STATE OF CALIFORNIA
Energy Resources Conservation and Development Commission

APPLICATION FOR CERTIFICATION FOR
THE HIDDEN HILLS SOLAR ELECTRIC GENERATING SYSTEM
HHSEGS 11-AFC-02

California Energy Commission
DOCKETED
11-AFC-2
TN # 69496
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REBUTTAL TESTIMONY

C.R. MACDONALD, INTERVERNOR

EXHIBIT 752

February 11, 2013

REBUTTAL TESTIMONY

C.R. MACDONALD, INTERVENOR

I. INTRODUCTION

A. Qualifications: Committee Order Granting Petition To Intervene

B. Prior Filings: In addition to the statements herein, this testimony includes by reference the following documents submitted in this proceeding:

Exhibit
747 Opening Testimony and Exhibits 700-751

C. Additional Filings:

Exhibit
752 Rebuttal Testimony
Section I: Opening Statement
Section II: Applicant
Section III: FSA

Attachment I: "Review of Cultural, Historic, and Visual Resource Assessments, Hidden Hills SEGS" by Thomas F. King, February 4, 2013

754 Environmental Justice and Charleston View: Photo Gallery

D. Documents Prepared By Others:

Exhibit
753 Resume of Thomas F. King, PhD

755 Letter in Opposition to Nomination of Ms. Lynne Sebastian to the Advisory Council on Historic Preservation, Pechanga Band of Luiseno Indians, January 22, 2013

756 Letter from Charleston View Resident to CEC Re: HHSEGS

757 Comment Letter From BLM, 3/12/12

758 BLM PSA Comments, 7/16/12

759 "Octillo Wind Express Manager Arrested", Imperial Valley Press, 2/07/13

To the best of my knowledge, all of the facts contained in this testimony are true and correct or were true and correct at the time they were previously filed. With respect to documents prepared by others, I have endeavored to find the most credible source of facts to incorporate by reference in these proceedings but can make no sworn testimony as to their truth or accuracy on the preparer's behalf. To the extent this testimony contains opinions, such opinions are my own. I make these statements, and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

I. OPENING STATEMENT

REBUTTAL TESTIMONY OF C.R. MACDONALD, INTERVENOR

Due to the sheer volume of testimony submitted, I believe it is impossible for a single individual to meaningfully review, much less analyze and respond to all of the presented testimony by Staff, Applicant and Intervenors in the required time frames.

With respect to the almost 2,200 page CEC Final Staff Assessment published December 21, 2012, I reviewed Staff's testimony every single day from publication through January 10th, 2013, but still failed to finish the Biological Resources section or read through the FSA more than once. At that time, the looming deadline for Intervenor Testimony submission mandated I stop review of the FSA and begin preparing my testimony to ensure time was sufficient to mail my testimony in order to meet the February 4th, , 2013 deadline.

Applicant's Testimony, submitted on January 21, 2013, included an additional 1,134 pages requiring review that I was only able to devote the most superficial glance at as my own testimony had to be mailed ten days from the time I received it.

On February 4, 2013, several hundred more pages of additional testimony and exhibits were submitted by the Center For Biological Diversity, the Old Spanish Trails Association, Richard Arnold, the County of Inyo, and the Amargosa Conservancy.

Having to finally breakdown and take a day off to pay bills, buy groceries and other depleted essentials, today, February 6th, I now have a chance to begin reviewing testimony and exhibits. Except, my Rebuttal Testimony is due in five days and if my Rebuttal Testimony file size turn out to be too large to email, I will have to have it ready by tomorrow to mail.

Yet even if the file size is small enough to email to the CEC, due on Monday, February 11, 2013, the deadline occurs on the same day CEC Staff has scheduled a workshop on the very critical issues regarding the solar flux effects on avian species that will hopefully provide the long awaited opportunity to; a) review the outstanding data that Staff has made a Motion to Subpoena from Applicant and, b) make Gary Santolo available for questions and answers regarding the SEDC Flux Study he performed.

However, the entire Pre-Hearing Conference package is due February 18, 2012, one week from the Rebuttal Testimony deadline and must include:

Each Prehearing Conference Statement shall specify under a separate heading:

> a) The subject areas that are complete and ready to proceed to Evidentiary Hearing;
>
> b) The subject areas that are not complete and not yet ready to proceed to Evidentiary Hearing, and the reasons therefore;

c) The subject areas that remain disputed and require adjudication, and the precise nature of the dispute for each subject area;

d) The identity of each witness sponsored by each party (Note: Witnesses must have professional expertise in the discipline of their testimony); the subject area(s) which each witness will present; a brief summary of the testimony to be offered by each witness; qualifications of each witness; the time required to present direct testimony by each witness; and whether the party seeks to have the witness testify in person or telephonically;

e) Subject areas upon which a party desires to cross-examine witnesses, a summary of the scope of each such cross-examination (including voir dire of any witness' qualifications), the issue(s) to which the cross examination pertains, and the time desired for each such cross-examination (**Note: A party who fails to provide the scope, relevance and time for cross examination with *specificity* risks preclusion from cross examining on that subject area**);

f) A list identifying exhibits and declarations that each party intends to offer into evidence and the technical subject areas to which they apply (as explained in the following section on "Format for Presenting Evidence"). Note: Parties must identify any evidence which they intend to designate as confidential;

g) Subject areas for which the Applicant will seek either a Commission override due to public necessity and convenience pursuant to Public Resources Code section 25525 or a specific finding that overriding economic, legal, social, technical or other benefits outweigh the significant effects on the environment pursuant to Public Resources Code section 21081(b);

h) Proposals for briefing deadlines, impact of scheduling conflicts, or other scheduling matters; and

i) For all subject areas, a description of any proposed modifications to the proposed conditions of certification listed in the Final Staff Assessment (FSA) based upon enforceability, ease of comprehension, and consistency with the evidence.

All of these requirements must be performed over the next 12 days – excluding a day for workshop attendance. If I fail to perform as required on any of the above accounts, at worst, I may be prevented from participating in the Hearing's completely or at best, will be excluded from participating in any subject area, cross-examination or asking any questions that were not previously outlined in my Pre-Hearing Conference package.

As it stands, not having a team of consultants or staff to do my work for me while simultaneously having to fulfill my full time employment obligations, I am not capable of meeting these requirements adequately, much less to the extent I would like to and/or am capable of.

Therefore, I am forced to present the most bare bones minimum Rebuttal Testimony five days will allow me to compose.

As such, it is my belief that while the outlined demands on parties and exacting requirements of the Pre-Hearing Conference under the compressed scheduling deadlines may serve needs to *expedite* decision making and/or appease political and industry pressures, it fails utterly to serve informed decision-making through meaningful party response and consequently, fails to serve the public interest that is dependent on this process for adequate review.

Sincerely,
Cindy R. MacDonald
February 6, 2013

II. APPLICANT

REBUTTAL TESTIMONY OF C.R. MACDONALD, INTERVENOR

I. VISUAL & CULTURAL RESOURCES

A. The Old Spanish Trail

In the Applicant's testimony, the following testimony is given;

> *"Because there are no designated scenic vistas in the project area and no adopted state scenic highways, the project will not have adverse effects on views from scenic vistas or state scenic highways."*
>
> *"The project will be visible from the corridor along Tecopa Road (KOPs 3 and 5) and from other areas of the Pahrump Valley (KOP 7) and will change those views. However, when the changes to the views from these KOPs are looked at closely and considered in light of the relatively small number of people who see them and the fact that the views that are affected have not been identified as scenic views or provided with formal protection as scenic resources, the impacts are less than significant."* (Visual Resources, Summary of Testimony, C. Potential Operational Related Impacts; Avoidance and Minimization, p. 4.)

I wholeheartedly disagree with this assessment primarily for two reasons.

The first is, it offers the most narrow interpretation of "*identified scenic views, scenic vistas and state scenic highways*" possible while simultaneously failing to acknowledge or account for the fact that the BLM on the "Nevada side" of Tecopa Road has built not one, but two kiosks identifying a major cultural and scenic resource in the area known as the Old Spanish Trail. These "interpretative centers" inform tourists and motorists on the Tecopa Road about the presence of the Old Spanish Trail in the area and have for years.

Just because California failed to identify, catalogue or "designate" the California portion of the Old Spanish Trail in some officially recognized capacity doesn't mean Nevada was equally delinquent.

The second reason is, one of the significant components of appreciating the Old Spanish Trail and the history behind it is the very remoteness of the area, the wide open views and how the majority of the area is relatively preserved since the time it was traveled by the pioneers. In other words, it would lose its ability to convey what the early pioneers faced on their travels if the surrounding views were interrupted with state of the art solar fields, fences, and skyscraper like towers with their glowing, glaring receivers radiating in the foreground and/or background.

The first Old Spanish Trail kiosk is located on the east side of the Tecopa Road just slightly west of SR160 (Photo 1). The second is located to the east of Tecopa Road almost adjacent to the old Cathedral Canyon road and very close to Stump Springs (Photo 3).

Photo 1: Old Spanish Trails Kiosk #1

Old Spanish Trails Kiosk located at the SR160/Tecopa Road juncture erected and maintained by BLM in Nevada. 1/02/13

Photo 2: Old Spanish Trails Kiosk #1

Close up of one side of the kiosk located on the SR160/Tecopa Road junction as shown in Photo 1. 1/02/13

Photo 5: Old Spanish Trails Kiosk #2

Another kiosk erected and maintained by BLM in Nevada describing the Old Spanish Trail located on the east side of Tecopa Road across from Cathedral Canyon Road near Stump Springs . 12/22/11

Photo 4: Old Spanish Trail Kiosk #2

Taken from the Old Spanish Trail Kiosk #2's parking area about three miles from the proposed project site. The large rock and empty metal sign frame mark the Cathedral Canyon road. 12/23/11.

Since these kiosks have been established, I have seen numerous cars stopped and people reading the boards over the years. *Somebody* is finding this information interesting enough to stop and review it!

However, I cannot testify to what they do about the information once they read it. Do they continue driving to explore the area? Decide to take a hike around the trails outlined on the kiosk's? No one can really answer these questions for sure but what can be said for sure is, Nevada has recognized the Tecopa Road provides access to a formally recognized cultural and scenic resource known to occur in the area for a very long time, the Old Spanish Trail. As such, I think it is reasonable to assume that if people read these kiosks, at the very least, they are probably inclined to think about what they read as they are traveling along the Tecopa Road.

Conversely, if motorists and/or tourists see 750 ft. glowing towers and five miles of mirrors spanning the Pahrump Valley floor instead, the ability of the visual integrity of the landscape to transmit to the viewers what the Old Spanish Trail was to the early pioneers will probably become, at best, a secondary consideration.

Applicant's utter dismissal of these facts is clearly illustrated in the following testimony;

> "*KOP 7 (Figure DR-32-2 R2, Supplemental Data Response Set 4 [Exhibit 42]) is a view toward the project site from Garnet Road, 1.75 miles south of Tecopa Road, and 2 miles southwest of the project site. This viewpoint represents views across the Pahrump Valley from the sloping desert area to the south and west of the cluster of residences at Charleston View. This viewpoint is located at the point where Garnett Road crosses a track that travels in a northwest/southwest direction for several miles through the desert in this area and that is thought by some to be one of traces of the Old Spanish Trail, and subsequently the Mormon Trail, which passed through this portion of the Pahrump Valley in the early to mid 19th Century. Because this track is not marked in any way, and there is no signage directing visitors to it, there is no basis for assuming that this location attracts any substantial numbers of visitors whose objective is to visit the routes of the historic trails. The existing views from this area have been altered by the grid of roads that has been cut through this portion of the valley and by the presence of the development at Charleston View, which is located in the middleground of the view, on top of the portion of alignment of this northwest/southwest track located directly to the south of the project site. The solar power towers, power block structures, and heliostat fields will be visible in the low area of the valley the far middleground of the view. The project features will add new elements to the landscape, but their presence will not dominate the view in terms of scale because of the vastness of the surroundings and the scale of the mountain backdrop*." (Visual Resources, Summary of Testimony, C. Potential Operational Related Impacts; Avoidance and Minimization, p. 5.)

Given the testimony provided by the Applicant, it would appear the only qualification for recognizing the value of the Old Spanish Trail is if the trail had a great big flashing neon arrow sign pointing to a spot on the ground at the proposed project site and people signed a register stating, "I was here for a look at the historic trail".

The truth of the matter is, there is no basis for the Applicant's unfounded claims that there is no signage directing or informing visitors of the fact that the Old Spanish Trail is directly in the proposed project area and surrounding vicinity or that any "substantial number of visitors" visit the area with the singular objective of visiting or viewing the trails as the reason for their journey.

The Applicant cites the average traffic on Tecopa Road is 258-275 vehicles a day and as such, represents such a low number of potential viewers that, impacts to cultural resource views and the surrounding landscape would be insignificant. Yet, if just ten percent of this traffic stops by the kiosks and reads about the Old Spanish Trail, then between 9,400 to 10,000 people a year would be exposed to and made aware of these historical facts as they were driving through the area.

If 10,000 viewers annually is "insignificant" to the Applicant, what number of viewers would it take to qualify in the Applicant's analysis as "significant"? A thousand tourists a day? A million tourists a year? Would it have to have a concession stand or gift shop adjacent to it to be acknowledged as a "legitimate" historic and cultural resource? And if the number of viewers finally reached this yet to be announced level of significance finally considered high enough by the Applicant to acknowledge significant impacts to the cultural and visual integrity associated with landscape surrounding the Old Spanish Trail, how would its isolation, remoteness and the endurance of the people who traveled it be conveyed if hundreds of people were milling around the area on a daily basis?

Except, based on the second part of the Applicant's testimony previously quoted, it wouldn't matter how many people visited the area and there would never be a number that would reach a "significant" threshold as, according to the Applicant, two 750 ft. skyscraper towers, glowing white hot receivers, and five square miles of fencing, mirrors and the solar flux fields would have a less than significant impact on the viewsheds, would not distract in the least from the Old Spanish Trail's history and incredulously, the Applicant maintains these massive intrusions would not dominate or irrevocably destroy the views in any or every direction anyway.

Finally, according to the Applicant's own maps of the proposed project site in relation to the Old Spanish Trail, the area in the Pahrump Valley that is most capable of providing a view to motorists of the Old Spanish Trail occurs on Tecopa Road, beginning at the California/Nevada Stateline and directly in front of the proposed project site. (*See* Visual Testimony, Figures, Figure VR-1, p. 29).

Also see Attachment I, "Review of Cultural, Historic, and Visual Resource Assessments, Hidden Hills SEGS", testimony by Thomas F. King, February 4, 2013.

B. Residential Views in "The View"

The Applicant provides testimony for the people who live in Charleston View and explains how we may "potentially" perceive the area, how we feel about our views and the scenic quality that surrounds us, what we look at, what is important to us, what is not and to what degree as illustrated in the quote below.

> "*In the area of rural residences at Charleston View, the project will change the existing character and visual quality of the view seen from this area (KOP 4, Figure 5.13-5 R1, Supplemental Data Response Set 2 [Exhibit 40]). The changes to this view have the potential to constitute a significant impact given the moderately high sensitivity of the residents of the 29 occupied dwelling units located in this area. From Charleston View, the solar power towers would be readily visible, and due to their height and proximity, the solar power towers would dominate views toward the north and would extend above the ridgeline of the Spring Mountains. The presence of the project infrastructure would add to the clutter in the views in this area, and would change the character of the background views, potentially making the area feel less remote and more developed. One point that it is important to note though, is that in the views from Charleston View, the solar power towers will not be in the same part of the view as Mount Charleston. Thus, the solar power towers will not block or otherwise intrude upon the view of the area's signature landmark feature, for which this rural residential area is named.*" (*See* Visual Resources, Summary of Testimony, C. Potential Operational Related Impacts; Avoidance and Minimization, p. 5/6.)

First off, for the Applicant to contend that this massive project might "*potentially*" make the area feel less remote and more developed and might "*potentially*" constitute a significant impact to visual resources is ludicrous.

There is no "potential" about it; it *will* make the area feel less remote and by a large margin! It *will* forever change the landscape and the rural environment now enjoyed by at least some of us to one of large-scale industrial use and it *will* irrevocably alter and significantly diminish the entire community's views of the valley, the quiet, frontier like surroundings and significantly reduce and/or eliminate the abundant wildlife also "viewed" in the surrounding area, daily lives and directly from the windows of our homes.

Secondly, the argument that the towers won't be as impactual on the views associated with Charleston View because they won't intrude on the peak of Mt. Charleston, the community's namesake, has no substance or basis in fact.

The name "Charleston View" was given to the area by the developer, not by the people who live there. While Mt. Charleston is certainly one of the many mountain views enjoyed throughout the landscape, it is merely one component of ALL the mountains and views that circle the valley and the Charleston View community.

My family and I have not called Charleston View "Charleston View" for many, many years. We call it "The View" because; a) it's shorter and, b) it's more descriptive of what it really means and has to offer visually.

When I turn down Rose Avenue, the "view" is the gently rolling hills that lie directly in front of me as I travel. (*See* Exhibit 720, Visual Resource Photo Gallery, Photo 18)

Since moving to the View, my Dad almost religiously went out during the early evening to view the Nopahs during sunset and often times, one or all of the family joined him to enjoy the "view", have conversation and eventually, watch the stars before dinner. He did this up until the very last night he was alive.

The "view" of Mt. Potosi is probably the most watched view from our house as both the sunrise is visible from the dining room window, which I use to watch as I was getting ready for school, as well as being the "artery" to Las Vegas where weather related events could impact commutes to work and/or getting "supplies" before Pahrump grew big enough to offer similar services and products. However, it is still a picturesque background and is equally a "signature landmark feature" in the area – at least to my remaining family and I.

The northern "view" from the View is the view that everyone must see as they drive the gravel roads to access the Old Spanish Trail Highway/Tecopa Road to exit the area. It is also the "view" we see when we drive to the mailboxes and deposit our trash. Finally, it also offers the only view of the Pahrump Dry Lake slightly northwest of the proposed project site. While this northern view is the least interesting from a mountain viewing perspective, it is the view that is the most critical for conducting "business" in the community, is the most visually expansive in the area due to its wide open nature and it showcases the white bluffs of the Hidden Hills area to the northeast that will all but disappear if the proposed HHSEGS is built.

Because neither the Applicant or their "expert" consultants live in the Charleston View area, routinely visit the area, have no significant history related to the area, have not made any efforts to find out what is important about the View to local residents culturally or visually that I'm aware of, and won't be impacted in the least if what is important to us is destroyed or radically altered, the Commission should dismiss any attempt by those who are disconnected and disassociated from the View to interpret, define, quantify, testify, and/or speak for community residents regarding project impacts, including project impacts to the visual integrity of the landscape that surrounds our homes and the community at large.

I can unequivocally testify that the Applicant's testimony does not speak for my family or myself on any level about the impacts this project will have on us or the Views we are so familiar with and enjoy year round.

Finally, the Applicant's testimony on both cultural and visual resource impacts of the proposed project fails to include any mention of, much analysis for, compliance with provisions in Inyo County's Title 21, which require acknowledgement, discussion, analysis, assessment and potential mitigation for impacts, adverse impacts and undue burdens to its citizens, their environment, or the public trust resources that we all share, including the natural beauty, views and views of wildlife that go hand in hand with a remote, rural and frontier like existence that is associated with living in Charleston View and stretches back, at least for us, to the early 1970's.

II. LAND USE

A. Gravel Roads/Public Roads

In Applicant's Land Use testimony, two affidavits' are attached by Brian Karn (LU-2) and Mary J. McMonigle (LU-3) regarding the use and placement of "No Trespassing" and "Private Property" signs on roads associated with the proposed project site and the surrounding areas.

Upon first reading these affidavit's, I was shocked at the audacity of both these individuals to make such sworn statements as I have never, ever seen a no trespassing sign or private property sign posted anywhere at or near the proposed project site or at Cathedral Canyon in the last forty years.

However, as I looked at Mr. Karn's affidavit and the map where he marked barricades were placed, I remembered my brother telling me that *before* Front Site Fire Arms Training Institute "officially" opened, a long line of vehicles use to regularly traverse the gravel road that went right by the Hidden Hills Ranch in order to get to the Front Site property.

From Old Spanish Trail Highway/Tecopa Road, there are several gravel roads that would interconnect to the "main" road that passes by Hidden Hills Ranch heading north to the Front Site property.

According to my brother, who knew Roland Wiley much better than I and would occasional converse with him at various times, Roland was really, really upset about this traffic and there were several instances when Mr. Wiley tried to demand they stop using the road. My brother claimed it had escalated to an almost "Hatfield and McCoy" type situation (at least from Roland Wiley's accounting).

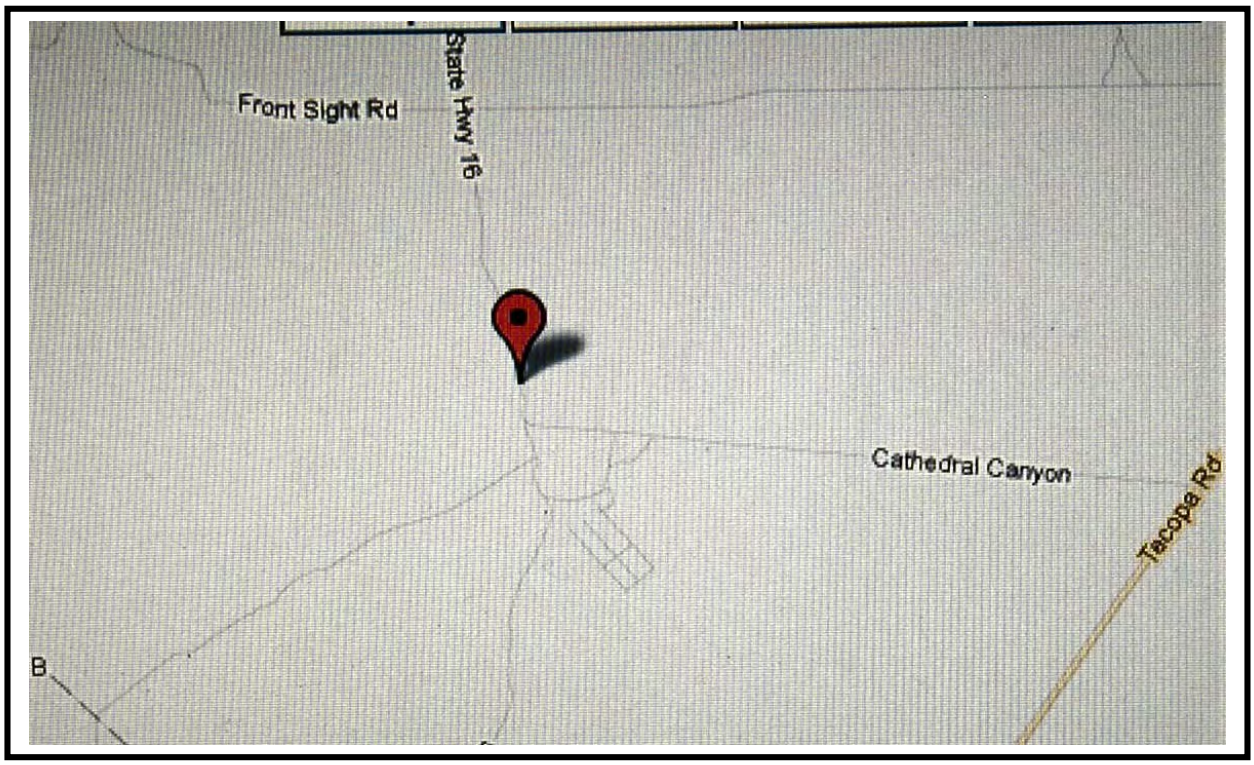
However, the gravel road that went by Hidden Hills Ranch being used by the "Front Site people" was none other than Nevada State Highway 16. It is my understanding that historically, Roland Wiley himself was responsible for bringing in the first road grader into the Pahrump Valley in order to grade the road from Sandy Valley to the Hidden Hills Ranch, which at the time was the only way to get to the Ranch by motor vehicle.

Quoted below is an excerpt from Wikipedia that describes the Nevada State Highway Route 16.

> *"State Route 160 was originally part of State Route 16 from Pahrump north to US 95. State Route 16 was one of Nevada's original state highways dating from the 1920s. It began at the Nevada/California border south of Pahrump and ran north to the city over Hidden Hills Ranch Road.*[citation needed] *From there, it continued north over present-day State Route 160."* (1)

Additionally, I was able to locate a map, though admittedly of poor quality, that shows how Nevada State Highway 16 went directly by Hidden Hills Ranch and north to Front Site as illustrated in Figure 1 below. The familiar "red balloon" marks the Hidden Hills Ranch and State Hwy 16 can be seen just above it.

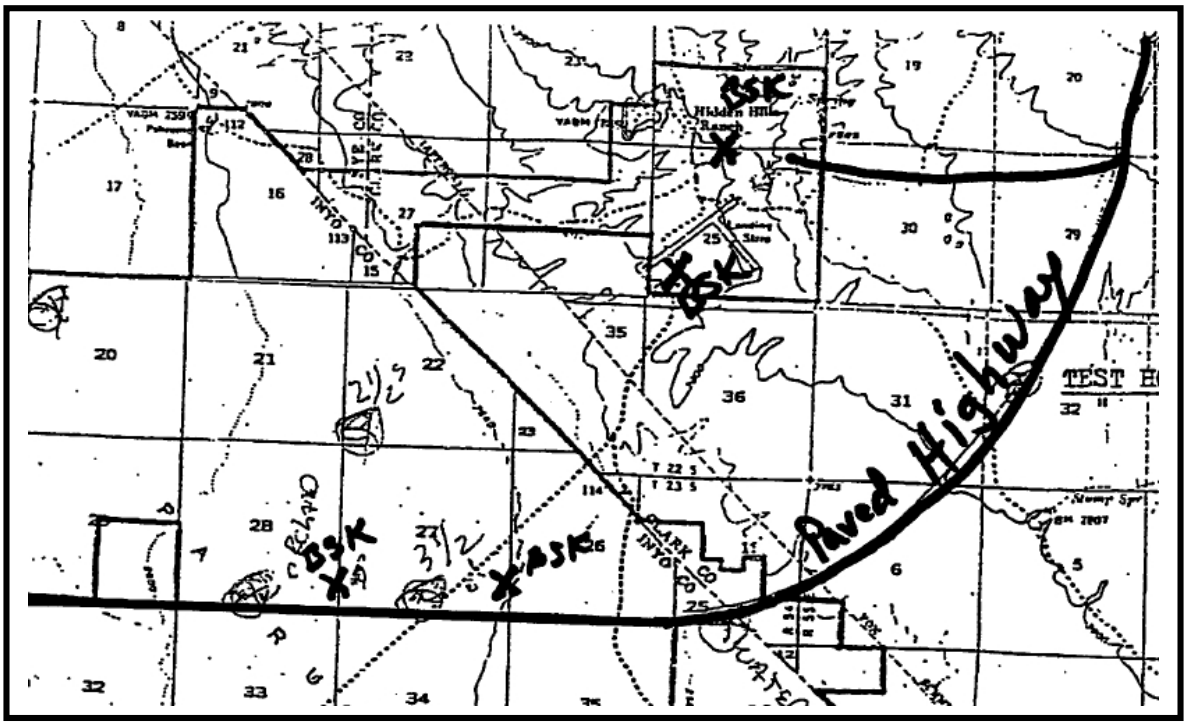
Figure 1: Hidden Hills Ranch & Nevada State Highway 16



(1) Accessed online on 2/06/13 at:
http://en.wikipedia.org/wiki/Nevada_State_Route_160

The timing around Mr. Karns brief involvement in the area (1992-1993) and his statements regarding barricades and "Private Property—Do Not Enter" signs being placed at the locations shown in Exhibit A, all possibly align to both the time Roland Wiley was having difficulty with the Front Site traffic and the location of State Highway 16 as shown in Figure 2. The dotted line in the map below appears to correspond relatively well to the outline shown of Nevada State Highway 16 shown in Figure 1.

Figure 2: Karn Affidavit, LU-2, Exhibit A, Close Up



I believe that Mr. Karn's affidavit is referring to this time period and a very specific issue related to the Front Site "invasion" of the Hidden Hills Ranch. However, he also swore that Roland Wiley had "*explained….that he had been continuously carrying a similar barricading and posting process since he acquired the lands decades before*."

However, I don't believe this statement and will refute it. I have never seen barricades or posted signs "for decades" at the project site, around the project site or on Roland Wiley's lands. Everyone has periodically used all the gravel roads Roland Wiley made, both on the project site and off, and not once did Roland Wiley ever say anything to any member of my family or to myself and my Dad and Roland were on fine speaking terms for all the years Mr. Wiley was alive. If there were a problem with us using the roads, Mr. Wiley had plenty of opportunity to let us know about it but he never saw fit to mention it to us or post any sort of barricade or signs that I, or my remaining family is aware of with one exception that I will discuss later.

Roland Wiley was usually very generous to "the locals" and even helped maintain the roads at Charleston View. Even after he passed away, Al Carpenter who became a caretaker for the Ranch and surrounding property, used "Wiley's" equipment and graded the Charleston View roads at least once that I know of before he passed away as well.

There is also the fact that Roland Wiley invested a significant amount of money and time into sculpting Cathedral Canyon, a beautiful and eclectic spiritual sanctuary and retreat that was free and open to the public for years. Cathedral Canyon stands as the ultimate testimony to the fact that its creation and maintenance were not carried out by someone who was stingy with their time and resources or wanted to keep the public "out" as both these affidavit's are trying to claim. Instead, he actively engaged in bringing people "in" to both enjoy Cathedral Canyon and the area. Mr. Wiley even paid for the electricity to light up the canyon, run the waterfall and play music throughout the Canyon. Does that sound like the kind of person that would barricade and post all kinds of "No Trespassing Signs" all over the place?

However, there may be some small exceptions as noted below.

Mr. Karn also references working on the orchards and in mentioning these affidavit's to my Mom, she stated she did remember when the peach orchard was operating and she went down to the "Orchard Well" area to buy some peaches, there was a "No Trespassing Sign" posted on the fence of the orchard. She believed Roland Wiley had posted it to protect the orchard, not to keep people off the roads.

It may also be possible that Roland Wiley posted "No Trespassing" signs or "Private Property" signs near or around his ranch in order to dissuade people visiting Cathedral Canyon from venturing into the Ranch property, which was located just down the road from Cathedral Canyon. Since I never drove down there to bother him, I cannot say.

However, I would like to ask Ms. McMonigle if this is what she is referring to in her affidavit with respect to the early years but she has also sworn that, "Further Affiant sayeth naught".

She also fails to describe which roads and which years barricades and signs were posted but states that;

> "*Affiant was aware that Roland Wiley would cause barricades to be posted at various times on various private roadways, to barricade private dirt roads owned and maintained by Roland Wiley traversing north and south from the Old Spanish Trail Highway in Inyo County, California going north between Sections 26, 27, 28, and 29 in Township 10 N Range 22 West SBB&M".*

Traversing north and south sounds suspiciously like Nevada State 16 and I have to wonder if she is talking about the "Front Site" issues because she never actually states what years she was aware of barricades and signs being posted. Except, it doesn't appear that she is willing to make herself available to testify or be cross-examined regarding this or any other matter.

Other than these two incidents and possibly signs being posted at the Hidden Hills Ranch, neither I nor my family can remember a single incident where "barricades and signs" were posted anywhere in the Charleston View area – including the proposed project site.

Additionally, Mr. Wiley has been gone for almost twenty years now. Since his passing, no "Private Property" or "No Trespassing Signs" have ever been placed anywhere in the area that we are aware of either and there has been plenty of opportunity by the "new" owners to do so.

I have also taken hundreds of photos of the project site and surrounding area since December 2011, partly to possibly provide testimony and evidence and partly to have photos of what it "use to look like" in the event the proposed HHSEGS is approved. I will gladly offer the Commission the opportunity to look through my entire photo files to see if they can find a single photo of a barricade or sign anywhere in my collection on Wiley's land.

Finally, as presented in Exhibit 700, Preliminary Comments, Technical Analysis and Recommendations, Land Use, Development and Zoning, Attachment 1: Hoot Gibson's Hidden Hills Ranchos Sales Brochure, it clearly states that "*Every Rancho fronts a graded road…"*, p. 127.

There is also a photo titled "*Hoot greets fly-in buyers on large all year "Hidden Ranch" airport"*. Hoot Gibson died in 1962, which means those same gravel roads touted in the brochure are over fifty years old and people in the area as well as visitors have used these roads ever since they were developed. I can personally testify that we have used them periodically since 1973, including visiting Cathedral Canyon and in the case of my Dad, to visit Roland Wiley personally at the Hidden Hills Ranch.

III. HHSEGS AFC Technical Disciplines (All)/Socioeconomics: Environmental Justice and Charleston View Residents

While I cannot speak for or report on all the people who now live in Charleston View as many of the people I was familiar with in the past have died or moved on, I can speak for both the general economic status of historical residents of Charleston View as well as my Mom's current status.

Historically, the majority of people who lived in Charleston View were older, retired people. Growing up in the area, there were only a two other families that had children that lived there any length of time. Over the years, periodically other families moved to the View but it was usually short-lived.

Because of the remoteness of the location, most people who ended up living there had some sort of pension, disability or social security to support them and those on fixed incomes also required a very low cost of living to make living on a fixed income possible, such as in Charleston View.

As for the economic status of those who live there today, I suspect it is very similar to its historical status as, one of the financial advantages of Charleston View is the relatively low cost of living that allows people to get by on a lot "less". When one views the majority of dwellings in Charleston View, it is self-evident that most residences have very little disposable income or invest in their property outside of maintenance needs.

To provide evidence of this fact, I drove around last year and photographed all the residences in Charleston View "proper" and have assembled some of these photos in Exhibit 754, Environmental Justice and Charleston View: Photo Gallery.

Though the Applicant is well familiar with the Charleston View area due to the extensive surveying required to file and support the HHSEGS AFC, the Applicant has contended and continues to contend that "no environmental justice issues" are triggered by the proposed project to the people of Charleston View.

In fact, a reader of the AFC would be hard pressed to find the Applicant even acknowledging Charleston View is a community whatsoever, much less admitting the massive adverse impacts its construction and operation would have on residents as illustrated below by just a few of many such quotes made by Applicant during the AFC process regarding the proposed project in relation to Charleston View and the people who live there.

> Applicant PSA Comment 13.21,
> "*Page 4.13 12, Visual Resources Table 2 (Applicable Laws, Ordinances, Regulations, and Standards), LOCAL, Row 10 – Policy and Strategy Description: The PSA states: "Within communities, building equipment shall be screened from public view." It is not clear that the Project is proposed "within a community" as that term is used in the ordinance."* (*See* HHSEGS FSA, Visual Resources, Appendix 1- PSA Response To Public Comments, p. 10)
>
> "*No adverse cumulative socioeconomic impacts are anticipated from either the construction or operation of HHSEGS. Instead, the local community will enjoy a beneficial (but not significant) impact from short-term construction and longer-term operations employment.*" (*See* Applicant's Socioeconomic Testimony, F. Summary of the Potential Cumulative Impacts, p. 4)
>
> "*The Applicant concurs with CEC staff that there will not be any Environmental Justice impacts from the project.*" (See Applicant's Socioeconomic Testimony, III. Response to Certain Issues Raised in the FSA, p. 5)

The Applicant's assertions that residents will only "enjoy benefits" from the proposed project is an outrageous falsehood. Furthermore, neither Applicant nor Staff has provided any substantial or supportable facts to base its "accuracy or truth" from pertaining to project impacts to the residents of Charleston View.

In fact, the Applicant didn't even bother to provide traffic data or any impact analysis whatsoever regarding Charleston View or St. Therese in their Updated Workforce Analysis (See Updated Workforce Analysis, Applicant Testimony: Exhibit 63)

Charleston View residents will see a radical and adverse impact to their rural lifestyle. They will be inundated with thousands of construction vehicles daily, 24/7 work schedules, non-stop noise pollution, significant reductions in wildlife, be heavily impacted by traffic when they try to get in and get out of the area, most likely will have to contend with reduced air quality, will receive little to no employment, will receive no increases in "revenue" to surrounding businesses as there are no surrounding businesses except St. Therese (who just showed up right before Bright Source filed their AFC). Residents most likely can only expect increases in the cost of living for the area over the life of the project, will have their water table and electrical use heavily impacted unless major intervention is mandated by the CEC, may lose access to television and finally, will see the beautiful, natural surrounding environment destroyed and turned into an industrial zone directly across the street.

But according to the Applicant, this will all be "enjoyed and beneficial" by the local community – though Applicant is still not sure if we are even a community at all.

As for the people who live in Charleston View, they would be hard pressed to find another place to live that equally provides such a low cost of living. Our land will be worthless to almost all potential future buyers with the sole possible exception of a handful of future operational workers who would be willing to forgo living in nearby Pahrump (with its related services) to save a few minutes of commute time.

As it stands, it is not reasonably foreseeable or believable that ANYONE would want to live next to the proposed HHSEGS, either during construction or operations with perhaps a few, isolated exceptions.

Yet, I believe the majority of Charleston View residents cannot afford to move away, cannot afford much, if any, increase in their cost of living, cannot afford to "rebuild" what has been built over the years, cannot afford a replacement residence (i.e., to buy a new trailer on another lot with water and power), cannot and will not be able to receive any sort of compensation for the sale of our land, would have great difficulty locating and buying a new residence that has comparable acreage, associated amenities and low cost of living that is also extremely rural but within reasonable access to products and services as provided in both Pahrump and Las Vegas.

I definitely know this is the case with my Mom. She has spent the last forty years in Charleston View, is living on a fixed income that barely gets her through (and that's with financial help), has invested years of hard work on her property that she is no longer physically capable of repeating in the event she were to try to live somewhere else and totally lacks the financial resources to replace what she has – *even if she wanted to abandon her home* because of the proposed HHSEGS, she would not be capable of doing so.

And so, Charleston View residents will be "stuck" living on the other side of the fence from a massive industrial power plant that is managed by "owners" that won't even acknowledge the wide ranging adverse impacts of the proposed project to Charleston View residents, who has already been accused of not dealing with local property owners in good faith as well as using strong armed tactics against local citizens. (*See* C.R. MacDonald, Opening Testimony, Exhibit 711, Exhibit I: Comment Letter, Law Offices of Briggs and Alexander, 7/31/12)

Most of the residents of Charleston View have very little idea what is about to happen to the area, mostly because they lack internet services nor is a local library reasonably available. However, a few months ago, a long-time resident handed me a hand written letter to express their thoughts on the proposed project; this resident wished to remain anonymous and asked if I could somehow get it entered into the public record during the AFC proceedings.

Since there is no evidence the Applicant or their consultants have made any effort to try and discern what the residents of Charleston View may think about their proposed project – outside of their business associates connected with St. Therese and the land owners of the project site who do not live there or will be impacted in any adverse way should it be approved – and most residents lack reasonable internet access, I am retyping the letter and submitting it under an anonymous heading for the Commission's consideration in my Rebuttal Testimony, Exhibit 756.

V. Project Description

As stated in my Opening Testimony, there are unresolved issues regarding attributes and facts described by the Applicant regarding the renewable portion of the proposed HHSEGS, which include actual Megawatt capabilities produced solely from the heliostat fields.

Large portions of my Opening Testimony and prior documents have continued to question and examine the feasibility, reliability, efficiency and believability of the proposed HHSEGS system's and design regarding the renewable portion of the facility.

In a recently published article regarding the Octillo Wind Farm, one local resident is quoted as noting the "speed" of the wind turbines didn't appear to be turning fast enough to support viable electrical production.

While this is not "expert" testimony, it is another indication that supports the critical need for intense scrutiny of many of the relatively new renewable utility scale technologies, especially considering that the energy sector in California has historically and currently continues to be victim of various predator-like activities from the energy, financial and investment sectors.

Additionally, there has been a disheartening trend of wide scale predator-type activities that have occurred over the last decade in the financial and investment sectors that projects like the proposed HHSEGS are heavily dependent on, as well as potentially massive adverse impacts to United States taxpayers due to renewable energy projects receiving a wide variety of public sector monies, grants, special considerations, tax exemptions, government contracts, and radical alterations and privatization of public lands.

Because of these facts, I would like to submit the following article in my Rebuttal Testimony for the Commissions consideration under Exhibit 759, "Octillo Wind Express Manager Arrested" (Imperial Valley Press, 2/07/13).

III. FINAL STAFF ASSESSMENT

REBUTTAL TESTIMONY OF C.R. MACDONALD, INTERVENOR

I. Alternative Analysis: Reduced Acreage Alternative

In the FSA's Alternative Testimony, Staff adds a "Reduced Acreage Alternative" that analyzes reducing the proposed project by eliminating Solar I, the northern portion of the proposed HHSEGS but maintaining Solar II, the plant closest to the Old Spanish Trail Highway/Tecopa Road and the community of Charleston View. It would appear the basis for the choice to eliminate Solar I over Solar II lies in the intent to place the preservation and conservation of special status plant habitat and higher quality desert tortoise habitat over impacts to residents and motorists.

Because of the FSA's Reduced Acreage Alternative choose to analyze the plant site closest to Charleston View and the Old Spanish Trail Highway, it is able to make a stronger case for impact analysis and significance thresholds in many of the technical disciplines that are "similar to the HHSEGS" that would not be the case had the FSA chose to analyze Solar I instead.

For example, during the construction emissions analysis, the FSA concludes that in the worse case scenario, construction emissions would be similar to the proposed project. But the significant difference is that these emissions would occur much farther away from residences and thereby give emissions more time and space to disperse versus Solar II, the chosen Alternative whose boundaries are located within a 1,000 feet of residences and the community mailbox and about 500 feet or less from the local dumpsters and the Old Spanish Trail Highway.

The FSA is able to make multiple conclusions about "similar" impacts because it chose to analyze siting the proposed Alternative directly across from the community of Charleston View and the Old Spanish Trail Highway versus in the more remote, northern location of Solar I.

In the event the FSA had chosen the more remote, northern sited Solar I to analyze, it would have concluded multiple impacts associated with the construction and operation of the facility would be *much less* than impacts associated with Solar II, located directly adjacent to the Old Spanish Trail Highway/Tecopa Road and the community of Charleston View.

These include reduced construction and operational noise due to increased distances, fifty percent reduction in water requirements, reduced residential proximity to potential fugitive dust emissions, combustion emissions from construction related vehicles and public health related issues such as Valley Fever, reduced residential proximity to glint and glare impacts, reduced impacts from impervious surfaces and flooding at the Old Spanish Trail Highway/Tecopa Road and residences due to increased distance from the site, reductions in the need to remove unsuitable soils, a higher level of public protection in the event of an earthquake, etc.

In almost all of the technical disciplines, if the FSA had chosen to analyze the more remote northern based Solar I, impacts of the proposed project to the Old Spanish Trail Highway/Tecopa Road and the community of Charleston View would have rendered a impact determination of *much less* on almost all accounts.

If the FSA's Alternative section had incorporated an analysis of utilizing the alternative site access route through the old Cathedral Canyon Road to access Solar I's site, which I submitted to the CEC in May 2012 (*See* Exhibit 704), construction related traffic, noise and emission impacts would be *significantly reduced* to residents of Charleston View.

The FSA also claims that the "same level of mitigation would be required" but this is not wholly accurate. While the same *methods* of mitigation may be involved, the level of resources necessary to implement them and direct, indirect and cumulative impacts would be reduced by half.

For example, construction water requirements of 288 AFY would be reduced to 144 AFY, the volume of required chemical dust palliatives would by reduced by 50% both during the construction and operational phase of the project, the construction waste of 280 tons and operational waste of 240 tons annually(1) would be reduced to 140 tons and 120 tons respectively, and so on. Though the *methods* of mitigation are the same, i.e., wastes must be disposed of regardless of the size of the project, the level, volume and impacts of disposing of these wastes are much, much less.

If the proposed project is approved "as is" with both Solar I and Solar II, then critical habitat for special status plants and desert tortoise will be destroyed anyway. Yet if the Reduced Acreage Alternative were to have offered and analyze the construction of the more remote, northern Solar I versus the currently chosen Solar II, a whole host of significant adverse impacts to Charleston View residents and the Old Spanish Trail Highway/Tecopa Road would be *significantly reduced* and relieve residents and motorists of at least some of the burden of adverse impacts associated with the construction and operation of the proposed HHSEGS.

(1) Applicant's Testimony, Waste Management, E. Summary of the Potential Cumulative Impacts, p. 3)

But the FSA's Alternative: Reduced Acreage Analysis suffers from the same denial of impacts to Charleston View residents as the rest of the FSA.

Since we don't really "count" (insignificant number of viewers, sparsely populated, Charleston View residents being replaced as being represented by Pahrump, Nevada residents or Charleston View residents being replaced and being represented as the entire population of Inyo County), the FSA saw no need to chose Solar I over Solar II – because what really matters is preserving the special status plants and threatened and endangered animals that the proposed project will adversely impact anyway and buying "new" habitat to replace the old habitat the proposed HHSEGS's will destroy.

Never mind the fact that even if a "Reduced Acreage Alternative" was chosen, regardless of whether it is Solar I or Solar II, it will justify the need to authorize the Hidden Hills Transmission and Gas Pipeline NEPA process that the Nevada BLM is overseeing. Once the lines are installed, it will open up the entire area to viably support additional projects such as the Sandy Valley SEGS, Elemental Solar and the most recently filed application for the Pahrump Valley Solar, another "power tower" application submitted to the Public Utilities Commission of Nevada on December 26, 2012. (*See* Center For Biological Diversity, HHSEGS Opening Testimony, Exhibit 535).

So what habitat or populations of any species are going to be maintained in any capacity in the Pahrump Valley over the next ten years?

Since the proposed HHSEGS will eliminate critical habitat anyway, will be responsible for inducing massive renewable power plant growth throughout the entire Pahrump Valley, why not choose Solar I under the Reduced Acreage Alternative to help relieve the burdens of Charleston View residents?

My guess? Solar II was analyzed under the Reduced Acreage Alternative because it is the most beneficial to the Applicant. It would save Applicant money for mitigation lands and species compensation while doing little to preserve and protect these same species or their habitat.

In the event the proposed HHSEGS is "partially" approved under the Reduced Acreage Alternative, once they get their foot in the door and get the transmission and gas line installed, the Applicant or new owners can also go back and "amend" the AFC to add on and construct Solar I in the future. By then, most of the wildlife they are now having to compensate for will be gone and most of the habitat will be deemed of "little value" due to the industrialization of the area that resulted from building Solar II and the growth its construction and operation induced throughout the Pahrump Valley.

I believe this is already happening in the area due to the wide spread activity that has been occurring over the last two years in and around the proposed project site – including the connected arrival of the renewable and sustainable "green" St. Therese Mission approved by Inyo County just two months before the HHSEGS AFC was filed with the CEC.

In September 2012, a local resident and I were talking and they described having just seen a badger crossing the Old Spanish Trail Highway/Tecopa Road at the California/Nevada State line in the vicinity of St. Therese Mission. It was the first time they had ever seen a badger since living in the area, which I would estimate at about 20 years.

In October 2012, as I was leaving Charleston View early in the morning, I spotted a desert kit fox at about the same location. How I managed to do that I will never know as the little thing so totally blended into the scenery, it is a wonder I spotted it at all. It was crouched down by the side of the road, ears up and looking very nervous. I immediately stopped and tried to photograph it but it disappeared before I could get my camera out.

In all the years I have lived and routinely visited the Charleston View area, I have never seen a desert kit fox. Neither has my Mom, who is very tuned into the wildlife in the area and has forty years of history in Charleston View.

Due to these two unusual sightings occurring relatively close together and in the same area, I think it is possible the animals in and around the proposed HHSEGS project site are already being directly or indirectly hazed from the vicinity.

In turn, I think it will make very little difference to local wildlife regarding "which" solar plant is chosen under the Reduced Acreage Alternative as either of them will result in too much activity for local wildlife to tolerate for long.

II. HHSEGS AFC Technical Disciplines (All)/Socioeconomics: Environmental Justice and Charleston View Residents

The FSA combines the population of Charleston View residents with people in Nevada as well as substituting the entire population of Inyo County for residents of Charleston View to reach its Environmental Justice determinations and conclusions.

Though I have submitted multiple comments to CEC Staff regarding the environmental justice issues Charleston View residents face, some as early as March 9, 2012, (*See* Exhibit 700) the FSA ignored any outside consideration or comments and instead, substituted real people in a real community with census population statistics that they *knew* did not fairly or accurately describe the Charleston View population, community or the adverse impacts the proposed HHSEGS would have on the small population of Charleston View residents who will bear almost the totality of the burdens created by the HHSEGS should it be approved.

The FSA's Socioeconomic section is the ultimate source for how the entire FSA negated environmental justice considerations related to Charleston View residents. In making this determination, the FSA cites the sole document used for their analysis as being, "*Environmental Justice: Guidance Under the National Environmental Policy Act"* even though the proposed HHSEGS is being evaluated for project compliance under CEQA, not NEPA. (*See* HHSEGS FSA, Socioeconomics, p. 1)

The FSA's Socioeconomic's also only cited three applicable LORS - all of them pertaining to fees, charges and tax codes and nothing relating to CEQA or any other applicable California Public Resource Codes as they would relate to the community or population of Charleston View. (*See* HHSEGS FSA, Socioeconomics, Table 1, p. 2).

On July 10, 2012, California Attorney General Kamala D. Harris issued and posted a Fact Sheet on Environmental Justice for all California residents. (See C.R. MacDonald, Opening Testimony, Exhibit 744).

Throughout its pages are multiple legal citations, descriptions and "promises" of state laws designed to protect California citizens from exactly the kind of unfair treatment and inaccurate analysis that the Applicant and FSA are both promoting and testifying in support of.

Because the CEC subordinates local governmental planning and compliance requirements due to its sole jurisdiction, the burden falls on the CEC to enforce environmental justice provisions under CEQA and multiple state laws that were recently described, outlined and committed too by California's Attorney General.

This enforcement should, at very least, mandate Staff transparently disclose and accurately report project impacts to Charleston View residents - such as construction vehicle traffic to residents attempting to exit or gain access to their homes or construction traffic noise levels to residents in the near proximity of the Old Spanish Trail Highway/Tecopa Road; to acknowledge and analyze the undue burdens the proposed project will have on Charleston View residents instead of denying these burdens or pretending that someone in Pahrump or Shoshone will share these burdens equally; recognize and evaluate the social values and changes to the Charleston View area, the associated cultural "shock" to residents being forced to make a rapid adjustment from a remote, rural lifestyle to massive industrialization of the area on every level; whether there is a reasonable probability that Charleston View residents could afford to escape the multiple adverse impacts of the proposed HHSEGS should it be approved; and finally, to require Staff reanalyze and report on environmental justice issues related to Charleston View residents *under California laws* such as CEQA, Public Resource Codes and Government Codes instead of making environmental justice determinations solely from NEPA or placing NEPA guidance above CEQA during a CEQA review as, at best, the FSA's basis for the determinations are highly questionable and at worst, completely non-compliant with the substantial requirements of CEQA and applicable LORS.

III. Soils & Surface Waters

Low Impact Design: Not Factually Supported

While the AFC and subsequent documents states the proposed HHSEGS will employ a Low Impact Design (LID) throughout the site in efforts to partially preserve existing vegetation, a feature the Applicant advertises as a more environmentally friendly design, a photo of the more advanced Ivanpah SEGS was included in the BLM's Comments for the Hidden Hills PSA clearly showing remaining post-construction vegetation is, at best, minimal. (*See* HHSEGS, C.R. MacDonald, Rebuttal Testimony, Exhibit 758, BLM Comments on Hidden Hills PSA, Figure 1, p. 5)

The photograph also illustrates a marked difference in soil appearance between disturbed and undisturbed areas. As a result, the evidence does not support the believability of the advertised advantages of a LID design as little vegetation remains and soils in the heliostat fields looks highly disturbed. Instead, the on-the-ground reality shown in the photograph provides a more realistic view of the LID's impacts that is much more in alignment with the projected outcomes described by BLM regarding the same design employed at the Ivanpah SEGS in the May 2009 BLM/CEC Comment Letter on Revised Stormwater Design as quoted below:

> "*This particular comment concerns the treatment of the other areas of the site - the areas between and amid the heliostats which are not included within the power block, administrative areas, access roads, and service pathways. Construction efforts in these areas will include: driving vehicles to deliver personnel and materials; use of equipment to cut vegetation and install heliostat supports; removal or rocks and undefined "lightgrading" in some areas; and equipment and foot-traffic to install heliostat wiring conduits. The current calculations assume that these activities will have no long-term impact on drainages, vegetation, and infiltration rates in those areas. It also assumes that the current proposal to perform all of this construction without more aggressive grading and road maintenance is feasible."*
>
> *"The assumption that these activities will have no long-term effect on drainages, vegetation, and soil infiltration rates is not supported by information currently provided in the Supplemental Project Description. Some necessary information is not provided, such as the wheelbases of the vehicles and equipment, the pressure exerted by the tires, the locations of trips, and the numbers of trips. Other information is provided but is not believable - for instance, the proposal to cut vegetation to provide clearance for equipment, and then to shade the vegetation with heliostats, does not support an assumption that long-term vegetation effects on runoff will be negligible."*
>
> *"Currently, these calculations are entirely based on best-case assumptions that are not supported by any provided data. In addition, many of the assumptions, such as the assumption that construction vehicle traffic will not compact soils or affect drainages, are counter-intuitive. Should these assumptions prove incorrect, the entire Low Impact Development scenario may be unworkable."* (*See* HHSEGS Opening Testimony, C.R.M., Exhibit 733, p. 8)

Though the Applicant modeled the entire HHSEGS project site under "disturbed conditions" for assessing air quality impacts (a subject I continue to have unanswered questions about), like the FSA's Air Quality and Soils and Surface analysis, all parties presumed mitigation measures via water and/or chemical dust suppressants would reduce disturbed soils, erosion and fugitive dust emissions by 85-90%.

However, again the photo of the Ivanpah SEGS indicates that disturbed soils will be spread throughout the heliostat fields, which comprise the majority of the proposed site. There is no indication in the FSA that chemical dust suppressants will be periodically applied throughout the heliostat fields over the life of the project or if they are, that fragile desert vegetation can withstand the cumulative impacts of being mowed, being routinely shaded and shielded from rain because of the mirrors *and* being able to withstand routine chemical applications of dust suppressants.

This leaves water as the only remaining method to control disturbed soils, fugitive dust and wind related soil erosion as the heliostat fields will continue will to receive periodic disturbances due to invasive plant control, herbicide applications, heliostat/mirror maintenance, vegetation mowing, etc. over the life of the project and can never permanently develop a "crust" due to maintenance requirements over the life of the project.

The FSA never reasonably describes supportable calculations regarding project water needs for mitigating the disturbed soils to reduce wind blown erosion throughout the heliostat fields over the life of the project. It also never reasonably describes the believability of the LID with respect to preserving any onsite vegetation outside of leaving root systems intact.

IV. Air Quality: Low Impact Design And Air Quality Mitigation Not Factually Supported

The same issues highlighted in the Soils and Surface Waters section of this Rebuttal Testimony regarding the Applicant's LID are also applicable to the Air Quality analysis and conclusions.

The Ivanpah photo referenced above also provides contrary evidence to the Great Basin Unified Air Pollution Control District's response regarding soil disturbances, impacts and wind blow erosion/fugitive dust resulting from the use of "Gators" to install the heliostats and perform maintenance activities throughout the site instead of merely being driven on graded maintenance paths. (*See* HHSEGS Opening Testimony, C.R. MacDonald, Exhibit 740, GBUAPCD FDOC, Appendix C, Response to Question 21.2, p. C-15)

V. Water Supply Plan

In the FSA's proposed Conditions for Certification, WATER SUPPLY-1, a whole host of mitigation plans are proposed to offset potentially critical impacts of the proposed project to the areas water supply. However, this undisclosed future analysis provides no reasonably supportable mitigation under the substantial requirements of CEQA. Instead, all data and analysis is deferred to a future planning process that will not be transparent to the public, will prohibit public disclosure, review and input and will result in substituting CEQA requirements that mandate public participation to "private plans" that will be developed post-approval and in private between the Applicant and the CEC.

In other words, the FSA claims it has "mitigated" project impacts to less than significant without providing any data or analysis regarding what that mitigation actually will be, is it believable or realistic and how it will be reasonably implemented.

Additionally, the proposed mitigation to offset project water use by mandating the Applicant purchase and retire local, existing water rights in the State of Nevada, as suggested by the BLM, is most likely wholly unenforceable by the CEC as it outside the CEC's and CEQA's jurisdiction. (*See* HHSEGS Rebuttal Testimony, C.R. MacDonald, Exhibit 757, BLM Comment Letter, 3/12/12).

As a result of all of the above conditions, it cannot be stated that the proposed COC of Water Supply-1 will mitigate the proposed project's impacts to the areas water supply to "less than significant".

VI. Water Supply, Alternatives And Waste Management

In my Preliminary Comments, Technical Analysis and Recommendations submitted to CEC Staff of March 9, 2012, I submitted both a discussion and recommendations regarding assessing the feasibility of recycling waste water produced from the proposed project's operations by transporting treated water back to the site for reuse during operations over its lifetime as well as questions surrounding the legality of the proposed project transporting of unknown quantities offsite under "beneficial use" laws in California and/or transporting California water across state lines (*See* HHSEGS Opening Testimony, C.R. MacDonald, Exhibit 700, Water Resources, #4. Water Transport/Recycling, p. 174-175 and #5. Water Replacement Value, p. 176-180)

In my Opening Testimony, I also reiterated the fact that this alternative was never acknowledged, discussed, or analyzed for feasibility. (*See* HHSEGS Opening Testimony, C.R. MacDonald, Section 2. Project Alternatives, #6, p. 2-7)

While the HHSEGS AFC proposes that untreatable wastewater from the proposed HHSEGS will be trucked offsite to a wastewater treatment facility, the recently suspended Rio Mesa SEGS AFC proposed a wholly different method to handle wastewater generated from the facility, this being to have onsite evaporation ponds for wastewater treatment instead of

hauling it offsite. (*See* Rio Mesa SEGS AFC [11-AFC-04], Socioeconomics, 5.10.3.10, Water and Wastewater, p. 5.10-40)

Despite both of these proposed SEGS projects being almost identical in design and implementation and both AFC's submitted by the same parent corporation, Bright Source Energy, the proposed methods of handling project wastewater between these two projects are highly variable with little, if any explanation as to why the Applicant will remove wastewater from the proposed HHSEGS site while maintaining wastewater at the Rio Mesa SEGS site.

These facts further point to the critical need to scrutinize the proposed HHSEGS water requirements, treatment of wastewater and transporting critical water resources offsite, possibly out of California and potentially profiting, directly or indirectly, from the removal of water from the proposed HHSEGS project site over its life span.

Unfortunately, these subjects have still not been addressed, reported on, analyzed or potentially mitigate for and as such, remains unresolved and potentially significant to critical water resources and project impacts to water supplies in the project site vicinity and Pahrump Valley Groundwater Basin.

ATTACHMENT I

Review of Cultural, Historic, and Visual Resource Assessments
Hidden Hills Solar Electric Generating System

Thomas F. King

February 4, 2013

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Review of cultural, historic, and visual resource assessments, Hidden Hills Solar Electric Generating System

Thomas F. King
February 4, 2013

At the request of Ms. Cindy MacDonald, I have examined the "cultural resources" and "visual resources" sections of the Final Staff Assessment (FSA) prepared for the California Energy Commission (Commission). I have also examined the testimony of the Commission's applicant on the same subject.

My qualifications for offering comments on these documents are outlined in the attached resume. In summary, I have worked within and outside government in the fields of cultural resource management (CRM) and environmental impact assessment (EIA) since the 1960s, authored ten books and a large number of professional articles and government guidelines relating to these subjects, and hold a PhD in anthropology with an emphasis on archaeology and experience in the California desert. I have no financial or other interests in the proposed Hidden Hills Solar Electric Generating System or its proposed siting. To the best of my knowledge, all facts contained in this memorandum, and all references to and citations of documents) are true and correct. The opinions offered are my own.

In the interests of full disclosure, I should also say that I am professionally acquainted with both the Commission's ethnographer, Dr. Thomas Gates, and the applicant's ethnographic consultant, Dr. Lynne Sebastian. I have long been impressed with Dr. Gates' abilities and integrity, and have been sadly disillusioned in recent years with Dr. Sebastian's.

Comments on the FSA

There are a number of things in the FSA with which I could quibble, but I generally find it to be quite a thoughtful document, and about as thorough as can be expected given the limited data with which the staff apparently had to work.

Like many documents of its kind, the FSA sometimes confuses and conflates terms like "cultural resource," "historic resource," and "archaeological site;" this tends to muddy its analysis and raise what may be unnecessary questions. It seems apparent from the ethnographic element of the FSA, for instance, that water is an important cultural resource for Indian tribes of the area, but by defining "cultural resource" as "tangible or observable evidence of past human activity" (p. 4.3-3, underscore

added) the FSA seems to exclude water from consideration. "Historic (or "historical") resource" and more especially "archaeological resource" have statutory and regulatory definitions that rightly or wrongly suggest association with human activity. "Cultural resource" is not defined in law, and by conflating the term with those that do have explicit legal definitions, the FSA risks leading the Commission into ignoring serious impacts like those on the cultural value of water.

I also cannot tell why the staff has defined the Pahrump Metapatch Mesquite Woodland-Coppice Dune Landscape as "archaeological," while characterizing and describing it largely with reference to ethnographic, geomorphological and hydrological variables. Nor do I understand -- given the unavoidable presumption that the "archaeological resources" of the area were the creations of Paiute ancestors -- why the staff does not seem to have felt it necessary to consult the tribes of the area when evaluating these resources. The tribes were very responsibly consulted in preparation of the "ethnographic" sections of the FSA, but seemingly not in addressing the "archaeology." This seems strange and rather arbitrary, and may give the Commission a false impression of the area's cultural, historical, and archaeological significance. A more holistic approach might have been more fruitful.

Still, on the whole the "cultural resources" section of the FSA appears to me to be a responsible analysis that reaches respectable conclusions.

The "visual resources" section also appears to me to reflect responsible analysis, but I am puzzled by its rather abstract character. Visual impact analyses in which I have been involved in the past[1] have recognized the seemingly obvious fact that visual impacts invariably involve the operation of eyes and brains. As a result, they have involved actual viewers of actual scenes -- asking people who regularly apply their eyes and brains to a viewshed to say what they value about it, and to react to mock-ups of proposed new constructions within the viewshed. The FSA gives the reader little idea of who regularly looks down onto or across the land where the project is proposed, and what they value (if anything) about the view. I wonder particularly about Native American spiritual practitioners and others who may use the area for religious or inspirational purposes -- do such people exist, and if they do, what burdens might the project place on their practice of religion? Similarly, I wonder who, if anyone, walks, rides or drives the route of the Old Spanish Trail to seek history-based inspiration, and what their impressions of the project's impacts may be. Again, this is not to say that the FSA is irresponsible or poorly constructed in its treatment of visual impacts -- only that it is rather bloodless and abstract, losing track of the viewers in its analysis of views.

Finally with reference to both sections, while I recognize that the Commission's purview is limited to California, I understand that the project will involve activities in Nevada as well, which will have to be reviewed by federal agencies under the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA). I wonder how the Commission's review will be coordinated with these reviews – particularly with the consultation-based review required under Section 106 of NHPA. The potential for costly and time-consuming complications appears to me

[1] E.g., analysis of the impacts of a high-rise residential development in Virginia on the monuments of the National Mall; analysis of the impacts of a surface coal mine in Kentucky on the Cumberland Gap National Park.

to be high if provision is not made for coordination, and for ensuring that all studies carried out for EIA purposes are responsive to both state and federal guidelines. I raise this issue because of my concern about the lack of documented consultation with stakeholders – a core part of NHPA Section 106 review – in the FSA's discussion of "archaeological resources" and of visual impacts.

Comments on the Applicant's Testimony

The applicant's "cultural resources" analysis contrasts dramatically with the FSA's, and predictably enough seeks to deny any serious cultural value to the areas affected by the project.

This process of denial begins by not seeking anything but prehistoric and historic archaeological resources. As far as I can tell, the applicant's effort to identify impacts on "cultural resources" has amounted to reviewing readily available background documents and sending out archaeologists to perform "pedestrian" (i.e. walking) survey of the land surface, followed by excavation of some trenches to characterize subsurface conditions. Notably, despite a few unsubstantiated assertions to the contrary, I see no evidence that the applicant consulted any of the tribes in the area, or any of the people who may be interested in places like the Old Spanish Trail. The applicant's evaluation of the area's "cultural resources" is in fact an evaluation only of how significant the area's archaeological sites appear to be to archaeologists employed by the applicant.

Discussing the FSA's conclusions, the applicant first asserts (on page 6) that the FSA simply lacks the "substantial evidence" necessary to form the basis for judging places like the Pahrump Metapatch to be eligible for the California Register of Historic Resources (CRHR). That may be true, but if it is, then surely someone needs to develop such information, and until it is developed, the Commission lacks a complete record upon which to base its decision about the project. I agree with the applicant that it is inappropriate to propose developing such information as mitigation; that would allow the project to be approved and go forward without full consideration of its environmental impacts. Such evidence, if needed, should be gathered and analyzed in advance of the Commission's decision, to inform that decision.

The applicant also objects (on page 7) to the staff's "assumptions" about the eligibility of places for the CRHR. I find this rather sadly amusing. In the 1980s I worked for the Advisory Council on Historic Preservation (ACHP), which oversees federal agency compliance with Section 106 of NHPA. In the early 1980s, the ACHP's regulations followed NPS guidance in requiring that eligibility for the National Register of Historic Places (NRHP) be determined only by NPS, after multi-level review by federal agencies and State Historic Preservation Officers. During a revision of the regulations directed by the administration of then-president Ronald Reagan, and at the request of such disparate agencies as the U.S. Army and the Bureau of Land Management as well as private sector mining and energy interests, we included provisions allowing agencies to assume eligibility for the NRHP. This enabled agencies and applicants to reduce bureaucratic red tape and get on with deciding how to manage significant properties. It appears that the Commission's staff is merely adopting the same sort of efficiency-enhancing approach to evaluation, and this outrages the applicant – who I assume must think that if it and

the Commission just do not assume eligibility for the California Register, they can assume ineligibility and ignore the resources. It doesn't work that way under the federal regulations, and I do not think it does under CEQA either. I note, in fact, that the State's CEQA Handbook, at §15064.5(a)(4), says that—

> *"(t)he fact that a resource is not listed in, or determined to be eligible for listing….,does not preclude a lead agency from determining that the resource may be an historical resource…"*

As I read this language, it seems to be consistent with federal guidance and practice. Confronted with a place that may be an "historical resource" per state law, an agency like the Commission can either (a) assume eligibility and get on with its decision-making, or (b) collect the data and go through the administrative processes necessary to formalize its determination. It cannot just avert its eyes and ignore a place because someone thinks it lacks sufficient information to reach a decision.

To rebut the FSA's ethnographic element, the applicant brings in Dr. Sebastian to perform what I have observed to be a common service she provides to clients. This is the third time I have seen Dr. Sebastian pursue what I have come to characterize as "the Sebastian Strategy;" the previous cases were those of the proposed Glamis Gold Mine in Imperial County (under federal law and the North American Free Trade Agreement) and of the proposed Liberty Quarry in western Riverside County (under CEQA). In neither case did her client prevail. The Sebastian Strategy works like this:

Step 1: First, one touts one's credentials (See pages 1 and 2 of Dr. Sebastian's paper, "Ethnographic Landscapes and the Hidden Hills Solar Electric Generating System: "I am a nationally recognized expert.." etc. etc.).

Step 2: Then, either at the outset or woven through one's analysis, one characterizes the context of regulatory and other official guidance in which the analysis is performed, being very careful to do so in the most narrowly pedantic manner possible and to avoid any acknowledgement of alternative interpretations.

Step 3: Then, one reviews background ethnographic and historical documents, but one never, never in the course of doing so consults with the people upon whose cultural resources and views one is offering opinions.

Step 4: One assures the reader of one's great respect for the people, communities, and cultures that allegedly ascribe value to the project area, but explains, patiently, that:

(a) they simply do not know their own culture and history, and/or
(b) however valid their views may be, those views regrettably do not fit into the context of regulation and official guidance that one has carefully constructed at Step 2.

Step 5: Where the place or places involved comprise a somewhat extensive landscape, one goes on to suggest that even if such places are culturally significant, they constitute such large areas that the proposed project will really have only the most miniscule little impact on them – or that the places of real significance, in terms

of the regulations and guidance to which one refers, are really pretty small and conveniently situated outside the area subject to effect.

In this case, Dr. Sebastian devotes much of her Step 2 discourse to a scholastic parsing of NPS guidance about characterizing historic, cultural, and "ethnographic" landscapes, emphasizing that the available official guidance tends to allude to evidence of human modification of such landscapes. Since Paiute communities did not make major, permanent changes to their landscapes (if one ignores things like trails and mesquite husbandry) -- and since those human modifications that are apparent in the landscape in this case have been filtered out of the ethnographic analysis by being characterized as "archaeological resources" -- why then, it's a real shame, but the Paiute just don't have any cultural landscapes, as the NPS guidance describes them.

Dr. Sebastian cannot quite ignore the fact that another NPS guideline document -- National Register Bulletin 38 on traditional cultural properties, of which I am a co-author and upon which my 2003 textbook *Places That Count* is based -- could give comfort to the notion that even a landscape without visible modifications may be culturally significant. She deals with this inconvenience by counting up the number of times my co-author and I used the word "landscape" in the bulletin. We used the word only four times (contrasted, incidentally, with 17 uses of the word "building," most often when quoting pre-existing NPS documents or in citations). Based on this observation she concludes that Bulletin 38 fails "to provide guidance on identifying and evaluating ethnographic landscapes" (Page 3).

In arriving at this conclusion Dr. Sebastian ignores the fact that as examples of known or hypothetical traditional cultural properties the bulletin includes mountains, lakes, canyons, and other substantial geographic features -- landscapes by other names. Because we did not use precisely the term in which Dr. Sebastian is interested (which as she notes came into use by NPS in 1991, a year after publication of Bulletin 38), Dr. Sebastian apparently finds that Bulletin 38 provides no official basis for the staff's definition of cultural or "ethnographic" landscapes.

Having thus assured the Commission that there is simply no place in pertinent cultural resource law and regulation for consideration of a landscape like those discussed in the FSA, Dr. Sebastian goes on to assert, as usual, that even if such a landscape were viewed as eligible for the CRHR, it would comprise or be part of something so much larger that it would lose meaning, or the proposed project's effects would be lost within it.

There may be good reasons to argue about the significance and character of the various cultural landscapes the Commission staff has defined in the FSA. It may be that more "substantial evidence" is needed before their eligibility for the CRHR can be confirmed or disconfirmed. It may be that the project will have little impact on them if they are eligible. There is, however, no basis I can think of for accepting Dr. Sebastian's analysis as authoritative. If the Commission is inclined not to accept the FSA's conclusions, what should be done is to consult more thoroughly, holistically, and systematically with the Paiute and other people who may ascribe cultural value to the landscapes. Only they can say what is significant to them, or what will affect that significance. That, incidentally, is the main thrust of National Register Bulletin 38.

The applicant's treatment of visual resources suffers from what seem to me to be the same flaws as does the staff's analysis – i.e. a failure to address the views (sic) of those who actually look at and may (or may not) value the viewshed within which the project is proposed. Predictably, the applicant regards the project's visual impacts as less substantial than does the staff, but lacking reference to the opinions of actual viewers, I cannot see that either the applicant or the staff has a leg to stand upon.

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APPLICATION FOR CERTIFICATION FOR THE HIDDEN HILLS SOLAR ELECTRIC GENERATING SYSTEM

Docket No. 11-AFC-02

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DECLARATION OF SERVICE

I, *Cindy R. MacDonald*, declare that on *February 11, 2013*, I served and filed copies of the attached *Rebuttal Testimony, Exhibits 752-759*, dated *February 11, 2013*. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: http://www.energy.ca.gov/sitingcases/hiddenhills/.

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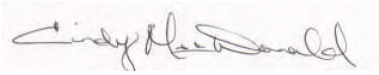
Dated: February 11, 2013



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