

**From:** [Slovick, Mark](#)  
**To:** [Hingtgen, Robert J](#); [Gungle, Ashley](#); [Ramaiya, Jarrett](#)  
**Subject:** FW: 130428 - Maupin  
**Date:** Tuesday, April 16, 2013 3:45:01 PM  
**Attachments:** [maupin.pds.doc](#)  
[130428.pdf](#)  
[Response to Inquiry: Renewable energy projects in Boulevard and Jacumba.msg](#)  
**Importance:** High

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fyi

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**From:** Carranza, Patricia V.  
**Sent:** Tuesday, April 16, 2013 3:02 PM  
**To:** Quinones, Diane  
**Cc:** Vanegas, Michelle; Jazskowiak, Priscilla A.; Caballes, Cecilia; Real, Sami; Quasarano, Susan  
**Subject:** 130428 - Maupin  
**Importance:** High

Good afternoon Diane –

Attached is PDS response to CAO referral #130428 – Maupin.

Thank you,

**Patricia V. Carranza**

**Administrative Secretary**

**Planning & Development Services**

**5510 Overland Avenue, Ste 310**

**San Diego, CA 92123**

**858-694-2970**



# ACTION REQUEST

County of San Diego

Walter F. Ekard

Chief Administrative Officer

Date Due:	4/17/13	Referral #	130428
Request Date:	4/3/13	Relates To:	

Staff Contact: ADAM WILSON	Dist: 2	Assigned: PDS	Coordinate with: DPW, AG, DEH, FIRE AUTHORITY
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**Subject: PROPOSED RENEWABLE ENERGY PROJECTS - MAUPIN**

- Reply directly with a copy to me.     
  Prepare Report     
  Investigate & Report  
 Prepare in final form for signature of  
 Please provide recommendations/comments.     
  Please evaluate, complete form and return to me.

### INSTRUCTIONS:

Please review Mr. Maupin's email requesting information regarding the proposed renewable energy projects in the Boulevard and Jacumba areas. Please prepare a reply to his questions/concerns. Please indicate that you are responding at the request of Supervisor Jacob and the CAO.

Please note that PDS is designated as the lead department in this referral and should obtain input from other departments (if applicable) in order to prepare a coordinated response. Please format your input so that it may be easily inserted into the final response. Assisting departments that provide input should return the completed Action Request form along with a copy of the information provided. If no input is provided to the lead department, no further action is required.

C: Priscilla Jaszkwiaak

Thank you,

Diane Quinones  
(619) 531-5184

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DEPARTMENT: PLEASE CHECK THE APPROPRIATE CATEGORY FOR THIS REFERRAL (BELOW):

1. Staff training need    
 2. Service shortcoming    
 3. Not within County jurisdiction    
 4. Other   
 5. Request for information/service

DEPARTMENT STAFF: Sami Real

PHONE: 858-694-3722

STAFF TIME: 9 hours

**PLEASE RETURN THIS FORM W/ COMPLETED STAFF INFO AND YOUR RESPONSE VIA EMAIL TO DIANE QUINONES**  
 CAO-1 (7/08)

**From:** [Real, Sami](#)  
**To:** [rom904@hughes.net](mailto:rom904@hughes.net)  
**Subject:** Response to Inquiry; Renewable energy projects in Boulevard and Jacumba  
**Date:** Monday, April 15, 2013 5:57:37 PM  
**Attachments:** [130428.pdf](#)  
[Maupin resp ltr 04-2013.pdf](#)

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Dear Mr. Maupin:

At the request of District 2 County Supervisor Dianne Jacob and Chief Administrative Officer Helen Robbins-Meyer, I am responding to your email inquiry, dated February 20, 2013, regarding renewable energy projects in the Boulevard and Jacumba communities.

For your use, I have prepared a letter that provides you with answers to the questions you listed in the above referenced email.

If you have any questions or request for additional information, please feel free to contact me using the information below.

Sincerely,

***Sami Real***, Chief of Project Planning  
COUNTY OF SAN DIEGO | Planning & Development Services  
5510 Overland Avenue | Suite 310 | San Diego | CA | 92123  
T. 858.694-3722 | F. 858.694.3373 | MAIN 858.694.2960  
PDS Website <http://www.sdcountry.ca.gov/pds/index.html>  
PDS Mapping Service <http://gis.co.san-diego.ca.us/>



MARK WARDLAW  
*Director*

**County of San Diego**  
**PLANNING & DEVELOPMENT SERVICES**

5510 OVERLAND AVENUE, SUITE 110, SAN DIEGO, CALIFORNIA 92123  
INFORMATION (858) 694-2960  
TOLL FREE (800) 411-0017  
[www.sdcounty.ca.gov/pds](http://www.sdcounty.ca.gov/pds)

April 15, 2013

Mr. Bob Maupin  
[Rom904@hughes.net](mailto:Rom904@hughes.net)

**RENEWABLE ENERGY PROJECTS IN BOULEVARD AND JACUMBA**

Dear Mr. Maupin:

At the request of District 2 County Supervisor Dianne Jacob and Chief Administrative Officer Helen Robbins-Meyer, I am responding to your email inquiry regarding renewable energy projects in Boulevard and Jacumba. In the email dated February 20, 2013, you requested answers to questions related to roads, water, dust and runoff, glare, heat generated by solar farms, and wind turbines. In order to provide you with accurate and complete information, staffing resources, both internally and externally from Planning & Development Services (PDS) were utilized. Below is a summary response to each of the subject areas included in your email from Project Planning (PDS), Land Development (PDS), Advanced Planning (PDS), and the San Diego County Fire Authority within the County's Public Safety Group.

On the issue of roads, all discretionary projects are required to analyze their impacts to roads and intersections to ensure adequate capacity and safety pursuant to the California Environmental Quality Act (CEQA). During project review, if it is determined that improvements need to be made to the roads to address impacts to capacity and safety, the project would be conditioned to complete all necessary road improvements. In all cases, however, the applicant is responsible for the maintenance and repair of any damage to roads caused during the construction of the project.

On the issue of water, it is crucial that long-term groundwater supplies are carefully evaluated for projects within the County's jurisdiction. Most solar projects in the Boulevard and Jacumba community are groundwater dependent. For the Soitec Tierra Del Sol project, the County is requiring a groundwater investigation to analyze the aquifer of the well to be utilized and will evaluate well interference on the nearest offsite wells. Additionally, there is also a cumulative analysis being performed to address potential long-term impacts of groundwater use in the area. To mitigate impacts to groundwater resources, the Major Use Permit will likely be conditioned to have a maximum amount of groundwater that is allowed to be pumped during

the construction phase of the project and the ongoing water use once established. A monitoring well network will also likely be required in which water level thresholds would be set in order to ensure impacts to offsite wells remain less than significant. With these measures in place, this should preclude the possibility of offsite wells going dry as suggested in your comments. Lastly, the application of a permeable soil binding stabilization agent on the ground surface will be non-toxic and would not have any long term effects on water quality in the area.

On the issue of dust and runoff, to minimize the occurrence of dust related to construction and on-going operations of the facility, a permeable soil binding stabilization agent will be applied bi-annually to the surface of all onsite roads. The applicant also proposes to use disintegrated granite or will replant the access roads with a native seed mix to control dust. All of these methods allow for infiltration of water into the ground.

On the issue of runoff related to the Tierra del Sol Solar project, minor impervious areas will be constructed for transformer pads, sub-station pads, foundation posts for the solar panels, and the Operation & Maintenance building. The project would also result in the construction of 10 onsite drainage basins/areas, a number of infiltration trenches, and earthen swales to handle the site drainage. Furthermore, the exposed ground and the areas underneath the panels will be replanted with native plants and a permeable nontoxic soil binding stabilization agent will be applied on the onsite roads. In summary and as required by storm water and hydromodification standards, the grading of the site will mimic the existing terrain and the drainage patterns will remain unchanged, which will help to keep the pre-project peak flow rates relatively unchanged.

On the issue of glare related to the Tierra del Sol Solar project, the Department has requested the applicant to provide a technical analysis to address the concern of glare. The analysis is required to include discussions on how the project would address the issue of glare so as to not adversely affect surrounding residents and drivers using surrounding roadways. Furthermore, it is not anticipated that implementation of the project, including other solar projects in the area, would lead to an increase of vehicle accidents and health problems.

On the issue of heat generated by solar farms, solar panels are designed to convert energy but would not radiate heat outward or offsite. The normal operating temperature of a solar panel would be approximately 172 degrees during a typical summer day while the temperature underneath the panel would be significantly lower given the shade generated under the panels. Additionally, the panels are designed to allow airflow both inside and outside the module to sustain a constant temperature. There is also no evidence that the panels would cause updraft conditions causing obstruction to aerial operations and the Department is coordinating with the appropriate federal agency to ensure no impacts to their operations would occur. To address the impacts related to fire safety, the project will require sufficient clearing of vegetation to serve as fuel modification zones and the Department is working in coordination with the local fire agency to ensure service can be provided to the project site.

On the issue of wind turbines, the Department is currently in the process of drafting a wind ordinance to address the siting and suitability of said facilities within the County. During the

process of drafting the proposed ordinance, the Department has worked closely with various stakeholders including the local community group and the US Border Patrol. Under the County's proposed wind ordinance, all large turbines will be required to obtain a Major Use Permit. During the review of a Major Use Permit, shadow flicker and noise impacts, among others, will be analyzed as part of environmental review process which will require the preparation of shadow flicker and noise studies to analyze the potential impacts resulting from the operation of said facility and will provide project specific mitigation, as necessary. As for fire safety and aerial operations, turbines are monitored 24 hours a day and are equipped with automatic speed controls as well as manual shuts offs in the event of an emergency such as a fire and procedures have been put in place to update public safety mapping databases when large turbines are developed within the unincorporated County.

To address the long term effect related to the operation of a wind turbine, the County's Health and Human Services Agency (HHSA) conducted a review of research on the human health effect of wind turbines and issued a Public Health Position Statement. HHSA's analysis included examining the available research on potential health impacts from noise, electromagnetic radiation, shadow flicker, blade glint and land surface temperature relationship. Based on the review of the available evidence, including journal articles, surveys, literature review and government reports, HHSA concluded that while anecdotal reports support adverse health effects, there are no epidemiological evidence-based studies to support direct pathological effects from wind turbines and that any potential impact on humans can be mitigated by following existing planning guidelines related to turbine placement.

If you have any questions or requests for information on the Tierra del Sol Solar project, please contact Ashley Gungle, PDS Project Manager, at (858) 495-5375 or via email at [ashley.gungle@sdcounty.ca.gov](mailto:ashley.gungle@sdcounty.ca.gov). If you have any other questions or need additional information on the matters included in this letter, please contact me at (858) 694-3722 or e-mail at [sami.real@sdcounty.ca.gov](mailto:sami.real@sdcounty.ca.gov).

Sincerely,



SAMI REAL, Project Planning Division Chief  
Planning & Development Services





**DIANNE JACOB**  
 SUPERVISOR, SECOND DISTRICT  
 SAN DIEGO COUNTY BOARD OF SUPERVISORS

Serving the  
 cities of:  
 El Cajon  
 La Mesa  
 Lemon Grove  
 Poway  
 Santee

March 25, 2013

Serving the  
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 Cuyamaca  
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 Eucalyptus Hills  
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 Flinn Springs  
 Granite Hills  
 Grantville  
 Guatay  
 Harbison Canyon  
 Jacumba  
 Jamul  
 Julian  
 Lake Morena  
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 Mount Laguna  
 Pine Hills  
 Pine Valley  
 Potrero  
 Ramona  
 Rancho San Diego  
 Rolando  
 San Carlos  
 San Pasqual  
 Santa Ysabel  
 Shelter Valley  
 Spring Valley  
 Tecate  
 Tierra del Sol  
 Vallecitos

Mr. Bob Maupin  
 Rom904@hughes.net

Dear Mr. *Bob*:

Thank you for your e-mail requesting assistance with your questions regarding the proposed renewable energy projects in the Boulevard and Jacumba areas. I appreciate your contacting my office and voicing your concerns.

You have raised important questions that should be answered. In order to be as helpful as possible, I have taken the liberty of forwarding a copy of your e-mail to Ms. Helen Robbins-Meyer, Chief Administrative Officer for the County of San Diego. I have asked her to review your e-mail and respond back to you with any information the County may have in order to address your questions.

Again, thank you for writing. If I can be of further assistance, please feel free to contact me or Adam Wilson of my staff at (619) 531-5522, or via my web site at [www.diannejacob.com](http://www.diannejacob.com).

Sincerely,

DIANNE JACOB  
 Vice-Chairwoman

Serving the Indian  
 reservations of:

Barona  
 Campo  
 Cosmit  
 Ewiiapaayp  
 Inaja  
 Jamul  
 La Posta  
 Manzanita  
 Santa Ysabel  
 Sycuan  
 Viejas

DJ:aw/me

cc: Ms. Helen Robbins-Meyer, Chief Administrative Officer, w/ attachment

Re, Alice

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**From:** bob [rom904@hughes.net]  
**Sent:** Wednesday, February 20, 2013 4:17 PM  
**To:** Jacob, Dianne; Ron-Roberts; Cox, Greg; Roberts, Dave; Horn, Bill  
**Subject:** Boulevard - Jacumba scrapping of the plan 2020  
**Attachments:** This is an open letter to all the Supervisors on the board.wpd

Attached are questions that myself, and others in the Boulevard - Jacumba area are trying to get answers to. So far we have had no response from the staff at planning. The developers don't have any answers except to tell us to go along with their projects and every thing will be wonderful.

be impossible to live in if you already have a breathing problem. If they are going to mitigate the problem with soil binders, refer back to water quality.

On the issue of runoff: My property is on the east end of the Tierra del Sol Solar project. The property that it is proposed to be built on is sloped down, for over a mile, to my property. The runoff from over 3,000,000 square feet of mirrors, 32 miles of dirt roads and 13 miles of load bearing roads will inundate my property with the runoff and mud from this site. There will be no vegetation left to stop the runoff and absorb excess water. I can find nowhere in their project description a plan to trap and contain runoff. Who do I hold financially responsible for any destruction to my property? The County, because you approve it, or the LLC that proposes to build it?

The issue of glare: Every morning and evening, these three million square feet of mirrors rise to catch the first and last rays of the sun. Will the resulting glare damage the eye sight of those living in the area? Will this massive glare effect the drivers on the surrounding roads? Every solar project in the Boulevard - Jacumba area has this problem. Who will be accountable for the resulting increase in accidents and long term health problems?

Has anyone researched the effects of the heat generated by solar farms? Each mirror operates at about 178 degrees. What effect does acres of mirrors at this temperature have on the local vegetation? How far does the heat radiate? What amount of updraft does it cause? Will the up-draft and glare be an obstruction to aircraft and other operations of the Border Patrol? Will the concentration of these projects in this area cause climate change, resulting in an area of ecological disaster in the name of green energy? What effect will the added heat have on the long term health of the people and both wild and domestic animals? How will the massive influx of heat effect the fire danger? No fire department in the area is equipped the fight electrical fires. Since they cannot be put out by squirting water on them, the fire departments will have to hold back until the fire spreads. In a Santa Anna condition, this can spell disaster for the entire county. For those of us that live out here it will be an ongoing disaster all the time.

The issue of wind turbines: Whenever a propeller turns, it causes turbulence behind it. Will this resulting turbulence hamper fire fighting from the air? Will it hamper the Border Patrols ability to use helicopters for homeland security? What is the prolonged effect of the propeller flicker and turbine noise be on the local residents and animals? All of the proposed projects will have stray electricity caused by the fact that they do not generate at the required sixty cycles to get on the grid. What will the long term effect of the large amounts of electricity shunted into the ground be on local residents and animals?

After the South West Power Link was erected, passing within 150 yards of our house, my wife came down with polycythemia rubra vera which is related to leukemia. She has been on oral chemo for over twenty years. It has now turned into myelofibrosis which means that she must take even more medication to stay alive. We have lost two dogs to canine leukemia since the line went in. All of this is because some people and some animals are adversely effected by the E. M. F. and stray electricity produced by the line. Will all of these projects around us be what pushes her, and others, into an early grave in the name of "Green Energy?" After the water

February 20, 2013

This is an open letter to all the Supervisors on the board. It is my hope that staff will let their boss actually read this.

We are on track for an ecological disaster in the Boulevard - Jacumba areas. It is apparent that the County general plan of rural and agriculture is being thrown out in favor of commercial - industrial use to promote a lot of "green energy." There are many questions that need to be answered to avoid a complete ecological mess that will take decades to fix, if it ever can be done, after it is allowed to happen. I have posed most of the questions to staff in the planning department as far back as last July. So far no response.

On the issue of roads: None of the roads in the area are built to withstand constant travel by large trucks and heavy equipment. Who is going to be responsible for the maintenance and repair during and after construction of all the projects in the area? The roads out here are the old dirt roads that have been covered with a thin layer of asphalt. Some are already in disrepair in the areas where construction has been or is ongoing. Who is going to fix them, and when?

On the issue of water: All of the projects will consume large amounts of water for construction and cleaning. Citing just the Soitec Tierra del Sol project. They say that they need between 19,606,400 and 23,783,900 gallons just for construction. That is, using the lower number, the amount that would be used by 87 two-bedroom two-bath homes in one year. The density allowed in the general plan is one house per eighty acres, not one on every five acres. The reason for that is the scarcity of water in the area. Where are they going to get the water? If they pump it out of the ground the resulting decrease in the water table will cause most of the wells on the neighboring properties to go dry. Who is going to be held responsible for re-drilling all of the wells? The County, because you approved the project, or the developer? If the water is imported, what chemicals will be in it, and what long term effect will it have on the water quality? They also say that they will apply soil binding agents to cut down on dust. What are the long term effects of this going to be on the water quality? If the water becomes unuseable, who do we hold responsible? The County, because you approved these projects, or the LLCs that developed them? The LLCs will declare bankruptcy and leave us with water that cannot be used and property and homes that must be abandoned because of this.

On the issue of dust and runoff: All of these projects require new roads to be put in for construction and maintenance. Again, citing the Soitec Tierra del Sol solar project, they say that they are going to put in over thirty miles of dirt roads on four hundred forty plus acres. The roads on the east side of the project are all dirt, so are the roads on the south both in the U. S. and Mexico. Part of Tierra del Sol Road on the north is also dirt. Within two to three day after a rain, driving on a dirt road raises a cloud of dust. With trucks and equipment going constantly, how is this going to effect the air quality in the area? With all of the projects mapped out for Boulevard and Jacumba it would appear that we are going to be turned into a dust bowl that will

table is diminished and what is left is poisoned by the application of chemicals to the land, the native vegetation, including the old growth oaks, will cease to exist. It will leave the Boulevard - Jacumba area a barren dust bowl. However, as the County seal states, "The Nobelist Motive is the Public Good." So, the people out here and our land can be sacrificed in the name of the public good ?

If it would not be too much trouble, I would like answers to the questions posed before any projects are approved.



Thank you

R. O. Maupin  
904 Tierra del Sol Road  
Boulevard, California 91905  
619-766-4463  
rom904@hughes.net