks/ P.O. Box 1011/ Lucerne Valley, CA

Virus-free. www.avg.com

Donoghue, Christine

From: Brad Hicks <47deadeye@gmail.com>
Sent: Monday, June 19, 2017 9:57 AM
To: Oquendo, John
Subject: Ord Mountain Proposal

Those poor people who are being so impacted by this ridiculous project should be given more consideration. The rule should be adopted that nothing can be built within a mile of any privately owned property, developed or not, visually appealing or not. Undoubtedly this would force SCE and their minions to reconsider their siting of these obscenities. Bradley R Hicks/ PO Box 1011/ Lucerne Valley, CA, 92356-1011

Virus-free. www.avg.com

Donoghue, Christine

From: Christine Huber, CCS, CPC <christinehuber@sbcglobal.net>
Sent: Tuesday, June 27, 2017 3:32 PM
To: Oquendo, John
Subject: Christine Huber - Ord Mountain Solar Project Application

Dear Mr. Oquendo,

Please reconsider the decision to put another solar project near our desert recreational area.

What an ugly eye sore these solar projects are, many visitors frequent these area's in the desert for photography, astronomy & outdoor recreational activities.

These lands are surrounded by public use areas. Who wants to camp or visit an area with a massive solar panels and substation equipment??

There has got to be another location or another solution for these huge corporate energy companies.

I have a cabin in Big Bear, as well as Johnson Valley, many tourist come down the mountain for recreational hiking and OHV use.

It's sad that 29 Palms marine base just acquired a massive land grab from the public lands & now corporate greed is encroaching on our public use areas, **when will it end?**

Please reconsider the decision for the Ord Mountain Solar Project.

Sincerely,

Christine Huber
5451 Big Horn Rd.
Johnson Valley, CA 92285
(949)433-0179

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County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:
See attached

Name (please print)
JOHN & FAY HUFF
Organization

Mailing Address
30125 Exeter L.V.
Telephone No. (daytime)
(760) 669-5524
E-mail address
fayhuff@hotmail.com

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

Fw: Renewable Energy Projects

y huff

Thu 6/1/2017 10:02 PM

To: Molly.Wiltshire@bos.sbcounty.gov <Molly.Wiltshire@bos.sbcounty.gov>;

From: fay huff <fayhuff@hotmail.com>
Sent: Thursday, June 1, 2017 9:52 PM
To: Linda Mawby
Subject: Renewable Energy Projects

The Lucerne Valley Economic Development Association has solicited comments from its participants regarding Renewable Energy (specifically solar) and recommended that any comments be forwarded to you. Here we go:
1.We seem to be inundated with completed, approved or proposed solar projects in the Lucerne Valley, Johnson Valley, Barstow area. We like our beautiful desert the way it is. There are loads of places to construct new solar that can't even be seen.
2. Local residents are not a part of the location evaluation or approval process any more. Various municipal ganizations have recommended several acceptable solar farm sites - none of which seem to be acceptable to anyone else. Sun is sun - doesn't much matter where you find it.
3. Property values in the high desert are not wonderful, but the sure way to make them go even lower is to erect a new solar farm in close proximity.
4. Credibility of the planners, developers and construction entities is pretty low considering the proposed/approved project and the finished article are seldom close to being similar.
5. Solar projects are allowed to surround/intrude/encroach and closely border inhabited dwellings making the property worthless, unsalable and practically uninhabitable. In some cases, solar panels surround a residence on 3 sides and become the only view the resident has. — Aesthetics
6. When solar projects up here are being constructed, the ecosystem is seriously disturbed. The small animal populations are displaced and we're not talking about the dreaded desert tortoise. Their new habitats often become the homes nearest the solar project under construction. Imagine waking up to mice on your pillow and having your cars electrical system devoured by larger rodents. These have both happened to us. } ecosystem Native Habitat
7. Human diseases, especially lung diseases, increase exponentially when a solar project is underway. Valley Fever, Emphysema, COPD, Pneumonia and others all go on the rise when a solar project starts up. Bacteria and viruses that have been buried and dormant are now reactivated and airborne for miles affecting those who moved here for the great air quality and are now victims of the great solar invasion.
8. Investors who bought property here 20 or 30 years ago for retirement are now pretty disappointed to find a solar farm as their new neighbor. It might mitigate the disappointment if we were sharing in this wonderful new technology and lighting our homes with solar. But, alas, it's all going down the hill to keep the lights bright at Disneyland and keep everything running at SCE.

IF

. LA and Orange County need solar energy, put the panels on top of every parking structure, shopping mall, school, hospital, factory, airport, etc. **IN LA and ORANGE COUNTY.** Let those of us who enjoy the pristine and tranquil High Desert and came here to live determine its destiny the way it looks today.

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

THERE IS AN UNDERLYING CONTEMPT FOR OUR WAY OF LIFE IN THE DESERT. THE INDUSTRIALIZATION OF OUR RURAL WAY OF LIFE IS ALL ABOUT DESTROYING THE DESERT AND MAKING MONEY BY SHIPPING ALL OF THIS ELECTRICAL GENERATION TO SOMEWHERE ELSE AND OF NO BENEFIT TO OUR COMMUNITY. WE LOVE OUR LIFE AND DO NOT WANT IT DESTROYED

Name (please print)
JOSEPH KNUDSON

Organization

Mailing Address
P.O. BOX 1266

Telephone No. (daytime)
442-229-3949

E-mail address
JOSEPHKNUDSON@YMAIL.COM

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

(1) Rural Lifestyle Preservation

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

SAN BERNARDINO COUNTY

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

Water Shortage Dust Pollution Animals, Native Habitat

Lucerne Valley is an environmentally sensitive region. This project (1) would create an uncontrollable blowing sand & dust (2) Our water is in short supply & must not be wasted on this project (3) This will upset the critters in the project area & drive them onto neighboring properties. (4) The destruction of pristine desert scenery from our home & from Scenic Hwy 247. (5) More pollution will also come from more high capacity transmission lines & an additional substation. (6) Loss of value for neighboring properties of up to 50%, plus the properties become unwanted by buyers. Many seniors will lose much of their life savings.

Destruction of Scenic views

Pollution/Air

Property Values

Name (please print)
Bill Lembright

Organization
Lucerne Valley Market & Hardware, resident

Mailing Address
PO Box 749 Lucerne Valley, CA 92356

Telephone No. (daytime)
N/A

E-mail address
billlembright@gmail.com

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following: LV residents are planning a well camoflaged community solar microgrid to provide mostly for our own electrical needs. All other industrial sized projects should be constructed in areas already ~~zoned~~ unsuitable for home construction and commercial land development in the future that will generate taxes to fund local infrastructure. Those areas not suitable for homes & businessed include large parts of Hinkley, Harper Dry Lake energy production lands, Kramer Junction. These areas are no longer pristine desert, whereas Lucerne Valley is pristine. DON'T ruin ~~our~~ the quality of ~~our~~ environment.

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345
Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

Please do not allow this or any other destructive, unacceptable, unwanted industrial renewables in our community.

To mail: fold, seal, and affix stamp

June 28, 2017

By Email: John.Oquendo@lus.sbcounty.gov and by Regular Mail.
Mr. John Oquendo
AICP
Senior Planner
San Bernardino County Land Use Services Dept.
15900 Smoke Tree Street Hesperia, California 92345

Re: Scoping Comment Re the Ord Mountain Solar Project

Dear Mr. Oquendo:

I live at 16821 Meridian Rd. in Lucerne Valley, which is directly across the street from where the proposed solar project would be located. I understand that the Initial Study says that my home and the others in the community are modest and undeveloped and so the EIR doesn't need to consider the impacts that the project would have on me and my community. I strongly disagree with that assessment – the EIR must carefully consider those impacts, which would be enormous.

I initially chose my home very very carefully. I am a different kind of person. I have no cell phone, no TV, no internet service and I am a gardener. I tried to choose the farthest out place where I could have privacy, quiet, dark nights to see the stars, and to create the small farm of my dreams. I wanted to be at the edge of the desert as I like to hike into the Ord mountains. I have seen a lot of wildlife during my hikes.

After my family purchased the home, along came the first proposed solar plant. I waited for years before I started doing the repairs and planting I wanted to do. At some point I had contacted the county and was told the solar project adjacent to my home was not approved. I put in new windows and started renovations and planting. Now here it is back again. I discovered that by having a giant drone flying directly over me and my property. When I confronted the flyer he told me he was legally entitled to fly a drone over my home in order to survey the proposed solar plant. I consider my home a sacred place. I hope to someday grow drought resistant trees to share with others. It is one of the most beautiful areas and if the project gets built I will move and I will consider selling my business and leaving Lucerne Valley. If I can't escape the industrialization there is no reason for me to remain here. I also hoped someday to purchase some of the lots in the neighborhood to expand my property and perhaps build some smaller homes in the neighborhood to sell to others who appreciate the beauty.

I am also broker for Lucerne Valley Realty which my family owns. Just the proposal itself is already affecting property values negatively. It is a long drive to town and there are no services. There is no reason for anyone to purchase in this area if the beauty and rural lifestyle are taken away.

I receive calls at my real estate business from people asking where can they buy in Lucerne Valley where there will be no solar plant. I can't really say. To say that a solar plant should be allowed in residential and agricultural areas is unbelievable. They are an industrial use - period.

On another note, I also strongly disagree with the statement in the Initial Study that my community is on disturbed land that has no real wildlife population. I have personally viewed desert tortoises, hawks, owls, foxes and even an eagle in my years at my property. The effects on that the project would have on wildlife must be addressed in the EIR.

I request that you take the comments in my letter to heart and that the impacts that the project would have on me, my community and wildlife populations be carefully considered in the EIR.

Sincerely,

Renée Lynn

Renée Lynn
16821 Meridian Rd – no mail (Mail goes to PO Box 1249)
Lucerne Valley, CA 92356
broker@lvre.net

June 30, 2017

Dear Mr. Oquendo, San Bernardino County Land Use Services,

I am responding to the **Ord Mountain Solar Project** proposal. I am concerned that air quality may be negatively impacted in Lucerne Valley during construction and operation.

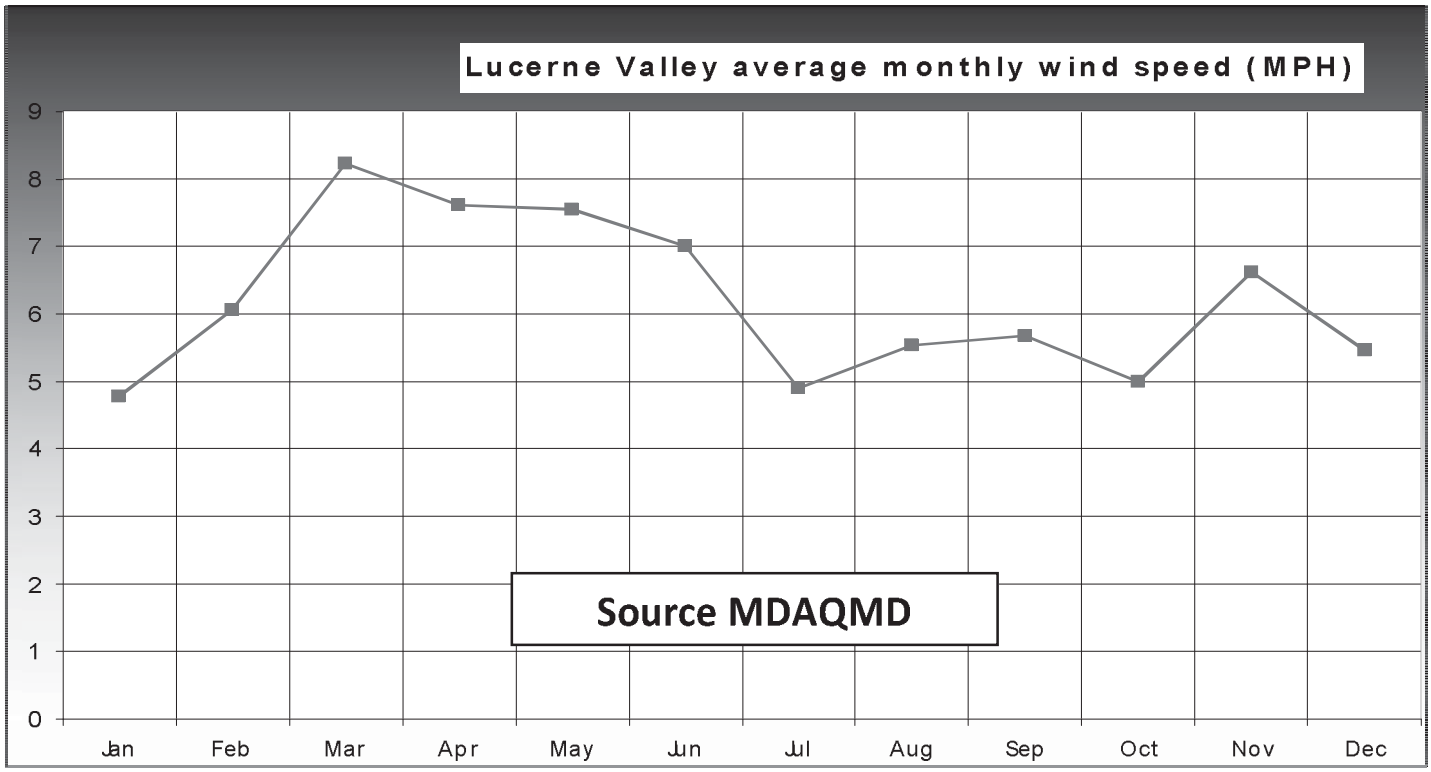
DURING CONSTRUCTION

During the construction of the Agincourt and Marathon Projects in Lucerne Valley, there were times that the wind transported dust pollution during construction. This in spite of using water trucks as shown in this picture of the construction at Agincourt in Lucerne Valley.

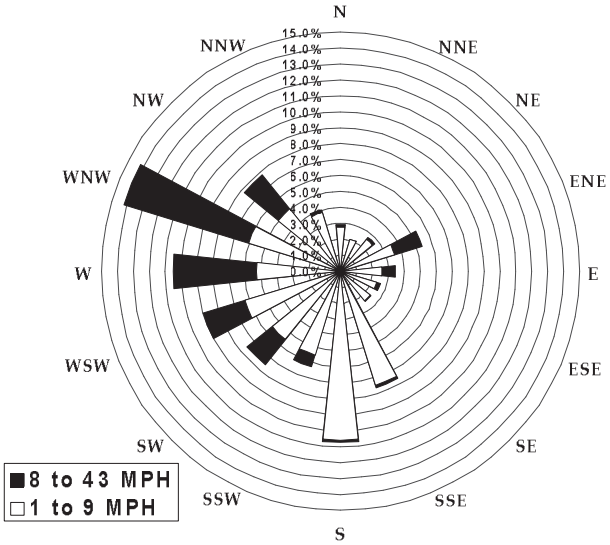
On a windy day in spring, I was travelling on highway 247 from Johnson Valley to Lucerne Valley. What I thought might be a fire in Lucerne Valley turned out to be dust rising from both the Agincourt and Marathon Projects in Lucerne Valley. I stopped by the site and found out that they had suspended construction as soon as the air transport had managed to become an issue. There were only a couple of water trucks working the sites, but they were working as hard as they could and the dust pollution was still still out of control. Because they started construction in the spring when the wind is historically at its highest in the High Desert, many days saw plumes of dust transported over Johnson Valley and Landers into Yucca Valley and the Joshua Tree National Forest. It has been also predicted that the amount of water that they have requested during construction is not enough for dust mitigation. The same person (Chuck Bell) had also rightly predicted that Agincourt and Marathon would also need more water and more water trucks.

Since the Ord Mountain project is three times as large as either Agincourt or Marathon, and has three times the potential for PM10 transport, it should <u>not</u> be started in the spring or late winter.

As the chart below shows, the months best suited for construction are July, August, September and October.

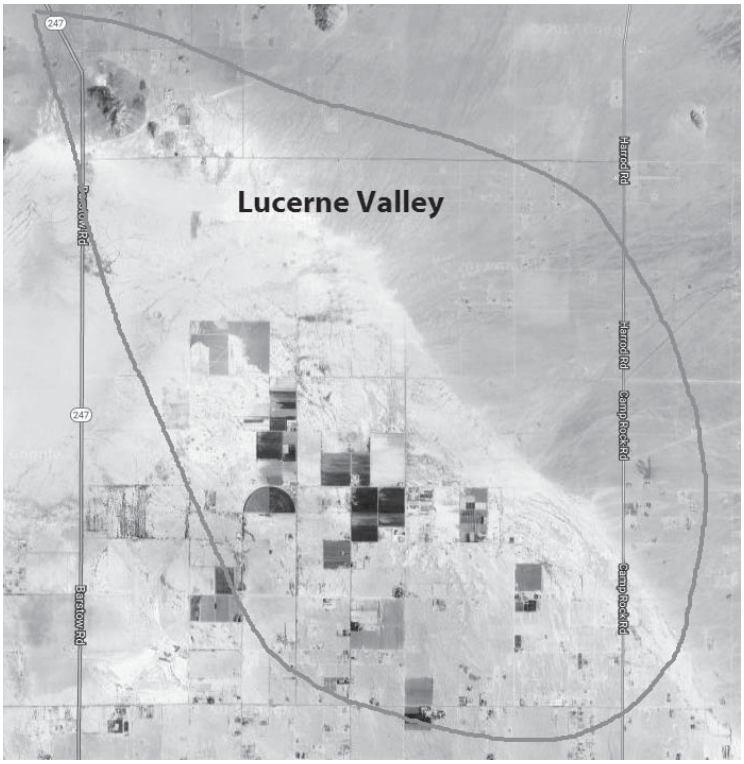


This is especially true for the site that NextEra has chosen for the Ord Mountain Project and could have a large impact on several thousand residents living downwind of the site.



Lucerne Valley Wind Rose

Source MDAQMD



DURING OPERATION

Not all solar farms are the same. We have learned an expensive lesson in Newberry Springs that certain mounting techniques create more of a problem than others. The original plan of 6- to 7-foot solar panels somehow changed to an installation of 27-feet-high by 47-feet-long solar panels. This was an oversight by County staff that proved to be a costly mistake to be avoided on future projects. Since 2013, large sand dunes plague the residents near the site. A similar situation could occur in Lucerne Valley if the larger panels are allowed to be installed at the Ord Mountain Solar site.

Jeremy Doles stands atop a sand drift on his mother's property in Newberry Springs. In the background is a solar power plant the family claims is responsible for large volumes of fine sand drifting onto the property. [Kay Lovato, Desert Dispatch]

According to the San Bernardino County Information Officer David Wert, "…the county will absolutely consider taking enforcement action to ensure that the project operator takes adequate measures to manage the impacts of moving sand caused by the installation of the project." And now because of ownership changes, it is difficult to know who is in charge of the site. It is obvious who stands to lose as the county grapples with the problems it allowed the company to create.

John D. Coffey said in reply to the news story, "This was, and remains, a worst case example of spot zoning, which has been ruled unconstitutional in federal courts. Residents should consult legal counsel to determine if a cause of action for inverse condemnation may lie. The County broke their homes and neighborhood and turned it into an industrial park. I think they should be made whole for their losses, which can never be physically remedied, even if/when the solar farm is removed."

The one in Newberry Springs is 3 MW on 22 acres. The one proposed in Lucerne Valley as Ord Mountain is 20 times larger and would cover 440 acres. This could be a disaster to Lucerne Valley if allowed to follow the Newberry Springs example. There should be no changes made to the type of construction once approved.

CONCLUSION

The USEPA (United States Environmental Protection Agency) has determined that PM10 (Particulate matter below 10 microns in size) poses a threat to humans because these particles can get deep into your lungs, and some may even get into your bloodstream.

Exposure to such particles can affect both your lungs and your heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- premature death in people with heart or lung disease
- nonfatal heart attacks
- irregular heartbeat
- aggravated asthma
- decreased lung function
- increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure.

This is a picture of an accident on Highway 247 about 4 miles south of the Ord Mountain proposed site where blowing sand and dust left about 30 people injured during a dust storm. The exposure to people in this scenario is far greater than 150 ug/m3 (Micrograms per cubic meter).

A recent WHO (World Health Organization) study shows, “There is good evidence of the effects of short-term exposure to PM10 on respiratory health, but for mortality, and especially as a consequence of long-term exposure, PM 2.5 is a stronger risk factor than the coarse part of PM10 (particles in the 2.5–10 µm range). All-cause daily mortality is estimated to increase by 0.2–0.6% per 10 µg/m3 of PM10.” This and numerous other studies show a definite correlation between PM10, heart disease, lung cancer, asthma and mortality.

The residents of Lucerne Valley are aware of this and actively support any and all means to reduce pollution. We have been in communication with the MDAQMD (Mojave Desert Air Quality Management District) on an ongoing problem with abandoned alfalfa farms that have increased PM10 in the valley. We are addressing this problem at our Municipal Advisory Council (MAC) meeting on July 20, 2017 with the MDAQMD in attendance. At this meeting, the residents of Lucerne Valley are also calling for PM10 control and monitoring on these industrial scale solar farms.

Until mitigation can be resolved, the residents of Lucerne Valley are asking for a halt to these encroaching large scale solar farms now totaling over 600 proposed Megawatts in Lucerne Valley. In caparison, the Ivanpah solar farm at state line near Primm, NV is only 392 MW. The residents are also asking that we follow a Community plan that takes into consideration the will of the people of Lucerne Valley, as well as the corresponding reduction in electrical energy usage by Californians. With the evolving technologies of LEDs, more efficient motors, and large and small scale battery storage and microgrids, Californians are continuing to do more with less.

It would be unfair to say that the residents of Lucerne Valley are NIMBYs; we have areas in Lucerne Valley that we agree could minimize the impact to our environment while providing solar energy to California. Unfortunately, these continue to be ignored by San Bernardino County as well as the solar farm developers. If we could all work together, we could agree to make this a win-win situation for all of us.

If you are not willing to stem the tide of these large solar farms, at least monitor the air pollution transport of PM10 by installing before, during and after construction (at the developer’s cost) a series of PM10 BAM (Beta Attenuation Monitors). This could be used to ensure that the residents of Lucerne Valley are not impacted by blowing dust, a subsequent reduction of their quality of life, and the reduction of their property values. There are several residents that have said they would be happy to have these monitors installed on their property to make sure that they and the rest of Lucerne Valley do not fall victim to poor planning, improper dust control, and increased risk of lung cancer, heart disease and mortality.

Thank you for your consideration,

Tony Malone (760) 577-8491

Tonymalone44@hotmail.com

(No Environmental Related Comments Provided) RS

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

SAN BERNARDINO COUNTY

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

Comments:

I DO NOT RESIDE NEAR THIS PROPOSED PROJECT. I'M AT THE WEST END OF LUCERNE VLY. I MOVED HERE IN 1999, AFTER MUCH RESEARCH, FROM A CONDO IN SOUTH ORANGE COUNTY. I HAVE COME TO OBSERVE THE COUNTY OF SAN BERDO IS THE ENEMY OF THIS COMMUNITY, AND YOU'RE ALWAYS ATTEMPTING TO START A WAR WITH HOME OWNERS & VOTERS HERE. IF YOU WANT ANOTHER WAR, YOU'VE GOT ANOTHER ONE. I LIKE SOLAR POWER, BUT NOT THE WAY YOU ALL KEEP PROPOSING IT IN AREAS OF RURAL RESIDENTS.

BRYAN MEDER, RETIRED O.C. POLICE OFFICER
Name (please print)

LUCERNE VALLEY DISASTER READINESS COUNCIL (LVDRC) A 501 C
Organization

PO BOX 1611 LUCERNE VLY, CA 92356-1611
Mailing Address

760-248-2915
Telephone No. (daytime)

BRYANM760@YAHOO.COM
E-mail address

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

WHY DID YOU LIST YOUR EMAIL ADDRESS ON SCREEN AS JOHNOQUENDO@SBCOUNTY.GOV (NOT THE SAME) ???

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

YES, WE HAVE 30 DAYS FOR COMMENTS.... 6/13/17 TO 6/30/17
LIAR!!!

To mail: fold, seal, and affix stamp

YOU ARE OUR ENEMY... WE ARE AT WAR WITH YOU!

Donoghue, Christine

From: Gunsablazin <dwm92307@yahoo.com>
Sent: Thursday, June 29, 2017 12:12 PM
To: Supervisor Gonzales; Supervisor Hagman; Supervisor Lovingood; Supervisor Ramos; Supervisor Rutherford; Oquendo, John
Cc: Linda Morrison
Subject: Letter opposing OMS

I am writing to ask for your help to oppose Next Era Corporations Ord Mountain Solar project.

The State of California mandates an ever-increasing renewable energy goal, artificially creating the "need" for projects like Ord Mountain Solar, and using our money to incentivize corporate investment in them. All the while those in the know such as former San Diego Gas and Electric engineer Jaleh Firooz have reported that a combination of improved energy efficiency, local solar production, storage, and other planning strategies would be more than sufficient to handle the power needs even as the population grows. Thus there really is no need for more utility-scale solar projects to be built on desert ecosystems.

Next Era claims that the site for the project is disturbed land. The area is indeed old agricultural ranch land. However this land has been vacant and allowed to recover for 30 to 40 years. The saltbush, scrub, and creosote have returned. Also the area holds rare LeConte's thrashers, burrowing owl, desert tortoise, and possibly some rare plant alliances that specialize in salt flats and playa edges. Mojave ground squirrels may be found on the site. It is suitable habitat, and populations have been found in the area.

The solar project proposal is right in the middle of a crucial Linkage corridor for wildlife between the Granite Mountains and Ord Mountains, which federal agencies want to conserve as a Bighorn Sheep movement area, not blocking valley crossings with development as sheep pass between mountain ranges. This Linkage connects to the San Bernardino Mountains and north into the excellent population of Bighorn in the Ord-Rodman area. This is part of DRECP 2 planning. So the solar project should wait until DRECP 2 planning has been completed for the area.

I know a lot of you folks don't see the negativity that a project like this brings to a rural community. Many of you don't live in or understand the nature of living in a rural community. We came out here to see the mountains, and the wide open spaces. We came out here because we don't want our neighbor 15 feet away from us. We love the wildlife and wish to co-exist with them.

Projects like this have heavily targeted Lucerne Valley for 10 years, and every project has a requirement for a substation in that same place. If the Edison Company doesn't get that sub-station west of Barstow Road their going to scream! In fact it seems like Edison is somehow involved in choosing the location of these projects.

Please oppose the Ord Mountain Solar project, and let's put an end to these poorly sited, unnecessary, industrial scale corporate projects.

Dennis Morrison

Lucerne Valley Resident

DATE: June 28, 2017

ATTN: County of San Bernardino, Land Use Services Department

John Oquendo, AICP, Senior Planner
Email: John.Oquendo@lus.sbcounty.gov
15900 Smoke Tree Street, Suite 131, Hesperia, CA 92345

RE: Ord Mountain Solar, LLC: P201600510

FROM: Jennifer Orsini, Johnson Valley

Dear Mr. Oquendo,

I am writing in response to the proposed Ord Mountain solar field and substation along Scenic Highway 247 in Lucerne Valley.

I'm concerned about this conversion of desert land into an industrial scale renewable energy project:

The timing of this project has disadvantaged the community, given that the Renewable Energy and Conservation Element (RECE) of the County's General Plan is to be considered by the Board of Supervisors and the current Element, April 2017 draft clearly states goals that are not being met by this project.

I believe that the scale, site and type of project would be discouraged under the guidelines included within the current wording of this Element. It is a disservice to the local community to have a project of this scope approved, when it probably would need revision if it were to be apply for approval after the RECE policies are made official.

The SB County Core Values, as included in the RECE, April 2017 revision list important community values such as:

-Quality of Life: A high quality of life for residents of the county that provides a broad range of choices to support the county's diverse people, geography, and economy to live, work, and play.

-Conservation of Natural and Cultural Resources: Stewardship that conserves and responsibly uses environmental, scenic, recreational, and cultural assets, ensures healthy habitats for sensitive plants and wildlife, enhances air quality and makes the county a great place for residents and visitors alike.

Overall, the main points and discussions that I feel this project creates issues with are the following:

-dust and air quality degradation

-conflict with well-defined desert wildlife linkages

-loss of habitat for endangered species

-loss of uninterrupted scenic vistas

-effects on the Community of rural residents

-establishment of this sub-station would open-the-door to many more industrial scale projects

Much has been made of these issues at community meetings.

Please add my voice to theirs as a negative vote against the Ord Mountain Solar project.

Thank you for taking the time to read this,

Jennifer Orsini

Johnson Valley

Donoghue, Christine

From: Millie Rader <milliemrader@gmail.com>
Sent: Tuesday, June 27, 2017 10:48 AM
To: Oquendo, John
Subject: Ord Mountain Solar project, Lucerne Valley
Attachments: NextEra.Scoping.Letter, signed by the Raders.doc; North Valley View.jpg

Mr. Oquendo,

Thank you so much for considering our comments on the Ord Mountain Solar project. I have attached a letter and a photo of my view of the area under consideration for this new solar project.

Mr, Oquendo I was born and raised in Lucerne Valley and have lived in what is known as the "Gem Tract," 3 miles south of the center of town, for 55 years. We have a magnificent view of the valley floor and of the Ord Mountains. We would prefer not to have that view marred by any solar or wind projects.

We have friends who live just 100 feet east of your proposed project. Not only will this devalue their property, it will ruin their westward view and create a dust plain just upwind from them. I am not sure if you have ever been to our lovely valley, but the wind comes up every day out the west and any disturbed land creates dust bowel conditions affecting visibility and the health of those inhaling the pm10 dust particles. Valley fever has been known to occur in these kinds of conditions.

I thank you for considering the impacts that this project will have on our residents.

You and I both know that there are many other locations along the power corridors where no humans inhabitants live within 50-100 miles. These are the perfect places for solar projects.

Thank you for your time.

Sincerely,
Millie Rader
32600 Spinel Road
Lucerne Valley, CA 92356

June __, 2017

By Email: John.Oquendo@lus.sbcounty.gov
Mr. John Oquendo, AICP
Senior Planner
San Bernardino County Land Use Services Dept.
15900 Smoke Tree Street Hesperia, California 92345

Re: Notice of Preparation of a Draft EIR and Scoping Meeting re the Ord Mountain Solar Project (#P2016005610/CUP) (the "Proposed Project")

Dear Mr. Oquendo:

We are a coalition made up of the following community groups, businesses, agencies and individuals: Lucerne Valley Economic Development Association (LVEDA), Johnson Valley Improvement Association, Homestead Valley Community Council, Oak Hills Property Owners Association, Newberry Springs Economic Development Association, Morongo Basin Conservation Association, Church of Our Lord and Savior (Lucerne Valley), Sierra Club Mojave Group, San Bernardino Valley Audubon Society, Lucerne Valley Market/Hardware, Alliance for Desert Preservation ("ADP"), Mojave Communities Conservation Collaborative, Friends of Juniper Flats, Brian Hammer, John Smith, Pat Flanagan, Ruth Rieman, Jenny Wilder, Neville Slade, George Stone, Gail Stone and Annie Lancaster. Together, we represent a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.

In response to the above-referenced Notice of Preparation, and pursuant to the California Environmental Quality Act, our coalition is submitting written comments on the scope and content of the Draft Environmental Impact Report ("DEIR") that the County, as lead agency, will cause to be prepared with respect to the Proposed Project. In providing these written comments, we have been guided by the Initial Study ("IS") prepared by Michael Baker International with respect to the Proposed Project, the purpose of which was, according to the aforesaid Notice of Preparation, to "refine the scope of the ElR, identify resource areas that will be eliminated from further analysis, and to solicit public input on the scope of the EIR." We reserve the right to make other and further comments regarding scoping in subsequent correspondence and at any other public scoping meetings concerning the Proposed Project.

1. **The DEIR Must Include a Complete and Comprehensive Assessment as to the Extent to which the Proposed Project Would Conflict with the Planning Goals and Policies Enunciated by San Bernardino County.**

According to California Code of Regulations Section 15125(d), an "EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans." More specifically, according to Item X(b) of Pa.. G to the CEQA Guidelines, EIR's must address the following question: "[does the proposed project] "conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?"

The IS concludes (at p. 70) that the Proposed Project would have a "less than significant" impact on any applicable land use plans, policies and regulations because "the current [San Bernardino County (the "County")] General Plan Land Use Element designation for the proposed solar and energy storage project area is Agriculture (AG), which allows development of electrical power generation with a CUP (Development Code Section 85.06)." The IS also states that the siting requirements of the County's 2013 solar ordinance (the "Solar Ordinance") would be considered ". . . during the review and CUP application process."

But the IS did not give any consideration to the land use policies and goals stated in:

(1) The County's February 17, 2016 Resolution of the County's Board of Supervisors (the "Resolution"), which designated five sites -- which are seriously degraded, away from Lucerne Valley and other population centers, and relatively close to existing transmission – as the only places that utility-scale can go, subject to the project's otherwise satisfying the County's criteria;

(2) the "County of San Bernardino Position Paper on the Draft Desert Renewable Energy Conservation Plan," dated February 3, 2015 (the "Position Paper"), in which the County stated that the communities of Lucerne Valley, Newberry Springs, Stoddard Valley, Johnson Valley and Apple Valley are not appropriate for DFAs, which are places in which the DRECP would allow utility-scale renewable energy projects to be established;

(3) the Renewable Energy and Conservation Element ("RECE") for the County's General Plan, which the County is now in the process of adopting; and

(4) the Lucerne Valley Community Plan, which is part of the County's General Plan in its current form. It expressly proscribes commercial development that would destroy the region's rural desert character.

In order to comply with Section 15125(d) of CEQA, the DEIR's conflict analysis will have to specifically address the inconsistency between each of the above-referenced preservation-oriented land use policies and goals and the Proposed Project. In order to pass muster under the CEQA – and in view of the fact that the proposed 60 MW, 484-acre utility-scale solar project (and pendant Calcite substation) would industrialize a large portion of Lucerne Valley – it is especially crucial that this analysis be forthright, in-depth and meaningful. Skirting the entire issue the way the IS did will not do the trick by any means.

A. <u>The Resolution</u>.

In the Resolution – which is entitled "Establishing the County's Position" -- the County's Board of Supervisors designated five sites -- which are seriously degraded, away from population centers, and relatively close to existing transmission – as the only places that utility-scale can go, subject to the projects otherwise satisfying the County's criteria. The Resolution was adopted by a unanimous vote.

The Proposed Project would not be located in or near any of the five designated sites.

In selecting those areas most amenable to utility-scale projects, the Board of Supervisors gave attention to such important factors as close access to transmission, no adjacent human communities and the prevalence of severely degraded biomes. The Supervisors quickly eliminated Lucerne Valley and the other North Slope communities because of high conflicts with these factors. The Supervisors were further guided by these two maps:

(1) a map included in Ms. Penrod's (SC Wildlands) "California Desert Connectivity Project" (Penrod et al. 2012) – which is lauded in the draft DRECP as providing "a comprehensive and detailed habitat connectivity analysis for the California deserts" (App. Q (Sections 3.4.1 and 3.4.2)) – depicting the "Desert Linkage Network," upon which is overlaid the Desert Tortoise TCA Habitat Linkages (as prepared for the DRECP by the USFWS -- one of the four state and federal agencies sponsoring the DRECP). These combined linkages reflect the interconnections between individuals of a species and among species, with a focus on how they subsist, migrate and procreate over time as part of a desert knit together by connectivity corridors as a living, breathing biome[1]; and

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[1] Ms. Penrod prepared a report for ADP – which embodied her comments on the draft DRECP – that expanded this linkage network. Among other things, her report demonstrates that almost all of Lucerne Valley should be protected from large-scale development as part of a far-reaching wildlife linkage network integral to connecting the intact landscape block of the San Bernardino Mountains with the desert region to the north.

(2) DRECP Databasin maps showing: (a) the DRECP's DFAs, Variance Lands and Unallocated Lands overlaid on the Desert Tortoise TCA Habitat Linkages; (b) the ACECs (Areas of Critical Ecological Concern) and NLCS (National Landscape Conservation System) areas under the DRECP where utility-scale would be prohibited; (c) Overdraft Groundwater Basins in the County; (d) Conservation Values; (e) Special Recreation Management Areas/Extensive Recreation Management Areas; and (f) existing transmission.

Those maps – and the fact that Lucerne Valley, Apple Valley, Johnson Valley and Morongo Valley, among others, host well-established towns and dispersed desert rural communities[2] that would be negatively impacted by industrial-scale renewables (among many other considerations, utility-scale facilities like the Project draw from already overdrafted groundwater basins) – compelled the conclusion, through a simple process of elimination, that the County's north and eastern slope valley areas must be kept off-limits to such large-scale development; they also confirm that there are highly degraded, transmission-adjacent, former and current industrial, mine and brownfield sites further north -- near Trona, Hinckley, North of Kramer Junction, El Mirage and Amboy -- where such development could be permitted, i.e., the five sites designated in the Resolution.[3]

The County's above-referenced valley areas, including Lucerne Valley, have a very unique and precious, yet extremely fragile, attribute that provides a high quality of life for their residents (and that make them such appealing places to visit and, hence, such a boon to the tourist industry): they host well-established, dispersed desert rural population clusters that thrive amid functioning desert sub-ecosystems, which, in turn, are part of the largest intact biome in the western states, i.e., the Mojave Desert. If this harmonious convergence of human and natural communities were to be allowed to disappear, it would be gone forever. So the County stepped in to protect this irreplaceable community resource through the Resolution, as well as by way of its Position Paper and RECE (as will be discussed below).

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[2] An appreciable portion of Lucerne Valley remains zoned for "agriculture," but it is now used primarily for rural residential purposes. "Rural Living" zones make up about 50% of the area, while "Resource Conservation" districts make up about 21% of the area (these figures come from the Lucerne Valley Community Plan).

[3] The five sites also have the virtue of being located: (1) over ample groundwater supplies (moreover, the groundwater underlying the Trona, Hinckley and Amboy sites is non-potable, and can only be put to industrial uses); (2) outside of any military flight corridors; (3) on land that has a flat enough gradient to host utility-scale solar development; and (4) away from communities affected by utility-scale development.

The DEIR will need to address in depth the obvious and unavoidable conflicts between the Proposed Project and the County's planning preferences and priorities, as expressed in the Resolution.

B. <u>The Position Paper</u>.

The Resolution was not the first time that the County has articulated its foremost values and priorities in terms of siting large-scale renewable projects. In the "County of San Bernardino Position Paper on the Draft Desert Renewable Energy Conservation Plan," dated February 3, 2015, the County stated that the communities of Lucerne Valley, Newberry Springs, Stoddard Valley, Johnson Valley and Apple Valley were not appropriate for Development Focus Areas ("DFAs"), which are places in which the DRECP would allow utility-scale renewable energy projects to be established.

In issuing its Position Paper, the County was clearly seeking to protect the human and natural communities of its east and north slope valley regions by putting them off limits to industrial-scale development, which directly conflicts with the desire of the project proponent desire to develop an enormous 480-acre utility-scale facility in the heart of Lucerne Valley. In order to comply with CEQA, the DEIR will have to analyze this conflict.

C. <u>The RECE</u>.

The IS readily concedes that the Proposed Project conflicts with the RECE, but contends that, because the application for the Proposed Project was submitted to the County's Land Use Planning Department prior to formal enactment of the RECE – the RECE, which has been approved by the County's Planning Dept., will go before its Board of Supervisors for formal approval on August 8, 2017 – the Proposed Project has been "grandfathered" in such that the RECE holds no sway over it. This is incorrect. The project proponent did not, merely by filing an application, exempt itself from the RECE -- by the time the DEIR comes out, there will very likely be an RECE in place that confines utility-scale projects to five specific areas in the County, none of which are in, or near, Lucerne Valley (this point will be further discussed below).

But, even if the Proposed Project could be considered to be "grandfathered" in, the DEIR would still have to address the conflict between the Proposed Project and the policies and goals – the "core values -- reflected in the pending RECE, especially given that they embody a hard-won, all but set-in-concrete consensus between the County's populace and its governing bodies, one that was forged over many arduous years of public meetings – in the Countywide SPARC, REVEAL and Community Plan processes -- regarding how the County's planning vision should

be cast.[4] This is confirmed in the discussion appended to subsection (d) of CEQA Regs. 15125, which states, in relevant part – while referring to regional plans developed "as a way of dealing with large-scale environmental problems" -- that "[w]here individual projects would run counter ***to the efforts identified as desirable or approved by agencies in the regional plans***, the Lead Agency should address the inconsistency between the project plans and the regional plans." (Emphasis added.)

The policies and goals embodied in the RECE are discussed below.

The RECE, which prominently mentions the Resolution as its guiding principle when it comes to locating utility-scale projects, clearly evinces an intention by the County to foster community-oriented solar and to all but ban further utility-scale solar projects. In so doing, the RECE cites the many virtues of community-oriented solar: it promotes energy independence, reduction of the need for new transmission, the sustaining of sensitive natural resources and habitats and local economic growth. In that regard, the RECE promotes as a primary "core value" the need to maintain a "high quality of life for residents of the County," as well as the need to bar renewable energy projects that "substantially conflict with surrounding land uses, especially existing communities or residential areas where residents object to the visual character of RE projects."

Reflecting the County's strong bent against utility-scale generation, the RECE sets out strict siting criteria for such facilities; in fact, they are so strict --- when it comes to areas like Lucerne Valley – that they *de facto* banish utility-scale projects from them. RE Policy 5.2 of the RECE, as well as Policy 5.4, strongly encourage utility-scale generation on the five areas identified in the Resolution. Policy 5.4 make it clear that utility-scale development elsewhere will be required to meet a higher standard of evaluation for appropriate site selection, and that a "two-step application process" will be required in order to evaluate site selection early in the process. If the Proposed Project application were run through that two-stage process, it would be never pass the first stage in view of the RECE's stringent site selection criteria.

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[4] To show just how far we have come in reaching this consensus, one need only look at the County's February 24, 2015 Renewable Energy and Conservation Element Framework: Purpose, Values and Standards," which commenced with the ominous assertion that the State's renewable (RPS) energy mandates have "major implications for [the County] and its people." The Framework's basic thrust was that, in order to comply with those mandates, vast areas of the County would -- subject to some ameliorating siting standards -- have to be opened to utility-scale development. By way of contrast, the RECE calls for confining them to five specified fairly remote areas (again, this point will be discussed below).

The lands surrounding the Proposed Project site host a well-established desert rural community, as well as scientifically-recognized wildlife corridors that are also acknowledged by our federal and state governments. Among other thing, the area is considered core golden eagle habitat for the western Mojave desert. It is a natural desert setting inhabited by, among other things, the climax vegetation for the area -- mostly salt bush (atriplex canescens) -- which provides habitat and foraging zones for a host of threatened species (as will be more fully discussed below in Section 2).

The siting of the approximately 500-acre Proposed Project, and Calcite substation, would compromise the County's above-referenced "core values." If utility-scale renewable energy projects are allowed to invade a rich and living desert biome like the one at hand[5], a welter of renewable energy projects could be ushered in that end up being inimical to the letter and spirit of the goals and policies stated in the RECE. And piecemeal, inconsistent renewable energy development could ultimately defeat the central purpose behind formulating the RECE, which is to create and implement a comprehensive planning vision for renewable energy development that serves the needs of all businesses and residents of this County.

The DEIR must include an assessment of the degree to which the Proposed Project (and Calcite substation) would conflict with the policies and goals stated in the RECE. This consistency analysis will obviously have to go much farther than the one found in the IS. Fundamental to a meaningful conflict analysis will be the following over-arching principle in the County's land use regime: in view of the harm that industrial operations (like the Proposed Project and Calcite substation) visit on the visual integrity, economy, social ecology and environmental health of rural residents, they do not make good neighbors.

D. The Lucerne Valley Community Plan.

The IS makes no reference to the Lucerne Valley Community Plan (the "Community Plan"), even though it is part of the current version of the County's General Plan.[6] According to

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[5] Policy 5.2 also contains a catch-all category for "other sites proven by a detailed suitability analysis to reflect the significantly disturbed nature or conditions" of the specific land types enumerated in Policy 5.2, i.e., waste disposal sites, mining sites, airports, etc. But, as indicated above, the lands comprising the Proposed Project site do not begin to resemble heavily degraded lands of the type listed, so the DEIR would have to explain why the Proposed Project would qualify under the catch-all category (or acknowledge that it would not).

[6] According to the Lucerne Valley Community Plan, it is "an integral part of the overall General Plan," and it is "to provide goals and policies that address the unique land use issues of the Community Plan area that are not included in the Countywide General Plan."

the Community Plan, it is "an integral part of the overall General Plan," and it is "to provide goals and policies that address the unique land use issues of the Community Plan area that are not included in the Countywide General Plan."

The Community Plan identifies: (1) as "Unique Characteristics" (LV1.3.1) that "Lucerne Valley offers a rural lifestyle, characterized by the predominance of large lots, limited commercial development and the prevalence of agricultural and animal raising uses in the area. The desert landscape and natural resources further define the rural character of the community;" and (2) as a chief concern (LV1.3.2) of residents that growth pressures will "threaten the features of their rural community," including its "natural beauty [which is] characterized by an abundance of open space and scenic vistas . . ."

Further, as one of its primary "Community Priorities," the Community Plan specifies (LV1.3.3) the need to "[r]etain the rural character of the community by maintaining low density residential development and ***commercial development that serves the needs of local residents***" (emphasis added); as well as the need to maintain (LV/LU 1.1) "***strict adherence*** to the Land Use Policy Map unless proposed changes are ***clearly demonstrated*** to be consistent with the community character" (emphasis added).

The DEIR must analyze the conflict that the Proposed Project and substation would have with the Community Plan. Such an assessment is particularly important given that the two projects would represent an abrupt and pronounced departure from the rural desert character of the surrounding area and would incrementally advance the industrialization of the desert, all of which would encourage further consumption of irreplaceable, community-defining natural open space and scarce resources like water.[7]

2. The DEIR Must Not Ignore, as the IS Has Done, the Science Demonstrating that the Proposed Project Would be Located in Recognized Wildlife Corridors and Where Protected and Special Status and Covered Species Are Present.

The IS concedes, as it must (at p. 46), that the Proposed Project would have potentially significant impacts on biological resources. Among other things, the "potentially significant impact" box is checked on the IS next to question: "[w]ould the project [i]nterfere

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[7] The IS reflects that the Proposed Project would require enormous volumes of water for its construction, maintenance and operations, and that it is anticipated that the water may have to be trucked to the site, which raises a real issue as to whether essential services would be available to support the Proposed Project. Water issues will be discussed further *infra.*

substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?"

But nowhere in the IS is there any mention of the fact that the Proposed Project and substation would most certainly interrupt established wildlife habitat connectivity linkages recognized by the DRECP and SC Wildlands, including critical north – south linkages between the San Bernardino Mountains and the Ord Mountains. The IS discounts this by heavily relying on the discredited notion that, since the location once served agricultural needs, it is now a "disturbed" site and thus plays no part in keeping biomes whole and healthy. In that regard, the IS states (on p. 47) that:

> "Historical agricultural practices have removed the natural vegetation communities, limiting the quality and availability of habitat for wildlife. The land use (transportation, residential, and agricultural) of areas adjacent to the project site also limit the value to wildlife of the habitat in the vicinity."

The IS goes on to grudgingly agree, nevertheless (on p. 47), that "this topic will be analyzed further in the EIR." But the method that the IS proposes for addressing it -- "biological observations would be conducted to determine if the project site and adjacent off-site areas act as significant linkage areas" (p. 47) – would be of such limited scope and effectiveness that it would almost certainly fail to identify something as nuanced as regional wildlife connectivity patterns. And myopic biological observations – which would amount at most to a "snap-shot in time" species census of the proposed project site only (and maybe some adjacent lands) – would be entirely superfluous given that there already are published *long-term, regional scientific* studies that have already been undertaken by nationally-recognized authorities on biological connectivity in the Southern California deserts. In point of fact, the on-site wildlife census proposed by the IS would not have even a fraction of the value of the published connectivity studies, which will be discussed in the following paragraphs.

As mentioned above, the Proposed Project would be located directly between – and very close to -- the Granite Mountain and Ord Mountain ACECs (which are "Areas of Critical Environmental Concern," as designated by the DRECP in the BLM LUPA), where it would, in conjunction with a Calcite substation, all but occlude the mouth of a fairly narrow valley separating those two mountain ranges.

As such, the Proposed Project and substation would be located within scientifically-recognized -- and federally and state-sanctioned -- wildlife corridors and linkages, and in close proximity to extremely sensitive habitat where state and federally listed Special Status Species and covered species are present and/or very close by, such as bighorn sheep, desert tortoises, golden eagles and Bendire's Thrasher. The area is considered core habitat for golden eagles.

These facts are confirmed by the following nationally-recognized scientific studies and maps:

1. Ms. Penrod's above-referenced (SC Wildlands) "California Desert Connectivity Project" (Penrod et al. 2012), which depicts the "Desert Linkage Network;"

2. Ms. Penrod's report for ADP, which embodied her comments on the draft DRECP, expanded the linkage network depicted in the above-referenced publication, and demonstrates that almost all of Lucerne Valley should be protected from large-scale development as part of a far-reaching wildlife linkage network integral to connecting the intact landscape block of the San Bernardino Mountains with the desert region to the north;

3. "Desert Bighorn Sheep Intermountain; Unfiltered Core Habitat, DRECP" map, prepared by the California Dept. of Fish and Wildlife,[8] which are considered to have a "Very High" to "Moderately High" habitat on the Granite Mountain and Ord Mountain ACECs, which are adjacent to the proposed Project site (the "Very High" habitat is located within three miles of the site)[9];

4. "Golden Eagle Nest Occurrences, DRECP map" (prepared by the California Dept. of Fish and Wildlife) and "DRECP Species Distribution Map for Golden Eagles, DRECP map," prepared by Conservation Biology Institute (CBI), which confirm that there are ten nests within five miles of the Project site, four or five within three miles of it, and 55 nests within ten miles of it;[10]

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[8] This map, and the others referred to below in this section, are datasets on the DRECP Data Basin, and can be accessed through that DRECP.databasin.org.

[9] The IS makes some extremely under-informed statements, such as that the "site is devoid of … sensitive natural community identified by CDFW or USFWS. " In fact, the CDFW has stated that the two ACEC's adjacent to the Proposed Project site constitute "Very High" to "Moderately High" habitat for desert bighorn sheep.

[10] Golden eagles (a*quila chrysaetos*) need ample foraging areas around their nests, and the Project, along with a Calcite substation, would markedly reduce such areas and threaten their survival. According to the Conservation Biology Institute and the California Natural Diversity Database (CNDDB) – which is a product of the California Department of Fish and Wildlife's Biogeographic Data Branch (BDB) – a foraging area with a ten-mile radius (from a given nest) is required. (The CNDDB is a computerized library of the status and locations of California's rare species and natural community types, and includes in its data all federally and state listed plant

5. "Wildlife Allocation (WA) and Areas of Critical Concern (ACEC) Designations, DRECP and Final EIS, LUPA, Final map, prepared by the California Energy Commission, the BLM, the California Dept. of Fish and Wildlife and U.S. Fish and Wildlife Service;" and

6. "Desert Tortoise TCA Habitat Linkages, DRECP" map, prepared by the U.S. Fish and Wildlife Service. Also the USFW has done an extensive study of desert tortoise linkages in the Ord-Rodman area, and identified the valley area as vitally important to maintain intact linkages.

Bighorn sheep, golden eagles, desert tortoises and Bendire's Thrasher are not the only species that would be impinged upon by the Proposed Project and Calcite substation. According to the DRECP Data Basin, the following species have a very suitable habitat there or are known to have a presence: (1) Le Conte's Thrasher; (2) Kit fox; and (3) American Badger. Each of these special status species is present within three miles of the Proposed Project site. The Project Site is in a moderately high-value "species stack" for eight to ten special-status species according to a DRECP Data Basin Map entitled "Covered Species Stack."

The referenced data and maps, and particularly Ms. Penrod's reports, make it clear that the desert region surrounding the Project site is an intact, living and breathing biome that emphatically deserves the County's protection, and that there will be dire environmental consequences if wildlife is kept from using natural features -- like the valley between the Granite Mountains and the Ord Mountains -- for passage, forage and living habitat.

But, with the Proposed Project located on the east side of Hwy. 247, and a Calcite substation situated just west of the highway, critical wildlife corridors running through the fairly narrow valley between the Granite Mountains and the Ord Mountains (and the ACECs that they host) would be substantially occluded, as would inter-mountain wildlife movement between the Granite Mountain and Ord Mountain ACECs. Hence the development of large utility-scale projects and transmission there will potentially eliminate and render non-functional the wildlife linkage for northern Lucerne Valley, as well as the critical linkage between the Granite

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and animal species that are species of special concern or considered "sensitive" by government agencies and the conservation community, as well as candidates for such status.)

The referenced DRECP map was created by merging the DRAFT__BRC__EagleNest__Data and Golden Eagle__DFG layers provided by the BLM. This data reflects nest locations recorded by various state agencies and their contractors during, among other time periods, 2008, 2010 and 2012.

Mountains and the San Bernardino Mountains. It is an unfortunate truism that, if you break one link in the connectivity chain, the whole chain falls apart.

The Proposed Project site is also a particularly bad place to construct a utility-scale facility and substation because, as will be discussed below in Section 4, they would be located in an area where there is a confluence of high wind erosion potential and erosive soils. Disturbance of topsoil on the 500-acre site, and destruction of vegetation that would otherwise anchor it, would produce a great deal of dust – dust that would essentially eliminate a large foraging area for a number of special status species (including birds and bats) in the surrounding area outside of the Proposed Project footprint, according to Garry George of Audubon California.

As discussed below in Section 4, blowing dust has, unfortunately, been a frequent by-product of utility-scale projects in the County.

Glare coming off vast arrays of solar panels would also affect bird and bat species in the area, as would noise emitted by the Project during construction, maintenance and operation. As noted above, the area is extremely quiet (readings of 22 decibels are not unheard of), and that quiet would most certainly be shattered by the construction, maintenance and operation of an industrial-scale Project.[11]

To summarize, in light of the confluence of factors cited above, the desert habitat surrounding the Proposed Project site is just about the last place a large industrial generation facility should be constructed and operated in the County's deserts. This, and the fact that the Calcite substation would invite a parade of additional nearby utility-scale and transmission projects, create a number of extremely troubling consequences in terms of "Biological Resources." If the dismissive attitude toward these issues displayed in the IS is carried over into the DEIR, then it is going to be seriously flawed.

In order to comply with CEQA, the DEIR must analyze each of the highly significant impacts mentioned above and carefully consider all alternatives.

3. The DEIR Must Address the Manner in Which the Proposed Project and Substation Would Conflict with the MSHCP and NCCP Being Jointly Developed by the County and the Town of Apple Valley.

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[11] That dust, glare and noise, and the visual blight created by the Proposed Project, would also damage the human communities in and around the Proposed Project area.

In response to the question – "[w]ould the Project conflict with any applicable habitat conservation plan or natural community conservation plan?" -- the IS states (at p. 72): "No Impact." This sentiment is echoed on p. 48 of the IS.

But this assertion is incorrect. In reality, the proposed Calcite substation – the establishment of which is a prerequisite for the Proposed Project -- would be located in a Multiple Habitat Conservation Plan ("MSHCP") and Natural Community Conservation Plan ("NCCP") being jointly developed by the County and the Town of Apple Valley (the "Town").[12] Hence the substation would conflict with the MSHCP and NCCP.

Moreover, the MSHCP and NCCP, and their design overlays -- the overlays are based on science developed at the landscape level, as well as from local, boots-on-the-ground surveys -- were designed to link up with and complement adjacent, vital wildlife corridors and habitats (for, among other animals, bighorn sheep, the golden eagle and desert tortoise) which run through the Proposed Project site. The Proposed Project would, by completely occluding these linkages and habitats, impinge on, and conflict with, the habitat design embodied in the MSHCP and NCCP.

There will in fact be very real conflicts with the MSHCP and NCCP, and the DEIR must address them thoroughly.

4. The DEIR Must Independently Assess the Contention that the Proposed Project Can Be Built Without Substantially Disturbing On-Site Vegetation and, in Determining the Amount of Fugitive Dust It Would Emit, the DEIR Must Require On-Site Monitoring.

The IS acknowledges (at p. 52) – in response to the question: "[w]ould the project [r]esult in substantial soil erosion or the loss of topsoil?" – that it would have a "potentially significant effect." But the IS soft-peddles this in the discussion (on p. 52) that follows:

> "[n]o substantial vegetation removal would occur for the installation of the proposed project. It is expected that vegetation would be cleared for the footprints of the individual tracker units, but those would be situated above the ground at a maximum height of approximately 6 feet. This allows the retention of some of the vegetation on site, which would reduce wind speeds near ground level and result in less erosion."

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[12] The Town has been proactive in publishing its plans and the underlying data, including the submittal to the DRECP of detailed scoping, protest and comment letters going back to 2011. Moreover, the Town, as the lead agency, has been developing and ground-truthing this plan for at least six years, and, at this point it is a highly evolved, very detailed plan.

The DEIR must thoroughly and independently examine the highly dubious proposition that a quarter of a million solar panels (and a substation) could be constructed with such exquisite care that the only vegetation cleared, or grading needed, would be for the tracker poles' foundations. Construction work on the massive scale proposed – by 150 workers per day (IS, p. 12) for the Proposed Project and 90 workers per day on for the substation (p. 26) -- using heavy equipment across some 500 acres – would inevitably destroy much more vegetation than that, vegetation which is located on desert lands that are notorious for being easily scarred and slow to heal. Regardless of the developer's stated intentions, the Proposed Project site would wind up denuded and subject to serious erosion from pervasive desert winds.

Even if, as the IS contends, some native vegetation could be spared from the bulldozer, it would have to be cut back and otherwise disturbed to such a degree that its long-term survival would be highly questionable. This is so, in part, because much of that vegetation – which includes salt bush (atriplex canescens, a climax plant species for the area) – has a height significantly greater than the minimum eighteen-inches needed for solar panel clearance. The IS itself acknowledges (at p. 14) that "[d]uring construction of the solar and energy storage facility, ***it is expected that <u>most</u> of the vegetation would be cut, trimmed, or flattened as necessary***, but otherwise undisturbed so that reestablishment is possible." (Emphasis added.) While revealing, the quoted sentence contains obvious double-speak. How could vegetation that has been systematically slashed and trampled come out undisturbed? The notion that this highly vulnerable vegetation would readily bounce back from sustained abuse of this sort is nothing more than a pipe dream, as is the implication in the IS that root networks will survive regardless of what happens to plant life above-ground.

And, even if some on-site vegetation manages to dodge the bulldozer, *and* to survive being "cut, trimmed or flattened" to accommodate panel installation, all surviving species of flora would have to be carefully pruned back – and kept alive -- over the multi-decade span of the project's operational life. It is highly unlikely that the developer (or its successors) would be willing or able – financially or technically – to bring off such a daunting balancing act, or that any appreciable amount of the vegetation would survive this gauntlet.

Solar panel installation would not be the only reason that grading and scraping would be needed on the project site. It would also be required in order to build the honeycomb of roads needed for construction, maintenance and cleaning of vast complexes of solar panels and trackers, for installation of a perimeter security fence and for extensive trenching. The IS's listing of the heavy equipment (on p. 11) needed to construct the project – graders, along with a bulldozer, scraper, 10-ton roller, sheep's-foot roller, tractor (with mower attachment), excavators (for trenching), as well as (see the IS, p. 13) motor graders and compaction equipment – makes it clear that there would be a great deal of soil disturbance involved, as does its statement (on pp. 13-14) that: (1) "[v]egetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed . . ."; and (2) earthwork would also "occur to install aggregate base access roads and transmission line maintenance roads."

The IS obliquely acknowledges that it is painting a rosy picture in suggesting that native plant communities would flourish under the Proposed Project. Tipping its hand ever so slightly, the IS concedes (on p. 52) that its proposed construction methods would allow only for "the retention of ***some*** of the vegetation on site . . ." (emphasis added), that, "[w]hile minimized, ***grading activities will occur throughout the project site*** [emphasis added]" and that "[g]round disturbance and foundation placement would be required for each transmission line pole, including vegetation removal in the immediate area." But, in its next breath, the IS contends (at p. 52) that "[t]he ground disturbance for both projects in combination would be minimal in relation to the surrounding desert area," i.e., there's so much untouched and expendable desert out there that the Proposed Project and substation would represent a drop in the proverbial bucket, so why concern ourselves with one more project? Such empty and transparent rationalizations are no substitute for the rigorous analysis required by an EIR.

The Proposed Project and substation would be sited in an area of high wind erosion potential, according to the "Soil sensitivity factors for the DRECP" map and the "Confidence levels for sensitive soil factor maps for the DRECP." Because the contemplated land disturbance would eliminate vegetation that would otherwise anchor the soil, it would lead to the release of large and unhealthy volumes of dust into the local environment and surrounding communities. In order to make a valid assessment in that regard, the DEIR must determine exactly how much vegetation would be removed (and retained), and exactly how much grading would be required. The DEIR must treat projections from the developer along those lines as advisory at best, and make its own independent assessment. Other utility-scale solar projects in the region have proven to be particularly bad neighbors, and have failed to live up to their developers' promises.[13]

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[13] The Soltec PV project in Newberry Springs has received a lot of negative attention. The developer reportedly promised that it would not scrape vast tracks of land, that the project would have minimal impact on vegetation and wildlife, and that mitigation measures (such as soils stabilization) would be implemented. None of this came to pass, and it has also become apparent that an unduly low estimate was presented, during the application phase, of the amount of water the project would consume.

The Agincourt and Lone Valley Solar projects in Lucerne Valley (on Camp Rock Rd.) – now known as "Lone Valley Solar" -- have been spewing dust, despite applying much more water than the developers projected.

Joshua Tree has not fared any better with three nearby utility-scale solar projects: Cascade Solar, SEPV8 Solar (Lear Avenue) and Indian Trail Solar. Once vegetation was removed to construct them, soils became unstable and dust and sand began blowing. Dust storms are now a regular feature during high wind events. Prescribed mitigation measures -- like watering exposed soil and ceasing construction if the winds exceeded a certain level -- have proven completely ineffectual, if implemented at all.

Armed with such information, the DEIR will have a basic predicate for making an informed assessment concerning fugitive dust. But, in order to do so, the DEIR will also need a valid baseline for dust emissions for North Lucerne Valley. Unfortunately, the Mojave Desert Air Quality Management District (the "District"), which covers 20,000 square miles of desert terrain in the County and in Riverside County, cannot provide such a baseline, because the District does not have any air quality monitoring stations there (the monitoring stations are located in Trona, Lancaster, Victorville, Phelan, Lucerne Valley (in the San Bernardino Mountains, near the Mitsubishi cement plant), and Twentynine Palms). In accord with a directive from the District, County planners would nevertheless – unless the DEIR acquires more data (as is suggested below) – use the Victorville station's dust emission readings and meteorological data, in order to estimate the Proposed Project's dust emissions, even though the conditions at the Victorville station differ night and day from those present in North Lucerne Valley in terms of soils and wind speeds and directions.[14]

Because emissions readings from the Victorville station do not provide a valid long-term PM10 baseline for the North Lucerne Valley, the DEIR must commission its own air quality/dust monitoring at (and adjacent to) the Proposed Project site, and readings must be taken during a

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Antelope Valley Solar Ranch, located in Lancaster, near Route 138, was built by First Solar, which seems to be the contractor of choice for many solar photovoltaic projects. The AVAQMD cited First Solar for violations of air quality standards on at least two separate occasions. The AVAQMD was quoted as saying that there was "a myriad of things [First Solar] could have done that we didn't think they were doing to prevent the violations."

These examples demonstrate that approving a utility-scale project based on even the most stringent-appearing criteria – such as a developer's pledge to use "best available practices" to achieve "mitigation" after the project is built – simply does not work. This underscores just how important it is that the DEIR undertake a truly independent analysis on the subject.

[14] The Victorville station, which is located on asphalt and is 300 feet from a road that has an average annual daily traffic count of 1,000 vehicles, monitors a 0.3 to 3.5 square mile area with a relatively uniform land use. Hence it is no surprise that the station's monitoring records show zero (0.0) days above the 24-hour federal and state PM10 standards.

The technical information in this letter regarding the District's monitoring program is drawn from a meticulously researched March 22, 2017 article in the Desert Report (which is a publication of the Sierra Club), entitled "The Perfect (Dust) Storm – Fugitive Dust and the Morongo Basin Community of Desert Heights." Its author, naturalist Pat Flanagan, is a board member of the Morongo Basin Conservation Association.

representative array of wind speeds/directions and meteorological conditions. Otherwise, the DEIR's findings on dust emissions would amount to little more than poorly-educated guesswork.

The DEIR's analysis must also include in its analysis the extent to which Valley Fever spores are present in the soils comprising the project site, spores that could become wind-blown due to construction and operational activities.

Finally, the DEIR cannot concern itself only with the degree to which the projects in question would kill plants living above the desert surface. The proposed construction and operation activities would, merely by disturbing desert soils, destroy below-the-surface communities of tiny plants and organisms in the delicate, living biocrust on the site. Biocrusts are "critical to healthy drylands around the world."[15] Not only do they add nitrogen and carbon to nutrient-poor soil, they host cyanobacteria that produce "sticky slime and the root-like filaments of the mosses [that] help bind soil to earth," such that "'[t]he wind can whip through this ecosystem, almost knock you down, and this crust is going to stay 100 percent solid." But, despite their "resilience to wind, biocrusts crack under pressure . . . [t]hen, when the wind blows, those areas kick up sand." Even without considering the effects of climate change, it takes five years or so for cyanobacteria to recolonize an area, and "another 20 years for a community of lichens and moss to establish." Clearly, the desert's ability to retain its soils is predicated on the health of its living and easily scarred biocrusts.

In conclusion, the DEIR must conduct an analysis of windblown dust and soil erosion that incorporates and investigates each of the points stated above.

5. The DEIR Must Thoroughly Consider the "Indirect and Secondary Effects," "Growth-Inducing Impacts" and Overall "Cumulative Effects" of the Proposed Project.

Under Section 15358(a)(2) of the CEQA Guidelines, indirect or secondary effects "may include growth-inducing effects and other effects related to induced changes in the pattern of land use… and related effects on air and water and other natural systems, including ecosystems."

The CEQA Guidelines further note that indirect or secondary effects include "an indirect physical change in the environment...which is not immediately related to the project, but which is caused indirectly by the project." (Section 15064 (d)(2)).

Further, CEQA requires that the DEIR give full consideration to "growth-inducing impacts". Specifically, CEQA Guidelines, Section 15126.2(d), says that environmental

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[15] This quote, and the others in this paragraph, come from an article in Discover magazine (July/August edition), entitled "The Desert's Living Skin."

documents must "…discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment…" Included in this analysis must be this question: Does the Proposed Project and substation encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

Still further, CEQA mandates a consideration of "cumulative effects" of the Proposed Project. Section 15355(b) of the CEQA Guidelines says that "the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects."

Section 15131(a) states that an "EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated social changes resulting from the project to physical changes caused in turn by the economic or social changes." As stated in Section 15131(b), "[e]conomic or social effects of a proposed project may be used to determine the significance of physical changes caused by the project."

A. **The Proposed Project Will Be Used to Validate the Proposed Calcite Substation, Which Could, in Turn, Be Cited as Justifying the Revival of the Coolwater-Lugo Transmission Project.**

Proponents of the Proposed Project cite the prospect of a Calcite substation being built as justification for putting a utility-scale project in an ecologically fragile portion of North Lucerne Valley. They tout its close proximity to the Pisgah-Lugo transmission line, while noting that, if Calcite were to be approved, the Proposed Project would be only one gen-tie away from it. Southern California Edison ("Edison"), in turn, cites the Proposed Project as justification for establishing a Calcite substation. Edison then touts Calcite as the linchpin for many additional generating projects in the area.

Nevertheless, the IS reads as though the impact of a Calcite substation would extend no further than its 13-acre footprint, but that is hardly the case.

Edison's website makes no bones at all about why it thinks a new Calcite substation should be established in Lucerne Valley: "[t]he project will connect [i.e., encourage the proliferation of] new renewable generation projects in the San Bernardino County High Desert to the transmission grid."

The prospect of a new Calcite substation has in fact triggered an influx of proposals for utility-scale facilities in its vicinity: (1) the Proposed Project -- the official County notice for the Proposed Project confirms that it "coincides with California Public Utilities Commission

proposal for the construction of the Calcite Substation . . .”; and (2) there are four more utility-scale projects queuing up to interconnect with a Calcite substation. [16]

The referenced proposals are, in turn, cited by Edison as justifying construction of the new substation. As stated by Edison representative, Jennifer Cusack (at the above-mentioned December 6, 2016 public meeting in Lucerne Valley), “we [Edison] have to interconnect new projects.”

With a bevy of new utility-scale projects in the pipeline all clustered around a Calcite substation – a substation that would provide a critical infrastructure link for new transmission lines -- Edison may well attempt a revival of the highly controversial, intensely opposed Coolwater-Lugo Transmission Project, which proffered – as one of its chief justifications – the dubious proposition that new transmission would be needed to interconnect posited renewable energy projects to the north and east of the Granite Mountains.

In short, approval of the Proposed Project would have an enormous “growth-inducing impact.” The County is lead agency, and its job is to thoroughly analyze the impact of Coolwater-Lugo, and to discuss alternatives that do not open the floodgates to more industrial-scale development.

B. Approval of One Utility-Scale Renewable Project in the Desert Has the “Secondary Effect” of Creating a “Beach-Head” for the Proliferation of Other Such Projects in Its Immediate Vicinity, All of Which Incrementally Industrializes Hitherto Intact Desert Parcels, Thereby Creating Classic “Induced Changes in the Pattern of Land Use.”

Desert areas, wild or rural in character, have little attraction for industrial-scale renewable energy facilities, like the Proposed Project, so long as no means exists to deliver the electricity to the grid. Hence, proponents of new renewable energy projects seek to site them next to

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[16] After word of a possible new Calcite substation got out, applications for the following additional projects – which would be located in the immediate vicinity of the community – began wending their way through approval processes: (1) 8 Minute Solar (a 200 MW utility-scale solar project proposed for land north of Lucerne Dry Lake and west of Hwy. 247); (2) Aurora Sorrel (a ***2,000-acre*** utility-scale project has been proposed for nearby state lands west of Hwy. 247 at the “Lucerne Cutoff;” and (3) two additional utility-scale projects that Edison has said are queuing up to interconnect with a Calcite substation (according to a statement made by an Edison representative, Kevin Richardson (at a December 6, 2016 public meeting in Lucerne Valley), everything about them remains confidential until the project proponents sign Large Generator Interconnect Agreements).

substations (either those which are in existence or which are predicated on approval of one or more utility-scale projects), or next to other existing renewable energy facilities in order to "piggy-back" on transmission lines connecting their neighbors' renewable projects to the grid. Hence approval of one utility-scale renewable project in the desert has the "secondary effect" of creating a "beach-head" for the proliferation of other such projects in its immediate vicinity, all of which incrementally industrializes hitherto intact desert parcels, thereby creating classic "induced changes in the pattern of land use."

Such projects, because they result in profound and permanent destruction of the natural environs, are often posited as rendering the surrounding desert lands "disturbed," i.e., these parcels are mischaracterized as biologically-defunct, "damaged goods" no longer possessing environmental, aesthetic and recreational worth. Therefore, they are often mistakenly deemed ripe for more large-scale commercial development, regardless of their existing rural desert designation and irrespective of the above-referenced land use policies dedicated to protecting that character.

That the IS misapprehends the Proposed Project site as being "disturbed" -- due to the presence of what it says are 33 homes so modest and underdeveloped that they do not deserve to be called a community[17] -- illustrates just how strongly land use planners' perceptions as to a parcel's environmental, aesthetic and recreational value are influenced by the level of development activity on other nearby parcels, and why it is so crucial that the DEIR fully and comprehensively assess the cumulative, growth-inducing effects of the Proposed Project and substation.

There are still further "secondary" and "growth-inducing effects." Once utility-scale renewable projects begin to move in, rural residents move out; this is true because such projects have historically made bad neighbors. The exodus of rural residents would, in turn, accelerate the process of industrialization as renewable project proponents seek to develop former, so-called "disturbed" home-sites.

Attention must also be given to the growth-inducing effects in the arena of inter-connection and transmission, and the ensuing "closed loop" effect, in which a remotely-located generating project like this one is used as a justification for the construction of extensive, environmentally-threatening transmission facilities, which in turn become a justification for more generation plants, and so on. Thus, what on the surface is a generation project having a

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[17] In that same vein, the IS completely ignores the fact that the project area is part of vital wildlife linkages, and contends (at p. 47) that, due to "historical agriculture" and residential usage, the project area is supposedly shunned by native wildlife species, except for the occasional tryst: by animals which are "particularly tolerant of human disturbances, [which] may occasionally breed on the site."

footprint of "only" approximately 500 acres becomes a continuous trigger for more and more transmission and generating projects. CEQA requires an analysis of such secondary effects and growth-inducing impacts, because otherwise these very real consequences grow and multiply "in the cracks" between one project and the next, never undergoing direct scrutiny.

In short, the enabling of new utility-scale renewable projects, like the Proposed Project, which, in turn, enable new transmission infrastructure projects like a Calcite substation (that, in turn, beget even further renewable projects), would have an obvious "secondary effect" and an "induced change in the pattern of land use." Section 15358(a)(2). The environmental impact of each new generating plant on the desert is large and enduring. Thus the enabling of utility-scale renewable energy projects causes "an indirect physical change in the environment . . . which is not immediately related to the project, but which is caused indirectly by the project." (Section 15064 (d)(2)).

Moreover, as part of an "Environmental Justice" analysis (which is more fully addressed below in Section 8), the DEIR must address the long-term and short-term effects that a proliferation of centralized energy generation facilities would have on the economic welfare of the County's residents. The County's economy is heavily dependent on tourism. It has been estimated at **$1 Billion *per year*** according to a University of Idaho study discussed in Basin Energy Assessment Team's "Renewable Energy Analysis" (October 2013). As part of an effort to promote tourism, Hwy. 247 has been proposed as (and is under consideration for) designation as a scenic highway; filling adjacent desert lands with vast new solar fields and transmission would create visual blight that might detract from that effort.

As noted above, the Proposed Project would require extensive scraping, grading, excavation for trenches, as well as the cutting, trimming and flattening of most on-site vegetation. This intensive and obtrusive activity would destroy the surface soil on some 500 acres, which will result in permanent loss of a fragile mini-ecosystem, and the loss of carbon dioxide sequestration capability, which in this desert happens below the surface.[18] Moreover,

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[18] The IS states that the DEIR will engage in an analysis addressing likely GHG releases that the proposed projects will cause. In doing so, the DEIR must include in its analysis a study of the degree to which the desert's natural ability to sequester carbon will be lost. See "Solar Power in the Desert: Are the current large-scale solar developments really improving California's environment?" UC Riverside. The authors of this article, Michael F. Allen and Alan McHughen, point out in their study, among many other things, that the benefits of reduced GHG emissions from a large-scale solar project are finite, because the project has a limited life, whereas the detriments caused by the destruction of soils entailed by the building and maintenance of the power plant and the related transmission facilities are extremely long-term. "Understanding the lifespans of the solar plants, compared with this long-term slow C [carbon] balance is a critical need for determining if these solar developments represent a net long-term

the required grading and trenching would destroy the vital caliche surface layer and the micro-biologically-rich subsurface of the proposed site. The desert has been likened to a "reverse rain forest," where the most biologically productive systems – the root systems – are underground.

Hence the DEIR must assess, in terms of cumulative effects, the degree to which the Proposed Project (and others like it) would lead to a release, rather than a reduction, of greenhouse gases, and these offsetting negative effects must be carefully quantified in the DEIR. (The Proposed Project's predilection for releasing dust, Valley Fever spores and fine particulates, among other things, which has been discussed above, must also be addressed in the DEIR.)

Another aspect of this Proposed Project sure to create a cascade of increased environmental problems is that any perimeter road around the project would invite and enable OHV use on the adjacent open desert.

6. The DEIR Must Thoroughly Examine the Amount of Water Required for the Construction, Operation and Maintenance (including Ongoing Dust Suppression), as Well as the Impact of the Proposed Project and Substation on the County's Finite Groundwater Resources.

The IS concludes (at pp. 94-95) that the Proposed Project will have a "less than significant impact" in terms of groundwater usage and that "no mitigation is required." This is a startling conclusion given that the project site would be located on an overdrafted groundwater basin, according to the "Overdraft Groundwater Basins, DRECP" map. Nevertheless, the IS insists that the DEIR will opine only as to "[t]he degree to which existing groundwater supply is sufficient for the project . . ." Such an approach would not comply with CEQA and the regulations that interpret it; they make it clear that sound science, rigorous empiricism and critical thinking are the cornerstones of a correctly-done environmental assessment.

The IS does not cite any serious studies of the impact that the proposed projects, and other like them, would have on those aquifers. Instead, the IS simply recites (at pp. 94-94) that the developer will obtain a BAP right to 1,761 AFY from Gabrych, the current property owner. But his adjudicated "production right," under the 2015 area-wide water judgment does not represent a scientific estimate of the amount of groundwater that he or any other property owners can draw from that sub-basin without irrevocably depleting it. It establishes only the amount of water that Gabrych can *legally* draw from the local aquifer, which is the Este Sub-basin. It does not mean that the water will actually be there, nor does it mean that, should Gabrych and the

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reduction in greenhouse gases." The article concludes that solar projects represent a net loss in that respect.

other parties bound to the judgment draw the amounts allotted to them, there would be enough to go around.

It is particularly urgent that the DEIR undertake a meaningful groundwater analysis, given that water is an irreplaceable resource that is this County's lifeblood, and one that it is subject to prolonged drought. It is also jeopardized by 20,000 MWs in total, according to the draft DRECP (with a portion of that on BLM lands as per the final BLM LUPA) of new utility-scale renewable energy that the DRECP plans for the California desert. Such data as we have on the subject – which comes chiefly from the DRECP itself – must be considered.[19]

While the draft DRECP did not conduct a meaningful analysis of groundwater baseline data, it nevertheless made valuable observations about the tenuous state of the desert's groundwater basins. For instance, the draft DRECP acknowledged that its DFAs would be located primarily on already overdrafted groundwater basins from which the enormous volumes of water needed -- for the construction, maintenance and operations of large-scale generation facilities -- would have to be drawn. In that regard, it conceded (at IV.6-24) that "[d]evelopment would occur in 35 groundwater basins," that 14 of them are stressed or in "overdraft or stressed," that "[m]ost (97%) of the developed area is within four ecoregion subareas [the High Desert areas of Los Angeles and San Bernardino Counties and the Imperial Valley]" -- which are the most populated areas of the California desert[20] -- and that "increased

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[19] The DRECP water data and findings continue to be relevant, notwithstanding the 2016 – 2017 rains. The jury is still very much out on whether as to what extent California's prolonged drought was broken in arid regions such as the Mojave Desert. Statements made by the State Water Resources Control Board (the "SWRCB"), in its comment letter regarding the DRECP, suggests that the drought would persist there despite the recent rains. The SWRCB comment letter states that the preponderance of groundwater in the Basins and Ranges hydrologic province is thousands of years old (i.e., it takes thousands of years for groundwater to travel from the point of recharge to the point of discharge). According to the SWRCB comment letter, our aquifers represent a closed system where 66% of the groundwater is between 100 and 33,000 years old with the only "young" recharge coming from the mountains [p. 18]. On a related note, the SWRCB states that, "[i]n most areas of the desert, deeper, older groundwater is saline. Excessive pumping will likely cause migration of saline water into fresh water aquifers [p. 11]."

[20] When the draft DRECP's map of the Preferred Alternative DFAs (which, along with transmission corridors, was to entail approximately 177,000 acres of "ground disturbance" (IV.7-215)) is superimposed on top of the DRECP's Overdraft Groundwater Basins map, one sees that (with small exceptions) all of the High Desert DFAs – from the Antelope Valley east to the Johnson Valley -- were located within the boundaries of already overdrafted groundwater basins. Indeed, the DRECP conceded: "[u]nder the Preferred Alternative, development in BLM lands can affect groundwater in 12 basins characterized as either in overdraft or stressed" [Section IV.6 of the DRECP].

groundwater use in these sensitive basins can adversely affect water supplies and exacerbate impacts associated with overdraft conditions and declining groundwater levels."

The draft DRECP also stated that the total estimated water use for the new projects it sought to foster would be 91,000 acre-feet per year (IV.6-24), and that the "[r]enewable energy facilities permitted under the DRECP could influence the quantity and timing of groundwater recharge because construction would include grading the land surface, removing vegetation, altering the conveyance and control of runoff and floods, or covering the land with impervious surfaces that alter the relationships between rainfall, runoff, infiltration and transpiration [IV.25-45]." Solar energy – which was the renewable technology preferred in the DRECP -- "would result in the largest amount of grading so it would have the largest impact on groundwater recharge among the renewable technologies permitted under the DRECP [IV.25-45]."

According to the vastly understated language of the draft DRECP, the "use of groundwater for renewable facilities permitted under the DRECP would combine with [other uses of groundwater] . . . to result in a cumulative lowering of groundwater levels affecting basin water supplies and groundwater [IV.25-46]."

The draft DRECP also took note (IV.25-45) of the "[p]opulation growth and anticipated development summarized in Section IV.25.2.2" -- including "future residential development that would also use a large amount of groundwater continuously [IV.25-46]" and that would result from anticipated renewable energy and other projects -- as further contributing to the drawdown of desert groundwater basins.

Even more ominously, the draft DRECP noted that the proposed renewable energy projects would result in "compression [of groundwater basins that would reduce] the volume of sediment beds and lower land surface elevations, which can damage existing structures, roads, and pipelines; reverse flow in sanitary sewer systems and water delivery canals; alter the magnitude and extent of flooding along creeks and lakes. ***This compression of clay beds [that make up groundwater basins] also represents a permanent reduction in storage capacity***" [IV.25-47]. (Emphasis added.) The proposed renewable energy plants and transmission facilities "could also cause water-level declines in the same groundwater basins and contribute to the migration of the saline areas of groundwater basins" [IV.25-47].

In terms of construction usage, the 550 MW Desert Sunlight 250 project (on 4,400 acres of land) – and the 1,550 acre feet of water allocated to its construction – can be used as a metric. Forty projects of that size would produce just over the DRECP's targeted 20,000 MWs in renewable energy. Assuming that those forty projects would use a similar amount of water during their construction, construction of 20,000 MW of new renewable energy projects would consume 620,000 acre feet, which equates with approximately 20 billion gallons of water.

In their maintenance and operations, the utility-scale solar projects in the Lucerne Valley DFA would, according to data from the draft DRECP, consume almost 1,000 acre-feet of water **per year,** which is enough water to fill four Rose Bowls to the brim. On a DRECP-wide basis, if all 20,000 MW of generation were to come from the least water-intensive generation method – which is solar PV (as opposed to solar thermal, which requires many multiples more water in cleaning, as well as a great deal of additional water for cooling operations) – and the PV panels were washed only six times per year, the cleaning of the panels alone would consume .15 acre feet per year per megawatt of generation, which would amount to a total water expenditure of approximately 3,000 acre feet per year (20,000 times .15 = 3,000).

Projects on the BLM land will be drawing from the same groundwater basins that the rest of the County relies on – in effect, public and private "straws" will all be drawing from the same figurative milkshake. Nevertheless, the draft DRECP made no study of the impact on the desert's aquifers of siting 20,000 MWs of new generation facilities, nor did the draft DRECP include any real baseline data concerning the health or sustainability of those basins under current demands, or when the effects of an ongoing drought of historic proportions is factored in.

This puts the onus on the DEIR and the projects' proponents to: (1) conduct and incorporate a comprehensive assessment as to how the siting of their proposed renewable energy generation and substation would – in combination with other factors, including the plethora of utility-scale and transmission projects that will be developed on public land under the BLM LUPA -- affect relevant groundwater basins, i.e., to what degree would their sustainability be threatened; and (2) conduct a baseline study as to the current status of each affected aquifer – how much potable and non-potable water is each such groundwater basin currently holding? How much water is being pumped out of each basin by the residents and businesses currently relying upon them? How much water can be expected to recharge the basins, either from natural sources or from the State Water Project? Are the groundwater basins sustainable in view of the demands currently being made on them (including the demands that would be made on them by the Proposed Project and substation), and in view of their recharge rates, or are these basins approaching collapse, i.e., what are their tipping points? What is the likely effect of ongoing drought on our groundwater basins?

Even at that, such an analysis would provide a very limited, snapshot-in-time prognostication that may not accurately portray our groundwater basins' future sustainability. At the meeting of the BLM's Desert Advisory Committee on September 27, 2014, in Pahrump, Nevada, Peter Godfrey, a BLM water specialist who was one of the authors of the groundwater portions of the draft DRECP, stated that, in order to assess our aquifers' future sustainability, a long-term time horizon of as much as 30 years is required, which is longer than the projected lifespan of the Proposed Project and substation. In other words, we won't really know whether these projects have compromised our groundwater basins until after they have passed the point of no return. The DEIR must factor into its analysis that it may be impossible, given practical

temporal limitations, to determine with any real degree of certainty whether the Proposed Project and substation will debilitate local groundwater basins, which strongly suggests that a "no action" alternative merits extraordinary attention.

According to the IS (p. 94), the Proposed Project and substation would use 1.93 acre feet of water during the 16-month construction period, that 6.0 acre feet per year would be used for panel washing and that 0.6 acre feet per year would be used for "maintenance and repair dust suppression." These estimates should be rigorously examined in the DEIR, given that the burden is on the proponent to provide empirical data to back them, particularly when there are close-by actual experiences of other projects from which to draw actual data. Moreover, there is a history of under-estimation by other solar projects as to actual water during the course of construction and operation. The DEIR must specifically address what happened in these projects and critique the estimates provided by the proponent in the light of these experiences.[21]

The IS speaks (at p. 14) in general terms of measures to reduce fugitive dust *during construction* of using approximately 75 acre-feet for dust suppression and earthwork (over an approximately 10-month period), but proposes no measures for controlling dust over the proposed project's multi-decade span of operational years, notwithstanding the arid, high-wind environment in which they would be located (and notwithstanding that, because the project site would be unmanned, the project proponents would have no one on site to address incidents of blowing dust). The IS projects that 0.6 acre feet per year will be used for "maintenance and

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[21] At the onset of the Agincourt and Marathon solar projects (now known as Lone Valley Solar), the proponents agreed to purchase from the Mojave Water Agency ten acre feet of water; instead, according to our information, they wound up using more than 50 acre feet (10 acre feet came directly from the Morongo Basin pipeline, and the other 40 acre feet were purchased from a local farmer). And these projects have been spewing tons of dust. The same thing has occurred with respect to the Soltec PV project in Newberry Springs.

The Desert Sunlight Solar PV facility in Riverside County was approved based on the promise of its proponents to limit themselves to 1,400 acre feet of groundwater during construction. But, after they broke ground, they said they would need 1,500 acre feet of water (which they later increased by another 50 acre feet). The developers took all of that water from an aquifer that has not gotten any re-charge in hundreds of years, according to a U.S. Geological Service survey.

Antelope Valley Solar Ranch, located in Lancaster, near Route 138, was built by First Solar, which seems to be the contractor of choice for many solar photovoltaic projects. The AVAQMD cited First Solar for violations of air quality standards on at least two separate occasions. The AVAQMD was quoted as saying that there was "a myriad of things [First Solar] could have done that we didn't think they were doing to prevent the violations."

repair dust suppression." This appears to be quite low given that that relatively meager volume of water would have to keep dust down over an arid, wind-prone and highly disturbed almost 500-acre site. Even the IS (at p. 95) calls this a "very minor amount of groundwater." The IS does not even state how much of the 0.6 AFY would be allotted to maintenance and repair, as opposed to dust suppression.

The DEIR must address whether the projected amount of water will be sufficient to prevent fugitive dust. The DEIR must also take a serious look at whether ***any*** amount of water would, after the site is seriously disturbed through construction, operation and maintenance of the two proposed projects -- be sufficient to prevent fugitive dust from plaguing the region, especially given D/CO 1.4 of the County's General Plan's Conservation Element, which sets out the requirement to "[r]educe disturbances to fragile desert soils as much as practicable in order to reduce fugitive dust . . ."

The IS recites the types of soil that are present on the proposed site, but it does not analyze whether the prevailing soil types would be conducive to fugitive dust blown off a de-vegetated site over the years by prevailing desert winds. These deficiencies must be remedied in the DEIR – such an analysis would be critical in determining how much water the Proposed Project and substation would really consume.

Also missing from the IS is any meaningful attention to the issue of Valley Fever. The DEIR must address some well-known facts about how disruption of the desert soil stirs up the microscopic spores that cause Valley Fever which can travel on the wind as far as 75 miles.[22] The DEIR must also address, in assessing environmental impact in terms of Valley Fever causation and dissemination, that: (1) soil disturbance in the Western Antelope Valley resulting from large-scale renewable energy development, and from construction of SCE's grid line and power station infrastructure, is suspected of causing a recent outbreak of Valley Fever in that region; and (2) any water that would be used to temporarily suppress dust would, unfortunately, cause Valley Fever spores to reproduce, because they thrive on alternating periods of extreme wetness and extreme dryness.

The DEIR must critically address the groundwater issue, and incorporate a comprehensive and cumulative study of the impacts on groundwater reserves that renewable energy projects, like the Proposed Project and substation, and their progeny, would have, with an emphasis on establishing the crucial "trigger points" at which groundwater pumping would render specific affected groundwater basins unable to meet the needs of the County's residents

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[22] The town of Lucerne Valley is very close by, and the Town of Apple Valley, and the cities of Victorville and Adelanto are, in terms of how mobile particulate matter can be, practically right around the corner.

and businesses. There must be a rigorous and honest comparison of alternatives to the project as proposed.

7. The DEIR Must Make an Honest and In-Depth Study of the Effects that the Proposed Project Would Have on the Local Community – One That Is Not Laden with the Unfounded Value Judgments Found in the IS.

The Proposed Project and substation would be located in an established rural desert community consisting of at least 54 homes within a half mile of the project boundaries (at least 33 of them are occupied by their owners or, as is the case with Rivers Edge Ranch, under active operation). The homes are oriented in a roughly radial pattern around a large open space which gives the locale a very spacious feel, one that complements the community's picturesque setting (the Proposed Project would occupy and eliminate that open space). It is located immediately north of a large dry lake, and in a narrow valley between the Granite Mountains and the Ord Mountains (both of which host extensive ACECs), which allows the residents to enjoy unimpeded and dramatic desert and mountain views in all directions. There has been no large-scale farming in the community for some fifty years according to local resident, Brian Hammer, and the natural landscape there, which is in an advanced stage of recovery, cannot be readily distinguished from other nearby pristine desert regions.

Nevertheless, while addressing the question -- would the Project "physically divide" an established community? – the IS (at p. 70) portrays the community in a bleak, unappealing and highly inaccurate manner: the IS contends that there are only 32 "modest" and "generally undeveloped" residences there, and that a mere 22 of them show signs of habitation. The IS also maintains that "many of the parcels are currently used as storage space for vehicles and/or machinery," while concluding dismissively that, "based on its generally sparsely developed and rural character, the surrounding area would not be considered an established community."[23] The IS cites this mischaracterization as support for its conclusion that the Proposed Project would have a "less than significant impact."

The IS's unfounded and inappropriate value judgments should not be incorporated into the DEIR. The IS depicts local property owners as a marginal population unworthy of protection under the County's above-discussed land use planning policies. Reading the IS's disparaging account, one can practically hear tumbleweeds blowing and rusty hinges creaking on abandoned shacks. Is there any doubt that, had the community consisted of million-dollar homes with well-manicured lawns, the IS's conclusion would have been entirely different?

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[23] The IS cites as authority for this proposition something that it calls the "(County of San Bernardino 2007)." We have been unable to determine what, if any, County publication it is referring to.

That the homes in the local community are indeed dispersed – this is a common and often defining characteristic of rural living, particularly in the desert – does not mean that the area is "generally sparsely" developed, nor would that disqualify the community from receiving protection against rampant industrialization. One need only look at the County's above-cited land use goals and policies for confirmation of that proposition: they are directed toward protection and preservation of the rural lifestyles of the County's desert residents.[24]

The County has, in accord with those goals and policies, protected small desert communities from utility-scale development. On May 5, 2015, the Board of Supervisors granted an appeal revoking a CUP for a proposed commercial photovoltaic solar project in Landers – called Bowman Solar – in part because it would have been incompatible with the dispersed rural residences that dot the surrounding region, ***notwithstanding that there were only "seven single-family residences*** . . . located within 1,000 feet of the proposed project parcel" according to the Initial Study for that project (emphasis added.). Such concerns also played a part in the County Planning Commission's denial, on November 6, 2014, of a CUP for the proposed Desert View photovoltaic solar project in western Lucerne Valley.

Several of the speakers at the June 13, 2017 scoping meeting on the DEIR – including Brian Hammer, Susan Hammer (the Hammers' property would be surrounded by the Proposed Project on two sides) and Patty Riddle – made it clear that the IS has grossly mischaracterized their community. They confirmed that, while local residents greatly value the open space around their homes – and the personal privacy and direct access to nature that it affords them -- they also enjoy a strong sense of community with their neighbors. And they have great pride in their properties. Brian Hammer mentioned that, while his house might not look like all that distinguished from the outside, he and his wife are extensively remodeling its interior. Patty Riddle acknowledged that she and her husband store a large number of collector cars on their property,[25] and that because of this it may not show well in an aerial photo, but her deep bond

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[24] In addition, the stated policy of the County's General Plan is: (1) to "maintain land use patterns in the Desert Region that enhance the rural environment and preserve the quality of life of the residents of the region (Goal D/LU 1);" (2) to "ensure that commercial and industrial development within the region is compatible with the rural desert character and meets the needs of local residents (D/LU 3);" (3) to "maintain land use patterns in the Desert Region that enhance the rural environment and preserve the quality of life of the residents of the region (Goal D/LU 1);" and (4) "to preserve the unique environmental features and natural resources of the Desert Region, including native wildlife, vegetation, water and scenic vistas" (Goal D/CO 1 of the General Plan's Open Space element).

[25] According to aerial photos, Ms. Riddle's property is the only one in the community upon which large assemblages of cars are found. The IS was mistaken in concluding that "***many*** of

with the property – upon which she has long maintained a home and a productive grove of nut-bearing trees, among other things -- was quite apparent.

The DEIR must completely re-think the approach taken by the IS toward the local community and provide a meaningful impact analysis that is consistent with the points made in this section of our letter. The basic premises for such an analysis must be that these homes form a community in the fullest sense of the word, and that, because the Proposed Project would so thoroughly consume and dominate all of the open space at the center of the community -- lapping up against the very property lines of many residents' homes -- it would "physically divide" the community.[26]

The DEIR must also incorporate a more expansive definition as to what the community is comprised of than the one used in the IS (persons living within a half mile of the Proposed Project site) because residents living outside that half-mile zone – including those living to the east of Peterman Hill – would be greatly impacted by the Proposed Project, especially given the enormous range that wind-blown fugitive dust has.

8. The DEIR Must Also Analyze a Broad Array of Environmental Justice[27] Impacts that the Proposed Projects Would Have on the Surrounding Community.

Environmental Justice ("EJ") concerns are accorded an immense amount of focus and weight in this State, and *all* social, economic and physical impacts that the Proposed Project and substation would impose on the surrounding community must be carefully and comprehensively

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the parcels are currently used as storage space for vehicles and/or machinery." (Emphasis added.)

[26] The IS correctly notes that the Proposed Project would not block residents from gaining access to Hwy. 247, but a project does not have to amount to a veritable Berlin Wall – an impregnable barrier that completely isolates one portion of a community from another by running through its entire length and breadth – in order to be considered as one that "physically divides" it. To conclude otherwise would be to give the quoted phrase an unduly narrow and literal interpretation, one that would render the CEQA criterion employing inapplicable to all but a very few development projects.

[27] Environmental justice is defined by the Environmental Protection Agency as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

analyzed as part of the DEIR. In other words, the DEIR's EJ analysis should not begin and end with consideration of the extent to which the Proposed Project and substation would "physically divide" the surrounding community.

Under CEQA, impacts to the environment are not limited to the natural environment, but also include "substantial adverse effects on human beings, either directly or indirectly." CEQA Guidelines, Section 15065(d). Along those same lines, the official website for the California Office of Attorney General (oag.ca.gov) states, in an attachment to its "CEQA and General Planning" section – entitled "Environmental Justice at the Local and Regional Level Legal Background" (the "EJ Guidelines") – that:

> "Human beings are an integral part of the 'environment.' An agency is required to find that a "project may have a 'significant effect on the environment' if, among other things, '[t]he environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]" (Pub. Res. Code, § 21083, subd. (b)(3); see also CEQA Guidelines, § 15126.2 [noting that a project may cause a significant effect by bringing people to hazards]."

The EJ Guidelines also state that: (1) a "local lead agency [is required] to determine whether pollution from a proposed project will have significant effects on any nearby communities, when considered together with any pollution burdens those communities already are bearing, or may bear from probable future projects;" and (2) "economic and social effects may be relevant in determining significance under CEQA in two ways . . . First, as the CEQA Guidelines note, social or economic impacts may lead to physical changes to the environment that are significant . . . Second, the economic and social effects of a physical change to the environment may be considered in determining whether that physical change is significant [citations to legal authorities were omitted for purposes of brevity]." See also Section 15131(b), which states that "[e]conomic or social effects of a proposed project may be used to determine the significance of physical changes caused by the project."

An environmental study is fatally defective when it accords greater weight to a nearby community of million-dollar homes than it does to less affluent communities. The IS has already started down the wrong path; the DEIR must reverse direction, and give serious consideration to the Proposed Project's likely effects on the people who would be living in its proximity.

In line with the above-cited EJ Guidelines and CEQA statutes, the following EJ concerns are triggered by the Proposed Project and substation:

1. <u>The community would not reap any benefits from the two projects</u>.

Local residents would be called upon to make a huge sacrifice in the name of large-scale energy generation and transmission: they would have to give up their desert rural lifestyles,

direct access to nature and unimpeded natural views, as well as the value of their homes. But they would get nothing in the bargain. All of the power generated would be exported to the grid for use outside the County, and all profits would go to NextEra and to Edison[28];

2. The community would directly suffer all of the substantial downsides generated by the two projects.

Residents would be subjected to noise, dust and constant intrusion from two major construction projects that would require hundreds of workers and platoons of heavy equipment over an extended period of time. And dust plumes would inevitably be unleashed during the operational life of the projects as the prevailing winds sweep over denuded desert soil, while new high tension lines crackle and hum loudly overhead. As the immense appeal of the community is destroyed in the process, the value of the homes in it would plummet, all of which will likely result in some or all of the homes being abandoned. If so, the area would sink into blight and become the derelict community depicted by the IS. Instead of the current, vibrant human community that exists side-by-side with thriving natural communities, there would be a quarter of a million solar panels left silently pivoting in the degraded landscape; and

3. The two projects would usher a proliferation of additional utility-scale projects into the vicinity, imposing additional ill effects on community members (see the cumulative effects discussion above).

This is already beginning to happen, despite the fact that neither the Proposed Project nor the substation have been approved. As detailed above in Fn. 16, there are four additional utility-scale projects being proposed for the immediate vicinity of the community that are now in the

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[28] California has such a glut of renewable energy that, for eight days in January and nine in February, the state had to pay Arizona to take all the surplus, even as natural gas power plants – eight such plants are being refurbished, continued generating electricity – continued to generate, according to a June 22, 2017 Los Angeles Times article, entitled "California has invested heavily in solar power. Now there's so much that other states are sometimes paid to take it." It also reports that curtailments of solar and wind power production for the first quarter of 2017 were more than double the same period last year, and the surge in solar power could push the number even higher in the future. Because of this surplus, existing power plants run, on average, at slightly less than one-third of capacity. And some plants are being closed decades earlier than planned. But the overbuilding of new plants and transmission continues apace because – according to industry insiders cited in the article – such construction receives a "lopsided incentive": "utilities can build in the construction costs into the amount that the utility can charge electricity users – no matter how much or how little is used." In other words, such charges include a guaranteed rate of return, i.e. profit, for the utilities.

approval pipeline. One such project would, if approved, consume 2,000 acres of desert. This proliferation of utility-scale projects would put the community at the epicenter of thousands of dust (and spore)-spewing industrialized acres, thereby making its residents the focus of an undue and highly disproportionate amount of health-compromising fugitive particulates and other pollutants.[29]

While each of the EJ considerations discussed above must be addressed in the DEIR, this letter is not meant to exhaustively catalog all such EJ concerns. It is meant solely to provide our initial take on what those concerns may be and as to how DEIR might address them.

9. The DEIR's Analysis of Proposals for Restoration of the Site of the Proposed Projects Must Take Proper Account of the Difficulty of Restoring Desert Terrain.

The Proposed Project and substation cannot be justified by the proposition that, after their operational life is over, the project sites can be restored to their former natural state, because the desert is an ecosystem well-known to be poorly responsive to restoration efforts. It is very difficult to restore desert habitats following disturbance; it is particularly hard to protect against OHV use after construction; and it is almost impossible to protect against increased fires and human disturbance as a result of increased access. Yet these phenomena – increased OHV use after construction, more fires and more human disturbance because of increased access – are inevitable consequences of the Proposed Project.

Making restoration efforts all the more difficult is climate change. According to the current draft DRECP, current climate change predictions identify the deserts of North America as being particularly hard hit. The report states: "Climate projections agree that temperatures will increase in the southern California deserts by more than 2º C…" Draft DRECP, App. P, page 13. That these increases in already very high temperatures will put tremendous stress on numerous species goes without saying. When the loss of water from extended drought is added to the mix, there ceases to be any basis to suggest that the additional stress on the desert from projects like this can be "mitigated" away through restoration some years hence.

The concept of restoration has no validity in a serious environmental study without meticulous examination of what kind of damage can be restored, and by what means, and over what time period. The DEIR must give this subject careful consideration.

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[29] The EJ Guidelines cite Gov. Code, § 65040.12, subd. (e), which states that "[f]airness in this context means that the benefits of a healthy environment should be available to everyone, and the burdens of pollution should not be focused on sensitive populations or on communities that already are experiencing its adverse effects."

10. Conclusion.

We welcome the opportunity to comment on the scope of the DEIR for the Proposed Project and substation, and look forward to continuing participation.

Very truly yours,

Community Associations, Businesses and Organizations:

LUCERNE VALLEY ECONOMIC DEVELOPMENT ASSOCIATION

Chuck Bell, President

HOMESTEAD VALLEY COMMUNITY COUNCIL

Joanna Wright, President

MORONGO BASIN CONSERVATION ASSOCIATION

Sarah Kennington, President

CHURCH OF OUR LORD AND SAVIOR (LUCERNE VALLEY)

JOHNSON VALLEY IMPROVEMENT ASSOCIATION

Betty Munson, Secretary

OAK HILLS PROPERTY OWNERS ASSOCIATION

David Blevins, President

NEWBERRY SPRINGS ECONOMIC DEVELOPMENT ASSOCIATION

Paul Deel, President

SAN BERNARDINO VALLEY AUDUBON SOCIETY

Drew Feldman, Conservation Chair

Bill Lembright, President

SIERRA CLUB MOJAVE GROUP

Susan Stueber, Chair

MOJAVE COMMUNITIES CONSERVATION COLLABORATIVE

Lorrie L. Steely, Founder

FRIENDS OF JUNIPER FLATS

Jennifer Wilder, Coordinator

LUCERNE VALLEY MARKET/ HARDWARE

Linda Gommel, Chief Executive Officer

ALLIANCE FOR DESERT PRESERVATION

Richard Ravana, President

Individuals:

Brian Hammer, Analyst and Adjunct Professor (resident of Adelanto)

John Smith (resident of Apple Valley)

Pat Flanagan (resident of Joshua Tree)

Jenny Wilder (resident of Apple Valley)

George Stone (resident of Apple Valley)

Gail Stone (resident of Apple Valley)

Ruth Rieman (resident of Flamingo Heights)

Neville Slade (resident of Apple Valley)

Millie Rader (55 year resident of Lucerne Valley)

David Rader (58 year resident of Lucerne Valley)

Annie Lancaster (resident of Apple Valley)

CCs:

James Ramos (Chairperson and Third District Supervisor;
SupervisorRamos@sbcounty.gov)

Robert Lovingood (Vice-Chairperson and First District Supervisor;
SupervisorLovingood@sbcounty.gov)

Janice Rutherford (Second District Supervisor;
SupervisorRutherford@sbcounty.gov)

Curt Hagman (Fourth District Supervisor;
SupervisorHagman@sbcounty.gov)
Josie Gonzales (Fifth District Supervisor;
SupervisorGonzales@sbcounty.gov)

Ms. Terri Rahhal
(Terri.Rahhal@lus.sbcounty.gov)

Mr. Tom Hudson
(Tom.Hudson@lus.sbcounty.gov)

County of San Bernardino
Public Scoping Meeting
Ord Mountain Solar Energy Project
June 13, 2017

We welcome your comments and suggestions in regards to ***environmental*** issues that should be included in the Draft Environmental Impact Report (EIR) for the proposed Ord Mountain Solar Energy Project.

June 27, 2017

Comments:

Dear Responsible Agencies and Interested Parties,
On Meridian Road there are 6 families living between Haynes Road and Wheelew Rd. The project will ruin our property value, that we have worked for years and years. It will differently ruin our way of living, in which we came to the desert for its beauty and peace and quiet with all the desert animals and birds. Please, please, don't do it!!

BARBARA M. Riddle 84 yrs. old
Name (please print)

Sincerely, Barbara M. Riddle
Organization

Mailing Address
P.O. Box 1799, Lucerne Valley, Calif. 92356

Telephone No. (daytime)
760-248-2344

~~E-mail address~~

Written comments on the environmental document can be provided at the scoping meeting, or written comments may be provided directly to the County of San Bernardino, Land Use Services Department. Comments provided by e-mail should include the name and address of the sender. Please send all written and/or e-mail comments to one of the following:

County of San Bernardino
Land Use Services Department
John Oquendo, AICP
Senior Planner
15900 Smoke Tree Street, Suite 131
Hesperia, CA 92345

Phone: (760) 995-8153
Email: John.Oquendo@lus.sbcounty.gov

Public Scoping comments must be received no later than 4:30 p.m. by June 30, 2017.

To mail: fold, seal, and affix stamp

Donoghue, Christine

From: Deborah Smith <dlblicksmith@yahoo.com>
Sent: Wednesday, June 28, 2017 9:36 PM
To: Oquendo, John
Subject: Ord Mountain Solar Project Comments.

Here are my comments:

County of San Bernardino

Public Scoping Meeting

Ord Mountain Solar Energy Project

June 13, 2017

Comments:

‘‘Lucerne Valley is remote but lies close to larger communities” like Apple Valley, Victorville, and Hesperia, to the west. Big Bear, Fawnskin, Lake Arrowhead, and Crestline, to the South. Yucca Valley, Joshua tree, and Johnson Valley to the east. Barstow, Landers, and Newberry Springs to the north.

‘‘We acknowledge the risk of valley fever from the large amount of clearing it takes for solar developers” (exerpts taken from meeting 6-13-2017 by developers)

‘‘If you build roads” (which was stated in Public Scoping Meeting that 2 new access roads would be built), “transmission, large scale renewable projects and grade desert habitat, you will have fugitive dust potential. When deserts are scraped, a Pandora's box of air quality issues is opened. Biological soil crust, desert pavement, and old growth vegetation “(from 50 plus years of non- use) “will all be lost.”

‘‘This can be an environmental justice issue” (excerpts are from 8-14-15 Letter from Dan Netcher BLM Project Manager.)

Lucerne Valley is located in the Southern Mojave Desert, within Western San Bernardino County, California. Since Lucerne Valley is an unincorporated community within the county, services and local government responsibilities within Lucerne Valley are operated by the county itself. This is a quote from the county, and Wikipedia.

What this does not say, is that although the last census has us at just over 5000 residents, there are many more people affected by the proposed solar project. I would guess as many as 400000 or more.

Due in part to the locality of Apple Valley(incorporated town), Barstow(incorporated town), Big Bear (incorporated town) and Johnson Valley (unincorporated town). These are some of the surrounding townships. They will all be affected in one way or another.

First the off roaders that travel Hwy 247 will have to suffer the blinding glare of the solar panels. Then there are also the big rig truckers. They bring consumables through and to the areas day and night. They also will be blinded by the glare of the solar panels. (Approximately 400 plus acres worth, we were told)

There are protected plants in this area. Including but not limited to:

California Fan Palm

Joshua Tree

Mojave Yucca

Wildflower Parish's Popcorn Flower (Plagiobothrys Parishii)

and the Ironwood tree.

Lucerne Valley is zoned : Rural residential, Resource conservation and Agricultural.

Lucerne Valley features 2 dry lakes. A variety of small meteorites have been found and documented from the dry lakes.

Chimney Rock is a California Historical Landmark and is located in Lucerne Valley.

Wolf Mountain Sanctuary is in Lucerne Valley. Tonya”Little Wolf” Carloni (½ Apache) is the founder.

Boondocked at Sawtooth Canyon Campground is in Lucerne Valley.

Cougar Buttes is in Lucerne Valley.

Remember, cabins and can dumps are archeology too. The desert in Lucerne Valley is dotted with the remains of mining cabins, stage stops, and homesteads. (One of the stage stops is very near the site of the solar project) The preservation of historic and prehistoric sites is equally important. The more time you spend in a site the greater the chance for serious impact to occur. Archaeological sites are protected by law. The BLM is supposed to protect these sites. Therefore, they should protect this little town.

President Obama just made the Mojave Desert a Nation Monument. President Obama used the 1906 Antiquities act to protect the 1.8 million acres of Mojave Desert under that act. I know that we may fall a bit west of the 1.8 million acre site, but the projected solar site in that position would have a negative impact on at least part of that 1.8 million acre site, if not all.

‘‘Here are some facts about the location of this project that DIDN”T get mentioned in the initial study.

1. The project is located in a very narrow gap between 2 areas of Critical Environmental Concern. The Granite Mountain ACEC to the West, and the Ord Mountain ACEC to the East. This project is so close to the Ord Mountain ACEC that even the developer calls it Ord Mountain Solar.
2. The project is in Critical Wildlife Corridors for the Desert Tortoise, American Badger, and Big Horn Sheep. The important and recognized linkage called 'Corridor for Desert Tortoise' needs to be well considered in the EIR.
3. It's in the midst of a concentrated group of nesting sites for the Golden Eagle-perhaps the richest breeding and nesting site for Golden Eagles in Southern California.
4. The 'Covered Species Stack'report on DataBasin shows that the project is located in and right next to 'Moderate' to 'High-Value' areas, covering more than 10 special Status species.

All this information comes straight from the DRECP, supplemented by further studies submitted by SC Wildlands.

The location of this proposed project, and the fact that the Calcite Substation would invite a parade of additional nearby projects, create a number of extremely troubling consequences for Biological resources. If the dismissive attitude toward these issues displayed int eh initial study is carried over into the EIR, then the EIR is going to be seriously flawed”

Sabra Chili- Alliance for Desert Preservation

Ord Mountain Wildlife Conservation Bank(application in progress)

See: ordmtn.outpost4u.com

The linkage connects the San Bernardino National Forrest with the extensive lands in the Granite, Ord, and Rodman Mountains.

Protected animals:

Desert Tortoise, Mojave Ground Squirrel, Kangaroo rat, Bat, Big Horn Sheep, Side-Blotched Lizard, Mojave rattlesnake, Gambils Quail, Red-Tailed Hawk, and Golden Eagle.

Just to name a few. There are more protected animals and plant life listed on the site I listed above.

So, if we look at the RECE Elements you stated in the Public Scoping Meeting:

Aesthetics – Would be greatly impacted by the blinding glare that can be seen for miles and will no doubt blind traffic in all directions. Not to mention the views from the homeowners nearby.

Air Quality- Massive Dust and a Pandora's box of air quality issues, Fugitive dust potential, just to name a few impacts here.

Biology- All plant life and animal life in a 400 plus acre area gone. Including protected species of both.

Tribal/Cultural Resources- any and all American Indian artifacts, known or unknown in the area destroyed. Any and all First Settlers artifacts known and unknown destroyed.

Geology and Soils-Meteorites, Valley fever, More air quality concerns as dust from grading is done. Loss of homes to the desert turtle, not to mention the loss of all plant life which feeds and homes the animals therein. Disruption of Water table, Loss of water table.

Greenhouse gas- I have no comment on this subject.

Hazards and hazardous materials- With the high winds that are almost a daily occurrence here in Lucerne Valley, anything that is brought in to create the new roads will blow into neighboring homes. Also the radiation from the solar site itself will blow in the wind as far as Joshua Tree and Yucca Valley.

Hydrology and Water quality-Loss of water table and Disruption of water table, not to mention the possible contamination of the water table. Could make local drinking water a thing of the past.

Noise-not just during construction. If you drive by the existing solar power station on Camp Rock Road just north of Hwy 18, you can hear the high piercing whine of the electricity. Nothing lives near there any more.

Traffic/Circulation- I am sure it will affect the local and non-local traffic in the worst ways. The blinding light coming from the panels will make driving in any direction on certain times of the day impossible. Not to mention adding to the cost of the big rig trucks as they have to find an alternate route around the glaring site. It will cost our town a lot in that most folks traveling to the off road destinations will no

longer stop in town or drive through town as they are doing now. They will also find an alternate route due to the blinding light from the panels.

I thank you for giving us the opportunity to voice our concerns and ideas on this project. If it were me, I would contract to the highest bidder and put the solar panels on the 200 or so houses that are proposed to be covered by this project If the company owns the panels on the homes they can still charge for services. And after all, isn't it all about the money to them?

Thanks again.

Deborah “Lynn” Myers

10029 Estrada Ave

Lucerne Valley, CA. 92356

George & Gail Stone 9567 Bellview Ave. Apple Valley. CA. 92308

John Oquendo, AICP, Senior Planer

San Bernardino County – Land Use Services

15900 Smoke Tree Street, Suite 131

Hesperia, CA 92345

RE: OPPOSED TO ORD MOUNTAIN LLC SOLAR PROJECT

Mr. Oquendo,

I had the opportunity to attend the meeting in Lucerne Valley (LVEDA) last night, where the County, project representatives, and Southern California Edison (SCE) attended to discuss the Ord Mountain Solar Project and hear from local residents. I must say, that the messaging from local community members could not have been louder, or clearer. "They do not want industrial power-generating projects in their rural residential living areas." The reasons given included:

- Loss of view shed
- Loss of rural living environment
- Depletion of water table for industrial purposes and threatening residents' water supplies where they live!
- Loss of property values
- Noise pollution (buzzing wires all times of the day and/or night)
- Increased dust and air pollution (significant health hazard – increased for the profit of big business)
- Knowledge that this project is just another scheming way of getting Coolwater Lugo transmission project by another avenue and under a different name
- Fail

It was quite apparent, that SCE is orchestrating these developers from behind the curtain to achieve their initial "South of Kramer"/ "Coolwater Lugo" / "Ord Mountain" transmission line project which includes "Jasper" / "Calcite" substation. Seems SCE thinks the constant changing of names will fool the public or

its representatives. Well, it does not fool the residents and communities negatively and permanently impacted by their project(s).

During scoping meetings, town halls, surveys, etc. that the County and the high desert communities have participated in, in the last few years, it has been abundantly clear, that the high desert communities are agreeable to several types of energy projects:

- Distributive generation – roof top: uses the power where its generated
- Generation within the 5 areas already defined in the resolution #2016-20 dated February 17, 2016 as acceptable for industrial power generation by the County, which are located away from our high desert communities, their view sheds, their water, their air, their investments in homes
- Within areas which have already been polluted by "industry" e.g. Hinkley
- *Disturbed land

We are keenly aware, that SCE is racing a clock of obsolescence. Rooftop is rapidly replacing old-antiquated-inefficient-ugly overhead power transmission. SCE's knows that if they do not succeed quickly in getting additional capacity and substation infrastructure, they will forever be unable to substantiate the need for such large expenditures, which include guaranteed return on investments (ROI) by the CPUC. SCE's only interest is ROI, it is not the projects (their just a means to an end), it is not the health or well-being of communities and/or their residents (stated in the initial study paraphrased "the community is not worth salvaging"). Make no mistake about it, SCE does not care about us or San Bernardino County!

In closing, thank you for taking the time to read my comments in whole, consider my point of view, and feedback from a County resident who is constantly under threat by big business for sake for profit and profit only.

Respectfully Submitted,

Stone, George

*-Much conversation was on the topic of disturbed land. Supposedly the 485 acres was previously farmed however, the farming activities were apparently so long in the past, that the land has returned to its original/natural state and those in attendance disagree with this area being defined as "Disturbed".

Donoghue, Christine

From: Brett Watkins <outinthetrees@gmail.com>
Sent: Friday, June 30, 2017 6:47 PM
To: Oquendo, John
Subject: Solar power plant at ord mountain.

Hello.
My name is Brett Watkins.
Myself and my family live at 16823 Meridian Rd in Lucerne Valley.

The solar power plant that is being planned is directly across the street from my house.. having this plant placed this close to my home will make an unhealthy environment for myself and my family... We would be directly down wind from this plant.

It will cause serious damage to my home trees and animals.. along with the air that we breathe....I moved to this location because my daughter has asthma and I have lung problems..the environment so far has been very beneficial for us...

Clearing the land and construction of this plant very well could be a death sentence for my daughter and I.

I bought my home to be away from the polluted city air and streets. This plant will make my environment worse than downtown LA.

Our health should come first. Please don't kill me and my family.

Brett Watkins.
16823 Meridian Rd.
Lucerne Valley.
442-242-2684

June 30, 2017

By Email: John.Oquendo@lus.sbcounty.gov
Mr. John Oquendo, AICP
Senior Planner
San Bernardino County Land Use Services Dept.
15900 Smoke Tree Street Hesperia, California 92345

Re: Notice of Preparation of a Draft EIR and Scoping Meeting re the Ord Mountain Solar Project (#P2016005610/CUP) (the "Proposed Project")

Dear Mr. Oquendo:

We are a coalition made up of the following community groups, businesses, agencies and individuals: Lucerne Valley Economic Development Association (LVEDA), Johnson Valley Improvement Association, Homestead Valley Community Council, Oak Hills Property Owners Association, Newberry Springs Economic Development Association, Flamingo Heights Community Association, Morongo Basin Conservation Association, Church of Our Lord and Savior (Lucerne Valley), Lucerne Valley Market/Hardware, Alliance for Desert Preservation ("ADP"), Lucerne Valley Museum and History Association, Mojave Communities Conservation Collaborative, Jack Harris, Regino Pitones, Jerry Cummings, Barbara Cummings, Brian Hammer, Sue Hammer, Donna R. Betz, Judy Wakefield, Sarah McKee, Renee Lynn, Ron Arnold, John W. Buchanan, Natalie M. Buchanan, Jai Hoon Yoo, Michael Ware, Amy Ware, Debra Goss, Bradley R. Hicks, Dennis Morrison, Brenda P. Hicks, Robert Buxton, Patti Riddle, Mark Riddle, Barbara M. Riddle, Bobbie Perrin, John Kenmuir, Bonnie Lott, Amanda Starn, Kymberly Starn, Kelly Medici, Brad Medici, John Medici, Robert Huntsman, Brett Watkins, Neville Slade, Jim Harvey, Pat Flanagan, Ruth Rieman, Marina West, Jeffrey LaGrange, Barbara LaGrange, John Smith, Barbara Smith, Jean Magee**,** Aaron Idouchi, Barbara Idouchi, John Jones, Bobbie Jones, Linda Morrison, Wayne Morrison, Tim Norton, Jody Norton, Randall Smith, Deborah Myers, Owen Myers, Kathryn Anema and Bryan Baker. Together, we represent a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.

In response to the above-referenced Notice of Preparation, and pursuant to the California Environmental Quality Act, our coalition is submitting written comments on the scope and content of the Draft Environmental Impact Report ("DEIR") that San Bernardino County (the "County"), as lead agency, will cause to be prepared with respect to the Proposed Project. In providing these written comments, we have been guided by the Initial Study ("IS") prepared by Michael Baker International with respect to the Proposed Project, the purpose of which was, according to the aforesaid Notice of Preparation, to "refine the scope of the EIR, identify resource areas that will be eliminated from further analysis, and to solicit public input on the scope of the EIR." We reserve the right to make other and further comments regarding scoping in subsequent correspondence and at any other public scoping meetings concerning the Proposed Project.

1. The DEIR Must Include a Complete and Comprehensive Assessment as to the Extent to which the Proposed Project Would Conflict with the Planning Goals and Policies Enunciated by San Bernardino County.

According to California Code of Regulations Section 15125(d), an "EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans." More specifically, according to Item X(b) of Pa. G to the CEQA Guidelines, EIRs must address the following question: "[does the proposed project] conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?"

The IS concludes (at p. 70) that the Proposed Project would have a "less than significant" impact on any applicable land use plans, policies and regulations because "the current [San Bernardino County] General Plan Land Use Element designation for the proposed solar and energy storage project area is Agriculture (AG), which allows development of electrical power generation with a CUP (Development Code Section 85.06)." The IS also states that the siting requirements of the County's 2013 solar ordinance would be considered ". . . during the review and CUP application process."

But the IS did not give any consideration to the land use policies and goals stated in:

(1) the February 17, 2016 Resolution of the County's Board of Supervisors (the "Resolution"), which designated five sites -- which are seriously degraded, away from Lucerne Valley and other population centers, and relatively close to existing transmission – as the only places that utility-scale can go, subject to the project's otherwise satisfying the County's criteria;

(2) the "County of San Bernardino Position Paper on the Draft Desert Renewable Energy Conservation Plan," dated February 3, 2015 (the "Position Paper"), in which the County stated that the communities of Lucerne Valley, Newberry Springs, Stoddard Valley, Johnson Valley and Apple Valley are not appropriate for Development Focus Areas ("DFAs"),

which are places in which the DRECP would allow utility-scale renewable energy projects to be established;

(3) the Renewable Energy and Conservation Element ("RECE") for the County's General Plan, which the County is now in the process of adopting; and

(4) the Lucerne Valley Community Plan, which is part of the County's General Plan in its current form. It expressly prohibits commercial development that would destroy the region's rural desert character.

In order to comply with Section 15125(d) of CEQA, the DEIR's conflict analysis will have to specifically address the inconsistency between each of the above-referenced preservation-oriented land use policies and goals and the Proposed Project. In order to pass muster under the CEQA – and in view of the fact that the proposed 60 MW, 484-acre utility-scale solar project (and pendant Calcite substation) would industrialize a large portion of Lucerne Valley – it is especially crucial that this analysis be forthright, in-depth and meaningful. Skirting the entire issue the way the IS did will not do the trick by any means.

A. **<u>The Resolution</u>.**

In the Resolution – which is entitled "Establishing the County's Position" -- the County's Board of Supervisors designated five sites -- which are seriously degraded, away from population centers, and relatively close to existing transmission – as the only places that utility-scale can go, subject to the projects otherwise satisfying the County's criteria. The Resolution was adopted by a unanimous vote.

The Proposed Project would not be located in or near any of the five designated sites.

In selecting those areas most amenable to utility-scale projects, the Board of Supervisors gave attention to such important factors as close access to transmission, no adjacent human communities and the prevalence of severely degraded biomes. The Supervisors quickly eliminated Lucerne Valley and the other North Slope communities because of high conflicts with these factors. The Supervisors were further guided by these two sets of maps:

(1) a map included in Kristeen Penrod's (SC Wildlands) "California Desert Connectivity Project" (Penrod et al. 2012) – which is lauded in the draft DRECP as providing "a comprehensive and detailed habitat connectivity analysis for the California deserts" (App. Q (Sections 3.4.1 and 3.4.2)) – depicting the "Desert Linkage Network," upon which is overlaid the Desert Tortoise TCA Habitat Linkages (as prepared for the DRECP by the USFWS -- one of the four state and federal agencies sponsoring the DRECP). These combined linkages reflect the interconnections between individuals of a species and among species, with a focus on how they

subsist, migrate and procreate over time as part of a desert knit together by connectivity corridors as a living, breathing biome[1]; and

(2) DRECP Databasin maps showing: (a) the DRECP's DFAs, Variance Lands and Unallocated Lands overlaid on the Desert Tortoise TCA Habitat Linkages; (b) the ACECs (Areas of Critical Ecological Concern) and NLCS (National Landscape Conservation System) areas under the DRECP where utility-scale would be prohibited; (c) Overdraft Groundwater Basins in the County; (d) Conservation Values; (e) Special Recreation Management Areas/Extensive Recreation Management Areas; and (f) existing transmission.

Those maps – and the fact that Lucerne Valley, Apple Valley, Johnson Valley and Morongo Basin, among others, host well-established towns and dispersed desert rural communities[2] that would be negatively impacted by industrial-scale renewables (among many other considerations, utility-scale facilities like the Proposed Project draw from already overdrafted groundwater basins) – compelled the conclusion, through a simple process of elimination, that the County's north and eastern slope valley areas must be kept off-limits to such large-scale development; they also confirm that there are highly degraded, transmission-adjacent, former and current industrial, mine and brownfield sites further north -- near Trona, Hinckley, North of Kramer Junction, El Mirage and Amboy -- where such development could be permitted, i.e., the five sites designated in the Resolution.[3]

The County's above-referenced valley areas, including Lucerne Valley, have a very unique and precious, yet extremely fragile, attribute that provides a high quality of life for their residents (and that makes them such appealing places to visit and, hence, such a boon to the tourist industry): they host well-established, dispersed desert rural population clusters that thrive amid functioning desert sub-ecosystems, which, in turn, are part of the largest intact biome in the western states, i.e., the Mojave Desert. If this harmonious convergence of human and natural communities were to be allowed to disappear, it would be gone forever. So the County stepped

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[1] Ms. Penrod prepared a report for ADP – which embodied her comments on the draft DRECP – that expanded this linkage network. Among other things, her report demonstrates that almost all of Lucerne Valley should be protected from large-scale development as part of a far-reaching wildlife linkage network integral to connecting the intact landscape block of the San Bernardino Mountains with the desert region to the north.

[2] An appreciable portion of Lucerne Valley remains zoned for "agriculture," but it is now used primarily for rural residential purposes. "Rural Living" zones make up about 50% of the area, while "Resource Conservation" districts make up about 21% of the area (these figures come from the Lucerne Valley Community Plan).

[3] The five sites also have the virtue of being located: (1) over ample groundwater supplies (moreover, the groundwater underlying the Trona, Hinckley and Amboy sites is non-potable, and can only be put to industrial uses); (2) outside of any military flight corridors; (3) on land that has a flat enough gradient to host utility-scale solar development; and (4) away from communities affected by utility-scale development.

in to protect this irreplaceable community resource through the Resolution, as well as by way of its Position Paper and RECE (as will be discussed below).

The DEIR will need to address in depth the obvious and unavoidable conflicts between the Proposed Project and the County's planning preferences and priorities, as expressed in the Resolution.

B. **The Position Paper**.

The Resolution was not the first time that the County has articulated its foremost values and priorities in terms of siting large-scale renewable projects. In the "County of San Bernardino Position Paper on the Draft Desert Renewable Energy Conservation Plan," dated February 3, 2015, the County stated that the communities of Lucerne Valley, Newberry Springs, Stoddard Valley, Johnson Valley and Apple Valley were not appropriate for DFAs, which are places in which the DRECP would allow utility-scale renewable energy projects to be established.

In issuing its Position Paper, the County was clearly seeking to protect the human and natural communities of its east and north slope valley regions by putting them off limits to industrial-scale development, which directly conflicts with the desire of the project proponent to develop an enormous 484 acre utility-scale facility in the heart of Lucerne Valley. In order to comply with CEQA, the DEIR will have to analyze this conflict.

C. **The RECE**.

The IS readily concedes that the Proposed Project conflicts with the RECE, but contends that, because the application for the Proposed Project was submitted to the County's Land Use Planning Department prior to formal enactment of the RECE – the RECE, which has been approved by the County's Planning Dept., will go before its Board of Supervisors for formal approval on August 8, 2017 – the Proposed Project has been "grandfathered" in such that the RECE holds no sway over it. This is incorrect. The project proponent did not, merely by filing an application, exempt itself from the RECE -- by the time the DEIR comes out, there will very likely be an RECE in place that confines utility-scale projects to five specific areas in the County, none of which are in, or near, Lucerne Valley (this point will be further discussed below).

But, even if the Proposed Project could be considered to be "grandfathered" in, the DEIR would still have to address the conflict between the Proposed Project and the policies and goals – the "core values -- reflected in the pending RECE, especially given that they embody a hard-won, all but set-in-concrete consensus between the County's populace and its governing bodies, one that was forged over many arduous years of public meetings – in the Countywide SPARC, REVEAL and Community Plan processes -- regarding how the County's planning vision should

be cast.[4] This is confirmed in the discussion appended to subsection (d) of CEQA Regs. 15125, which states, in relevant part – while referring to regional plans developed "as a way of dealing with large-scale environmental problems" -- that "[w]here individual projects would run counter ***to the efforts identified as desirable or approved by agencies in the regional plans***, the Lead Agency should address the inconsistency between the project plans and the regional plans." (Emphasis added.)

The policies and goals embodied in the RECE are discussed below.

The RECE, which prominently mentions the Resolution as its guiding principle when it comes to locating utility-scale projects, clearly evinces an intention by the County to foster community-oriented solar and to all but ban further utility-scale solar projects. In so doing, the RECE cites the many virtues of community-oriented solar: it promotes energy independence, reduction of the need for new transmission, the sustaining of sensitive natural resources and habitats and local economic growth. In that regard, the RECE promotes as a primary "core value" the need to maintain a "high quality of life for residents of the County," as well as the need to bar renewable energy projects that "substantially conflict with surrounding land uses, especially existing communities or residential areas where residents object to the visual character of RE projects."

Reflecting the County's strong bent against utility-scale generation, the RECE sets out strict siting criteria for such facilities; in fact, they are so strict --- when it comes to areas like Lucerne Valley – that they *de facto* banish utility-scale projects from them. RE Policy 5.2 of the RECE, as well as Policy 5.4, strongly encourage utility-scale generation on the five areas identified in the Resolution. Policy 5.4 makes it clear that utility-scale development elsewhere will be required to meet a higher standard of evaluation for appropriate site selection, and that a "two-step application process" will be required in order to evaluate site selection early in the process. If the Proposed Project application were run through that two-stage process, it would never pass the first stage in view of the RECE's stringent site selection criteria.

The lands surrounding the Proposed Project site host a well-established desert rural community, as well as scientifically-recognized wildlife corridors that are also acknowledged by our federal and state governments. Among other things, the area is considered core golden eagle habitat for the western Mojave Desert. It is a natural desert setting inhabited by, among other things, the climax vegetation for the area -- mostly salt bush (*atriplex canescens*) -- which

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[4] To show just how far we have come in reaching this consensus, one need only look at the County's February 24, 2015 Renewable Energy and Conservation Element Framework: Purpose, Values and Standards, which commenced with the ominous assertion that the State's renewable (RPS) energy mandates have "major implications for [the County] and its people." The Framework's basic thrust was that, in order to comply with those mandates, vast areas of the County would -- subject to some ameliorating siting standards -- have to be sacrificed to utility-scale development. By way of contrast, the RECE calls for confining them to five specified fairly remote areas (again, this point will be discussed below).

provides habitat and foraging zones for a host of threatened species (as will be more fully discussed below in Section 2).

The siting of the approximately 500-acre Proposed Project, and Calcite substation, would compromise the County's above-referenced "core values." If utility-scale renewable energy projects are allowed to invade a rich and living desert biome like the one at hand[5], a welter of renewable energy projects could be ushered in that end up being inimical to the letter and spirit of the goals and policies stated in the RECE. And piecemeal, inconsistent renewable energy development could ultimately defeat the central purpose behind formulating the RECE, which is to create and implement a comprehensive planning vision for renewable energy development that serves the needs of all businesses and residents of this County.

The DEIR must include an assessment of the degree to which the Proposed Project (and Calcite substation) would conflict with the policies and goals stated in the RECE. This consistency analysis will obviously have to go much farther than the one found in the IS. Fundamental to a meaningful conflict analysis will be the following over-arching principle in the County's land use regime: in view of the harm that industrial operations (like the Proposed Project and Calcite substation) visit on the visual integrity, economy, social ecology and environmental health of rural residents, they do not make good neighbors.

D. <u>The Lucerne Valley Community Plan</u>.

The IS makes no reference to the Lucerne Valley Community Plan (the "Community Plan"), even though it is part of the current version of the County's General Plan.[6]

The Community Plan identifies: (1) as "Unique Characteristics" (LV1.3.1) that "Lucerne Valley offers a rural lifestyle, characterized by the predominance of large lots, limited commercial development and the prevalence of agricultural and animal raising uses in the area. The desert landscape and natural resources further define the rural character of the community;" and (2) as a chief concern (LV1.3.2) of residents that growth pressures will "threaten the features of their rural community," including its "natural beauty [which is] characterized by an abundance of open space and scenic vistas . . ."

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[5] Policy 5.2 also contains a catch-all category for "other sites proven by a detailed suitability analysis to reflect the significantly disturbed nature or conditions" of the specific land types enumerated in Policy 5.2, i.e., waste disposal sites, mining sites, airports, etc. But, as indicated above, the lands comprising the Proposed Project site do not begin to resemble heavily degraded lands of the type listed, so the DEIR would have to explain why the Proposed Project would qualify under the catch-all category (or acknowledge that it would not).

[6] According to the Lucerne Valley Community Plan, it is "an integral part of the overall General Plan," and it is "to provide goals and policies that address the unique land use issues of the Community Plan area that are not included in the Countywide General Plan."

Further, as one of its primary "Community Priorities," the Community Plan specifies (LV1.3.3) the need to "[r]etain the rural character of the community by maintaining low density residential development and ***commercial development that serves the needs of local residents***" (emphasis added); as well as the need to maintain (LV/LU 1.1) "***strict adherence*** to the Land Use Policy Map unless proposed changes are ***clearly demonstrated*** to be consistent with the community character" (emphasis added).

The DEIR must analyze the conflict that the Proposed Project and substation would have with the Community Plan. Such an assessment is particularly important given that the two projects would represent an abrupt and pronounced departure from the rural desert character of the surrounding area and would incrementally advance the industrialization of the desert, all of which would encourage further consumption of irreplaceable, community-defining natural open space and scarce resources like water.[7]

2. The DEIR Must Not Ignore, as the IS Has Done, the Science Demonstrating that the Proposed Project Would be Located in Recognized Wildlife Corridors and Where Protected, Special Status and Covered Species Are Present.

The IS concedes, as it must (at p. 46), that the Proposed Project would have potentially significant impacts on biological resources. Among other things, the "potentially significant impact" box is checked on the IS next to the question: "[w]ould the project [i]nterfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?"

But nowhere in the IS is there any mention of the fact that the Proposed Project and substation would most certainly interrupt established wildlife habitat connectivity linkages recognized by the DRECP and SC Wildlands, including critical north – south linkages between the San Bernardino Mountains and the Ord Mountains. The IS discounts this by heavily relying on the discredited notion that, since the location once served agricultural needs, it is now a "disturbed" site and thus plays no part in keeping biomes whole and healthy. In that regard, the IS states (on p. 47) that:

> "Historical agricultural practices have removed the natural vegetation communities, limiting the quality and availability of habitat for wildlife. The land use (transportation, residential, and agricultural) of areas adjacent to the project site also limit the value to wildlife of the habitat in the vicinity."

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[7] The IS reflects that the Proposed Project would require enormous volumes of water for its construction, maintenance and operations, and that it is anticipated that the water may have to be trucked to the site, which raises a real issue as to whether essential services would be available to support the Proposed Project. Water issues will be discussed further *infra*.

The IS goes on to grudgingly agree, nevertheless (on p. 47), that "this topic will be analyzed further in the EIR." But the method that the IS proposes for addressing it -- "biological observations would be conducted to determine if the project site and adjacent off-site areas act as significant linkage areas" (p. 47) – would be of such limited scope and effectiveness that it would almost certainly fail to identify something as nuanced as regional wildlife connectivity patterns. And myopic biological observations – which would amount at most to a "snap-shot in time" species census of the proposed project site only (and maybe some adjacent lands) – would be entirely superfluous given that there already are published *long-term, regional scientific* studies that have already been undertaken by nationally-recognized authorities on biological connectivity in the Southern California deserts. In point of fact, the on-site wildlife census proposed by the IS would not have even a fraction of the value of the published connectivity studies, which will be discussed in the following paragraphs.

As mentioned above, the Proposed Project would be located directly between – and very close to -- the Granite Mountain and Ord Mountain ACECs (which are "Areas of Critical Environmental Concern," as designated by the DRECP in the BLM LUPA), where it would, in conjunction with a Calcite substation, all but occlude the mouth of a fairly narrow valley separating those two mountain ranges.

As such, the Proposed Project and substation would be located within scientifically-recognized -- and federally and state-sanctioned -- wildlife corridors and linkages, and in close proximity to extremely sensitive habitat where state and federally listed Special Status Species and covered species are present and/or very close by, such as bighorn sheep, desert tortoises, golden eagles and Bendire's Thrasher. The area is considered core habitat for golden eagles.

These facts are confirmed by the following nationally-recognized scientific studies and maps:

1. Ms. Penrod's above-referenced (SC Wildlands) "California Desert Connectivity Project" (Penrod et al. 2012), which depicts the "Desert Linkage Network;"

2. Ms. Penrod's report for ADP, which embodied her comments on the draft DRECP, expanded the linkage network depicted in the above-referenced publication, and demonstrates that almost all of Lucerne Valley should be protected from large-scale development as part of a far-reaching wildlife linkage network integral to connecting the intact landscape block of the San Bernardino Mountains with the desert region to the north;

3. "Desert Bighorn Sheep Intermountain; Unfiltered Core Habitat, DRECP" map, prepared by the California Dept. of Fish and Wildlife,[8] which are considered to

[8] This map, and the others referred to below in this section, are datasets on the DRECP Data Basin, and can be accessed through DRECP.databasin.org.

have a “Very High” to “Moderately High” habitat on the Granite Mountain and Ord Mountain ACECs, which are adjacent to the Proposed Project site (the “Very High” habitat is located within three miles of the site)[9];

4. “Golden Eagle Nest Occurrences, DRECP map” (prepared by the California Dept. of Fish and Wildlife) and “DRECP Species Distribution Map for Golden Eagles, DRECP map,” prepared by Conservation Biology Institute (CBI), which confirm that there are ten nests within five miles of the Proposed Project site, four or five within three miles of it, and 55 nests within ten miles of it;[10]

5. “Wildlife Allocation (WA) and Areas of Critical Concern (ACEC) Designations, DRECP and Final EIS, LUPA, Final map, prepared by the California Energy Commission, the BLM, the California Dept. of Fish and Wildlife and U.S. Fish and Wildlife Service;” and

6. “Desert Tortoise TCA Habitat Linkages, DRECP” map, prepared by the U.S. Fish and Wildlife Service. Also the USFWS has done an extensive study of desert tortoise linkages in the Ord-Rodman area, and identified the valley area as vitally important to maintaining intact linkages.

Bighorn sheep, golden eagles, desert tortoises and Bendire’s Thrasher are not the only species that would be impinged upon by the Proposed Project and Calcite substation. According to the DRECP Data Basin, the following species have a very suitable habitat there or are known to have a presence: (1) Le Conte’s Thrasher; (2) Kit Fox; and (3) American Badger. Each of

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[9] The IS makes some extremely under-informed statements, such as that the “site is devoid of … sensitive natural community identified by CDFW or USFWS. “ In fact, the CDFW has stated that the two ACECs adjacent to the Proposed Project site constitute “Very High” to “Moderately High” habitat for desert bighorn sheep.

[10] Golden eagles (*aquila chrysaetos*) need ample foraging areas around their nests, and the Proposed Project, along with a Calcite substation, would markedly reduce such areas and threaten their survival. According to the Conservation Biology Institute and the California Natural Diversity Database (CNDDB) – which is a product of the California Department of Fish and Wildlife's Biogeographic Data Branch (BDB) – a foraging area with a ten-mile radius (from a given nest) is required. (The CNDDB is a computerized library of the status and locations of California's rare species and natural community types, and includes in its data all federally and state listed plant and animal species that are species of special concern or considered "sensitive" by government agencies and the conservation community, as well as candidates for such status.)

The referenced DRECP map was created by merging the DRAFT__BRC__EagleNest__Data and Golden Eagle__DFG layers provided by the BLM. This data reflects nest locations recorded by various state agencies and their contractors during, among other time periods, 2008, 2010 and 2012.

these special status species is present within three miles of the Proposed Project site. The Proposed Project site is in a moderately high-value "species stack" for eight to ten special-status species according to a DRECP Data Basin Map entitled "Covered Species Stack."

The referenced data and maps, and particularly Ms. Penrod's reports, make it clear that the desert region surrounding the Proposed Project site is an intact, living and breathing biome that emphatically deserves the County's protection, and that there will be dire environmental consequences if wildlife is kept from using natural features -- like the valley between the Granite Mountains and the Ord Mountains -- for passage, forage and living habitat.

But, with the Proposed Project located on the east side of Hwy. 247, and a Calcite substation situated just west of the highway, critical wildlife corridors running through the fairly narrow valley between the Granite Mountains and the Ord Mountains (and the ACECs that they host) would be substantially occluded, as would inter-mountain wildlife movement between the Granite Mountain and Ord Mountain ACECs. Hence the development of large utility-scale projects and transmission there will potentially eliminate and render non-functional the wildlife linkage for northern Lucerne Valley, as well as the critical linkage between the Granite Mountains and the San Bernardino Mountains. It is an unfortunate truism that, if you break one link in the connectivity chain, the whole chain falls apart.

The Proposed Project site is also a particularly bad place to construct a utility-scale facility and substation because, as will be discussed below in Section 4, they would be located in an area where there is a confluence of high wind erosion potential and erosive soils. Disturbance of topsoil on the 500-acre site, and destruction of vegetation that would otherwise anchor it, would produce a great deal of dust – dust that would essentially eliminate a large foraging area for a number of special status species (including birds and bats) in the surrounding area outside of the Proposed Project footprint, according to Garry George of Audubon California.

As discussed below in Section 4, blowing dust has, unfortunately, been a frequent by-product of utility-scale projects in the County.

Glare coming off vast arrays of solar panels would also affect bird and bat species in the area, as would noise emitted by the Proposed Project during construction, maintenance and operation. As noted above, the area is extremely quiet (readings of 22 decibels are not unheard of), and that quiet would most certainly be shattered by the construction, maintenance and operation of an industrial-scale project.[11]

To summarize, in light of the confluence of factors cited above, the desert habitat surrounding the Proposed Project site is just about the last place a large industrial generation facility should be constructed and operated in the County's deserts. This, and the fact that a Calcite substation would invite a parade of additional nearby utility-scale and transmission

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[11] The dust, glare and noise, and the visual blight created by the Proposed Project, would also damage the human communities in and around the Proposed Project area.

projects, create a number of extremely troubling consequences in terms of "Biological Resources." If the dismissive attitude toward these issues displayed in the IS is carried over into the DEIR, then it is going to be seriously flawed.

In order to comply with CEQA, the DEIR must analyze each of the highly significant impacts mentioned above and carefully consider all alternatives.

3. The DEIR Must Address the Manner in Which the Proposed Project and Substation Would Conflict with the MSHCP and NCCP Being Jointly Developed by the County and the Town of Apple Valley.

In response to the question – "[w]ould the Project conflict with any applicable habitat conservation plan or natural community conservation plan?" -- the IS states (at p. 72): "No Impact." This sentiment is echoed on p. 48 of the IS.

But this assertion is incorrect. In reality, the proposed Calcite substation – the establishment of which is a prerequisite for the Proposed Project -- would be located in a Multiple Habitat Conservation Plan ("MSHCP") and Natural Community Conservation Plan ("NCCP") being jointly developed by the County and the Town of Apple Valley (the "Town").[12] Hence the substation would conflict with the MSHCP and NCCP.

Moreover, the MSHCP and NCCP, and their design overlays -- the overlays are based on science developed at the landscape level, as well as from local, boots-on-the-ground surveys -- were designed to link up with and complement adjacent, vital wildlife corridors and habitats (for, among other animals, bighorn sheep, the golden eagle and desert tortoise) which run through the Proposed Project site. The Proposed Project would, by completely occluding these linkages and habitats, impinge on, and conflict with, the habitat design embodied in the MSHCP and NCCP.

There will in fact be very real conflicts with the MSHCP and NCCP, and the DEIR must address them thoroughly.

4. The DEIR Must Independently Assess the Contention that the Proposed Project Can Be Built Without Substantially Disturbing On-Site Vegetation and, in Determining the Amount of Fugitive Dust It Would Emit, the DEIR Must Require On-Site Monitoring.

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[12] The Town has been proactive in publishing its plans and the underlying data, including the submittal to the DRECP of detailed scoping, protest and comment letters going back to 2011. Moreover, the Town, as the lead agency, has been developing and ground-truthing this plan for at least six years, and, at this point it is a highly evolved, very detailed plan.

The IS acknowledges (at p. 52) – in response to the question: "[w]ould the project [r]esult in substantial soil erosion or the loss of topsoil?" – that it would have a "potentially significant effect." But the IS soft-pedals this in the discussion (on p. 52) that follows:

> "[n]o substantial vegetation removal would occur for the installation of the proposed project. It is expected that vegetation would be cleared for the footprints of the individual tracker units, but those would be situated above the ground at a maximum height of approximately 6 feet. This allows the retention of some of the vegetation on site, which would reduce wind speeds near ground level and result in less erosion."

The DEIR must thoroughly and independently examine the highly dubious proposition that a quarter of a million solar panels (and a substation) could be constructed with such exquisite care that the only vegetation cleared, or grading needed, would be for the tracker poles' foundations. Construction work on the massive scale proposed – by 150 workers per day (IS, p. 12) for the Proposed Project and 90 workers per day on for the substation (p. 26) -- using heavy equipment across some 500 acres – would inevitably destroy much more vegetation than that, vegetation which is located on desert lands that are notorious for being easily scarred and slow to heal. Regardless of the developer's stated intentions, the Proposed Project site would wind up denuded and subject to serious erosion from pervasive desert winds.

Even if, as the IS contends, some native vegetation could be spared from the bulldozer, it would have to be cut back and otherwise disturbed to such a degree that its long-term survival would be highly questionable. This is so, in part, because much of that vegetation – which includes salt bush (*atriplex canescens*, a climax plant species for the area) – has a height significantly greater than the minimum eighteen to twenty-four inches needed for solar panel clearance. The IS itself acknowledges (at p. 14) that "[d]uring construction of the solar and energy storage facility, ***it is expected that <u>most</u> of the vegetation would be cut, trimmed, or flattened as necessary***, but otherwise undisturbed so that reestablishment is possible." (Emphasis added.) While revealing, the quoted sentence contains obvious double-speak. How could vegetation that has been systematically slashed and trampled come out undisturbed? The notion that this highly vulnerable vegetation would readily bounce back from sustained abuse of this sort is nothing more than a pipe dream, as is the implication in the IS that root networks will survive regardless of what happens to plant life above-ground.

And, even if some on-site vegetation manages to dodge the bulldozer, *and* to survive being "cut, trimmed or flattened" to accommodate panel installation, all surviving species of flora would have to be carefully pruned back – and kept alive -- over the multi-decade span of the project's operational life. It is highly unlikely that the developer (or its successors) would be willing or able – financially or technically – to bring off such a daunting balancing act, or that any appreciable amount of the vegetation would survive this gauntlet.

Solar panel installation would not be the only reason that grading and scraping would be needed on the project site. It would also be required in order to build the honeycomb of roads needed for construction, maintenance and cleaning of vast complexes of solar panels and trackers, for installation of a perimeter security fence and for extensive trenching. The IS's

listing of the heavy equipment (on p. 11) needed to construct the project – graders, along with a bulldozer, scraper, 10-ton roller, sheep's-foot roller, tractor (with mower attachment), excavators (for trenching), as well as (see the IS, p. 13) motor graders and compaction equipment – makes it clear that there would be a great deal of soil disturbance involved, as does its statement (on pp. 13-14) that: (1) "[v]egetation would be removed where gravel roads would be constructed, where fill would be placed from grading operations, where buildings are to be constructed . . ."; and (2) earthwork would also "occur to install aggregate base access roads and transmission line maintenance roads."

The IS obliquely acknowledges that it is painting a rosy picture in suggesting that native plant communities would flourish under the Proposed Project. Tipping its hand ever so slightly, the IS concedes (on p. 52) that its proposed construction methods would allow only for "the retention of ***some*** of the vegetation on site . . ." (emphasis added), that, "[w]hile minimized, ***grading activities will occur throughout the project site*** [emphasis added]" and that "[g]round disturbance and foundation placement would be required for each transmission line pole, including vegetation removal in the immediate area." But, in its next breath, the IS contends (at p. 52) that "[t]he ground disturbance for both projects in combination would be minimal in relation to the surrounding desert area," i.e., there's so much untouched and expendable desert out there that the Proposed Project and substation would represent a drop in the proverbial bucket, so why concern ourselves with one more project? Such empty and transparent rationalizations are no substitute for the rigorous analysis required by an EIR.

The Proposed Project and substation would be sited in an area of high wind erosion potential, according to the "Soil sensitivity factors for the DRECP" map and the "Confidence levels for sensitive soil factor maps for the DRECP." Because the contemplated land disturbance would eliminate vegetation that would otherwise anchor the soil, it would lead to the release of large and unhealthy volumes of dust into the local environment and surrounding communities. In order to make a valid assessment in that regard, the DEIR must determine exactly how much vegetation would be removed (and retained), and exactly how much grading would be required. The DEIR must treat projections from the developer along those lines as advisory at best, and make its own independent assessment. Other utility-scale solar projects in the region have proven to be particularly bad neighbors, and have failed to live up to their developers' promises.[13]

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[13] The Soltec PV project in Newberry Springs has received a lot of negative attention. The developer reportedly promised that it would not scrape vast tracts of land, that the project would have minimal impact on vegetation and wildlife, and that mitigation measures (such as soils stabilization) would be implemented. None of this came to pass, and it has also become apparent that an unduly low estimate was presented, during the application phase, of the amount of water the project would consume.

The Agincourt and Lone Valley Solar projects in Lucerne Valley (on Camp Rock Rd.) – now known as "Lone Valley Solar" -- have been spewing dust, despite applying much more water than the developers projected.

Armed with such information, the DEIR will have a basic predicate for making an informed assessment concerning fugitive dust. But, in order to do so, the DEIR will also need a valid baseline for dust emissions for North Lucerne Valley. Unfortunately, the Mojave Desert Air Quality Management District (the "District"), which covers 20,000 square miles of desert terrain in the County and in Riverside County, cannot provide such a baseline, because the District does not have any air quality monitoring stations there (the monitoring stations are located in Trona, Lancaster, Victorville, Phelan, Lucerne Valley (in the San Bernardino Mountains, near the Mitsubishi cement plant), and Twentynine Palms). In accord with a directive from the District, County planners would nevertheless – unless the DEIR acquires more data (as is suggested below) – use the Victorville station's dust emission readings and meteorological data, in order to estimate the Proposed Project's dust emissions, even though the conditions at the Victorville station differ night and day from those present in North Lucerne Valley in terms of soils and wind speeds and directions.[14]

Joshua Tree has not fared any better with three nearby utility-scale solar projects: Cascade Solar, SEPV8 Solar (Lear Avenue) and Indian Trail Solar. Once vegetation was removed to construct them, soils became unstable and dust and sand began blowing. Dust storms are now a regular feature during high wind events. Prescribed mitigation measures -- like watering exposed soil and ceasing construction if the winds exceed a certain level -- have proven completely ineffectual, if implemented at all.

Antelope Valley Solar Ranch, located in Lancaster, near Route 138, was built by First Solar, which seems to be the contractor of choice for many solar photovoltaic projects. The AVAQMD cited First Solar for violations of air quality standards on at least two separate occasions. The AVAQMD was quoted as saying that there was "a myriad of things [First Solar] could have done that we didn't think they were doing to prevent the violations."

These examples demonstrate that approving a utility-scale project based on even the most stringent-appearing criteria – such as a developer's pledge to use "best available practices" to achieve "mitigation" after the project is built – simply does not work. This underscores just how important it is that the DEIR undertake a truly independent analysis on the subject.

[14] The Victorville station, which is located on asphalt and is 300 feet from a road that has an average annual daily traffic count of 1,000 vehicles, monitors a 0.3 to 3.5 square mile area with a relatively uniform land use. Hence it is no surprise that the station's monitoring records show zero (0.0) days above the 24-hour federal and state PM10 standards.

The technical information in this letter regarding the District's monitoring program is drawn from a meticulously researched March 22, 2017 article in the *Desert Report* (which is a publication of the Sierra Club), entitled "The Perfect (Dust) Storm – Fugitive Dust and the Morongo Basin Community of Desert Heights." Its author, naturalist Pat Flanagan, is a board member of the Morongo Basin Conservation Association.

Because emissions readings from the Victorville station do not provide a valid long-term PM10 baseline for the North Lucerne Valley, the DEIR must commission its own air quality/dust monitoring at (and adjacent to) the Proposed Project site, and readings must be taken during a representative array of wind speeds/directions and meteorological conditions. Otherwise, the DEIR's findings on dust emissions would amount to little more than poorly-educated guesswork.

The DEIR's analysis must also include the extent to which Valley Fever spores are present in the soils comprising the project site, spores that could become wind-blown due to construction and operational activities.

Finally, the DEIR cannot concern itself only with the degree to which the projects in question would kill plants living above the desert surface. The proposed construction and operation activities would, merely by disturbing desert soils, destroy below-the-surface communities of tiny, delicate plants and organisms. The DEIR must be cognizant of the fact that root systems are bound together underground and that associated fungi hold soils together that would otherwise produce fugitive dust.

In conclusion, the DEIR must conduct an analysis of windblown dust and soil erosion that incorporates and investigates each of the points stated above.

5. The DEIR Must Thoroughly Consider the "Indirect and Secondary Effects," "Growth-Inducing Impacts" and Overall "Cumulative Effects" of the Proposed Project.

Under Section 15358(a)(2) of the CEQA Guidelines, indirect or secondary effects "may include growth-inducing effects and other effects related to induced changes in the pattern of land use… and related effects on air and water and other natural systems, including ecosystems."

The CEQA Guidelines further note that indirect or secondary effects include "an indirect physical change in the environment...which is not immediately related to the project, but which is caused indirectly by the project." (Section 15064 (d)(2)).

Further, CEQA requires that the DEIR give full consideration to "growth-inducing impacts." Specifically, CEQA Guidelines, Section 15126.2(d), says that environmental documents must ". . . discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment . . ." Included in this analysis must be this question: Does the Proposed Project and substation encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

Still further, CEQA mandates a consideration of "cumulative effects" of the Proposed Project. Section 15355(b) of the CEQA Guidelines says that "the cumulative impact from several projects is the change in the environment which results from the incremental impact of

the project when added to other closely related past, present, and reasonably foreseeable probable future projects."

Section 15131(a) states that an "EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated social changes resulting from the project to physical changes caused in turn by the economic or social changes." As stated in Section 15131(b), "[e]conomic or social effects of a proposed project may be used to determine the significance of physical changes caused by the project."

A. **The Proposed Project Will Be Used to Validate the Proposed Calcite Substation, Which Could, in Turn, Be Cited as Justifying the Revival of the Coolwater-Lugo Transmission Project.**

Proponents of the Proposed Project cite the prospect of a Calcite substation being built as justification for putting a utility-scale project in an ecologically fragile portion of North Lucerne Valley. They tout its close proximity to the Pisgah-Lugo transmission line, while noting that, if Calcite were to be approved, the Proposed Project would be only one gen-tie away from it. Southern California Edison ("Edison"), in turn, cites the Proposed Project as justification for establishing a Calcite substation. Edison then touts Calcite as the linchpin for many additional generating projects in the area.

Nevertheless, the IS reads as though the impact of a Calcite substation would extend no further than its 13-acre footprint, but that is hardly the case.

Edison's website makes no bones at all about why it thinks a new Calcite substation should be established in Lucerne Valley: "[t]he project will connect [i.e., encourage the proliferation of] new renewable generation projects in the San Bernardino County High Desert to the transmission grid."

The prospect of a new Calcite substation has in fact triggered an influx of proposals for utility-scale facilities in its vicinity: (1) the Proposed Project -- the official County notice for the Proposed Project confirms that it "coincides with California Public Utilities Commission proposal for the construction of the Calcite Substation . . ."; and (2) there are four more utility-scale projects queuing up to interconnect with a Calcite substation.[15]

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[15] After word of a possible new Calcite substation got out, applications for the following additional projects – which would be located in the immediate vicinity of the community – began wending their way through approval processes: (1) 8 Minute Solar (a 200 MW utility-scale solar project proposed for land north of Lucerne Dry Lake and west of Hwy. 247); (2) Aurora Sorrel (a ***2,000-acre*** utility-scale project) has been proposed for nearby state lands west of Hwy. 247 at the "Lucerne Cutoff;" and (3) two additional utility-scale projects that Edison has said are queuing up to interconnect with a Calcite substation (according to a statement made by an Edison representative, Kevin Richardson (at a December 6, 2016 public meeting in Lucerne Valley),

The referenced proposals are, in turn, cited by Edison as justifying construction of the new substation. As stated by Edison representative, Jennifer Cusack (at a December 6, 2016 public meeting in Lucerne Valley), "we [Edison] have to interconnect new projects."

With a bevy of new utility-scale projects in the pipeline all clustered around a Calcite substation – a substation that would provide a critical infrastructure link for new transmission lines -- Edison may well attempt a revival of the highly controversial, intensely opposed Coolwater-Lugo Transmission Project, which proffered – as one of its chief justifications – the dubious proposition that new transmission would be needed to interconnect posited renewable energy projects to the north and east of the Granite Mountains.

In short, approval of the Proposed Project would have an enormous "growth-inducing impact." The County is lead agency, and its job is to thoroughly analyze the impact of Coolwater-Lugo, and to discuss alternatives that do not open the floodgates to more industrial-scale development.

B. Approval of One Utility-Scale Renewable Project in the Desert Has the "Secondary Effect" of Creating a "Beach-Head" for the Proliferation of Other Such Projects in Its Immediate Vicinity, All of Which Incrementally Industrializes Hitherto Intact Desert Parcels, Thereby Creating Classic "Induced Changes in the Pattern of Land Use."

Desert areas, wild or rural in character, have little attraction for industrial-scale renewable energy facilities, like the Proposed Project, so long as no means exist to deliver the electricity to the grid. Hence, proponents of new renewable energy projects seek to site them next to substations (either those which are in existence or which are predicated on approval of one or more utility-scale projects), or next to other existing renewable energy facilities in order to "piggy-back" on transmission lines connecting their neighbors' renewable projects to the grid. Hence approval of one utility-scale renewable project in the desert has the "secondary effect" of creating a "beach-head" for the proliferation of other such projects in its immediate vicinity, all of which incrementally industrializes hitherto intact desert parcels, thereby creating classic "induced changes in the pattern of land use."

Such projects, because they result in profound and permanent destruction of the natural environs, are often posited as rendering the surrounding desert lands "disturbed," i.e., these parcels are mischaracterized as biologically-defunct, "damaged goods" no longer possessing environmental, aesthetic and recreational worth. Therefore, they are often mistakenly deemed ripe for more large-scale commercial development, regardless of their existing rural desert

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everything about them remains confidential until the project proponents sign Large Generator Interconnect Agreements).

designation and irrespective of the above-referenced land use policies dedicated to protecting that character.

That the IS misapprehends the Proposed Project site as being "disturbed" -- due to the presence of what it says are 33 homes so modest and underdeveloped that they do not deserve to be called a community[16] -- illustrates just how strongly land use planners' perceptions as to a parcel's environmental, aesthetic and recreational value are influenced by the level of development activity on other nearby parcels, and why it is so crucial that the DEIR fully and comprehensively assess the cumulative, growth-inducing effects of the Proposed Project and substation.

There are still further "secondary" and "growth-inducing" effects. Once utility-scale renewable projects begin to move in, rural residents move out; this is true because such projects have historically made bad neighbors. The exodus of rural residents would, in turn, accelerate the process of industrialization as renewable project proponents seek to develop former, so-called "disturbed" home-sites.

Attention must also be given to the growth-inducing effects in the arena of inter-connection and transmission, and the ensuing "closed loop" effect, in which a remotely-located generating project like this one is used as a justification for the construction of extensive, environmentally-threatening transmission facilities, which in turn become a justification for more generation plants, and so on. Thus, what on the surface is a generation project having a footprint of "only" approximately 500 acres becomes a continuous trigger for more and more transmission and generating projects. CEQA requires an analysis of such secondary effects and growth-inducing impacts, because otherwise these very real consequences grow and multiply "in the cracks" between one project and the next, never undergoing direct scrutiny.

In short, the enabling of new utility-scale renewable projects, like the Proposed Project, which, in turn, enable new transmission infrastructure projects like a Calcite substation (that, in turn, beget even further renewable projects), would have an obvious "secondary effect" and an "induced change in the pattern of land use." Section 15358(a)(2). The environmental impact of each new generating plant on the desert is large and enduring. Thus the enabling of utility-scale renewable energy projects causes "an indirect physical change in the environment . . . which is not immediately related to the project, but which is caused indirectly by the project." (Section 15064 (d)(2)).

Moreover, as part of an "Environmental Justice" analysis (which is more fully addressed below in Section 8), the DEIR must address the long-term and short-term effects that a proliferation of centralized energy generation facilities would have on the economic welfare of

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[16] In that same vein, the IS completely ignores the fact that the project area is part of vital wildlife linkages, and contends (at p. 47) that, due to "historical agriculture" and residential usage, the project area is supposedly shunned by native wildlife species, except for the occasional tryst: by animals which are "particularly tolerant of human disturbances, [which] may occasionally breed on the site."

the County's residents. The County's economy is heavily dependent on tourism. It has been estimated at **$1 Billion *per year*** according to a University of Idaho study discussed in Basin Energy Assessment Team's "Renewable Energy Analysis" (October 2013). As part of an effort to promote tourism, Hwy. 247 has been proposed as (and is under consideration for) designation as a scenic highway; filling adjacent desert lands with vast new solar fields and transmission would create visual blight that will detract from that effort.

As noted above, the Proposed Project would require extensive scraping, grading, excavation for trenches, as well as the cutting, trimming and flattening of most on-site vegetation. This intensive and obtrusive activity would destroy the surface soil on the majority of the 500 acres, which will result in permanent loss of a fragile mini-ecosystem, and the loss of carbon dioxide sequestration capability, which in this desert happens below the surface.[17] Moreover, the required grading and trenching would destroy the vital caliche surface layer and the micro-biologically-rich subsurface of the proposed site. The desert has been likened to a "reverse rain forest," where the most biologically productive systems – the root systems – are underground.

Hence the DEIR must assess, in terms of cumulative effects, the degree to which the Proposed Project (and others like it) would lead to a release, rather than a reduction, of greenhouse gases, and these offsetting negative effects must be carefully quantified in the DEIR. (The Proposed Project's capacity for releasing dust, Valley Fever spores and fine particulates, among other things, which has been discussed above, must also be addressed in the DEIR.)

Another aspect of this Proposed Project sure to create a cascade of increased environmental problems is that any perimeter road around the project would invite and enable OHV use on the adjacent open desert.

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[17] The IS states that the DEIR will engage in an analysis addressing likely GHG releases that the proposed projects will cause. In doing so, the DEIR must include in its analysis a study of the degree to which the desert's natural ability to sequester carbon will be lost. See "Solar Power in the Desert: Are the current large-scale solar developments really improving California's environment?" UC Riverside. The authors of this article, Michael F. Allen and Alan McHughen, point out in their study, among many other things, that the benefits of reduced GHG emissions from a large-scale solar project are finite, because the project has a limited life, whereas the detriments caused by the destruction of soils entailed by the building and maintenance of the power plant and the related transmission facilities are extremely long-term. "Understanding the lifespans of the solar plants, compared with this long-term slow C [carbon] balance is a critical need for determining if these solar developments represent a net long-term reduction in greenhouse gases." The article concludes that solar projects represent a net loss in that respect.

6. The DEIR Must Thoroughly Examine the Amount of Water Required for the Construction, Operation and Maintenance (including Ongoing Dust Suppression), as Well as the Impact of the Proposed Project and Substation on the County's Finite Groundwater Resources.

The IS concludes (at pp. 94-95) that the Proposed Project will have a "less than significant impact" in terms of groundwater usage and that "no mitigation is required." This is a startling conclusion given that the project site would be located on an overdrafted groundwater basin, according to the "Overdraft Groundwater Basins, DRECP" map. Nevertheless, the IS insists that the DEIR will opine only as to "[t]he degree to which existing groundwater supply is sufficient for the project . . ." Such an approach would not comply with CEQA and the regulations that interpret it; they make it clear that sound science, rigorous empiricism and critical thinking are the cornerstones of a correctly-done environmental assessment.

The IS does not cite any serious studies of the impact that the proposed projects, and others like them, would have on those aquifers. Instead, the IS simply recites (at pp. 94-94) that the developer will obtain a BAP right to 1,761 AFY from Gabrych, the current property owner. But his adjudicated "production right," under the 2015 area-wide water judgment does not represent a scientific estimate of the amount of groundwater that he or any other property owners can draw from that sub-basin without irrevocably depleting it. It establishes only the amount of water that Gabrych can *legally* draw from the local aquifer, which is the Este Sub-basin. It does not mean that the water will actually be there, nor does it mean that, should Gabrych and the other parties bound to the judgment draw the amounts allotted to them, there would be enough to go around.

It is particularly urgent that the DEIR undertake a meaningful groundwater analysis, given that water is an irreplaceable resource that is this County's lifeblood, and that it is subject to prolonged drought. It is also jeopardized by 20,000 MWs in total, according to the draft DRECP (with a portion of that on BLM lands as per the final BLM LUPA) of new utility-scale renewable energy that the DRECP plans for the California desert. Such data as we have on the subject – which comes chiefly from the DRECP itself – must be considered.[18]

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[18] The DRECP water data and findings continue to be relevant, notwithstanding the 2016 – 2017 rains. The jury is still very much out on whether and to what extent California's prolonged drought was broken in arid regions such as the Mojave Desert. Statements made by the State Water Resources Control Board (the "SWRCB"), in its comment letter regarding the DRECP, suggests that the drought would persist there despite the recent rains. The SWRCB comment letter states that the preponderance of groundwater in the Basins and Ranges hydrologic province is thousands of years old (i.e., it takes thousands of years for groundwater to travel from the point of recharge to the point of discharge). According to the SWRCB comment letter, our aquifers represent a closed system where 66% of the groundwater is between 100 and 33,000 years old with the only "young" recharge coming from the mountains [p. 18]. On a related note, the SWRCB states that, "[i]n most areas of the desert, deeper, older groundwater is saline. Excessive pumping will likely cause migration of saline water into fresh water aquifers [p. 11]."

While the draft DRECP did not conduct a meaningful analysis of groundwater baseline data, it nevertheless made valuable observations about the tenuous state of the desert's groundwater basins. For instance, the draft DRECP acknowledged that its DFAs would be located primarily on already overdrafted groundwater basins from which the enormous volumes of water needed -- for the construction, maintenance and operations of large-scale generation facilities -- would have to be drawn. In that regard, it conceded (at IV.6-24) that "[d]evelopment would occur in 35 groundwater basins," that 14 of them are stressed or in "overdraft or stressed," that "[m]ost (97%) of the developed area is within four ecoregion subareas [the High Desert areas of Los Angeles and San Bernardino Counties and the Imperial Valley]" -- which are the most populated areas of the California desert[19] -- and that "increased groundwater use in these sensitive basins can adversely affect water supplies and exacerbate impacts associated with overdraft conditions and declining groundwater levels."

The draft DRECP also stated that the total estimated water use for the new projects it sought to foster would be 91,000 acre-feet per year (IV.6-24), and that the "[r]enewable energy facilities permitted under the DRECP could influence the quantity and timing of groundwater recharge because construction would include grading the land surface, removing vegetation, altering the conveyance and control of runoff and floods, or covering the land with impervious surfaces that alter the relationships between rainfall, runoff, infiltration and transpiration [IV.25-45]." Solar energy – which was the renewable technology preferred in the DRECP -- "would result in the largest amount of grading so it would have the largest impact on groundwater recharge among the renewable technologies permitted under the DRECP [IV.25-45]."

According to the vastly understated language of the draft DRECP, the "use of groundwater for renewable facilities permitted under the DRECP would combine with [other uses of groundwater] . . . to result in a cumulative lowering of groundwater levels affecting basin water supplies and groundwater [IV.25-46]."

The draft DRECP also took note (IV.25-45) of the "[p]opulation growth and anticipated development summarized in Section IV.25.2.2" -- including "future residential development that would also use a large amount of groundwater continuously [IV.25-46]" and that would result from anticipated renewable energy and other projects -- as further contributing to the drawdown of desert groundwater basins.

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[19] When the draft DRECP's map of the Preferred Alternative DFAs (which, along with transmission corridors, was to entail approximately 177,000 acres of "ground disturbance" (IV.7-215)) is superimposed on top of the DRECP's Overdraft Groundwater Basins map, one sees that (with small exceptions) all of the High Desert DFAs – from the Antelope Valley east to the Johnson Valley -- were located within the boundaries of already overdrafted groundwater basins. Indeed, the DRECP conceded: "[u]nder the Preferred Alternative, development in BLM lands can affect groundwater in 12 basins characterized as either in overdraft or stressed" [Section IV.6 of the DRECP].

Even more ominously, the draft DRECP noted that the proposed renewable energy projects would result in "compression [of groundwater basins that would reduce] the volume of sediment beds and lower land surface elevations, which can damage existing structures, roads, and pipelines; reverse flow in sanitary sewer systems and water delivery canals; alter the magnitude and extent of flooding along creeks and lakes. ***This compression of clay beds [that make up groundwater basins] also represents a permanent reduction in storage capacity***" [IV.25-47]. (Emphasis added.) The proposed renewable energy plants and transmission facilities "could also cause water-level declines in the same groundwater basins and contribute to the migration of the saline areas of groundwater basins" [IV.25-47].

In terms of construction usage, the 550 MW Desert Sunlight 250 project (on 4,400 acres of land) – and the 1,550 acre feet of water allocated to its construction – can be used as a metric. Forty projects of that size would produce just over the DRECP's targeted 20,000 MWs in renewable energy. Assuming that those forty projects would use a similar amount of water during their construction, construction of 20,000 MW of new renewable energy projects would consume 620,000 acre feet, which equates with approximately 20 billion gallons of water.

In their maintenance and operations, the utility-scale solar projects in the Lucerne Valley DFA would, according to data from the draft DRECP, consume almost 1,000 acre-feet of water **per year,** which is enough water to fill four Rose Bowls to the brim. On a DRECP-wide basis, if all 20,000 MW of generation were to come from the least water-intensive generation method – which is solar PV (as opposed to solar thermal, which requires many multiples more water in cleaning, as well as a great deal of additional water for cooling operations) – and the PV panels were washed only six times per year, the cleaning of the panels alone would consume .15 acre feet per year per megawatt of generation, which would amount to a total water expenditure of approximately 3,000 acre feet per year (20,000 times .15 = 3,000).

Projects on the BLM land will be drawing from the same groundwater basins that the rest of the County relies on – in effect, public and private "straws" will all be drawing from the same figurative milkshake. Nevertheless, the draft DRECP made no study of the impact on the desert's aquifers of siting 20,000 MWs of new generation facilities, nor did the draft DRECP include any real baseline data concerning the health or sustainability of those basins under current demands, or when the effects of an ongoing drought of historic proportions is factored in.

This puts the onus on the DEIR to conduct a far-reaching analysis of the cumulative effects that the Proposed Project and substation would have on our inter-connected aquifer systems, particularly given that the proliferation of large-scale, water-thirsty projects, like the Cadiz Valley Water Conservation and Storage Project, the Eagle Mountain Pumped Storage Hydroelectric Project (1,300 MW) and any major efforts to remediate the Salton Sea, will stress already fragile water reserves.

Hence the DEIR and the projects' proponents must: (1) conduct and incorporate a comprehensive assessment as to how the siting of their proposed renewable energy generation and substation would – in combination with other factors, including the plethora of utility-scale and transmission projects that will be developed on public land under the BLM LUPA -- affect

relevant groundwater basins, i.e., to what degree would their sustainability be threatened; and (2) conduct a baseline study as to the current status of each affected aquifer – how much potable and non-potable water is each such groundwater basin currently holding? How much water is being pumped out of each basin by the residents and businesses currently relying upon them? How much water can be expected to recharge the basins, either from natural sources or from the State Water Project? Are the groundwater basins sustainable in view of the demands currently being made on them (including the demands that would be made on them by the Proposed Project and substation), and in view of their recharge rates, or are these basins approaching collapse, i.e., what are their tipping points? What is the likely effect of ongoing drought on our groundwater basins?

Even at that, such an analysis would provide a very limited, snapshot-in-time prognostication that may not accurately portray our groundwater basins' future sustainability. At the meeting of the BLM's Desert Advisory Committee on September 27, 2014, in Pahrump, Nevada, Peter Godfrey, a BLM water specialist who was one of the authors of the groundwater portions of the draft DRECP, stated that, in order to assess our aquifers' future sustainability, a long-term time horizon of as much as 30 years is required, which is longer than the projected lifespan of the Proposed Project and substation. In other words, we won't really know whether these projects have compromised our groundwater basins until after they have passed the point of no return. The DEIR must factor into its analysis that it may be impossible, given practical temporal limitations, to determine with any real degree of certainty whether the Proposed Project and substation will debilitate local groundwater basins, which strongly suggests that a "no action" alternative merits extraordinary attention.

According to the IS (p. 94), the Proposed Project and substation would use 1.93 acre feet of water during the 16-month construction period, that 6.0 acre feet per year would be used for panel washing and that 0.6 acre feet per year would be used for "maintenance and repair dust suppression." These estimates should be rigorously examined in the DEIR, given that the burden is on the proponent to provide empirical data to back them, particularly when there are close-by actual experiences of other projects from which to draw actual data. Moreover, there is a history of under-estimation by other solar projects as to actual volume of water used during the course of construction and operation. The DEIR must specifically address what happened in these projects and critique the estimates provided by the proponent in light of these experiences.[20]

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[20] At the onset of the Agincourt and Marathon solar projects (now known as Lone Valley Solar), the proponents agreed to purchase from the Mojave Water Agency ten acre feet of water; instead, according to our information, they wound up using more than 50 acre feet (10 acre feet came directly from the Morongo Basin pipeline, and the other 40 acre feet were purchased from a local farmer). And these projects have been spewing tons of dust. The same thing has occurred with respect to the Soltec PV project in Newberry Springs.

The Desert Sunlight Solar PV facility in Riverside County was approved based on the promise of its proponents to limit themselves to 1,400 acre feet of groundwater during construction. But, after they broke ground, they said they would need 1,500 acre feet of water (which they later increased by another 50 acre feet). The developers took all of that water from

The IS speaks (at p. 14) in general terms of measures to reduce fugitive dust *during construction* of using approximately 75 acre-feet for dust suppression and earthwork (over an approximately 10-month period), but proposes no measures for controlling dust over the proposed project's multi-decade span of operational years, notwithstanding the arid, high-wind environment in which they would be located (and notwithstanding that, because the project site would be unmanned, the project proponents would have no one on site to address incidents of blowing dust). The IS projects that 0.6 acre feet per year will be used for "maintenance and repair dust suppression." This appears to be quite low given that that relatively meager volume of water would have to keep dust down over an arid, wind-prone and highly disturbed almost 500-acre site. Even the IS (at p. 95) calls this a "very minor amount of groundwater." The IS does not even state how much of the 0.6 AFY would be allotted to maintenance and repair, as opposed to dust suppression.

The DEIR must address whether the projected amount of water will be sufficient to prevent fugitive dust. The DEIR must also take a serious look at whether ***any*** amount of water would, after the site is seriously disturbed through construction, operation and maintenance of the two proposed projects -- be sufficient to prevent fugitive dust from plaguing the region, especially given D/CO 1.4 of the County's General Plan's Conservation Element, which sets out the requirement to "[r]educe disturbances to fragile desert soils as much as practicable in order to reduce fugitive dust . . ."

The IS recites the types of soil that are present on the proposed site, but it does not analyze whether the prevailing soil types would be conducive to fugitive dust blown off a de-vegetated site over the years by prevailing desert winds. These deficiencies must be remedied in the DEIR – such an analysis would be critical in determining how much water the Proposed Project and substation would really consume.

Also missing from the IS is any meaningful attention to the issue of Valley Fever. The DEIR must address some well-known facts about how disruption of the desert soil stirs up the microscopic spores that cause Valley Fever which can travel on the wind as far as 75 miles.[21]

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an aquifer that has not gotten any re-charge in hundreds of years, according to a U.S. Geological Service survey.

Antelope Valley Solar Ranch, located in Lancaster, near Route 138, was built by First Solar, which seems to be the contractor of choice for many solar photovoltaic projects. The AVAQMD cited First Solar for violations of air quality standards on at least two separate occasions. The AVAQMD was quoted as saying that there was "a myriad of things [First Solar] could have done that we didn't think they were doing to prevent the violations."

[21] The town of Lucerne Valley is very close by, and the Town of Apple Valley, and the cities of Victorville and Adelanto are, in terms of how mobile particulate matter can be, practically right around the corner.

The DEIR must also address, in assessing environmental impact in terms of Valley Fever causation and dissemination, that: (1) soil disturbance in the Western Antelope Valley resulting from large-scale renewable energy development, and from construction of SCE's grid line and power station infrastructure, is suspected of causing a recent outbreak of Valley Fever in that region; and (2) any water that would be used to temporarily suppress dust would, unfortunately, cause Valley Fever spores to reproduce, because they thrive on alternating periods of extreme wetness and extreme dryness.

The DEIR must critically address the groundwater issue, and incorporate a comprehensive and cumulative study of the impacts on groundwater reserves that renewable energy projects, like the Proposed Project and substation, and their progeny, would have, with an emphasis on establishing the crucial "trigger points" at which groundwater pumping would render specific affected groundwater basins unable to meet the needs of the County's residents and businesses. There must be a rigorous and honest comparison of alternatives to the project as proposed.

7. The DEIR Must Make an Honest and In-Depth Study of the Effects that the Proposed Project Would Have on the Local Community – One That Is Not Laden with the Unfounded Value Judgments Found in the IS.

The Proposed Project and substation would be located in an established rural desert community consisting of at least 54 homes within a half-mile of the project boundaries (at least 33 of them are occupied by their owners or, as is the case with Rivers Edge Ranch, under active operation). The homes are oriented in a roughly radial pattern around a large open space which gives the locale a very spacious feel, one that complements the community's picturesque setting (the Proposed Project would occupy and eliminate that open space). It is located immediately north of a large dry lake, and in a narrow valley between the Granite Mountains and the Ord Mountains (both of which host extensive ACECs), which allows the residents to enjoy unimpeded and dramatic desert and mountain views in all directions. Most of the land in the community does not show signs of having been farmed, and cannot be readily distinguished from other nearby pristine desert regions. That portion of it that has been farmed is in an advanced stage of recovery and is part of a functioning natural habitat. There has been no large-scale agriculture in the community for approximately a decade.

Nevertheless, while addressing the question -- would the Project "physically divide" an established community? – the IS (at p. 70) portrays the community in a bleak, unappealing and highly inaccurate manner: the IS contends that there are only 32 "modest" and "generally undeveloped" residences there, and that a mere 22 of them show signs of habitation. The IS also maintains that "many of the parcels are currently used as storage space for vehicles and/or machinery," while concluding dismissively that, "based on its generally sparsely developed and

rural character, the surrounding area would not be considered an established community."[22] The IS cites this mischaracterization as support for its conclusion that the Proposed Project would have a "less than significant impact."

The IS's unfounded and inappropriate value judgments should not be incorporated into the DEIR. The IS depicts local property owners as a marginal population unworthy of protection under the County's above-discussed land use planning policies. Reading the IS's disparaging account, one can practically hear tumbleweeds blowing and rusty hinges creaking on abandoned shacks. Is there any doubt that, had the community consisted of million-dollar homes with well-manicured lawns, the IS's conclusion would have been entirely different?

That the homes in the local community are indeed dispersed – this is a common and often defining characteristic of rural living, particularly in the desert – does not mean that the area is "generally sparsely" developed, nor would that disqualify the community from receiving protection against rampant industrialization. One need only look at the County's above-cited land use goals and policies for confirmation of that proposition: they are directed toward protection and preservation of the rural lifestyles of the County's desert residents.[23]

The County has, in accord with those goals and policies, protected small desert communities from utility-scale development. On May 5, 2015, the Board of Supervisors granted an appeal revoking a CUP for a proposed commercial photovoltaic solar project in Landers – called Bowman Solar – in part because it would have been incompatible with the dispersed rural residences that dot the surrounding region, ***notwithstanding that there were only "seven single-family residences*** . . . located within 1,000 feet of the proposed project parcel" according to the Initial Study for that project (emphasis added.). Such concerns also played a part in the County Planning Commission's denial, on November 6, 2014, of a CUP for the proposed Desert View photovoltaic solar project in western Lucerne Valley.

Several of the speakers at the June 13, 2017 scoping meeting on the DEIR – including Brian Hammer, Susan Hammer (the Hammers' property would be surrounded by the Proposed

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[22] The IS cites as authority for this proposition something that it calls the "(County of San Bernardino 2007)." We have been unable to determine what, if any, County publication it is referring to.

[23] In addition, the stated policy of the County's General Plan is: (1) to "maintain land use patterns in the Desert Region that enhance the rural environment and preserve the quality of life of the residents of the region (Goal D/LU 1);" (2) to "ensure that commercial and industrial development within the region is compatible with the rural desert character and meets the needs of local residents (D/LU 3);" (3) to "maintain land use patterns in the Desert Region that enhance the rural environment and preserve the quality of life of the residents of the region (Goal D/LU 1);" and (4) "to preserve the unique environmental features and natural resources of the Desert Region, including native wildlife, vegetation, water and scenic vistas" (Goal D/CO 1 of the General Plan's Open Space element).

Project on two sides) and Patty Riddle – made it clear that the IS has grossly mischaracterized their community. They confirmed that, while local residents greatly value the open space around their homes – and the personal privacy and direct access to nature that it affords them -- they also enjoy a strong sense of community with their neighbors. And they have great pride in their properties. Brian Hammer mentioned that, while his house might not look all that distinguished from the outside, he and his wife are extensively remodeling its interior. Patty Riddle acknowledged that she and her husband store a large number of collector cars on their property,[24] and that because of this it may not show well in an aerial photo, but her deep bond with the property – upon which she has long maintained a home and a productive grove of nut-bearing trees, among other things -- was quite apparent.

The DEIR must completely re-think the approach taken by the IS toward the local community and provide a meaningful impact analysis that is consistent with the points made in this section of our letter. The basic premises for such an analysis must be that these homes form a community in the fullest sense of the word, and that, because the Proposed Project would so thoroughly consume and dominate all of the open space at the center of the community -- lapping up against the very property lines of many residents' homes -- it would "physically divide" the community.[25]

The DEIR must also incorporate a more expansive definition as to what the community is comprised of than the one used in the IS (persons living within a half-mile of the Proposed Project site) because residents living outside that half-mile zone – including those living to the east of Peterman Hill – would be greatly impacted by the Proposed Project, especially given the enormous range that wind-blown fugitive dust has.

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[24] According to aerial photos, Ms. Riddle's property is the only one in the community upon which large assemblages of cars are found. The IS was mistaken in concluding that "***many*** of the parcels are currently used as storage space for vehicles and/or machinery." (Emphasis added.)

[25] The IS correctly notes that the Proposed Project would not block residents from gaining access to Hwy. 247, but a project does not have to amount to a veritable Berlin Wall – an impregnable barrier that completely isolates one portion of a community from another by running through its entire length and breadth – in order to be considered as one that "physically divides" it. To conclude otherwise would be to give the quoted phrase an unduly narrow and literal interpretation, one that would render the CEQA criterion employing it inapplicable to all but a very few development projects.

8. The DEIR Must Also Analyze a Broad Array of Environmental Justice[26] Impacts that the Proposed Projects Would Have on the Surrounding Community.

Environmental Justice ("EJ") concerns are accorded an immense amount of focus and weight in this State, and *all* social, economic and physical impacts that the Proposed Project and substation would impose on the surrounding community must be carefully and comprehensively analyzed as part of the DEIR. In other words, the DEIR's EJ analysis should not begin and end with consideration of the extent to which the Proposed Project and substation would "physically divide" the surrounding community.

Under CEQA, impacts to the environment are not limited to the natural environment, but also include "substantial adverse effects on human beings, either directly or indirectly." CEQA Guidelines, Section 15065(d). Along those same lines, the official website for the California Office of Attorney General (oag.ca.gov) states, in an attachment to its "CEQA and General Planning" section – entitled "Environmental Justice at the Local and Regional Level Legal Background" (the "EJ Guidelines") – that:

> "Human beings are an integral part of the 'environment.' An agency is required to find that a "project may have a 'significant effect on the environment' if, among other things, '[t]he environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]" (Pub. Res. Code, § 21083, subd. (b)(3); see also CEQA Guidelines, § 15126.2 [noting that a project may cause a significant effect by bringing people to hazards]."

The EJ Guidelines also state that: (1) a "local lead agency [is required] to determine whether pollution from a proposed project will have significant effects on any nearby communities, when considered together with any pollution burdens those communities already are bearing, or may bear from probable future projects;" and (2) "economic and social effects may be relevant in determining significance under CEQA in two ways . . . First, as the CEQA Guidelines note, social or economic impacts may lead to physical changes to the environment that are significant . . . Second, the economic and social effects of a physical change to the environment may be considered in determining whether that physical change is significant [citations to legal authorities were omitted for purposes of brevity]." See also Section 15131(b), which states that "[e]conomic or social effects of a proposed project may be used to determine the significance of physical changes caused by the project."

An environmental study is fatally defective when it accords greater weight to a nearby community of million-dollar homes than it does to less affluent communities. The IS has already

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[26] Environmental justice is defined by the Environmental Protection Agency as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

started down the wrong path; the DEIR must reverse direction, and give serious consideration to the Proposed Project's likely effects on the people who would be living in its proximity.

In line with the above-cited EJ Guidelines and CEQA statutes, the following EJ concerns are triggered by the Proposed Project and substation:

1. The community would not reap any benefits from the two projects.

Local residents would be called upon to make a huge sacrifice in the name of large-scale energy generation and transmission: they would have to give up their desert rural lifestyles, direct access to nature and unimpeded natural views, as well as the value of their homes. But they would get nothing in the bargain. All of the power generated would be exported to the grid for use outside the County, and all profits would go to NextEra and to Edison[27];

2. The community would directly suffer all of the substantial downsides generated by the two projects.

Residents would be subjected to noise, dust and constant intrusion from two major construction projects that would require hundreds of workers and platoons of heavy equipment over an extended period of time. And dust plumes would inevitably be unleashed during the operational life of the projects as the prevailing winds sweep over denuded desert soil, while new high tension lines crackle and hum loudly overhead. As the immense appeal of the community is destroyed in the process, the value of the homes in it would plummet, all of which will likely result in some or all of the homes being abandoned. If so, the area would sink into blight and become the derelict community depicted by the IS. Instead of the current, vibrant human community that exists side-by-side with thriving natural communities, there would be a quarter of a million solar panels left silently pivoting in the degraded landscape; and

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[27] California has such a glut of renewable energy that, for eight days in January and nine in February, the state had to pay Arizona to take all the surplus, even as natural gas power plants – eight such plants are being refurbished – continued to generate, according to a June 22, 2017 *Los Angeles Times* article, entitled "California has invested heavily in solar power. Now there's so much that other states are sometimes paid to take it." It also reports that curtailments of solar and wind power production for the first quarter of 2017 were more than double the same period last year, and the surge in solar power could push the number even higher in the future. Because of this surplus, existing power plants run, on average, at slightly less than one-third of capacity. And some plants are being closed decades earlier than planned. But the overbuilding of new plants and transmission continues apace because – according to industry insiders cited in the article – such construction receives a "lopsided incentive": "utilities can build in the construction costs into the amount that the utility can charge electricity users – no matter how much or how little is used." In other words, such charges include a guaranteed rate of return, i.e. profit, for the utilities.

3. The two projects would usher a proliferation of additional utility-scale projects into the vicinity, imposing additional ill effects on community members (see the cumulative effects discussion above).

This is already beginning to happen, despite the fact that neither the Proposed Project nor the substation has been approved. As detailed above in Fn. 15, there are four additional utility-scale projects being proposed for the immediate vicinity of the community that are now in the approval pipeline. One such project would, if approved, consume 2,000 acres of desert. This proliferation of utility-scale projects would put the community at the epicenter of thousands of dust (and spore)-spewing industrialized acres, thereby making its residents the focus of an undue and highly disproportionate amount of health-compromising fugitive particulates and other pollutants.[28]

While each of the EJ considerations discussed above must be addressed in the DEIR, this letter is not meant to exhaustively catalog all such EJ concerns. It is meant solely to provide our initial take on what those concerns may be and as to how the DEIR might address them.

9. The DEIR's Analysis of Proposals for Restoration of the Site of the Proposed Projects Must Take Proper Account of the Difficulty of Restoring Desert Terrain.

The Proposed Project and substation cannot be justified by the proposition that, after their operational life is over, the project sites can be restored to their former natural state, because the desert is an ecosystem well-known to be poorly responsive to restoration efforts. It is very difficult to restore desert habitats following disturbance; it is particularly hard to protect against OHV use after construction; and it is almost impossible to protect against increased fires and human disturbance as a result of increased access. Yet these phenomena – increased OHV use after construction, more fires and more human disturbance because of increased access – are inevitable consequences of the Proposed Project.

Making restoration efforts all the more difficult is climate change. According to the current draft DRECP, current climate change predictions identify the deserts of North America as being particularly hard hit. The report states: "Climate projections agree that temperatures will increase in the southern California deserts by more than 2º C…" Draft DRECP, App. P, page 13. That these increases in already very high temperatures will put tremendous stress on numerous species goes without saying. When the loss of water from extended drought is added to the mix, there ceases to be any basis to suggest that the additional stress on the desert from projects like this can be "mitigated" away through restoration some years hence.

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[28] The EJ Guidelines cite Gov. Code, § 65040.12, subd. (e), which states that "[f]airness in this context means that the benefits of a healthy environment should be available to everyone, and the burdens of pollution should not be focused on sensitive populations or on communities that already are experiencing its adverse effects."

The concept of restoration has no validity in a serious environmental study without meticulous examination of what kind of damage can be restored, and by what means, and over what time period. The DEIR must give this subject careful consideration.

10. Conclusion.

We welcome the opportunity to comment on the scope of the DEIR for the Proposed Project and substation, and look forward to continuing participation.

Very truly yours,

Community Associations, Businesses and Organizations:

LUCERNE VALLEY ECONOMIC DEVELOPMENT ASSOCIATION

Chuck Bell, President

JOHNSON VALLEY IMPROVEMENT ASSOCIATION

Betty Munson, Secretary

HOMESTEAD VALLEY COMMUNITY COUNCIL

Joanna Wright, President

OAK HILLS PROPERTY OWNERS ASSOCIATION

David Blevins, President

FLAMINGO HEIGHTS COMMUNITY ASSOCIATION

Dorothy Beasley, President

NEWBERRY SPRINGS ECONOMIC DEVELOPMENT ASSOCIATION

Paul Deel, President

MORONGO BASIN CONSERVATION ASSOCIATION

Sarah Kennington, President

CHURCH OF OUR LORD AND SAVIOR (LUCERNE VALLEY)

Bill Lembright, President

LUCERNE VALLEY MUSEUM AND HISTORY ASSOCIATION

Barbara A. “Rusty” LaGrange

LUCERNE VALLEY MARKET/ HARDWARE

Linda Gommel, Chief Executive Officer

MOJAVE COMMUNITIES CONSERVATION COLLABORATIVE

Lorrie L. Steely, Founder

ALLIANCE FOR DESERT PRESERVATION

Richard Ravana, President

Individuals (the persons whose addresses are noted below in parentheses live in, or own property in, the community surrounding the Proposed Project site):

Jack Harris (16731 Meridian Rd., Lucerne Valley, CA)

Regino Pitones (15924 Meridian Rd., Lucerne Valley, CA)

Jerry Cummings (15750 Meridian Rd., Lucerne Valley, CA)

Barbara Cummings (15750 Meridian Rd., Lucerne Valley, CA)

Brian Hammer, Analyst and Adjunct Professor (owner of home at 33261 Haynes Rd., Lucerne Valley, CA)

Sue Hammer (owner of home at 33261 Haynes Rd., Lucerne Valley, CA)

Donna R. Betz (33434 Northside Rd., Lucerne Valley, CA)

Judy Wakefield (34776 Lancelet, Lucerne Valley, CA)

Natalie M. Buchanan (15449 Meridian Rd., Lucerne Valley, CA)

Jai Hoon Yoo (15468 Meridian Rd., Lucerne Valley, CA)

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Amy Ware (33603 Wilderness Lane, Lucerne Valley, CA)

Debra Goss (33550 Wilderness Lane, Lucerne Valley, CA)

Bradley R. Hicks (P.O. Box 1011, Lucerne Valley, CA)

Dennis Morrison (P.O. Box 216, Lucerne Valley, CA)

Brenda P. Hicks (P.O. Box 175, Lucerne Valley, CA)

Sarah McKee (33850 Waalew Rd., Lucerne Valley, CA)

Renee Lynn (16821 Meridian Rd., Lucerne Valley, CA)

Ron Arnold (33434 Northside Rd., #B, Lucerne Valley, CA)

John W. Buchanan (15449 Meridian Rd., Lucerne Valley, CA)

Bobbie Perrin (16274 Meridian Rd, Lucerne Valley, CA)

John Kenmuir (33631 Haynes Rd., Lucerne Valley, CA)

Bonnie Lott (33631 Haynes Rd., Lucerne Valley, CA)

Amanda Starn (resident of Apple Valley, owner of Parcel #0453-071-49-0000)

Kymberly Starn (resident of Apple Valley, owner of Parcel #0453-071-49-0000)

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Mark Riddle (P.O. Box 682 – Meridian Rd. – Lucerne Valley, CA)

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Marina West (resident of Landers)

John Smith (resident of Apple Valley)

Barbara Smith (resident of Apple Valley)

Jeffrey LaGrange (resident of Lucerne Valley)

John Jones (resident of Johnson Valley)

Bobbie Jones (resident of Johnson Valley)

Linda Morrison (resident of Apple Valley)

Wayne Morrison (resident of Apple Valley)

Ruth Rieman (resident of Flamingo Heights)

Tim Norton (resident of Johnson Valley)

Jody Norton (resident of Johnson Valley)

Barbara LaGrange (resident of Lucerne Valley)

Bryan Baker (resident of Apple Valley)

Jean Magee (resident of Lucerne Valley)

Deborah Myers (resident of Lucerne Valley)

Aaron Idouchi (resident of Milpas Highlands (Apple Valley)

Owen Myers (resident of Lucerne Valley)

Barbara Idouchi (resident of Milpas Highlands (Apple Valley)

Kathryn Anema (resident of Lucerne Valley)

Randall Smith (resident of Apple Valley)

CCs:

James Ramos (Chairperson and Third District Supervisor; SupervisorRamos@sbcounty.gov)

Robert Lovingood (Vice-Chairperson and First District Supervisor; SupervisorLovingood@sbcounty.gov)

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Curt Hagman (Fourth District Supervisor; SupervisorHagman@sbcounty.gov)

Josie Gonzales (Fifth District Supervisor; SupervisorGonzales@sbcounty.gov)

6-26-17

Dear John, (I get quite a few of these too!)

I'm writing to ask if you could send me a printed copy of the EIR for the proposed solar project on the side of Ord Mountain north of Lucerne Dry Lake? I'm very interested in environmental issues in your state and saw it mentioned in the Hi-Desert Star newspaper, to which I subscribe. I do not have a computer, hence the request for a printed copy. I'm sending along a few bucks to cover postage. If the report is too big, just keep the money in your coffee fund!

Thanks.

Sincerely,

John K. Ziegler
20 Hillery Court
Apt. A41
York, PA 17402-7891