

April 30, 2020

**By Email: Randy.Collins@slc.ca.gov**

Mr. Randy Collins  
Public Land Management Specialist  
California State Lands Commission  
100 Howe Avenue, Suite 100-South  
Sacramento, Calif. 95824-8202

**Re: Environmental Justice Outreach; Stagecoach Solar Project, Lucerne Valley, San Bernardino County; proposed 200 Megawatt Solar Energy Facility (the “Proposed Project”)**

Dear Mr. Collins:

We are a coalition made up of the following community groups, businesses, agencies and individuals: Lucerne Valley Economic Development Association (LVEDA), Church of Our Lord and Savior (Lucerne Valley), Lucerne Valley Market/Hardware, Lucerne Valley Realty, Expert Appliance Service, Jubilee Mutual Water Company, Inc., Homestead Valley Community Council, Johnson Valley Improvement Association, Newberry Springs Chamber of Commerce, Newberry Springs Economic Development Association, Newberry Springs Community Alliance, Morongo Basin Conservation Association, Mojave Communities Conservation Collaborative, California Desert Coalition, Friends of Pioneertown, Sustainable Learning Center, Friends of Big Morongo Canyon Preserve, Brian Hammer, Roger Peterson, Sue Hammer, Dennis Morrison, Renee Lynn, Millie Rader, Jerry Swarthout, David Rader, Neil Nadler, Todd Jones, Lorraine Cross, Louis Kannenberg, Rusty LaGrange, George V. Yablonsky, Franklin S. Fowler Jr., M.D., Carl Porter, Jeanne C. Fowler, Roland Reyes, Kathryn Anema, Charlie Brewster, Teresa Reyes, Frank Quinones, Randy Pumbo, Herlinda V. Quinones, Lawrence Land, Gary Aplet, Kenneth D. Lair, Barry Blair, Barbara Smith, Susan Blair, Jackie R. Lindgren, Gregg Hallam, Bryan Baker, Nicole Hallam, Robert L. Berkman, Ellen Johnson, Laraine Turk, Jim Johnson, Ted Stimpfel, Marina West, Randy West, Diana Bork, Ann Garry, Sarah Kennington, Dave Garry, Elizabeth Stewart, Steve Bardwell, Matthew McCarthy, David S. Miller, Cindy Charlton, Dixie Coutant, Jerry Broyles, Monica L. Mahoney, Gene Parsons, Catherine Cannon, Star Decker and Robert Stiefel. Together, we represent a broad spectrum of residents, businesses, organizations, recreationists and conservationists in the High Desert of San Bernardino County.

Our coalition has been active in commenting on renewable energy, land use and environmental policies affecting High Desert communities, which has included engaging with San Bernardino County (the “County”) concerning the Renewable Energy and Conservation Element of the Countywide Plan and various proposed utility-scale renewable energy projects, including several that are proposed for northern Lucerne Valley in the vicinity of the Proposed Project site. We are writing now in response to the “Environmental Justice Outreach” letter, dated February 19, 2020 (the “EJ Outreach Letter”), sent by the California State Lands Commission (the “CSLC”), which asks for our “input on the impacts and benefits of this action [the Proposed Project] on the local community.”<sup>1</sup> As will be discussed below, the Proposed Project would, if approved, impose disproportionate environmental hazards and other serious repercussions on Lucerne Valley -- which is a disadvantaged community in several respects -- that would be contrary to the goals and policies stated in the CSLC’s “Environmental Justice Policy” (the “EJ Policy”).

We support the CSLC’s goal of:

(1) fostering and increasing our state’s renewable energy capacity by, as stated in the EJ Policy, “facilitating and encouraging community- or regional-scale renewable energy facilities” (EJ Policy, p. 2 (para. 1(b) of the “Environmental Justice Goals”), and encouraging such facilities in order to enhance “social equity” (EJ Policy, p. 10 (Goal 6.0) (see also p. 12 (“Goal 8: Encourage Community-Oriented Lessees)));

(2) “promoting equity and advancing environmental justice through more inclusive decision-making that considers the disproportionate burdens on disadvantaged communities and Native Nations (p. 1 of the EJ Policy);” and

(3) implementing the EJ Policy to create, as stated in the EJ Outreach letter, a “future in which environmental justice communities and tribal communities are no longer disproportionately impacted by pollution and environmental hazards . . .”

In line with the CSLC’s aims, our coalition has engaged with the County in an effort to prevent utility-scale renewable energy projects – large generation facilities that export power out of the County to the electrical grid -- from impinging on disadvantaged High Desert communities and the surrounding open space that defines them and maintains their quality of life.

## **1. Introduction**

Lucerne Valley is a well-established community of dispersed rural homes located in a primarily undisturbed natural desert setting in which important inter-mountain wildlife corridors are present, with a harmonious (yet delicate) balance maintained between its human and natural

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<sup>1</sup> We request that all future notices and communications pertaining to the Proposed Project be directed to our representative, Chuck Bell, at the following email address: [chuckb@sisp.net](mailto:chuckb@sisp.net).

communities. It is an economically disadvantaged community that is home to a predominantly older population with significant health deficits.

The Proposed Project would consist of a 5,359-acre utility-scale renewable energy (solar panel) facility and a 7.6-mile 220 kV transmission line (the “Gen-Tie Line”).<sup>2</sup> In order to connect the Proposed Project to the grid, Southern California Edison (“Edison”) would have to construct a new regional electrical substation in its vicinity (the sites for the Proposed Project and substation are depicted on the maps attached to this letter as Figures 3 and 5<sup>3</sup>). Development of this magnitude would fundamentally and irrevocably industrialize Lucerne Valley and, in the process, generate harmful environmental impacts that would deprive its residents of their health, homes and groundwater, while devastating the local tourism-driven economy and property values. Two of the primary by-products of the Proposed Project would be visual blight and health-destroying dust, spores and respirable fine particulate matter blowing off of a wind-prone project site scraped bare of its native, soil-retaining plants. The Proposed Project would render the desert rural lifestyle enjoyed by Lucerne Valley’s residents a thing of the past, and ultimately displace them in whole or in large part.

As a result, the Proposed Project, Gen-Tie Line and substation would impose an undue and highly disproportionate burden on one small community in the name of achieving the state’s ambitious SB 100 mandate (which requires that the state must rely on 100% zero emission energy sources by 2045) and AB 32 mandate (which requires a reduction in greenhouse gas emissions of 80% below 1990 levels by 2050).

And that is not the only sacrifice that Lucerne Valley is being called upon to make in order to ramp up the state’s renewable energy production. It already faces an existential threat from three other utility-scale solar projects currently under application: (1) Sienna Solar North, East & West (which would consist of four separate solar generation facilities totaling 1,630 acres); (2) Ord Mountain Solar (483 acres); and (3) Calcite Solar I (which would consist of four separate solar generation facilities totaling 664 acres). Those three projects (whose locations are depicted in red on the maps attached to this letter as Figures 3 and 5, under the legend: “Proposed County Projects”), together with the Proposed Project, would totally repurpose over

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<sup>2</sup> This information comes from the “Project Details” document appended to the EJ Outreach Letter (the “Project Details”).

<sup>3</sup> All maps attached to this letter as Figures 1 through 6 were prepared by Brian Hammer, Adjunct Professor at Victor Valley College (Agriculture and Natural Resources Dept.), and GIS Analyst for a state agency.

8,136 acres of desert land in Lucerne Valley as industrial sites.<sup>4</sup> Their effects would extend far beyond the project footprints, and the interstitial land – the land that falls between and around the projects -- would also be rendered uninhabitable, ecologically dead and visually unappealing due to its unfortunate proximity to the industrially-altered project sites.

Edison is attempting to propel all four Lucerne Valley utility-scale projects into existence by proposing to build the above-referenced substation there (called the “Calcite” substation) in order to interconnect them to the grid. The Calcite substation is so integral to the Ord Mountain project (which would be the closest one to the Proposed Project) that it is considered a connected project for CEQA review.<sup>5</sup> The green-lighting of any of the four proposed Lucerne Valley utility-scale projects would be cited by Edison as justification for the new Calcite substation. Approval of that substation would, in turn, encourage approval of the four projects, as well as a cluster of additional utility-scale generation facilities in its vicinity.

In short, the Proposed Project – which is the biggest by far of any of the Lucerne Valley utility-scale projects currently under application -- would, if approved, be key to transforming the region into an industrial wasteland (with Lucerne Valley at its epicenter) characterized by vast complexes of solar panels, graded/scraped land, a honeycomb of roads for construction, maintenance, cleaning and security and a web of visually-intrusive (and electrical field-producing) lines crackling and humming overhead. As laudable as the state’s renewable energy goals are, placing even one utility-scale project – the Proposed Project -- in Lucerne Valley’s midst would be most inequitable; concentrating others there would strike a grievous blow to the entire region.

That the Proposed Project would inflict a disproportionate environmental burden on Lucerne Valley is also borne out by the following facts:

1. Lucerne Valley has a predominantly older and health-impaired population – the median age of its residents is 50.4 years, while the California median age is 36.5 years – that is most susceptible to (and least able to recover from) from adverse impacts from the Proposed

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<sup>4</sup> Proponents of the Ord Mountain and Calcite Solar I projects have put them on hold for the time being, according to the “County of San Bernardino Land Use Services Planning Division Renewable Energy Projects as of March 2020.” Nevertheless, they are still very much in the approval “pipeline.” Savvy large-scale renewable energy developers file applications to establish “grandfather” status for their projects, and then put them on hold to serve strategic aims. The developers of Ord Mountain and Calcite Solar I might be waiting to see whether political momentum would be generated by approval of the other proposed Lucerne Valley projects. If that happens, you can bet that the “holds” would then be lifted.

<sup>5</sup> The Draft Environmental Impact Report (the “DEIR”) for the Ord Mountain project, which states (in its section 2.1) with respect to the “Calcite Substation Project” (which is described in Appendix K of the DEIR) that “[b]ecause 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 for CEQA review.”

Project, such as the harmful effects of inhaling blowing dust, spores and respirable fine particulate matter made airborne by the operation (and construction) of the Proposed Project, and least able to relocate;

2. Lucerne Valley residents would get nothing in the bargain if the Proposed Project were to go forward (as further discussed in Section 7 below). All of the power generated by the Proposed Project would be exported to the grid for use outside the County, while all profits would go to Avangrid Renewable LLC (an affiliate of Avangrid, Inc., which is a publicly-traded U.S. holding company with \$30 Billion in assets and operations in 25 states) and to Edison; and

3. Lucerne Valley already experiences pollution generated by industrial activity on its southern outskirts that produces products, power and benefits accruing almost entirely outside the County.

As a result, approval of the Proposed Project would run counter to both the letter and spirit of the EJ Policy.

## **2. A Description of the Lucerne Valley Community.**

The Proposed Project site is at the northwestern corner of the Lucerne Valley Community Service Area 29 (“LV CSA”), as shown on the maps attached to this letter as Figures 1 and 2.<sup>6</sup> Lucerne Valley comprises the entire area within the boundaries of LV CSA (which is depicted on Figures 1 and 2 as “Lucerne Valley (CSA 29)”).

Lucerne Valley, with a population of 6,590 (according to the 2010 United States Census), is made up of approximately 3,556 dwelling units (according to Census Blocks derived from the 2010 United States Census (homes are plotted on Figures 1 and 2)) dispersed within a predominantly intact natural desert setting. The Lucerne Valley community is spread out and dispersed, with lots of open space between homes, because they were originally established on large homestead plots (initially 160-acres, later 40 acres) used mostly for farming and ranching. Many homes and surrounding plots there have been passed on between family generations. (See “Range One East,” by Virginia C. Hemphill-Gobar (published in 1972 by J.S. Gobar Foundation)). (The “Aurora Solar LLC (a subsidiary of Avangrid Renewable LLC) Application for Lease of State Lands (August 2016)” (the “Application”) does not acknowledge that the community even exists; it states that the “project area includes scattered rural residences and open, undeveloped desert lands.”) This provides Lucerne Valley with a very unique and precious, yet extremely fragile, attribute that provides a high quality of life for its residents (and that makes it an appealing place to visit and a boon to the tourist industry): it hosts well-

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<sup>6</sup> Mr. Hammer determined the locations of the homes on the Figure 1 and Figure 2 maps using the following method: each home location was plotted at the centroid of any parcel that showed an improved value according to the County’s assessment records. In the High Desert region, this method effectively differentiates improved home sites from parcels of unimproved desert land.

established, dispersed 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.

Lucerne Valley hosts scientifically-recognized wildlife corridors that are also acknowledged by our federal and state governments, as well as “Areas of Critical Environmental Concern” (“ACECs”) established under the DRECP. Among other things, Lucerne Valley provides core golden eagle habitat for the western Mojave Desert. Its natural desert setting is inhabited by the climax vegetation for the area, which in turn provides habitat and foraging zones for a host of threatened species. Figure 11 to the Application shows eleven “Special Status” animals and plants in the immediate vicinity of the Proposed Project (the map bears the legend “DRECP Occurrences”), including the desert tortoise, red-tailed hawk, Le Conte’s Thrasher and Bendire’s Thrasher. Part of residents’ quality of life is that they can see wildlife moving amongst their homes.

The County’s current Community Plan for the LV CSA 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 . . .”

Local residents greatly value the open space around their homes – and the personal privacy and direct access to nature that it affords them – while nevertheless enjoying a strong sense of community with their neighbors. Efforts to introduce utility-scale generation into north Lucerne Valley have met strong opposition from throughout the community. Approximately 50 to 60 local people have typically attended monthly meetings of the Lucerne Valley Economic Development Association, all of whom expressed a desire to exclude large-scale solar and related transmission development from Lucerne Valley.

As will be discussed below in Section 4, Lucerne Valley is an economically disadvantaged area. Its population consists predominantly of older people with health conditions who are the most susceptible to the ill effects of pollution.

### **3. A Description of the Proposed Project.**

According to the Project Details, the project area would be 3,600 acres, with “associated infrastructure to occupy approx. 1,750 acres.” It is not clear from the Project Details whether that acreage figure is meant to encompass the 7.6 miles of the Gen-Tie Line required to link the Proposed Project to the proposed Calcite substation. Further acreage would be required to accommodate the equipment and structures making up the Calcite substation; its buildings would be approximately 10 to 80 feet tall, while transmission line structures would be 50 to 180 feet tall, according to the DEIR (p. 3.1–38) for the Ord Mountain solar project. The Proposed

Project, the Gen-Tie Line and the proposed Calcite substation are depicted on the maps attached to this letter as Figures 3 and 5.

According to the Application, the Proposed Project would produce up to 200 MWs (using fixed-tilt or tracking solar panels) on undisturbed land west of Hwy. 247, south of Stoddard Ridge, west of Black Mt. and north of Sidewinder Mt. (these two mountains are part of the Granite Mountains).

The Proposed Project site – which consists of only minimally disturbed mature creosote bush scrub that is hundreds to thousands of years old – is all but surrounded by DRECP-declared ACECs, as shown on Figure 4. As also indicated on Figure 4, the Proposed Project site is in the midst of an important wildlife corridor which is incorporated in the DRECP as the “Desert Linkage Network.” Lucerne Valley hosts arms of this network that provide passage from the San Bernardino Mountains north through the basins and ranges connecting with China Lake North Range and the southern Sierra.

Each of the solar panels making up the Proposed Project would require support structures and footings, as well as extensive perimeter fencing, lighting and access/service roads. This would require the grading and removal of the existing desert soil and the plants that anchor it.

The Proposed Project would be of such magnitude that, according to the Application, it would have: (1) an on-site operations and management building for the life of the project with up to 10 permanent full-time employees (a typical utility-scale project does not require any full-time, on-site employees); and its (2) own 34.5/220 kV substation on a 5-acre site for the purpose of stepping-up energy generated onsite to 220 kV for connection to the Gen-Tie Line.

The Application proposed three alternate routes for the Gen-Tie Line. One would traverse BLM land in the Granite Mountains (which is designated by the DRECP as an “Area of Critical Environmental Concern” (an “ACEC”) almost exclusively; a second proposed route would be mostly on BLM land (with two short stretches over private County lands, including a final easterly run from BLM land in the Granite Mountains to the Calcite substation); and a third proposed route would run mostly on private County land in the valley between the Granite Mountains and Ord Mountains. The Application states that transmission poles would be dug into the ground off-site by drilling and foundations would be established for the Gen-Tie Line.

The Project Details indicate that the project proponent has settled on the third proposed route for the Gen-Tie Line, which is the one that would inflict the most environmental harm on Lucerne Valley residents, especially those living in the relatively narrow inter-mountain area between the Granite Mountain and Ord Mountain ACECs; it would also mean that the Gen-Tie Line would run alongside (and, in places, over) Hwy. 247, which has been designated by the County as a scenic highway (and which is now under serious consideration by the state for inclusion in the State Scenic Highway system, which would provide protection against development that would reduce the visual appeal of the surroundings). That would ruin the desert and mountain vistas that draw motorists to Lucerne Valley and support its economy.

The applicant is Aurora Solar LLC, which is a wholly owned subsidiary of Avangrid Renewables, LLC (a publicly-traded U.S. holding company with \$30 Billion in assets and operations in 25 states). They are affiliated with Avangrid, Inc. Avangrid, Inc. was formerly known as Iberdrola USA, Inc. A letter accompanying the Application says that the name change was part of a re-branding process. The Application form specifically asked for an estimate of the gross and net profits that the Proposed Project would generate, and the bases for those estimates, but the developer stated only that its profits would be determined in the future depending on how an engineering study comes out. While it can be anticipated that Avangrid Renewables, LLC would profit handsomely from the Proposed Project, a specific projection of the estimated profits would highlight the pronounced disparity between the high costs that the Proposed Project would impose on the local community versus the immense benefits that would be enjoyed elsewhere.

**4. Lucerne Valley is a Low-Income Community That Is Already Affected by Environmental Pollution. It Is Therefore Entitled to the Full Protection of the EJ Policy.**

The EJ Policy provides a very inclusive definition as to which communities fall within its purview, one which takes into consideration a wide array of circumstances. In that regard, the EJ Policy states (at p. 2) that it “uses the terms ‘disadvantaged,’ ‘marginalized,’ and ‘vulnerable’ interchangeably; it intends to encompass not only definitions contemplated by SB 1000 [Fn. 1 in the EJ Policy sets out a specific definition in Senate Bill 1000 (the Planning for Healthy Communities Act) for “disadvantaged communities”], but also to include low-income and minority populations that are disproportionately burdened by or less able to prevent, respond, and recover from adverse environmental impacts.”

**A. That Lucerne Valley is an Economically Disadvantaged Community Brings It Within the Ambit of the EJ Policy.**

While, as noted above, the EJ Policy’s protections are not limited to those communities that strictly qualify under SB 1000, it is noteworthy that Lucerne Valley has been deemed by the County to qualify as an environmental justice area under its definition.

SB 1000 mandates that, after January 1, 2018, cities and counties adopt an environmental justice element in their general plans that identifies “objectives and policies to reduce the unique or compounded health risks in disadvantaged communities.” SB 1000 requires local governments to identify any “disadvantaged communities” in its jurisdiction which, according to Gov. Code, § 65302, subd. (h)(1)-(2), are defined as: (1) “an area identified by the California Environmental Protection Agency (“CalEPA”) pursuant to Section 39711 of the Health and



Safety Code”;<sup>7</sup> or (2) “an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.”<sup>8</sup>

The SB 1000 factors were applied in the “County of San Bernardino Environmental Justice and Legacy Communities Background Report, dated November 26, 2018 (the “EJ Background Report”), which was “prepared to inform the preparation of the [San Bernardino County] Countywide Plan.”<sup>9</sup> After noting that “[t]here is no unilateral definition for ‘disadvantaged communities’ [p. 2-9],” the EJ Background Report concludes that Lucerne Valley qualifies as an Environmental Justice Focus Area, noting, among many other things, that “three [out of four census] tracts in Lucerne Valley have poverty and unemployment rates scored in the upper quartile [p. 3-12].”

Portions of Lucerne Valley also meet the “Disadvantaged Community” (“DAC”) criteria of the Department of Water Resources (the “DWR”), which relies on the US Census American Community Survey (ACS) 5-Year Data: 2012 – 2016 baseline (which is the most current data available on the subject), according to <https://water.ca.gov/Work-With-Us/Grants-And-Loans/Mapping-Tools>. That website states that the statewide median household income for the current dataset is \$63,783; therefore, the calculated DAC threshold is \$51,026. There is no relevant data available on that website for the north Lucerne Valley area in which the Proposed Project site is located, but there is little doubt that that area would meet the DAC criteria. As noted above, the Figure 2 map also depicts each of the homes located in Lucerne Valley and its environs (as well as the Proposed Project site).

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<sup>7</sup> CalEPA designates an area as a disadvantaged community if a census tract scores at or above 75 percent on the agency’s CalEnviroScreen screening tool. That screening tool can be found on the following website, which was prepared by Office of Environmental Health Hazard Assessment (“OEHHA”), a division of Cal EPA: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>. See CalEPA and Office of Health Hazard Assessment, CalEnviroScreen 3.0 (<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>).

<sup>8</sup> SB 1000 defines a “low-income area” as “an area with household incomes at or below 80 percent of the statewide median income” or (2) an area with “household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s (HCD) list of state income limits adopted pursuant to Section 50093 of the Health and Safety Code.” (Gov. Code, § 65302(h)(4)(C).)

<sup>9</sup> The EJ Background Report can only be accessed through a hyperlink on a side margin within the Hazards Element subpage on the Countywide Plan website. While the version on the website has “DRAFT” marked across its pages, it appears to be the official environmental justice discussion for the Countywide Plan.

Also noted on the Figure 2 map (with cross-hatching) are those portions of Lucerne Valley that meet the DAC/DWR criteria for constituting *severely* disadvantaged communities, which are those areas in which household incomes are less than 60% of the statewide median household income. While there is no data for the north Lucerne Valley area, it is likely that it meets the criteria for being considered severely disadvantaged.

Portions of Lucerne Valley are also considered “Economically Disadvantaged Areas” (“EDAs”) according to the above-mentioned “CalEnviroScreen” website. Using geospatial data and mapping tools drawn from the CalEnviroScreen website, Mr. Hammer plotted – on the map attached to this letter as Figure 1 -- those portions of Lucerne Valley that meet the EDA criteria (while there is no relevant data available on that website for the north Lucerne Valley area in which the Proposed Project site is located, there is little doubt that that area would meet the EDA). The DAC zones (on Figure 2) in Lucerne Valley coincide with the EDA zones shown on Figure 1, and the maps are quite similar.

**B. That Lucerne Valley Has an Older Population (And Is Already Experiencing the Effects of Pollution) Brings It Within the Ambit of the EJ Policy.**

As noted above, the EJ Policy (p. 2) encompasses “populations that are disproportionately burdened by or less able to prevent, respond, and recover from adverse environmental impacts.” Lucerne Valley already experiences pollution generated by industries that produce benefits accruing almost entirely outside the County.

According to the EJ Background Report’s Table 3-4b (p. 3-13), Lucerne Valley “has significant air quality issues. The region does not meet federal standards for ozone and respirable particulate matter (PM10) or state standards for ozone and respirable fine particulate matter.” “Several census tracts in [there are four of them there] have pollution burden scores measured in the upper quartile [p. 3-12].”

Lucerne Valley, as per the EJ Background Report, qualifies under SB 1000 as an “Economic Justice Focus Area,” based on the following specific finding, among others (p. 3-11 and 12):

“All census tracts in Lucerne Valley rank in the 3<sup>rd</sup> or 4<sup>th</sup> quartiles, with a high portion of lower income households. Concerns in Lucerne Valley include higher rates of asthma due to ozone (2 tracts), airborne allergens carried by seasonal winds, and other local pollution sources . . . Three tracts in Lucerne Valley have poverty and unemployment rates scored in the upper quartile [p. 3-12].”

The EJ Background Report (p. 3-13) correctly notes that there are mining operations in Lucerne Valley. There are, in fact, three industrial calcium carbonate (limestone) mines (one of which has a cement production plant on site) on the southern outskirts of the community, along the north slope of the San Bernardino Mountains, as well as two nearby sand/gravel/aggregate plants. In addition, there are already two operating utility-scale renewable energy projects

located in the southern portion of Lucerne Valley (south of Hwy. 247, on Camp Rock Road) which have emitted wind-blown dust and particulates.<sup>10</sup>

Moreover, Lucerne Valley has a vulnerable predominantly older, health-compromised population – the median age of its residents is 50.4 years, while the California median age is 36.5 years (according to the [www.City-Data.com](http://www.City-Data.com) website<sup>11</sup>) -- that would be most susceptible to (and least able to recover from) adverse impacts from the Proposed Project, such as the harmful effects of inhaling blowing dust, spores and respirable fine particulate matter made airborne by the operation (and construction) of the Proposed Project. According to the EJ Background Report (p. 3-12), “[c]oncerns in Lucerne Valley include higher rates of asthma due to ozone (2 tracts), airborne allergens carried by seasonal winds, and other local pollution sources. Cardiovascular disease scores in the upper quartile for two tracts and may be the result of a 37 percent obesity rate (12 points above the average).” Moreover, according to the EJ Background Report (p. 3-13), “23% of working age adults [are] in poor health, 8% heart disease rate, and 13% diabetes rate (50% above the state average),” with the majority “of health infrastructure located 15 miles west in Apple Valley.” Lucerne Valley is a “medically underserved area” and does not have a hospital, skilled nursing facility or community clinic according to the EJ Background Report (p. 3-13) (there is, however, now a medical clinic in Lucerne Valley, which is supplemented by visits from a medical van from St. Mary’s Hospital).

Moreover, older, low-income residents whose health and quality of life have been compromised by proximity to the Proposed Project (and its potential progeny) would also be the least able, due to a lack of financial resources, to relocate, especially if the value of their biggest investment – their homes – has been decimated by the Proposed Project. Vulnerable residents of the community – indeed, any of its residents – could find themselves trapped in homes that have become valueless in an unlivable industrialized landscape.

Lucerne Valley is hardly the only place that utility-scale projects can be sited in a state as big as California and in an enormous County (the largest one in the continental United States). Recognizing this, the County’s Board of Supervisors adopted a Resolution, entitled “Establishing the County’s Position,” dated February 17, 2016 (it is discussed in Section 6(C) below), 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 should go, subject to the project’s otherwise satisfying the County’s criteria (the sites are

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<sup>10</sup> The EJ Background Report (p. 3-13) states that there are cleanup sites in Lucerne Valley due to military land uses and military waste burial sites, but we are not aware of any such sites there. The EJ Background Report (p. 3-13) also says that there are four solid waste landfills in Lucerne Valley, when in fact there was only one, and it has been closed for some time.

<sup>11</sup> The [www.City-Data.com](http://www.City-Data.com) website does not specify how or when the underlying data was compiled, and we lack the resources needed to independently confirm its accuracy, but it does comport with coalition members’ understanding that an atypically large portion of Lucerne Valley’s population consists of older persons.

north of Kramer Junction, Trona, Hinkley, El Mirage and Amboy). As will also be discussed below in Section 6(A), Policy 5.2 of the County's Renewable Energy and Conservation Element *de facto* banishes utility-scale projects to those five areas. Meanwhile, some counties in this state, like Kern County, welcome solar utility-scale facilities and have designated zones for them.

Given the plethora of siting options available, environmental justice would not be served by concentrating utility-scale projects in vulnerable communities like Lucerne Valley.

**5. Approval of the Proposed Project Would Violate the Tenets of the EJ Policy By Causing Lucerne Valley to Suffer a Disproportionate Environmental and Social Impact, While Providing It With No Benefits.**

The EJ Policy starts with the following declaration: the CSLC “commits to the principle that past environmental injustices will not define California’s future and supports the ideal that all communities equitably share in the environmental benefits and burdens resulting from its decisions. The environmental justice goals below are bold and transformative because that is what California needs.”

Indeed, environmental *injustice* has long been the very hallmark of industrial expansion. Lucerne Valley is precisely the sort of community that has traditionally been shunted aside in the name of “progress,” being small, low-income and rural. We are greatly encouraged to see that the CSLC has, with the “bold and transformative” approach announced in the EJ policy, made it its mission to reverse that historical trajectory, and to see to it that “all communities equitably share in the environmental benefits and burdens.” Pursuant to that policy, all communities across our state must equitably share the burdens associated with ramping up California’s renewable energy capacity, and the state’s SB 100 goals (which include reaching 100% zero-carbon energy resources by the end of 2045) and AB 32 goals (which include reducing greenhouse gas emissions 80% below 1990 levels by 2050) cannot be achieved on the backs of the state’s rural populations. As observed by the EJ Background Report (p. 2-10), “geographic inequities” result “where the burdens of undesirable land uses or costs are concentrated in certain neighborhoods and the benefits are received elsewhere.”<sup>12</sup>

Those geographic inequities involve far more than the physical impacts of pollution. According to the EJ Background Report (p. 1-1), “the field of environmental justice has expanded beyond its original focus of reducing the disproportionate burden of pollution among certain populations. Environmental justice now includes broader social equity . . .” Environmental Justice “is considered an equity issue. It is an integral component of equity, but social equity also encompasses a larger framework such as access to jobs and economic

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<sup>12</sup> Likewise, Gov. Code, § 65040.12, subd. (e), 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.”

opportunity . . . [s]ocial equity is applied across the age range and various disciplines and has many other nuances . . . Equity can be used as the larger framework for ensuring opportunities for all in the community,” according to the Office of Planning and Research-issued “2017 General Plan Guidelines.”<sup>13</sup>

That Lucerne Valley requires the full measure of protection promised by the EJ Policy, and would otherwise suffer from pollution, social inequity and loss of economic opportunity, is underscored by its unique nature: its human and natural communities have long co-existed in a harmonious manner that has allowed both to thrive among open space in a predominantly undeveloped natural desert landscape. By its very nature, this carefully-maintained balance is highly fragile and easily disturbed, and the high quality of life enjoyed by the community’s residents – through direct access to nature and beautiful vistas in an area that is home to important inter-mountain wildlife corridors – would be lost forever if even one utility-scale facility were to be imposed on it. Add to that the severe health effects and damage to the local tourist-oriented economy that would result, and it becomes apparent just how little it would take to effectively steamroll Lucerne Valley out of existence.

As will be further discussed below, approval of the Proposed Project would be contrary to the EJ Policy because it would inflict disproportionate environmental harm on Lucerne Valley and provide no benefits to the community.

**A. The Proposed Project, the Gen-Tie Line and the Calcite Substation Would Release Dust, Spores and Respirable Fine Particulates in a Wind-Prone Area, Harm Health and Drive Out Residents.**

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<sup>13</sup> According to the CEQA Guidelines, Section 15604(e), economic or social impacts that are related to physical impacts must be addressed:

“[e]conomic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner any other physical change resulting from the project.”

Under CEQA, impacts to the environment 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” – that: “Human beings are an integral part of the ‘environment.’” (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].”

Extensive grading, scraping and stripping of the project site would be required for installation of vast complexes of solar panels and trackers (including foundations for the trackers), for the construction of the honeycomb of roads needed for construction, maintenance and cleaning of them, for installation of a perimeter security fence, for extensive trenching and for construction of a 7.6 mile Gen-Tie Line. According to the Application, the Proposed Project would require:

1. “grubbing of the existing vegetation; grading necessary for preparation of an approximately 10-acre temporary fenced lay-down area; the construction of access and service roads; construction of necessary drainage structures; grading to provide ground slopes suitable for array development; trenching for the electrical DC and AC collection system, including the telecommunication lines; installation of the structures, racking, modules, and inverter units; and construction of a 34.5 kV underground collection system leading to the 34.5 kV switchyard area;” and

2. “ground-disturbing activities [that would] expose soils and allow invasive and non-native plant species to become established. In addition, increased human and vehicle activity in the project area during construction would have the potential to introduce seeds of invasive and non-native species into the area (human and vehicle activity during operations and maintenance would similarly have the potential to introduce invasive and non-native species to the area).”

Construction of the Calcite substation would require even more grading and clearing. Both projects would require a massive amount of soil disturbance and destruction of native soil-anchoring vegetation on desert lands that are notorious for being easily scarred and slow to heal.

As a result, the Proposed Project site would, after construction is completed, wind up denuded and subject to serious erosion from pervasive desert winds (the Proposed Project and Calcite 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”). A region-wide blight would be occasioned during the frequent high-wind events in Lucerne Valley, and large and unhealthy volumes of dust, spores and respirable particulate matter would inevitably emanate from the Proposed Project, as well as from the Sienna, Ord Mountain and Calcite solar projects, each of which would require extensive grading

that destroys the desert pavement and anchoring vegetation.<sup>14</sup>

Making matters worse, there is no valid baseline for measuring dust emissions in north Lucerne Valley. 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 have to 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

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<sup>14</sup> 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.

The Soitec 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.

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.

night and day from those present in north Lucerne Valley in terms of soils and wind speeds and directions.<sup>15</sup>

Valley Fever spores are present throughout the High Desert, and can be expected to be present in the soils comprising the Proposed Project site. Those spores would likely become wind-blown and respirable due to construction and operational activities. Valley Fever spores can travel on the wind as far as 75 miles. 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 having caused an outbreak of Valley Fever in that region. Any water that would be used to suppress dust emissions would, unfortunately, causes Valley Fever spores to reproduce, because they thrive on alternating periods of extreme wetness and extreme dryness.

Finally, the construction activities associated with the Proposed Project, Gen-Tie Line, and Calcite substation destroy the above ground green photosynthesizing leaves of the soil-anchoring plants. During photosynthesis, the native plants would naturally capture carbon and pump it underground through its roots and into its associated microbes to fix and store the carbon. Desert soil disturbance destroys the ability of soils to prevent dust storms and store carbon. (For a description of this process see the March 19, 2019 "Desert Report" by Robin Kobaly (she is a botanist and plant ecologist, and has recently published "The Desert Underground" (Summertree Institute 2019)). The Proposed Project site is intact, mature creosote scrub with centuries to millennial old mycorrhizal development underground. It is a system capturing and storing carbon that, if destroyed will leave a destructive footprint for miles around.

#### **B. The Proposed Project Would Ruin Lucerne Valley's Local Economy, Which Is Oriented Towards Tourism to a Large Extent.**

The proliferation of centralized energy generation facilities in Lucerne Valley would have a devastating impact on its economic welfare, as well as on the economy of the County as a whole, which 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).

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<sup>15</sup> 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.



The industrialization of Lucerne Valley – the visual blight caused by one or more major utility-scale projects, the resulting wind-driven plumes of health-destroying particulate matter, the loss of major wildlife corridors and a landscape characterized by abandoned homes – would wreck the local tourist economy. The Proposed Project and Gen-Tie line would be particularly devastating to Lucerne Valley’s appeal given that the project site consists of virgin desert land framed on three sides by rugged mountainous terrain.

A major effort is underway to promote tourism in Lucerne Valley, the main thrust of which is an ongoing campaign to have Hwy. 247 designated as part of the State Scenic Highway System.<sup>16</sup> Hwy. 247 is the major traffic artery through Lucerne Valley, connecting the 15 Freeway at Barstow with Highway 18 (which extends southeasterly to the San Bernardino Mountain resorts); Hwy. 247 is also the major roadway to and from points east, such as Johnson Valley, Joshua Tree, Landers and Morongo Basin. Designation of (and promotion of) Hwy. 247 as a State Scenic Highway would certainly draw more motorists and be a great boon to the local economy. The protection against industrialization that such a designation would extend to adjacent desert lands would also draw investment in and expansion of Lucerne Valley’s tourist economy. Potential industrialization has long cast a depressing shadow over its economic development.

But eligibility for official inclusion in the State Scenic Highway System depends on the state’s determination “based on the amount of natural landscape visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes upon the motorist’s enjoyment of the view.” An influx of vast new solar fields and transmission infrastructure would create visual blight that would detract from, if not derail, that effort (which is now in its final phase<sup>17</sup>), as would the Gen-Tie Line. As noted above in Section 3, it would follow (and be visible from) Hwy. 247 for much of its length. The Calcite substation, and related transmission, would also be close to and visible from Hwy. 247, which would further detract from the area’s appeal.

Heavy equipment and water trucks used during the construction and operation of the Proposed Project, Gen-Tie Line and Calcite substation would also likely cause major damage to state and County roads in Lucerne Valley (County roads are not built to support that kind of

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<sup>16</sup> The County has already designated Hwy. 247, as per General Plan (Policy OS 5.3), as a scenic highway – which means that it is a “roadway that has scenic and aesthetic qualities that over time have been found to add beauty to the County” and that this designation “applies all applicable policies to development on these routes . . .”

<sup>17</sup> A committee of local residents (drawn from the communities served by Hwy. 247), acting under the auspices of the County, is now in the process of refining, as per the state’s comments, the extensive and meticulous documentation it has submitted in support of the scenic highway application. Members of this committee anticipate that the state will approve the application in mid-2020.

weight). As it stands now, governmental budgets are barely sufficient to keep those roads in repair to support local residential use. The Proposed Project and its progeny would also, by generating traffic through the commercial portion of Lucerne Valley, create a traffic safety issue given that there is only one four-way stop (with a short turning radius) in that locale. Any loss or substantial interruption of a major vehicular artery serving Lucerne Valley would directly impinge on the local economy, and result in a grave environmental injustice to the community.

Asking Lucerne Valley to sacrifice its economic well-being, in the name of increasing the state's renewable energy generation capacity, would be most inequitable; it would also be inimical to the EJ Policy's express goals.

**C. 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 Ord Mountain solar project (which would be the closest one to the Proposed Project) have cited the prospect of a Calcite substation being built as justification for putting a major utility-scale project in Lucerne Valley. They tout its close proximity to the Pisgah-Lugo transmission line, while noting that, if Calcite were to be approved, it would be only one gen-tie away from it. The same justification will no doubt be proffered for the Proposed Project.

Edison, in turn, cites the utility-scale projects aimed at Lucerne Valley as justification for establishing a Calcite substation. Edison then touts Calcite as the linchpin for many additional generating projects in the area.

Edison's website made 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."

If, as expected, the Calcite substation could accommodate utility-scale projects in addition to the Proposed Project, it will induce further utility-scale development in the region. The prospect of a new Calcite substation has in fact triggered an influx of proposals for utility-scale facilities in its vicinity. As noted above in Section 1 of this letter, there are three more utility-scale projects queuing up to interconnect with a Calcite substation, all of which would industrialize more than 8,136 acres in Lucerne Valley.

The referenced proposals for utility-scale projects 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 (which are found on the western side of Lucerne Valley).

**D. Approval of One Utility-Scale Renewable Project in Lucerne Valley Would Create a “Beach-Head” for the Proliferation of Other Such Projects in Its Immediate Vicinity, All of Which Incrementally Industrialize Hitherto Intact Desert Parcels.**

The Application form poses a question as to whether the Proposed Project would be part of a larger project or a series of projects. In response, the project proponent stated in the Application that “[t]he development of the subject State lease lands is not a component of a larger project or a series of projects. Further analysis is not warranted in the environmental documentation prepared by the CSLC.” The Application denies (on p. 33) that the Proposed Project would be related to or dependent on any other project, but acknowledged that an environmental review was in the works for the Calcite substation.

As noted above, and as will be further discussed below, the developer’s representations are highly inaccurate.

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., they are deliberately mischaracterized as biologically-defunct, “damaged goods” no longer possessing environmental, aesthetic and recreational worth. This is exactly what the DEIR for the Ord Mountain project attempted to do in its discussion of visual aesthetics. Therefore, they are often erroneously deemed ripe for more large-scale commercial development, regardless of their existing rural desert designation and irrespective of the land use policies dedicated to protecting that character (which are discussed in Section 6 below).

In addition, the Ord Mountain DEIR tried to cite a cluster of homes around its project site as causing it to be “disturbed” in an effort to downgrade the area’s environmental, aesthetic and recreational value in the eyes of planners and decision makers. At the same time, the DEIR

denied the existence of a community that merited any protection. As the developer for the Proposed Project and its consultant can readily attest, Lucerne Valley residents expressed strong disagreement, at the public scoping meeting on the proposed Ord Mountain project, with the conclusion that, when it comes to Lucerne Valley, “nobody lives there.” A coalition of High Desert residents – the same one that is submitting the current environmental justice letter – reiterated this point in a letter which delivered a pointed critique of the Ord Mountain DEIR. Efforts to introduce utility-scale generation into north Lucerne Valley have met strong opposition from the community.

There are still further secondary 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.<sup>18</sup>

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 – such as the Gen-Tie Line -- which in turn become a justification for more generation plants, and so on. Thus, what on the surface is a generation project having “only” a finite footprint becomes a continuous trigger for more and more transmission and generating projects. This is precisely why 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 the obvious secondary effect of inducing a major change in the pattern of land use in Lucerne Valley. The environmental impact of each new generating plant on the desert and its populace is large and enduring.

**E. The Volume of Water Required for the Construction, Operation and Maintenance (including Ongoing Dust Suppression) of the Proposed Project, Gen-Tie Line and Substation Would Deplete Lucerne Valley’s Finite and Threatened Groundwater Resources.**

The Proposed Project would be located on an over-drafted groundwater basin – the Este Sub-basin -- according to the “Overdraft Groundwater Basins, DRECP” map, and directly in the middle of the groundwater sub-basin referred to on Figure 4 as the “North Valley Subwatershed” of the Lucerne Lake Watershed Area (Mr. Hammer geo-processed this sub-basin on Figure 4 from a digital elevation model). The Proposed Project (and its potential progeny) would

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<sup>18</sup> Efforts have already begun to lease a right of way for the Proposed Project’s Gen-Tie Line, which is meant to send a strong signal to the community.

compromise the underlying groundwater reservoir by drawing immense volumes of water for its construction and operation. The Proposed Project would also reduce groundwater recharge through removal of vegetation, alteration of the land through grading and covering the land with impervious surfaces, all of which would alter the relationships between rainfall, runoff, infiltration and transpiration. In other words, with native vegetation scraped off the immense Project Site, there would be nothing to retain the rainwater flowing down from the surrounding mountains towards the center of the North Valley Subwatershed, so, instead of percolating into the aquifer, it would flow out of the north valley area.

The Application disclosed that the Proposed Project would require large volumes of water: water consumption during the construction phase alone is estimated at approximately 1,200 acre-feet (AF) for dust suppression and earthwork over an approximately 18-month period.

The Application also specifies that the project's permanent employees would perform in-place panel washings every 6 to 8 weeks using a tanker truck, and smaller "satellite" panel washing trucks (each panel washing truck would carry water treatment equipment and truck-mounted panel washing booms or module cleaning robotics). On-site water storage tanks may be installed to facilitate washing and to support fire suppression. The "operations & management" building for the project would include a groundwater well to provide potable water. There would also be septic tanks and a leech-field.

The Application estimates that on-site operations would use up to approximately 46 acre feet *per year* rounded up to include the potential for domestic use.<sup>19</sup> The Application provides no estimate as to the volume of water needed to prevent fugitive dust, particulate matter and spores from blowing off the 5,359-acre site during the life of the Proposed Project, and the developer has not specified whether it would make any efforts in that direction, even though to not do so would violate Policy 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 . . ."). Of course, no amount of water would, after the arid, wind-prone site is denuded and disturbed through construction, operation and maintenance, be sufficient to prevent fugitive matter from being wind-borne across the region.<sup>20</sup>

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<sup>19</sup> As stated below in this letter, PV panels washed six times per year would consume .15 acre feet per year per megawatt of generation, which would mean that washing the panels for the Proposed Project's 200 MWs would consume at least 30 AFY.

<sup>20</sup> To put things in perspective, 1,000 acre-feet of water is enough to fill four Rose Bowls to the brim. So, over a 40-year lifespan, the Proposed Project – using the estimates found in the Application -- would use enough water *to fill at least twelve Rose Bowls* (1,200 acre feet + 1,840 acre feet (40 years x 46 acre feet per year) = 3,040 acre-feet), assuming that that amount of water could actually be drawn from local groundwater supplies.

In short, even though the Application estimates an alarmingly high amount of water usage for the Proposed Project, it would require significantly more water than estimated.<sup>21</sup>

Where would this huge volume of water come from? According to the Application (p. 30), it would be pumped out of Lucerne Valley's threatened aquifer or trucked onsite from a local water supplier. But neither of those methods would provide a viable water source for the Proposed Project.<sup>22</sup> The Application does not say what proportion of this water would be drawn on-site vs. obtained from local water companies, nor does it specify how many groundwater

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<sup>21</sup> Solar developers typically provide unrealistically low water usage estimates. At the onset of the Agincourt and Marathon solar projects (now known as Lone Valley Solar) in Lucerne Valley, the proponents agreed to purchase from the Mojave Water Agency 10 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 spewed tons of dust. The same thing has occurred with respect to the Soitec 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."

<sup>22</sup> Under the 1995 Mojave Basin Area Adjudication (the "MBA Adjudication") ([www.mojavewater.org/judgment\\_summary.html](http://www.mojavewater.org/judgment_summary.html)), no inter-basin water transfers are permitted to the Este Subarea, so water could not lawfully be trucked in from outside Lucerne Valley. That would leave the project proponent with two untenable choices: (1) it could seek water from the State Water Project through the Morongo Basin Pipeline, but it is highly unlikely that it would be allocated any appreciable amount of water from that source; or (2) pump groundwater from the over-drafted Este Subarea and pay a "makeup obligation" to the Mojave Water Agency to recharge it, but no recharge site currently exists.

wells would need to be established (p. E-9).<sup>23</sup> But either way, Lucerne Valley would lose if the developer ignored the above-cited restrictions: either Lucerne Valley's sub-basin would be drawn down by on-site groundwater wells or pollution/particulate-spewing water trucks would course up and down Highways 18 and 247 (the nearest water company is 10 miles away from the project site) bringing water from over-drafted groundwater reservoirs under adjacent communities that are interconnected with the Este Sub-basin, i.e., a water company drawing from a well in Apple Valley – under which the already over-drafted Alto Subarea groundwater basin is located -- would ultimately be reducing groundwater re-charge throughout the region, including Lucerne Valley.

Depleting Lucerne Valley's groundwater supply could also incentivize the court in the MBA Adjudication to force local water users to ramp down the amount of groundwater they are entitled to pump -- their "Free Production Allowance (FPA)" – which would have a direct environmental justice impact on a disadvantaged community like Lucerne Valley and impair its economic future.

Utility-scale developers typically dismiss concerns about groundwater usage by noting that their project sites have been accorded adjudicated "production rights." But such rights, under the MBA Adjudication, do not represent a scientific estimate of the amount of groundwater that can actually be drawn from a given sub-basin without irrevocably depleting it. Adjudicated water rights establish only the amount of water that an individual can *legally* draw from a local aquifer, such as the Este Sub-basin. It does not mean that the water will actually be there (or that water of sufficient quality will be there), nor does it guarantee that, should the property owners bound to the judgment draw the amounts allotted to them, there would be enough to go around.

Water is an irreplaceable resource that is Lucerne Valley's lifeblood, and that 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

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<sup>23</sup> The Soda Mt. solar project (it was denied approval by the County Supervisors)– which would have consumed *less* acreage (Soda Mt. would have used 1,767 acres to generate 287 MW vs. 3,600 acres for 200 MWs for the Proposed Project) than the Proposed Project – would have required up to five groundwater production wells and three groundwater monitoring wells.

Incidentally, according to the Application, "[t]here are eleven primary local water suppliers for the Lucerne Valley . . . ," with the nearest water purveyor located approximately 10 miles south of the Proposed Project site.

subject – which comes chiefly from the DRECP itself – must be considered.<sup>24</sup>

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 "Development Focus Areas" ("DFAs") would be located primarily on already over-drafted 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<sup>25</sup> -- 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]."

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<sup>24</sup> Statements made by the State Water Resources Control Board (the "SWRCB"), in its comment letter regarding the DRECP, suggested that there would be prolonged drought, and that has been borne out since. 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]."

<sup>25</sup> 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 over-drafted 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].



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 much 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 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 includes 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 factor in the effects of an ongoing drought of historic proportions.

There is currently no method of determining the cumulative effects that the Proposed Project, the Gen-Tie Line and the Calcite substation would have on our inter-connected aquifer systems. Meanwhile, there is a 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 potential efforts to remediate the Salton Sea that would stress already fragile water reserves.

The only way to truly determine the extent to which the Proposed Project, Gen-Tie Line and Calcite substation would rob Lucerne Valley of its precious groundwater supplies would be to undertake: (1) a comprehensive assessment as to how the siting of their proposed renewable energy generation and substation would – in combination with other factors, including the cumulative impacts of a 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) 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? 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, Gen-Tie Line and substation), and in view of their recharge rates, or are these basins approaching collapse, i.e., what are their tipping points?

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.<sup>26</sup>

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<sup>26</sup> The desire to safeguard groundwater supplies from being depleted over the long haul by large-scale development underlies SB 610 and SB 221. They require long-term supply availability projections for certain types of major development projects listed in Water Code Section 10912(a); they include residential development of more than 500 dwelling units, large shopping centers, office buildings, hotels and plants, as well as projects that "would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project." If the Proposed Project, the Gen-Tie Line and Calcite substation are allowed to proceed, we will address in subsequent correspondence the question of whether their water usage would exceed the quoted standard, and thereby require the project proponents to provide long-term supply availability projections.

Moreover, because environmental justice concerns are involved, performing an abstract projection as to the amount of water usage for the Projected Project, Gen-Tie Line and Calcite substation would not suffice. An analysis would also have to be performed comparing how this draw-down would affect a disadvantaged community like Lucerne Valley versus how it would affect more advantaged areas of the state.

The groundwater lying below Lucerne Valley belongs to its residents, and it is their only water source for all practical purposes. Meanwhile, the ongoing drought continues to pose a dire threat. As a result, the community faces the unfortunate reality that there may be continuing “ramp-downs” under the MBA Adjudication of the amounts of water that residents can draw from the Este Sub-Basin. In view of this, the lack of definitive studies, and the fact that Lucerne Valley’s groundwater basins are already under threat due to overuse in drought-ridden times, it should be assumed that extensive groundwater pumping for the Proposed Project and its progeny would render them unable to meet the needs of Lucerne Valley’s residents and businesses.

**F. Siting the Proposed Project, Gen-Tie Line and Calcite Substation in Lucerne Valley Would Represent an Exercise in Social Engineering That Directly Contravenes the EJ Policy.**

Powerful forces seek to loose a tide of utility-scale facilities and related transmission into Lucerne Valley, even though it is not at all clear how much *utility-scale* generation will actually be needed to reach the state’s SB 100 and AB 32 goals, i.e., how much renewable energy can be derived from other fast-proliferating, non-utility scale sources, such as rooftop solar, that don’t require the destruction of thousands of rural acres. Nevertheless, those who would profit most from transforming Lucerne Valley into an industrial zone, while bearing none of the related burdens, urge this process on by invoking those very same goals. If Lucerne Valley were to be sacrificed in the name of achieving those goals and, as is likely, it later turns out that much less utility-scale is actually needed,<sup>27</sup> the fate of a vulnerable community would have already been irrevocably sealed, as would the fate of a desert notorious for being easily scarred and slow to heal. The community would be gone forever and a living, breathing biome totally lost. Responsibility, if it is even assessed, would be deflected and disavowed by proponents and decision-makers, while profits and power flow out of the community. The unspoken (and highly incorrect) assumption would be that the community and surrounding desert were regrettable, yet unavoidable, collateral damage. Permitting this kind of uncontrolled experimentation to proceed – effectively treating Lucerne Valley’s residents as “guinea pigs” -- would be cynical social

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<sup>27</sup> According to the California Energy Commission’s Official Blog ([calenergycommission.blogspot.com](http://calenergycommission.blogspot.com)), “behind the meter” generation (which is a reference to renewable generation produced on-site by, for example, rooftop solar systems) increased in California in just the past five years by 310%, and rooftop solar will readily achieve the state’s goal of having 1 Million solar roof systems installed.

At the same time, projections as to the amount of energy needed to power the state’s economy may need to be revamped in light of the current Covid-19 emergency and related economic fall-out.

engineering of the worst type, would represent the very antithesis of environmental justice, and would totally contravene the EJ Policy's goal of sheltering disadvantaged communities from having inequitable environmental, social and economic impacts of development thrust upon them.

**6. The County Has Already Determined That Utility-Scale Renewable Energy Facilities Would Impose Disproportionate and Intolerable Burdens on Rural Communities and Therefore Banned Them.**

The County's Renewable Energy and Conservation Element ("RECE") of its General Plan, its 2013 Solar Ordinance (Chapters 84.29 and 810.01), the above-referenced Lucerne Valley Community Plan, and various policy pronouncements made by the County, are founded on the principle that utility-scale renewable energy projects are inherently incompatible with rural desert communities.

**A. The RECE.**

The RECE, as amended by Policy 4.10, precludes utility-scale renewable energy projects anywhere within the boundaries of community plan areas, such as Lucerne Valley. Whether or not the Proposed Project can be "grandfathered" past this outright ban (in view of when the Application was filed), Policy 4.10 is highly significant, and instructive, in terms of the environmental justice implications arising from the Proposed Project.

The RECE, and especially Policy 4.10, represents a hard-won consensus between the County's populace and its governing bodies, one forged over many arduous years of public meetings – in the Countywide SPARC, REVEAL and Community Plan processes -- that utility-scale projects impose disproportionate and unacceptable environmental harm on rural desert and mountain communities. As noted in the DEIR for the Ord Mountain solar project (p. 3.9-5), one of the RECE's "guiding principles includes keeping utility-oriented projects separate from and sufficiently buffered from existing communities, to avoid adverse impacts on community development and quality of life."

The policies and goals embodied in the RECE are discussed below.

The RECE 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, where they are not outright banned by Policy 4.10, that are

so strict that they *de facto* banish utility-scale projects in all but five specific areas referenced in RE Policy 5.2<sup>28</sup> and 5.4 of the RECE (which are remote areas far away from designated community plan areas). 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.

The following over-arching principle can be discerned from the County’s land use regime: in view of the harm that industrial operations (like the Proposed Project, the Gen-Tie Line and Calcite substation) visit on the visual integrity, economy, social ecology and health of rural residents, they do not make good neighbors. In that respect, the RECE embodies a vision that closely resembles the one laid out in the EJ Policy.

### **B. The Lucerne Valley Community Plan.**

Like the RECE, the Lucerne Valley Community Plan (the “Community Plan”) takes a dim view of development that would industrialize rural communities. The Community Plan, which is an integral part of the overall General Plan, states that 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).

Most significantly, the Community Plan, in its Goal LV/LU-1, states its primary land use goal as follows: “Retain the existing rural desert character of the community.”

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<sup>28</sup> 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).

The Community Plan, like the RECE, further confirms the County's view that utility-scale projects and substations would represent an abrupt and pronounced departure from Lucerne Valley's rural desert character 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.

### **C. The Supervisors' February 17, 2016 Resolution and DRECP Position Paper.**

The County has taken land use policies and goals that further affirm its position that utility-scale generation inflicts disproportionate harm on its rural communities, as stated in:

(1) the February 17, 2016 Resolution of the County's Board of Supervisors (the "Resolution"), which designated five sites (the same ones that are referenced in the RECE -- 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 should go, subject to the project's otherwise satisfying the County's criteria; and

(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.

#### **(1) The Resolution.**

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 places that utility-scale should go, subject to the projects otherwise satisfying the County's criteria. The Resolution was adopted by a unanimous vote.

The Proposed Project, Gen-Tie Line and Calcite substation 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<sup>29</sup>; 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<sup>30</sup> 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, Hinkley, North of Kramer Junction, El Mirage and Amboy -- where such development could be permitted, i.e., the five sites designated in the Resolution.<sup>31</sup>

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<sup>29</sup> Ms. Penrod prepared a report for the DRECP – 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.

<sup>30</sup> 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).

<sup>31</sup> The five sites also have the virtue of being located: (1) over ample groundwater supplies (moreover, the groundwater underlying the Trona, Hinkley 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 County's above-referenced valley areas, like Lucerne Valley, enjoy a harmonious convergence of human and natural communities (and resulting tourism) that, while unique and precious, is extremely fragile and easily destroyed. 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.

## **(2) 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 5,359-acre utility-scale facility in Lucerne Valley.

Similar planning priorities and goals are expressed by the County in its current general plan and in its 2013 Solar Ordinance. See, for instance, Policy LU 1.2 (ensure compatibility of new development with “adjacent land uses and community character”), Policy LU 1.4 (“[e]ncourage preservation of the unique aspects of the rural communities and their rural character”) and Policy CO 8.1 (maximize beneficial effects and minimize adverse effects associated with the siting of major energy facilities and avoid inappropriately burdening certain communities). But the point is already well made: the County has consistently made enactments and policy pronouncements based on the premise that utility-scale renewable energy facilities impose disproportionate and intolerable burdens on its rural communities, including Lucerne Valley.

### **7. The Proposed Project Would Impose Immense and Intolerable Burdens on Residents of Lucerne Valley, While Providing Them with No Benefits.**

The Proposed Project, Gen-Tie Line and Calcite substation would, if built, fundamentally and irrevocably industrialize Lucerne Valley and, in the process, generate harmful environmental impacts that would deprive residents of their health, homes and groundwater, while devastating the economy and property values, and ultimately displace them in whole or in large part. The proposed development would also usher in a host of additional utility-scale and transmission projects that would completely transform the region to the profound detriment of its residents.

The Proposed Project and related development would be a permanent blight on the community. While the Application represents that the Proposed Project would have a useful life of 30 to 40 years, it does not reference any plan for removing or recycling the structures comprising the Proposed Project (or the Gen-Tie Line) at the end of their useful lives, or for



attempting to restore the site to its natural condition. In any event, no developer could be realistically expected to have the enormous resources, or the intention of committing them several decades in the future (if the developer is still in existence then), to effect such restoration, and it has yet to be demonstrated that, as a matter of biological science, the 5,359-acre region comprising the Proposed Project (and the Calcite substation site) could ever be restored to its undeveloped natural desert state, especially given the massive amount of industrial infrastructure that would have to be installed in creating the projects. Even the best-funded and best-intentioned developer would face the impossible task of re-building this fragile and unimaginably complex eco-region from its biological base upward, with the hope that critical wildlife corridors occluded for decades by the Proposed Project, Gen-Tie Line and Calcite substation could be restored after the existing flora and fauna had suffered local species collapse.

In line with the above-cited EJ Policy, the following concerns are triggered by the Proposed Project and substation:

**A. The Community Would Not Reap Any Benefits from the Proposed Project, Gen-Tie Line and Calcite Substation.**

Lucerne Valley 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 Avangrid Renewables, LLC (a publicly-traded U.S. holding company with \$30 Billion in assets and operations in 25 states) and to Edison.<sup>32</sup>

**B. The Community Would Directly Suffer All of the Substantial Downsides Generated by the Proposed Project, Gen-Tie Line and Calcite Substation.**

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<sup>32</sup> California has had a glut of renewable energy for some time now. For instance, in the first eight days in January and nine in February of 2017, 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.

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 a derelict community to the extent that residents have the financial wherewithal to pull up stakes. Instead of the current, vibrant human community that exists side-by-side with thriving natural communities, there would be hundreds of thousands of solar panels left silently pivoting in the degraded landscape; and

**C. The Proposed Development Would Usher a Proliferation of Additional Utility-Scale Projects into the Vicinity, Imposing Additional Ill Effects on Community Members (as per 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 noted above, there are three additional utility-scale projects being proposed for the immediate vicinity of the community that are now in the approval pipeline. 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.

Lucerne Valley residents would obviously not enjoy any countervailing benefits from such development, other than, for sake of argument, a tangential, indirect and very incremental increase in the state's renewable energy capacity. But this would be the same marginal benefit accruing to any resident of this state, indeed any citizen of this planet. Yet it would be the population living in the vicinity of the Proposed Project that would suffer all of the resulting environmental degradation and dislocation.

Lucerne Valley will not enjoy a boost in employment if the Proposed Project, Gen-Tie Line and Calcite substation were to be built. According to the Application, there would be only ten post-construction jobs created at the Proposed Project. Those ten jobs, as well as the jobs associated with construction of the Proposed Project, would be filled primarily with union workers drawn from the state/regional work force, with technicians and other specialists drawn from the energy industry and with persons drawn from Edison's workforce.

This profound and undeniable imbalance between anticipated burdens and benefits underscores the immense environmental injustice that would result from approval of the Proposed Project and related development.

## **8. Conclusion.**

We thank you for inviting us to comment on the environmental justice implications of the Proposed Project, the Calcite substation and the potential utility-scale projects that might arise in their wake, and we look forward to continuing participation in this process.

Very truly yours,

### **Community Associations, Businesses and Organizations:**

LUCERNE VALLEY ECONOMIC  
DEVELOPMENT ASSOCIATION

Chuck Bell, President

CHURCH OF OUR LORD AND SAVIOR  
(LUCERNE VALLEY)

Bill Lembright, President

LUCERNE VALLEY MARKET/  
HARDWARE

Linda Gommel, Chief Executive Officer

LUCERNE VALLEY REALTY

Martha Lynn, Owner

EXPERT APPLIANCE SERVICE

Bill Peterson and Alyn Peterson, Proprietors  
(and residents of Lucerne Valley)

JUBILEE MUTUAL WATER COMPANY,  
INC. (Lucerne Valley)

Raymond M. Gagne, Jr., General Manager

HOMESTEAD VALLEY COMMUNITY  
COUNCIL

Jim Harvey, President

JOHNSON VALLEY IMPROVEMENT  
ASSOCIATION

Betty Munson, Secretary

NEWBERRY SPRINGS CHAMBER OF  
COMMERCE

Paula Deel, Board Member

NEWBERRY SPRINGS ECONOMIC  
DEVELOPMENT ASSOCIATION

Paul Deel, President

NEWBERRY SPRINGS COMMUNITY  
ALLIANCE

Ted Stimpfel, President

MOJAVE COMMUNITIES  
CONSERVATION COLLABORATIVE

Lorrie L. Steely, Founder

FRIENDS OF PIONEERTOWN

David Miller, Member of the Board of  
Directors

FRIENDS OF BIG MORONGO CANYON  
PRESERVE

Meg Foley – Executive Director

MORONGO BASIN CONSERVATION  
ASSOCIATION

Steve Bardwell, Treasurer

CALIFORNIA DESERT COALITION

Claudia Sall, Secretary

SUSTAINABLE LEARNING CENTER  
(Apple Valley)

Neville Slade and Tammy Slade

**Individual Community Members:**

Brian Hammer, Analyst and Adjunct Professor  
(owner of home in Lucerne Valley)

Sue Hammer (owner of home in Lucerne  
Valley)

Renee Lynn (resident of Lucerne Valley)

Jerry Swarthout (resident of Lucerne Valley)

Neil Nadler (owner of home in Lucerne  
Valley)

Roger Peterson (resident of Lucerne Valley)

Dennis Morrison (resident of Lucerne Valley)

Millie Rader (resident of Lucerne Valley)

David Rader (resident of Lucerne Valley)

Todd Jones (resident of Lucerne Valley)

Lorraine Cross (resident of Lucerne Valley)	Louis Kannenberg (resident of Lucerne Valley)
Rusty LaGrange (resident of Lucerne Valley)	George V. Yablonsky (resident of Lucerne Valley)
Franklin S. Fowler Jr., M.D. (resident of Lucerne Valley)	Carl Porter (resident of Lucerne Valley)
Jeanne C. Fowler (resident of Lucerne Valley)	Roland Reyes (resident of Lucerne Valley)
Kathryn Anema (resident of Lucerne Valley)	Charlie Brewster (resident of Lucerne Valley)
Teresa Reyes (resident of Lucerne Valley)	Frank Quinones (resident of Lucerne Valley)
Randy Polumbo (owner of a home in Lucerne Valley)	Herlinda V. Quinones (resident of Lucerne Valley)
Lawrence Land (owner of a home in Lucerne Valley)	Gary Aplet (resident of Lucerne Valley)
Kenneth D. Lair (resident of Apple Valley)	Barry Blair (resident of Johnson Valley)
Barbara Smith (resident of Apple Valley)	Susan Blair (resident of Johnson Valley)
Jackie C. Lindgren (resident of Apple Valley)	Gregg Hallam (resident of Johnson Valley)
Bryan Baker (resident of Apple Valley)	Nicole Hallam (resident of Johnson Valley)
Robert L. Berkman (resident of Daggett)	Ellen Johnson (resident of Newberry Springs)
Laraine Turk (resident of Joshua Tree)	Jim Johnson (resident of Newberry Springs)
Ted Stimpfel (resident of Newberry Springs)	Marina West (resident of Landers)
Randy West (resident of Landers)	Diana Bork (resident of Helendale)
Ann Garry (resident of Pioneertown)	Sarah Kennington (resident of Pioneertown)
Dave Garry (resident of Pioneertown)	Elisabeth Stewart (resident of Yucca Valley)
Steve Bardwell (resident of Pioneertown)	Matthew McCarthy (resident of Yucca Valley)
David S. Miller (resident of Pioneertown)	Cindy Charlton (resident of Newberry Springs)
Dixie Coutant (resident of Tehachapi)	Jerry Broyles (resident of Pioneertown)

Monica L. Mahoney (resident of Joshua Tree)      Gene Parsons (resident of Pioneertown)  
Catherine Cannon (resident of Yucca Valley)      Star Decker (resident of Pioneertown)  
Robert Stiefel (resident of Yucca Valley)

CCs:

Robert Lovingood (Chairperson and First  
District Supervisor;  
[SupervisorLovingood@sbcounty.gov](mailto:SupervisorLovingood@sbcounty.gov))

Janice Rutherford (Second District Supervisor;  
[SupervisorRutherford@sbcounty.gov](mailto:SupervisorRutherford@sbcounty.gov))

Dawn Rowe (Vice-Chairperson and Third  
District Supervisor;  
[SupervisorRowe@sbcounty.gov](mailto:SupervisorRowe@sbcounty.gov))

Curt Hagman (Fourth District Supervisor;  
[SupervisorHagman@sbcounty.gov](mailto:SupervisorHagman@sbcounty.gov))

Josie Gonzales (Fifth District Supervisor;  
[SupervisorGonzales@sbcounty.gov](mailto:SupervisorGonzales@sbcounty.gov))

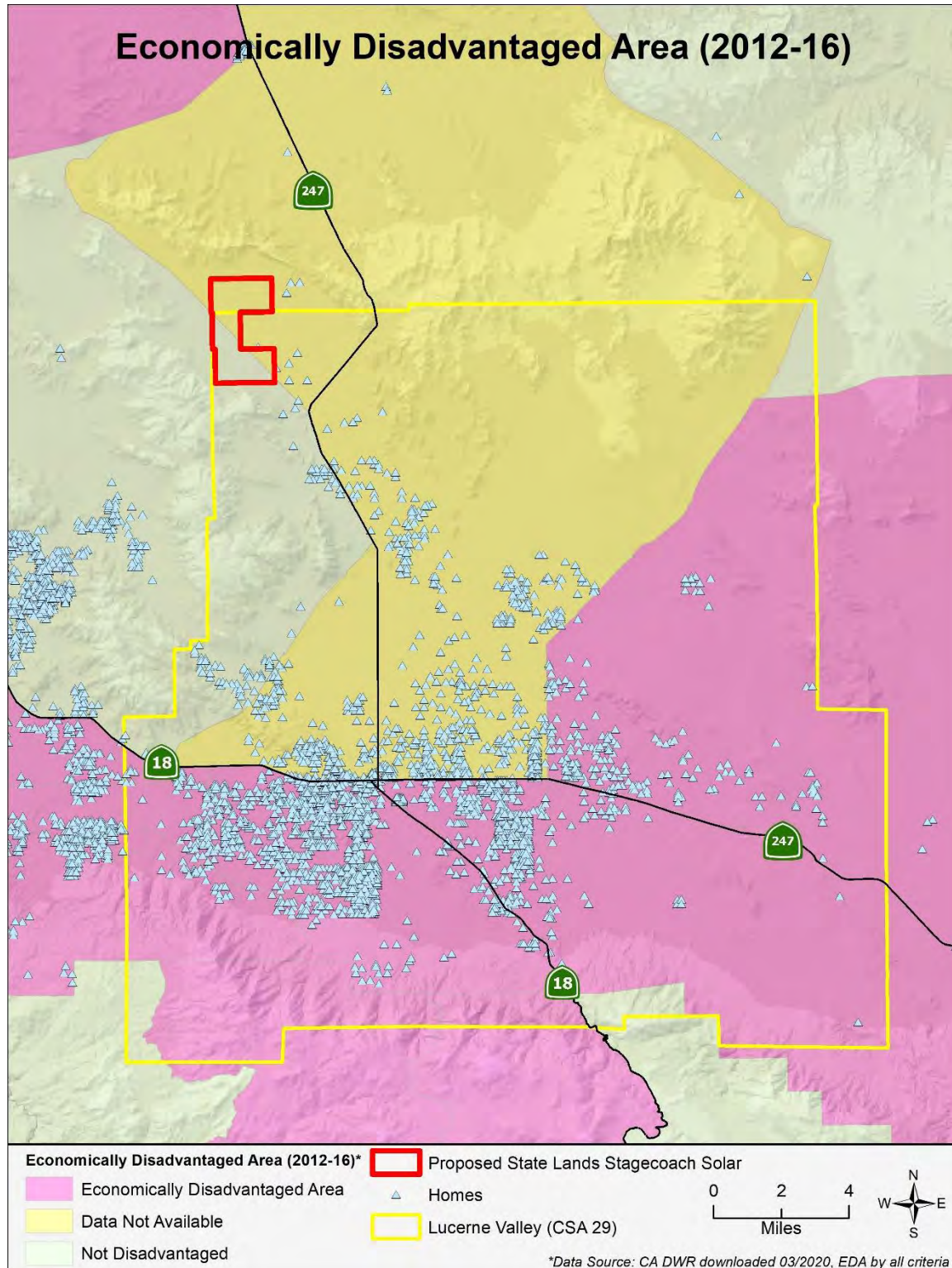
# **ATTACHMENTS**

**- MAPS -**

**Figures 1 through 6**

**FIGURE 1.**  
**Economically Disadvantaged Community Areas in**  
**Lucerne Valley**



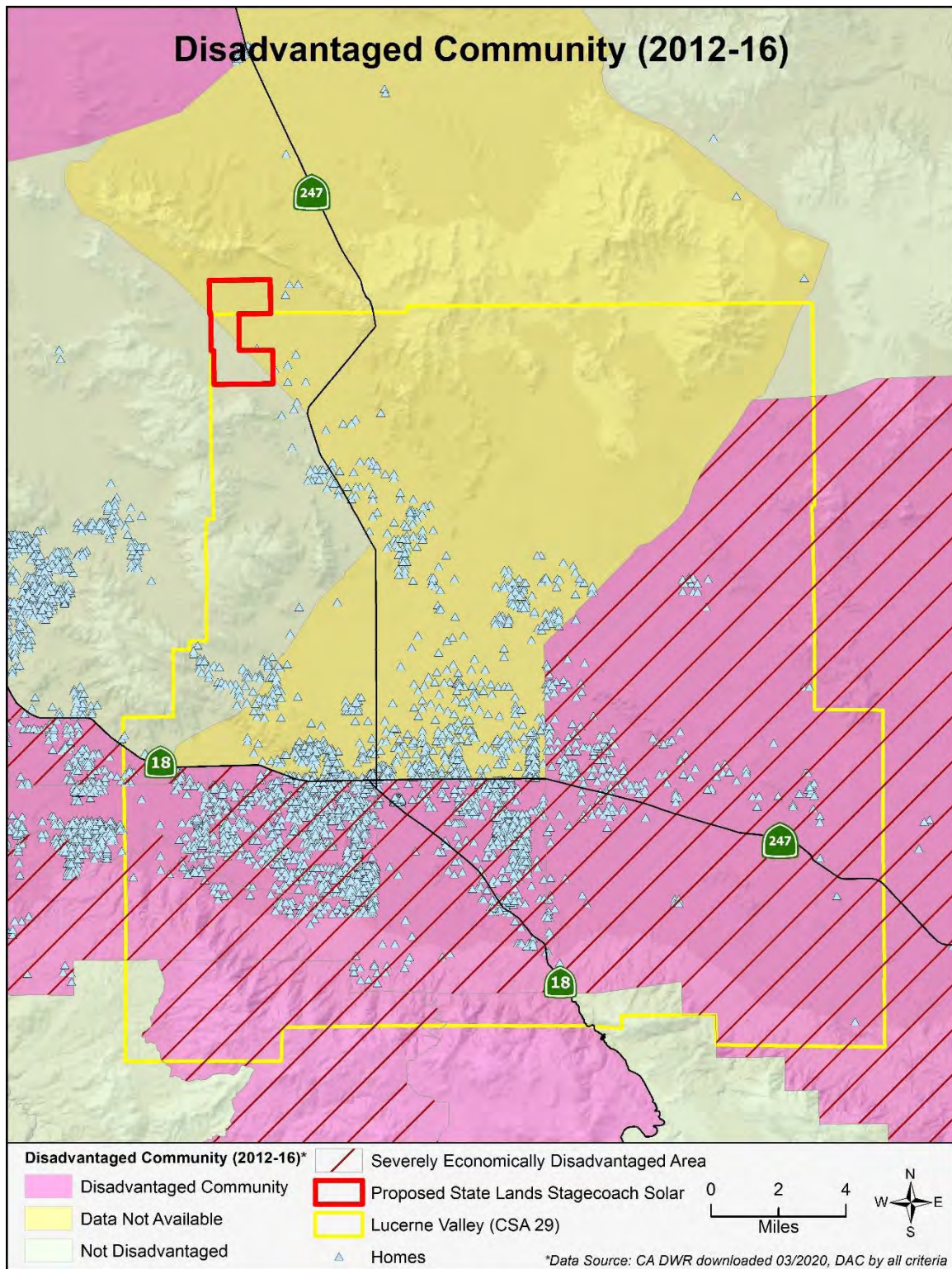


**Figure 1** Economically Disadvantaged Areas in Lucerne Valley

**FIGURE 2.**

**Disadvantaged and Severely Economically  
Disadvantaged Community Areas in Lucerne Valley**



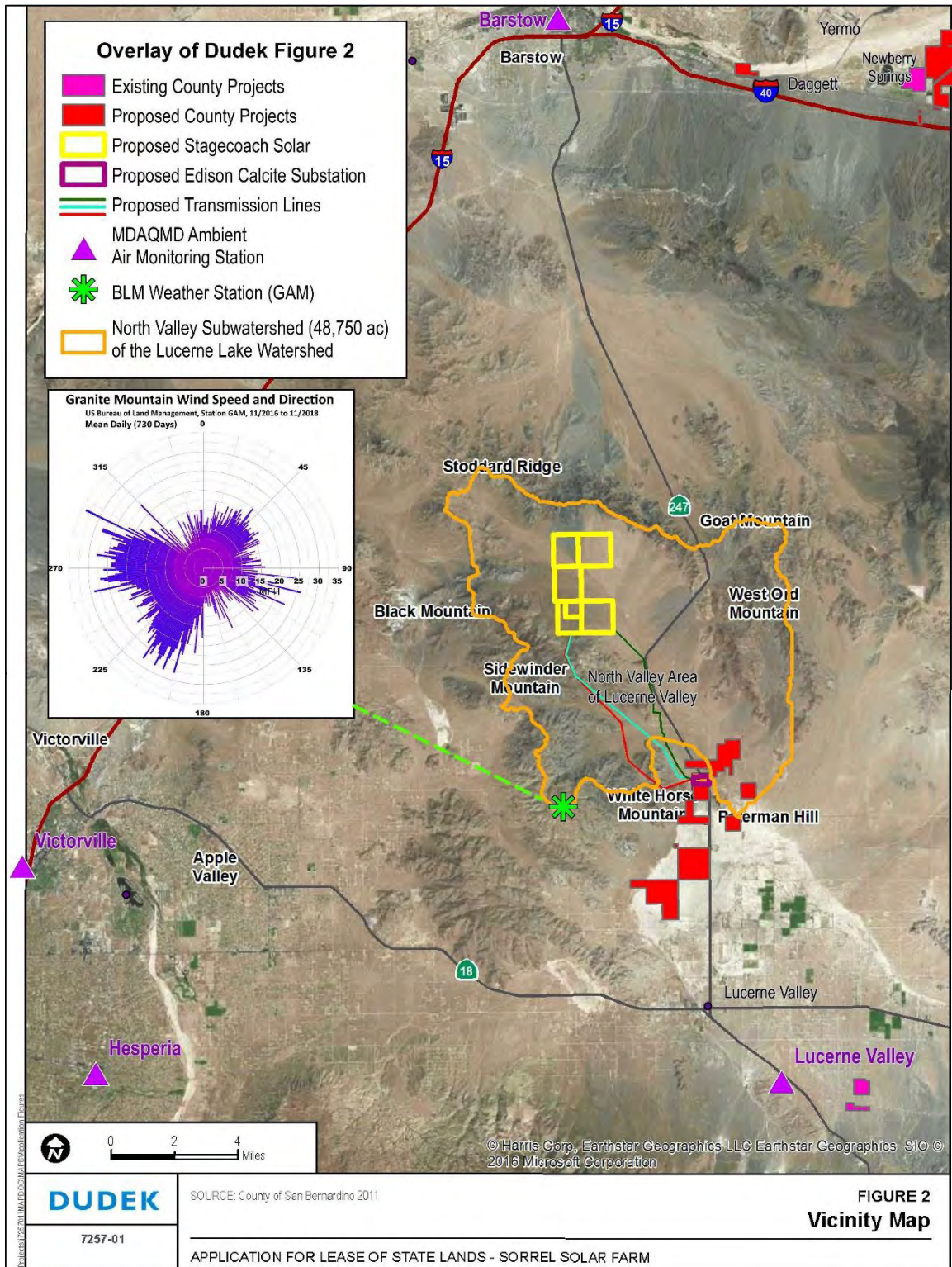


**Figure 2** Disadvantaged and Severely Economically Disadvantaged Community Areas in Lucerne Valley

**FIGURE 3.**

**Vicinity Map (overlay of map attached  
to project application)**

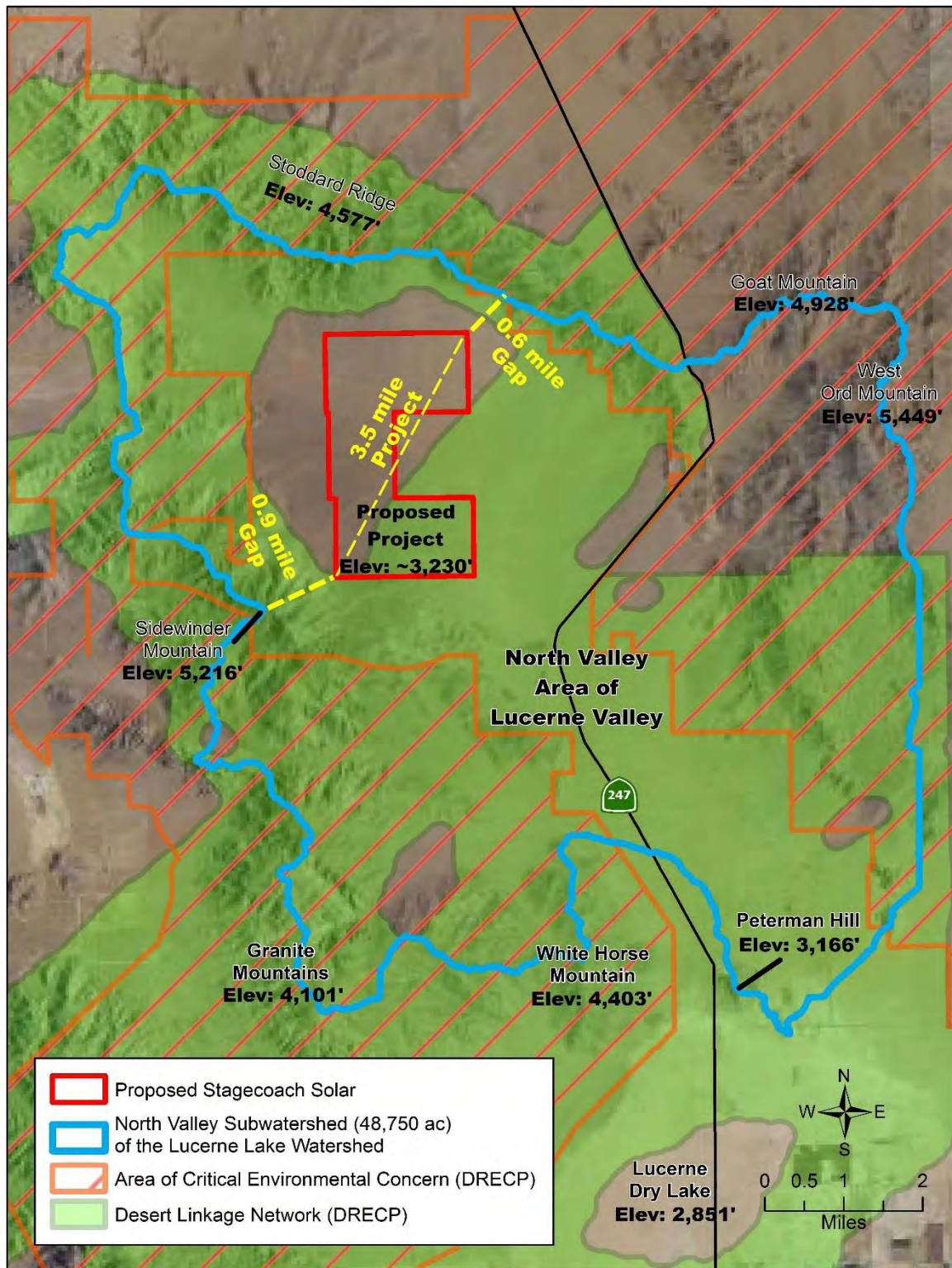




**Figure 3** Vicinity Map (overlay of map attached to Project Application)

**FIGURE 4.**  
**ACEC and Wildlife Linkage Design**





**Figure 4** ACEC and Wildlife Linkage Design

**FIGURE 5.**  
**North Valley Subwatershed Bluelines**



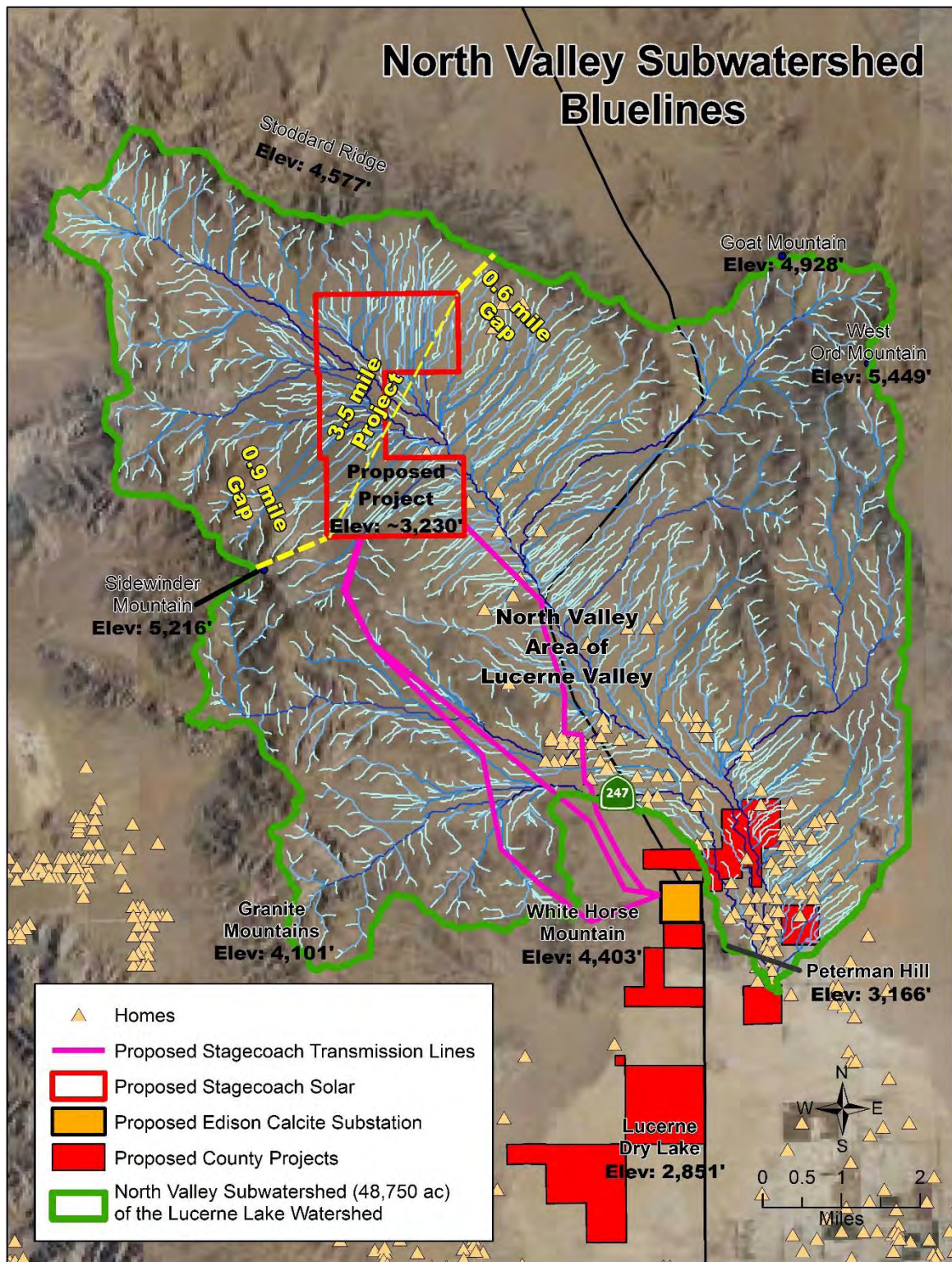
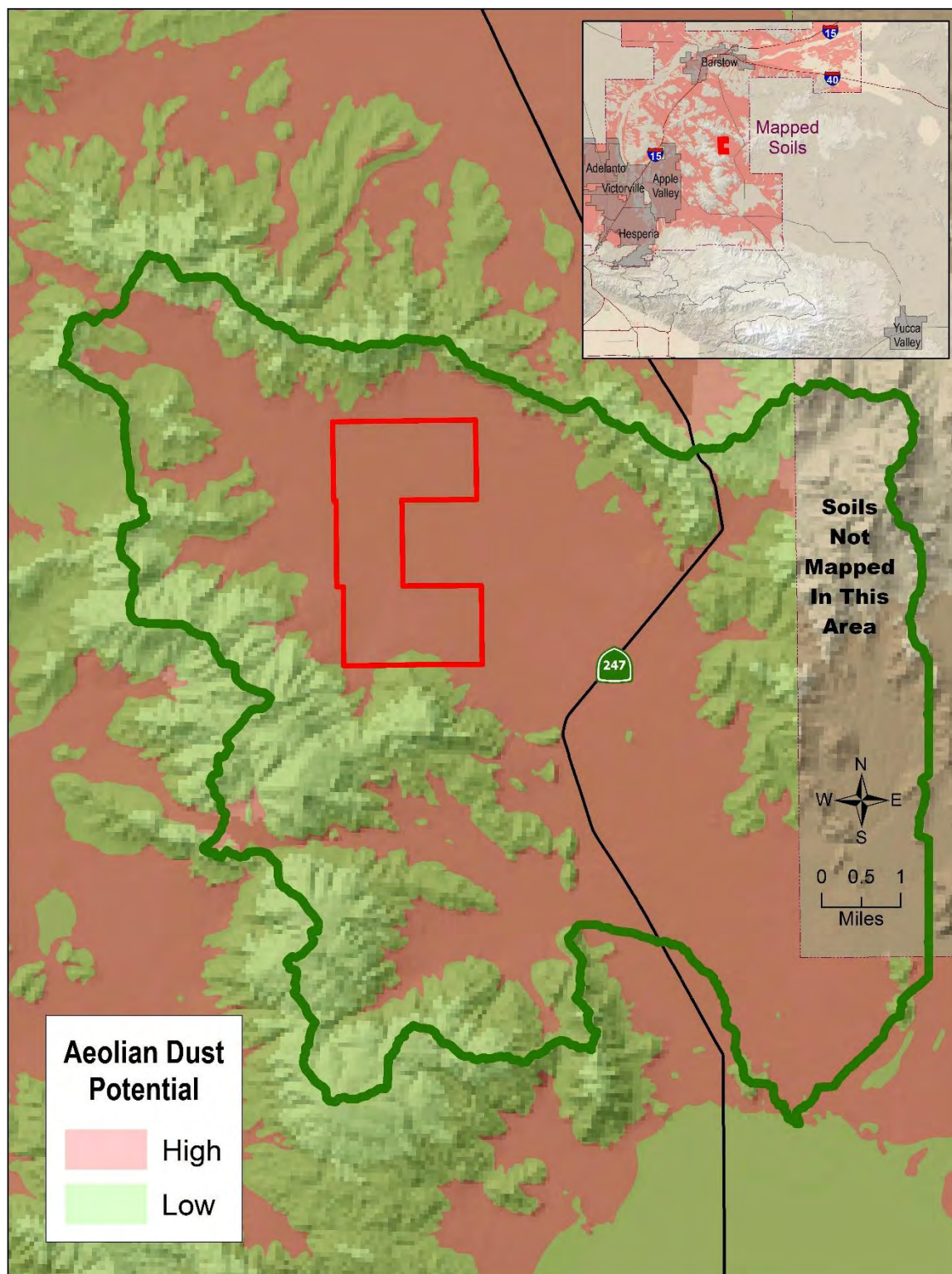


Figure 5 North Valley Subwatershed Bluelines

**Figure 6.**  
**Regional Dust Potential**





**Figure 6** Regional Dust Potential