Basin and Range Watch

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Rio Mesa Solar Electric Generating Facility – Comments

Basin and Range Watch is a group of volunteers who live in the deserts of Nevada and California, working to stop the destruction of our desert homeland. Industrial renewable energy companies are seeking to develop millions of acres of unspoiled habitat in our region. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems and open spaces. We have visited the site of the proposed Rio Mesa Solar Project and believe it would inflict both direct and cumulative damage the resources of the area.

Alternatives:

The FSA rejects the distributed generation alternative based on an assumption that distributed energy cannot meet the state's Renewable Portfolio Standards. This really is a distortion of the truth and we have to wonder why the California Energy Commission is willfully ignoring the number of GW being produced in the country of Germany. A distributed generation alternative would produce clean energy, create an economy that supports job growth and protect the environment. A distributed generation alternative would be a win/win scenario for most of the stakeholders involved. BrightSource has received considerable special treatment over their Ivanpah Project. It is time to place responsible protection of resources as a priority. You are basing your low numbers from four years ago, long before Germany reported off the chart numbers. We believe you are rejecting this alternative because you know it is viable and would nullify a need for utility scale boondoggle projects.

The following numbers and information come from the Soar Done Right Wrong from the Start paper:

US Solar Public Lands Policy, Wrong From the Start, A report on the Draft Solar Programmatic Environmental Impact Statement of the US Interior and Energy Departments. Solar Done Right April 4, 2011 available for download at solardoneright.org

"a 2007 Navigant study prepared for the California Energy Commission (CEC) estimated the combined solar PV capacity potential of residential and commercial rooftops in California to be 50,255 megawatts in 2010 and 67,889 megawatts in 2016.20 A 2009 Black & Veatch and Energy and Environmental Economics, Inc. (E3) report to the CPUC, found 11,543 megawatts of large (greater than 1/3 acre) urban rooftop capacity and 27,000 megawatts of ground-mounted capacity near existing substations.

A June 2010 update of the study found that California has a capacity of 55,000 megawatts of decentralized solar PV (over 100,000 GWh/year).22 This is more than enough to meet the estimated 40,000 to 56,000 GWh/year net short in the state. The potential for DG goes well beyond the numbers cited in these studies that only account for the most accessible commercial sites.

It is common knowledge that solar PV prices have fallen dramatically in the past two years. In a recent filing to the state's PUC, Southern California Edison asked for approval of 20 solar PV projects worth 250 MW – all of which are expected to generation 567 gigawatt-hours of electricity for less than the price of natural gas.23 Five years ago, solar PV and concentrated solar power were comparable in price, but solar PV is now indisputably cheaper than concentrated solar power. Solar PV with battery storage has a lower levelized cost than concentrating solar with storage, and many small installations spread widely over a larger geographic area, are far less vulnerable than large central-station solar generation that can be entirely shut down by a single cloud. Advocates of utility-scale solar commonly omit from their calculations avoided costs of new transmission, and the 7.5–15 percent losses from moving solar-generated electricity hundreds of miles to urban demand centers when comparing the cost of centralized vs. distributed solar generation. In cloudy Germany, 8,000 MW of distributed PV were installed in 2010 alone,more than 80 percent of it on rooftops.

A strategy focused primarily on distributed PV would be the most cost-effective approach to rapidly expanding solar power production in the United States. Germany has demonstrated that a spectacularly high, distributed PV installation rate is sustainable when an appropriate contract structure, the feed-in tariff, is utilized.

Approximately 17,000 megawatts of PV were installed worldwide by the end of 2009. Only 664 megawatts of the global total solar was concentrating solar thermal. Ironically, most of this solar thermal capacity was built in California in the 1980s and early 1990s.27 In his recent article "Federal Government Betting on the Wrong Solar 'Horse,'" engineer and PV expert Bill Powers points out:

The United States is wasting billions of dollars of American Recovery and Reinvestment Act (ARRA) cash grants and loan guarantees on very large, high-cost, high-environmental-impact, transmission-dependent desert solar thermal power plants that will be obsolete before they generate a single kilowatt-hour of electricity. The Department of Energy (DOE) is in the process of completing a potentially landmark study, the Solar Vision Study (SVS). It maps out a strategy to provide the United States with 10 to 20 percent of its electric energy from solar power by

2030. The document appears to be intended to serve as technical support for a national strategic commitment to solar thermal development. The SVS proposes that half of the nation's solar power will come from solar thermal installations, based on a low and unsupported cost-of-energy forecast for solar thermal plants. The SVS also presumes that the Southwest will be the hub from which this solar power is generated and transmitted to other parts of the country, while estimating an almost trivial transmission expense to make this happen.

A revised and corrected SVS would envision a solar future that is effectively 100 percent solar PV. This PV future would also be predominantly smaller-scale PV connected at the distribution level, to avoid the expense of transmission. Otherwise, enormous costs for new transmission capacity would be necessary to move remote Southwest solar power to demand centers around the country. Generally speaking, "rooftop" solar is shorthand for solar PV installed on commercial and residential rooftops, parking lots, highway easements, and virtually any site in the built environment that has suitable space for distributed generation. When all costs are factored in including new transmission infrastructure and transmission line losses – local, distributed solar PV is comparable in efficiency, faster to bring online, and more cost-effective than remote utility-scale solar thermal power or remote utility-scale PV plants.

Local installations such as rooftop or parking lot solar PV reduce peak load at the source of demand and thus reduce or eliminate the need for additional conventional generation and transmission infrastructure. Yet, because investor-owned utilities are guaranteed a high rate of return for transmission and new generation infrastructure, they oppose large-scale deployment of rooftop solar30 and thus work to perpetrate the myths surrounding point-of-use solar."

The FSA fails to consider analyzing an offsite brownfields alternative. The Environmental Protection Agency has identified 15 million acres of degraded lands in the USA that are suitable for renewable energy development.

The US Environmental Protection Agency has identified over 1.5 million acres of brownfields in the United States that would be suitable for utility scale solar development. See here:

http://www.epa.gov/oswercpa/

http://www.wvbrownfields.org/conferences/2010/presentations/Evans%20Paul%20-%20Jobs.pdf

The Arizona BLM is reviewing the "The Restoration Design Energy Project" http://www.blm.gov/az/st/en/prog/energy/arra_solar.html (RDEP), funded by the American Recovery and Reinvestment Act of 2009, which supports the Secretary of Interior's goals to build America's new energy future and to protect and restore treasured landscapes. The following statement is made:

"Emphasis will be on lands that are previously disturbed, developed, or where the effects on sensitive resources would be minimized. The BLM intends to use the results of the EIS to amend its land use plans across Arizona to identity areas that are considered to be most suitable for renewable energy projects.

While these amendments will only apply to BLM-managed lands, the EIS will examine all lands in Arizona and serve as a resource to the public, policy makers, and energy planners."

Biological Resources

Many documents which need public review have been deferred until after project approval, and we ask that these be provided by the applicant and the project delayed until these are available. These include:

Biological Resources Mitigation Implementation and Monitoring Plan
Bird and Bat Conservation Strategy
Eagle Conservation Plan
Documentation of ground disturbance for each habitat type
Facility Closure, Revegetation, and Reclamation Plan
Biological Resources Mitigation Implementation and Monitoring Plan
Integrated Weed Management Plan
Desert Dry Wash Woodland Monitoring Plan
Raven Monitoring, Management, and Control Plan
Nest Management Plan
Bird Mortality Monitoring Study

We agree with staff that the project will eliminate most ecological function from the majority of the project area, due to trampling, compaction, vegetation cutting, grading, and habitat fragmentation and disturbance. Other alternatives should be found for this project instead of a diverse and relatively intact Colorado Desert area.

Compensatory mitigation of palo verde-ironwood habitats by purchasing private parcels will be very difficult to achieve, and we agree with staff that this may not be feasible due to the rarity of this habitat type. Plus, if parcels are found that are small in size and scattered, this will not be equivalent to a large contiguous patch of habitat as is currently intact at the project site.

We do not find it acceptable to mitigate eagle or other bird mortality from power tower flux deaths by enhancement of other habitat. This project is too close to valuable National Wildlife Refuges in the Colorado River segment of the Pacific Flyway, and the advantages of renewable energy at this site do not outweigh the potential loss of birds.

Since Elf owls and Gila woodpeckers were found on the project site, this makes this area valuable for rare Sonoran Desert bird species on the western end of their range, and the possibility of breeding populations is present. Before the project is approved, surveys for nesting should be undertaken for Elf owl, and the area not developed but protected.

Desert tortoises are found on the project site, and before approval is given, the public should be given the opportunity to review a Biological Assessment by the Bureau of Land Management and the Biological Opinion by US Fish and Wildlife Service, to assess the density of the tortoise population, any disease found, and translocation plan.

A recent scientific study by Perez and colleagues has provided more evidence that translocation projects are often ill-planned and do not work. This could apply to desert tortoises, kit foxes, Gila monsters, and other species that have to be moved out of large-scale solar projects. The authors point to several reasons, such as aesthetic or sociopolitical motivations and the use of translocations as "simple solutions" to complex conservation problems. Before tortoise

translocation is undertaken, a full systematic evaluation should be done using the guidelines provided by this research: What is wrong with current translocations? A review and a decision making proposal. 2012. Irene Pérez, José D Anadón, Mario Díaz, Graciela G Nicola, José L Tella, and Andrés Giménez.
Frontiers in Ecology and the Environment 2012, accessed November 2012 at (www.frontiersinecology.org).

The sand habitat with Mojave fringe-toed lizards present should be avoided by the project gen-tie line, due to the excessive cumulative impacts to this species from the other proposed and approved solar, wind, and transmission projects in the Chuckwalla Valley and Palo Verde Mesa. Populations of this lizard may contain cryptic species not yet analyzed by genetic studies, and loss of increasingly large amounts of habitat could threaten unique popluations.

The rare plant Harwood's milk-vetch was found on the site, and mitigation measures are not sufficient to protect this species. Avoidance would still create disturbance, fragmentation, and possible weedy invasion that could harm this population. Off site mitigation and salvage are not acceptable measures to protect desert rare plants, which are declining cumulatively from development across the desert in California.

The Final Staff Assessment should be delayed until a late summer and fall rare plant survey is completed and published in a supplemental preliminary staff assessment so that the public can review and comment.

We recommend against "nesting" of compensatory habitat for species like Gila monster and rare plants, but parcels of land where these species are actually known to occur should be purchased and protected separately.

Concerning solar energy flux around the power tower in the solar field, staff lays out a convincing analysis that bird mortality will occur as birds fly through the field and are singed or burned by the high energy of concentrated solar beams. We believe that the mitigation for this largely unknown and unstudied avian mortality is inadequate. Simply covering the evaporation ponds with nets and off-site habitat enhancement may not equal the deaths of migratory birds entering the solar projects. More study should be undertaken before approval of this project and its unprecedented tall high-energy power towers.

Cultural Resources

We commend the staff description of the detailed and diverse cultural landscape of the Palo Verde Mesa and Colorado River area for being much more sensitive to the local living traditions and multivocal interpretations of the mountains, valleys, trails, and cultural memories. We thank the staff for including as many voices as possible, from the Quechan to the southern Pauite to the La Cuna de Aztlan. The cultural landscapes analysis is very thorough and good, and this analysis makes it clear the inappropriateness of constructing large-scale energy projects that would alter this landscape. Landscape integrity of ethnographic regions is important to consider and the Rio Mesa project would add to a cumulatively gigantic fragmentation and destruction of this cultural landscape.

Mitigation measures of payments to the Tribes for interpretive centers would not replace these living traditions that depend on the integrity of the traditional landscape.

Paleontological Resources

Significant fossil discoveries have been made on the Rio Mesa site by surveyors, revealing a lost world that could have fossils beds rivaling those at the famous La Brea Tar Pits in Los Angeles.

These significant paleontological resources identified on the project site include many labeled "high sensitivity." The PSA states that "during the applicant's initial paleontological field survey of the project site, a previously unrecognized, widely distributed paleosol (fossil soil), now known as the Palo Verde Mesa Paleosol, was discovered. To date, nearly 800 vertebrate fossils have been collected from the surface of the paleosol. In addition, the Chemehuevi formation equivalents and Late Pleistocene silts, sands and gravels are significant potential fossil bearing units identified on the site."

Most of the fossils apparently are found in deposits that represent past small shallow floodplain lakes. The location and abundance of the fossil beds is yet unstudied. But heliostat foundation construction of predrilling and vibratory pedestal insertion could destroy all fossils encountered where installation takes place in the high sensitivity fossil bearing sediments. This construction method would crush or break any fossils that might be present.

The premier organization for vertebrate fossil study, Society of Vertebrate Paleontologists, states that a vertebrate fossil is considered scientifically important unless otherwise demonstrated, due to the rarity of such remains. The Palo Verde Mesa paleosol has sediments laid down by the Ice Age Colorado River. Fossils found include tortoise bones and eggshells (21 %). Remains are those similar to the living desert tortoise (*Gopherus*) as well as the gigantic extinct *Hesperotestudo*. Also found were jackrabbit and cottontail fossils (both *Lepus* and *Sylvilagus*), a badger skull and mandibles (*Taxidea*), rodents, lizard, snake, bird bones, fragments of deer antler, probable bighorn sheep, mammoth ivory, and horse teeth (*Equus*). These fossils have been dated to approximately 13,700 years before present. Many of the fossils were in ancient animal-dug burrows. There are indications that this area was a desert refugium even during the cooler Pleistocene time. This paleosol will be impacted by construction grading and excavation, says the Energy Commission.

The Chemehuevi Formation includes finely bedded reddish mud, clay and silt visible on the lower parts of the bluffs of the Palo Verde Mesa, and are rare at the surface of the project footprint. A few exposures thought to be Chemehuevi Formation equivalents were encountered. They are probably present in the subsurface over much of the project site. Earlier work on this formation in the region, such as in nearby Arizona, found fossils of turtle, snake, lizard, bird, ray-finned fish, and proboscidean tusk. These beds may be 41,000 to 102,000 thousand years old.

Staff told the applicant that a Supplemental Paleontological Resources Delineation Report must be submitted no later than December 3, 2012. In it should be maps and drawings of all facilities and ground disturbance. A monitoring and sampling plan should be made. If significant fossils are found, a plan should be given for how construction will be halted and resumed. Some fossils may be removed and inventoried for deposition into a museum. After construction is completed a report of finds shall be prepared, and this suffices as mitigation.

In our opinion this is an amazing fossil discovery and important to science. The California Energy Commission should withhold approval of the project until a thorough paleontological survey is completed in order to assess the nature of this fossiliferous region. We request a two year delay

of this project in order to invite institutions to explore and document this find. We know of no other Pleistocene bed this extensive and diverse in the Mojave and Colorado Deserts with the exception of the Las Vegas Wash fossil beds in Clark County, Nevada -- an area dated to mid Pleistocene that also holds mammoth tusks; this area is being recommended by the Sierra Club, National Parks and Conservation Association, and other groups to be made into a National Monument. We feel that the Rio Mesa area may hold a similarly significant fossil bed or beds worthy of protection. Mitigation should include a visitor center for interpretation of this unique fossil landscape, and the applicant should be required to analyze alternative sites in order to avoid this rich zone. The prehistory of the ancient Colorado River may be told in the stories revealed by these fossil strata.

Project

Rio Mesa SEGF would cover approximately 3,805 acres that is largely intact Colorado Desert ecosystems. This area would include the two proposed power plants, associated heliostat fields, and support facilities located within a common area. Off-site project components would include a temporary construction area, transmission line corridors, and access roads encompassing approximately 2,188 acres, for a total of approximately 5,993 acres of desert land. Each solar plant would generate 250 megawatts (MW) (net), for a total net output of 500 MW and would use heliostats – large mirrors guided by a tracking system mounted on pylons – to focus the sun's rays on a receiver located on top of a 750-foot-tall cement power tower near the center of each solar field. Each solar field would use approximately 85,000 heliostats. We have visited the project site and question how heliostats will be placed over so many washes and uneven ground. We would like to see a better grading plan, or an explanation of how such uneven heliostat placement will correctly aim concentrated solar radiation at the central receiver tower.

Natural gas would be burned in auxiliary boilers to assist in morning start up and late afternoon when solar energy is diminished. The applicant has asked for more allowance for burning natural gas at their Ivanpah project, what assurance will there be that the Rio Mesa project will not need more as well, thus contributing to more emissions?

Air Quality:

Construction activity will go on for 2 to 3 years and will degrade air quality resources.

Coccidioidomycosis (Valley Fever) is a common issue that impacts desert communities when dust is stirred up.

Removal of stabilized soils and biological soil crust creates a destructive cycle of airborne particulates and erosion. As more stabilized soils are removed, blowing particulates from recently eroded areas act as abrasive catalysts that erode the remaining crusts thus resulting in more airborne particulates.

We are concerned that industrial construction in the region will compromise the air quality to the point where not only visual resources, but public health will be impacted.

We are also concerned that BrightSource will have no choice but to use more water in an already over-drafted aquifer to control the large disturbance they intend to create.

Construction should not be permitted during days of high winds. Wind speeds of 10 MPH and higher should be determining factors that limit construction. Construction should also be limited during the hottest months of the year. Evaporation rates will be greatest during the months of June, July and August.

It is unfortunate that local communities are getting almost no benefit from these large, recently approved industrial developments.

The following three photos show that there is a consistent failure of large solar and wind project developers to control and mitigate the dust emissions that have resulted from the large disturbances caused by recently approved high profile renewable energy projects. In spite of the fact that all of these developers have promised that dust emissions would not be an issue, we are finding that they are falling short of their mitigation requirements.

Ocotillo Wind Express Project, May 2012

^Dust storm from the Genesis Solar Energy Project, April, 2012. Naturally occurring dust from Ford Dry Lake was combined with newly disturbed surface soils from project construction.

Desert Sunlight Project near Desert Center, California. These dust storms were reported to be rare before the construction of the project began.

Ivanpah Solar Electric Generating System, October, 2010

Mitigation of Fugitive Dust Using Polymers: Most solar and wind projects are using water, but since that is having questionable success, many developers are looking to use synthetic and organic polymers The use of these products in single applications can fall within acceptable limits for their use, however continued use within the same area and the build up over time has not been studied and therefore no restrictions have been made for any product.

Synthetic polymers are generally considered acrylic or acetate based or from similar chemicals. The information available shows that they can decompose to components which are considered hazardous.

Some polymer based products create very hard crusts, is that when they start breaking down they will break down into clumps that are difficult to rework into the existing soil. This makes the restoration of the site problematic for decommissioning. This would make the

reestablishment of biological soil crusts very difficult and ultimately make the ecological restoration of the project site unlikely.

Would polymers reach the Colorado River?

Dust Control for Low-Volume Roads: Update on Public Lands Highway Discretionary Program Project "Environmental Effects of Dust Suppressant Chemicals on Roadside Plant and Animal Communities" Bethany K. Williams, Edward E. Little, and Susan E. Finger. USGS Columbia Environmental Research Center, Columbia, MO January 26, 2011

Water Use

Each 250 MW plant would require up to 84.5 acre feet per year (afy) or total of 169 afy for the entire 500 MW project. This does not include approximately 4.3 afy for common area uses. Water would be pumped from the aquifer using on-site wells. The plant would use dry-cooling for most of the year, but small amounts of wet-cooling would be used when the air temperature went above 85 degrees F. We note that nearby Blythe, CA, had a high temperature of 106 F yesterday on October 1. Will wet cooling be needed for half the year? How much extra water will be requested?

The PSA says one Wet Surface Air Cooler (WSAC) system in each power block would have a water flow rate of 4,000 gallons per minute (gpm). Each WSAC system would operate no more than 2,000 hours per year. This minimum would be approximately 30 afy of groundwater use. The drawdown impact at the proposed project pumping well, under estimated representative conditions, could be as high as 29 feet. The PSA says: "The proposed project would pump up to 5,506 AF of groundwater over the three-year construction period and 25-year life of the project. There is concern that since groundwater is in hydraulic connection with the Colorado River, project pumping may capture groundwater that would otherwise contribute to the volume of water flow in the river. The Colorado River is currently over-appropriated and any reduction in river flow would result in a significant impact." (page 4.9-21)

The PSA states: "The Colorado River is managed and operated under numerous compacts, federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the 'Law of the River.' This collection of documents apportions the water and regulates the use and management of the Colorado River among the seven basin states and Mexico. According to the "Law of the River," wells that draw water from the Colorado River by underground pumping need an entitlement for the diversion of water from the Colorado River. Consumptive use can occur through direct diversions of surface, as well as through withdrawal of water from the river by underground pumping." (page 4.9-31)

The water table at the project site is at or slightly above the accounting surface elevation as ruled by the Colorado River Commission, and so any withdrawal of groundwater by the project could have significant impacts to the Colorado River. Therefore the applicant will have to find mitigation measures to replace this same amount of water. But there simply is not enough water in the Colorado River to meet human demand. The imbalance averages 3.6 million afy, or 12 times what Las Vegas is annually allocated as its share by the federal government, which is by law the river master. The river is massively over-allocated, and even more demands are planned for the upper Colorado River Basin: hydraulic fracturing of oil-shale and tar sands technology could need 800,000 afy or more of river-basin water in Wyoming, Utah and Colorado. If this oil-shale drilling occurs with accompanying water use, the annual imbalance would rise to 4.4

million afy, equivalent to California's entire yearly allocation. Any pumping by the applicant for a solar project using Colorado River water must be considered in this cumulative scenario (source: Colorado River water working group meeting hosted by National Resources Defense Council).

The Energy Commission says the applicant must find water conservation projects to make up for removal of possible Colorado River water. These could include payment for irrigation improvements in the area, purchase of water rights within the Colorado River Basin to be held in reserve in perpetuity, tamarisk eradication, purchase of water from the City of Needles Water Bank, or other proposed mitigation methods. If it is determined that Colorado River water is being diverted by groundwater pumping, then the Municipal Water District (the owner of the Project site land) would have to purchase and replace this same amount from their non-Colorado River supplies and decrease their diversion of Colorado River water from Parker Dam.

The 5,506 acre feet of groundwater that would be pumped over the life of the proposed project is small compared to the estimated 6,840,000 AF of water in storage in the Palo Verde Mesa aquifer, but adds yet more imbalance to the over-allocated Colorado River. Well drawdown could lower the water table 10 feet in nearby Ironwood woodlands. Staff recommends that the applicant monitor stress and mortality in the trees, but we recommend siting the project in a disturbed area that will not impact the special microphyll woodland that is unique to this region of California.

Storm Drainage System

The site has large deep washes that channel flash floods across the Palo Verde Mesa. 29 ephemeral washes cross the project site, and three were designated as "Waters of the U.S." by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. BrightSource proposes to keep the original grades and natural drainage features across the majority of the project site. In limited areas, such as the power blocks, substation, heliostat assembly buildings and administrative areas, diversion channels, bypass channels, or swales to direct run-on flow from up-slope and run-off flow through and around each plant would be constructed. We question the efficacy of such storm water control systems after the destructive flood that wiped out a portion of the Genesis Solar Energy Project in an adjacent watershed. The applicant has not provided a Storm Water Pollution Prevention Plan (SWPPP), or a Drainage Erosion and Sediment Control Plan (DESCP). We hope the public will be able to review these documents soon.

Flash Floods:

Some of the recently approved large energy projects on public lands have experienced damage from large flood events.

Below are photos of three projects which experienced damage from flash floods. Each one of these projects was “Fast Tracked” or “Prioritized” for approval by the Interior Department. Mitigation and planning has been deferred for many of the issues that came up. These large energy projects are being built in poorly chosen locations. While these flood events are referred to as 100 Year Floods by the applicants, it is obvious that these events take place more commonly than every 100 years. Projects that span 5 square miles may sustain flood damage on a yearly basis on different parts of the site. The Rio Mesa Solar Project will be no exception. It has significant alluvial drainages throughout the project site. The slope of the project site and the large washes make flooding a guaranteed event.

These three projects received significant flood damage in less than one year under construction. It makes us wonder how wise it really is to build a project in an unstable alluvial flood zone when the goal is for that project to last three decades.

^Ivanpah Solar Electric Generating System: desert tortoise exclusion fence removed by floods. July, 2011

^Flooded wind turbine construction site; Ocotillo Wind Express project Site, June 2011

Unknown leftover foam from a chemical dust suppressant was spread everywhere when the Ocotillo Wind Express project site flooded in June, 2012

^The biggest flood took place at NextEra's Genesis Project on July 31st, 2012. The close proximity to a dry lake and alluvial fans make this project location one of the poorest choices to site a large solar project.

^Genesis Solar Project flood, July 31st, 2012

^Genesis Solar Project flood, July, 2012

Vegetation Cutting

The PSA says: "Other than areas required for access roads and drive zones, vegetation would be cut to a height of approximately 12 to 18 inches to allow clearance for heliostat function and, at the same time, leave the soil surface and root structures intact.

Occasional trimming of the vegetation may be required during the operational phase of the project to control plant re-growth that could affect heliostat mirror movement." The applicant might as well grade the area flat, as chopping 25-foot tall Desert ironwood (Olneya tesota) trees with large woody trunks. This will be like clearcutting a forest. Cutting trees down to one foot stumps could kill most of them.

Comment Deadline

The Energy Commission should extend the comment deadline for the Rio Mesa Solar Energy Generating Facility. Like all CEC documents, this one is very long and very detailed. The CEC is only giving people 30 days to comment on the biological resources section of the PSA and this

section is full of conflicts and unresolved issues. It is among the most complex of all the issues for this project. The CEC has a responsibility to allow a reasonable time frame for the public to review these projects. Several resources in the public domain will be adversely impacted by this project. It is very important that the CEC allocate enough time to solicit public review. The Bureau of Land Management reviews similar projects with a minimum of a 45 day comment period and a maximum of 90 days. This is a reasonable request for the Rio Mesa PSA. It is not reasonable to only give the public a 30 day review period. An additional 60 days should be given to comment.

Conclusion:

The California Energy Commission has an opportunity to do the right thing by selecting a No Action Alternative for this project. The CEC admits that biological, cultural, hydrologic, air quality, paleontological and visual resources will all be damaged by this project and there is little they can recommend for mitigation that would actually offset the damage. Nobody has ever built a power tower at this scale which makes this project a massive experiment on a technological scale at the expense of irreplaceable resources. It should have never got this far in the review process.

Thank you,

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