

San Diego Mineral & Gem Society, Inc. A Non-Profit Educational and Scientific Organization

Storm clouds gather over the California desert

January 26, 2015 by Lisbet Thoresen

N atural habitat, ecosystems, and scenic and wilderness areas, as well as geologically distinctive or historically significant areas in the California desert will be altered dramatically, perhaps irrevocably, if the *Recommended Alternative Plan* of the **Desert Renewable Energy Conservation Plan (DRECP)** is adopted as drafted currently.

Southern California desert communities can look forward to the unspoiled vistas and natural environment they value being blighted by the construction of power transmission corridors through public lands and utility-scale projects on adjacent private lands. Areas previously accessible for recreational uses, including sites that have been popular with amateur rockhounds for many decades, may be closed or become inaccessible due to trail and road closures on adjacent lands. At the least, recreational users can look forward to restricted access and an uncertain future in which development trumps other considerations on BLM-administered lands.

The comment period for the **DRECP**, which **closes on February 23rd**, provides opportunity for the public to influence provisions that determine the destiny of our natural resources on public lands.

Comments are needed <u>NOW</u> on the **DRECP**. We've made a start with the <u>SDMG DRECP</u> <u>Survey</u>. Shirley Leeson presented more than 100 survey results collected over two days at the

Desert Renewable Energy Conservation Plan (DRECP)

Land usage encompassing 22.5 million acres of California's deserts will be administered according to **DRECP** guidelines for the next 25 years. The plan makes a mosaic of the desert, with *Development Focus Areas* designated for private industry to build utility-scale energy projects adjacent to public lands or on 177,000 acres of BLM-administered public lands. **DRECP's** implementation will pave the way for large industrial developments to be connected to the power grid via power transmission corridors running through fragile ecosystems and pristine natural landscapes on public lands.

BLM needs to know your concerns about preserving the desert environment. BLM needs to know about the specific areas for which recreational uses or conservation concerns are important to you.

The comment period has been extended through February 23, 2015

Comment directly to DRECP at: http://www.drecp.org/about/contact.html#comments

December 6th BLM meeting held in Palm Springs. As of this writing, the next BLM meeting on the **DRECP** has not been scheduled, but we want to be prepared to submit many more surveys at the next meeting. This input is important – it will become part of the permanent record of the public response to the **DRECP**.

If you have not already taken the survey, please take a few minutes to do it, *just do it*.



You don't have to be a rockhound to take the survey, or for that matter, to sign on to letters and petitions. The **DRECP** affects residents of desert communities and visitors alike. It affects local residents, nature lovers, naturalists, recreational users (e.g., hikers, campers, rock climbers, photographers), botanists, geologists, hydrologists and palaeontologists, among others. It affects the

Make your voice heard take San Diego Mineral & Gem Society's <u>Survey for DRECP</u>

www.sdmg.org

Final Deadline Extended: Feb 15, 2015

(If there is more than one user in your household who wants to take the survey or you got the survey link from a forwarded email, and the survey is being blocked, you may have to close your browser and clear the history/cache, then open a fresh window.)

Some areas on public lands currently designated as recreational or wilderness areas may be at risk of restricted access or closure under provisions of the **Draft DRECP**. Some are adjacent to Development Focus Areas (DFAs) and may become energy transmission corridors for them. Comments about these sensitive areas are especially important at this time.

Alvord Mountains	Mineral Hill
Anza-Borrego	Mule Canyon
Brown Butte	Newberry (adj. areas to the
Cadiz	north)
Calico	North Edwards
Castle Butte	Pisgah Crater
Chambless	Rainbow Rock
Gem Hill	Stoddard Wells
Hector Hill	Wiley Wells
Lonely Butte	Yermo
Marble Mountains	

Two more things you can do...

DRECP does not include distributed energy generation (e.g., rooftop solar) in any of its five alternative plans. Tell BLM to include this option.

Sign the Petition: We don't have to sacrifice California's deserts for renewable energy!

www.tubbcanyondesertconservancy.org

– and –

Sign on to the Basin and Range Watch letter ≫

www.basinandrangewatch.org

watershed, flora and fauna of fragile ecosystems that are unique to California. Areas beloved by all of us may become inaccessible as trails and roads are closed and "recreational use" or special conservation designations are changed by BLM to accommodate large scale development plans (see below left, a list of potentially vulnerable rockcollecting areas).

Crafting an effective letter on DRECP

The more specific your comments, the more effective you will be in communicating to the BLM. The **Tubb Canyon Desert Conservancy** website has some great tips:

www.tubbcanyondesertconservancy.org

Desert activist Shaun Gonzales authored a cogent article on the conservation concerns attached to the locations and sizes of the Development Focus Areas (DFAs) in the DRECP. (Gonzales 2014b).

The concerns and issues addressed in the article are echoed in his own comment letter to the **DRECP**. It is an excellent model for its content, clarity, specificity, and tone. (Gonzales 2013)

A sample letter:

C I strongly support conservation designations that would protect the natural character of California's desert landscapes and offer enduring protection of desert wildlife, habitat, and previously untouched wild areas that rockhounds appreciate. Such designations include new areas of critical environmental concern (ACEC), National Landscape Conservation System (NLCS), and Special Recreation Management Areas (SRMA).

I recommend that ACEC and NLCS management objectives should explicitly specify that rockhounding is an acceptable/compatible activity for such designations. In addition, Special Recreation Permits for rockhounding should be identified as a compatible use in the management objectives for the NLCS lands. Also, designated routes should remain open.

Specific areas of concern to me include: List the areas here with pertinent details. Attach maps with annotations. "

You can use the DRECP map tool at: http://drecp.databasin.org

DRECP - Background

and usage encompassing 22.5 million acres ⊿ of California's deserts will be administered according to **DRECP** guidelines for the next 25 years. Its implementation will pave the way for private companies to build utility-scale energy projects that will be connected to the power grid via power transmission corridors criss-crossing public lands (Figure 1). A jointly administered project of the BLM, California Energy Commission, and the Department of Fish and Wildlife, the goals of the **DRECP** are driven by the legal requirement that "renewables" (solar, wind, geothermal) shall account for 33% of California's energy sources by 2020. The state has led the nation in the proliferation of solar energy projects, with the goals set for the 2020 target date having been realized already - six years ahead of schedule. Now, Governor Brown has upped the target to 50%. Wind and geothermal projects have flourished under the same mandate.

BLM has been criticized from many quarters for its lack of transparency on drafting the Plan and for eschewing public engagement or providing sufficient public notice to comment on its provisions.(see especially: Clarke 2012) When the **DRECP** was published on September 26, 2014, consistent with past behavior, the BLM provided limited opportunity for public review. A public hearing was scheduled in San Diego only 30 days after release of the 8,000-page document.

Environmental journalist **Chris Clarke** has been critical of both the Plan and the process. In a commentary last Fall on the KCET website, in which he advocated extending the comment period, **Clarke** wrote: "The draft DRECP is a mind-bendingly massive and complex document....It proposes to manage a change in the Californian landscape that rivals some of the largest environmental changes in California in the 19th and 20th centuries, like hydraulic mining, or the plowing of the Central Valley's wetlands and meadows, or the damming of most of the state's major rivers."(Clarke 2014)

In the face of strong criticism, the comment period was extended through January 9th, then again to February 23, 2015. Given the **Draft** **DRECP**'s scope, complexity, and voluminous size, the opportunity for cogent public participation is still inadequate.

Devil in the details

O r lack thereof. All five of the **DRECP** *Alternative Plans* consider only utility-scale projects. *Distributed energy generation* options (e.g., rooftop solar) are excluded from consideration. Why?

Why are massive transmission lines, which will have to be built to connect newly built plants to the power grid, not accounted for in the **DRECP**? They are an indispensible factor in California's energy equation. For the equation to balance, no facility can operate without a conduit linking to the grid.

While nearly 80% of the **Development Focus** Areas (DFAs) in the DRECP's Preferred Alternative Plan targets private property, and 90% of the conservation (no renewable development) is on public lands, one only has to look at a DRECP map to see that transmission corridors will have to pass through public lands to connect to the grid (Figure 1). The juxtaposition of private and public lands is a checkerboard with porous boundaries. Do birds know to fly around the **DFAs** and tortoises to avoid them? The footprint of acres of solar panels and profiles of 260 ft. tall wind turbines in this gerrymander-patterned landscape are visible for miles around and especially from the vantage of adjacent residential communities or public lands designated as wildlife or conservation areas. Southern California communities in Lucerne and Victor Valleys, and also Imperial Valley show the sorry toll imposed by DFAs on their rural character.(Gonzales 2014b)

The **DFAs** have been characterized as previously disturbed lands with lowest biological value and lowest conflict with existing uses. By whom? What will the demand be for water resources and fossil fuels to operate the plants? What will be the impact on air quality? (The air quality of the "disturbed" private lands is already the worst in the country.) What will happen when the land is no longer irrigated or planted with anything to hold down the soil? What about



Figure 1. DRECP DFAs and Anza-Borrego Desert State Park. Map courtesy of J. David Garmon.



hazardous waste disposal? What will be the provisions for EPA and Air Quality Management District compliance? Down the road, if projects fail and plants close, what will be the provisions for the safe and complete dismantling of plant facilities and rehabilitation of natural landscapes and habitat? Can California taxpayers look forward to being on the hook for the costs? The **DRECP** doesn't spell it out.

Surely, the public deserves more time to review and comment on the implications of these and other troublesome questions embodied in the **DRECP**. **Alliance for Desert Preservation** (www.a4dp.org) thinks so. The 501(C)(4) organization submitted a letter to the California Energy Commision on January 16th formally requesting that the whole comment process be restarted. The letter also requests a 60-day extension of the comment period. Anyone can <u>sign on to this letter</u> (see resources page at the end of this article).

California's experience with utility-scale renewable energy

C ertainly, renewable energy sources are a desirable alternative to fossil fuels and "dirty" energy sources. Past renewable energy projects and facilities currently in operation provide useful reference for comparison to evaluate objectively the prospects of future development administered under the **DRECP's** guidelines. In California, a myriad of factors have turned more than a few "green" energy projects into problem-plagued ventures or colossal boondoggles.

DRECP proponents overlook the troubled recent history and continue to focus only on the promise of upside benefits: economic relief for consumers, energy independence and sustainability, a low carbon footprint, creation of jobs, revenues for city and state coffers, et cetera; however, as projects have come online, the downside aspects are neither few nor trivial. Some are proving to be intractable.

Solar and wind farms in Ocotillo Wells in Imperial County, wind turbines in San Gorgonio Pass in Coachella Valley, and the solar project at Ivanpah Valley in the Mojave Desert, San Bernardino County, are illustrative case studies. The negative impact on ecosystems and quality of life/health-safety issues for desert communities have been underestimated, while the net benefits redounding to consumers or city, county and state governments, not to mention private industry, have been equivocal, at best. They have consistently over-promised and under-performed, with some serious, negative consequences.

The Ivanpah Solar Electric Generating System, for example, which received \$1.6 billion in Federal loan guarantees, was a joint venture among NRG Energy, Bright Source Energy and Google. Built to be the world's largest solar project of its kind, serious problems have bedeviled the enterprise (Danko 2014): it consumed 63% more fossil fuel to operate than originally estimated, its annual consumption of water in the drought-starved state hit 33 million gallons, and to date, it has achieved operational capacity of only 25% of the original projection.(Miller 2014) Boosting the lower than anticipated energy output draws significantly more natural gas to run the plant than originally estimated, and it comes at a significantly higher cost.(Gonzales 2014a; Danko 2014)

As it turns out, not all solar panels are created equal. They have a variable degradation (life expectancy) and fail rate, and their performance is highly weather-dependent.(Jordan and Kurtz 2012; Kelly-Detwiler 2013) In general, they do not operate optimally in environments that characteristically have extreme temperature excursions – like the desert. Dust, which deserts produce naturally in abundance, is another problem. It lowers performance, and so, solar arrays in the desert require more fossil fuel and water to keep them clean and generating energy optimally.

Another unintended consequence of largescale energy projects built in the desert has been the disastrous impact on wildlife and their natural habitat. The Ivanpah project has displaced desert tortoises and killed thousands of birds.(Laufer 2014; Rowe 2014; Wolf 2014) Terry Weiner, head of the Desert Protective Council, wrote: "The DPC disagrees with the premise of the DRECP, which is to continue expanding renewable energy development in our beleaguered California desert. We are learning from the photovoltaic solar developments in Imperial County that the "lake effect" of the panels from a birds-eye view has caused the death of over 150 species, and thousands of individual birds. Birds are being incinerated in the solar flux at the Ivanpah Solar Power Tower



Composite photo. Lavic Siding by Kris Rowe, wind turbines by Wiki user Z22.

project in the Mojave Desert."(Raftery 2014) Burning birds fall to the ground, often still alive, blinded and horribly injured, where they die or are mercifully killed by roaming predators attracted to the carnage. Ivanpah also kills eagles, as well as other endangered birds and butterflies.

Ivanpah has also raised safety concerns for aircraft along a popular flight corridor. Its intensely bright towers produce a blinding glare for pilots. This is the face of so-called "green" energy generation in the desert and the future legacy of the **DRECP**, if it is implemented as proposed. The travails at Ivanpah led NRG Energy's CEO **David Crane** to publish a letter to shareholders in 2012, in which he advocated a drastically revised perspective on the viability of renewable energy projects. In a complete turnabout, he was now embracing "a distributed energy generation clean energy future featuring individual choice and the empowerment of the American energy consumer" – in other words, point-of-use solutions such as rooftop solar panels versus the utility-scale model. (quoted in: Miller 2014) Environmentalists and other nature conservation advocates who are usually on the opposite side of the issue, can agree with **Crane** on this alternative vision.

Riverside County Supervisor **John Benoit** could have been speaking for municipalities everywhere, when he remarked in 2012, "We're [Riverside] going to be carrying the burden of having these types of facilities for decades to come, and because of the incentives that have been provided by federal and state government, there's virtually nothing left for the county government or the local people to get benefit back after the small number of construction jobs are gone," and further, "...the long-term effect is clear: We're going to have a desert that's dramatically changed and forever off the tax roll and out of use for any other recreational or other purpose."(quoted in: La Jeunesse 2012)

J. David Garmon, president of the Tubb Canyon Desert Conservancy, is critical of the DRECP for excluding distributed energy generation (DG) proposals. In an <u>op-ed that</u> <u>appeared in the San Diego Union-Tribune</u> in December, Dr. Garmon presented the case for embracing a DG/point-of-use model, and he made a cogent argument exposing the costly drawbacks of the DRECP's Alternative Plans – all of which propose only utility-scale projects.(Garmon 2014) Concerning the DRECP's Alternative Plans, including the Preferred or Recommended Plan, Garmon said in an article for East County Magazine,

"This rationale [omitting rooftop solar as an option] implies that anything that does not result in the creation of utility-scale generation facilities is in actuality not an alternative at all.... The perverse rationale implied by the above reasoning is that we cannot pursue conservation goals unless we are simultaneously "sacrificing" millions of acres of desert habitat." (quoted in: Raferty 2014)

In an effort to persuade the BLM to incorporate DG alternatives into the **DRECP**, **Garmon** has authored <u>a petition to support alternative</u> <u>distributed energy generation proposals</u> and to oppose what he characterizes as a wholesale, unnecessary and expensive giveaway to industry.

Kevin Emmerich and Laura Cunningham share many of the same concerns of David Garmon and others. Under the auspices of Basin and Range Watch, they have been documenting conditions in the Mojave Desert and the adverse impact large energy developments are having on the environment and habitat. They have submitted a detailed letter to DRECP proposing inclusion of a point-of-use alternative plan. Individuals and organizations are invited to sign on (see inset box, p. 2).

If no less an industry authority than **David Crane**, CEO of NRG Energy, one of Ivanpah's partners, came to the conclusion – based on real world experience – that utility-scale generation was untenable in California's deserts and further, that distributed generation (rooftop solar) is the viable alternative, one has to wonder why the **DRECP's** authors and the rest of industry isn't listening. One explanation may be that it is far more profitable to transport electricity along far off transmission lines than to work through local power grids on rooftops near the destination where the energy is actually needed.

Alfredo Martinez-Morales, managing director of UC Riverside's Southern California Research Initiative for Solar Energy, may have summed it up best: "These projects, no matter what, are going to have significant impacts, wherever they go....A lot of people assume that because they're located in the desert, the impact is minimal, but it's been shown now that that's not the case. The desert is a thriving environment, and it's home to very unique animals and plants."(quoted in: Roth 2014) And, we might add, it's home to a unique geological landscape. It's home to us.

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Acknowledgements

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Resources on Desert Preservation and Sustainable Renewable Energy

Alliance for Desert Preservation. www.a4dp.org

Petition: Support NCLS for Juniper Flats: www.a4dp.org/support-ncls-for-juniper-flats/ Petition: Stop Coldwater-Lugo Transmission Project: www.a4dp.org/oppose-coolwater-lugo/ Sign on to the letter that asks the CEC to restart the comment period on the DRECP: http://www.a4dp.org/wp-content/uploads/2015/01/a4dp_DRECP_comment.pdf

Basin and Range Watch. www.basinandrangewatch.org

Sign on to the letter proposing an alternative energy plan for inclusion in the DRECP: www.basinandrangewatch.org/DRECP-CEESP-Alternative.html

Desert Protective Council. dpcinc.org

Mojave Desert Blog. www.mojavedesertblog.com

J. David Garmon. Petition: We don't have to sacrifice California's deserts for renewable energy! http://petitions.moveon.org/sign/we-dont-have-to-sacrifice?source=c.em.mt&r_by=1516679

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- Save Gem Hill and Lonely Butte. www.facebook.com/pages/Save-Gem-Hill-Lonely-Butte/1556883827878433

Sierra Club Desert Chapter Newsletter.

www.desertreport.org/wp-content/uploads/2014/12/DR_Winter_20141.pdf

Solar Done Right. www.facebook.com/SolarDoneRight

Tubb Canyon Desert Conservancy. www.tubbcanyondesertconservancy.org