

# Soitec Solar: 4 projects / 168 MW planned for 1,500 acres of absentee owned land in Boulevard

East County Economic Development Council

Board meeting

November 19, 2014

**Donna Tisdale, Chair, Boulevard Planning Group  
& President of Backcountry Against Dumps (non-profit)**

*Any errors or omissions are unintentional*

# **Boulevard Planning Group opposes Soitec Solar projects**

- The community has repeatedly elected planners who support on-site renewables over industrial scale wind, solar, and bloated infrastructure projects.
- Our Planning Group has voted repeatedly to oppose Soitec's projects and community plan amendments based on lack of need, adverse impacts, and better alternatives.

**Our goal**...includes point-of-use renewables preferred over incompatible industrial scale projects that suck up million of gallons drought-stressed well water, disrupt and degrade our rural neighborhoods, our quality of life, and gut life-time investments /property values in our homes and ranches.

***Boulevard is not a renewable energy sacrifice zone!***



**No Soitec Solar in Boulevard, CA**

**As an ECEDC member, Soitec has clear advantage over impacted rural neighbors and resources -- located outside EDEDC's subregion**

- As a dues paying ECEDC member, Soitec, has a clear advantage over common sense, cheaper PV projects, and real world adverse impacts to low-income rural Boulevard community
- ***However, Soitec's Boulevard projects are “out of the money” and have lost their Power Purchase Agreements***

# **SDG&E's Power Purchase Agreement (PPA) with Soitec has been amended --moving their Boulevard projects to already permitted sites in Imperial Valley**

<http://regarchive.sdge.com/tm2/pdf/2552-E.pdf>

- The CPUC approved SDG&E's AL 2552-E for the third amendment to Soitec's PPA's.
- *Tierra Del Sol; LanWest , LanEast , and Rugged Solar projects will be move to Imperial Valley with a modified Commercial Operation Date—leaving the Boulevard sites with no PPAs!*
- ***Soitec also lost SDG&E's Power Purchase Agreement for the 150MW Imperial Valley Solar Energy Center West project*** that is now under construction at I-8 and Dunaway Road, near Seeley, *using regular PV instead of Soitec's dual tracking CPV that is much more expensive to build and operate.*

# Soitec's gains—at tax-payer expense= over \$200 million

- 30% Investment Tax Credit on \$500 million or so for 2 of 4 Boulevard projects (approximately \$167 million)
- \$25M Dept of Energy grant for San Diego factory
- \$10 million Sales & Use Tax exemptions
- San Diego Enterprise Zone Tax Credits
  - *Hiring Tax Credit*
  - *Sales and Use Tax Credit*
  - *Business Expense Deduction*
  - *Net Interest Deduction for Lenders*
  - *Net Operating Loss Carryover*

# Soitec's CPV projects are “out of the money” and “out of the market”

SDG&E's amended Power Purchase Agreement @ page 7-2, 7-6, 7-10:

<http://regarchive.sdge.com/tm2/pdf/2552-E.pdf>

- Soitec's CPV projects are “out of the money” and “out of the market” *according to the Independent Evaluator for SDG&E's third amendment to their Power Purchase Agreement with Soitec.*

# Peer review of \$25 million DOE grant for CPV plant raised concerns with Soitec's ability to compete with cheaper PV

<http://www.utsandiego.com/news/2014/oct/31/san-diego-solar-moves-east/>

- Quote from UT article 10-31-14:
  - *“In August, a peer review of the Energy Department grant to Soitec raised concerns about the company’s ability to compete with less-expensive conventional solar panels. The cheapest technology—not necessarily the most energy efficient—is likely to prevail the experts said”* (emphasis added)
  - Comment: current 250 jobs cost tax payers \$100,000 each

# **Only 52 jobs estimated for almost \$10 million Sales and Use Tax Exclusion = \$192,308 per job**

<http://www.treasurer.ca.gov/caeatfa/ste/applicants/considered.pdf>

- May 2012: California Sales and Use Tax Exclusion (STE) was approved for Soitec's CPV manufacturing plant in Rancho Bernardo
  - October 1, 2014 STE report to state:
    - \$7.35 M (86.27%) of STE used by Soitec Solar:
    - \$2M (98%) of STE used by Reflexite Soitec Optical:
- \* As of 10-31-14, Soitec reported 250 employees @CPV plant
- \* Soitec estimated 513 employees in 2012 STE application

# Soitec To Shutter German CPV Manufacturing, “Regroup” at Its San Diego Facility

<http://www.renewableenergyworld.com/rea/news/article/2013/08/soitec-to-shutter-germany-cpv-manufacturing-regroup-its-san-diego-facility>

- Aug 2013: Soitec “assessing the option to regroup its solar manufacturing operations at its San Diego, California facility in order to improve the cost-base structure of the Solar Energy Division.”

*Comment: Why not--when US and California tax payers help foot the bill?*

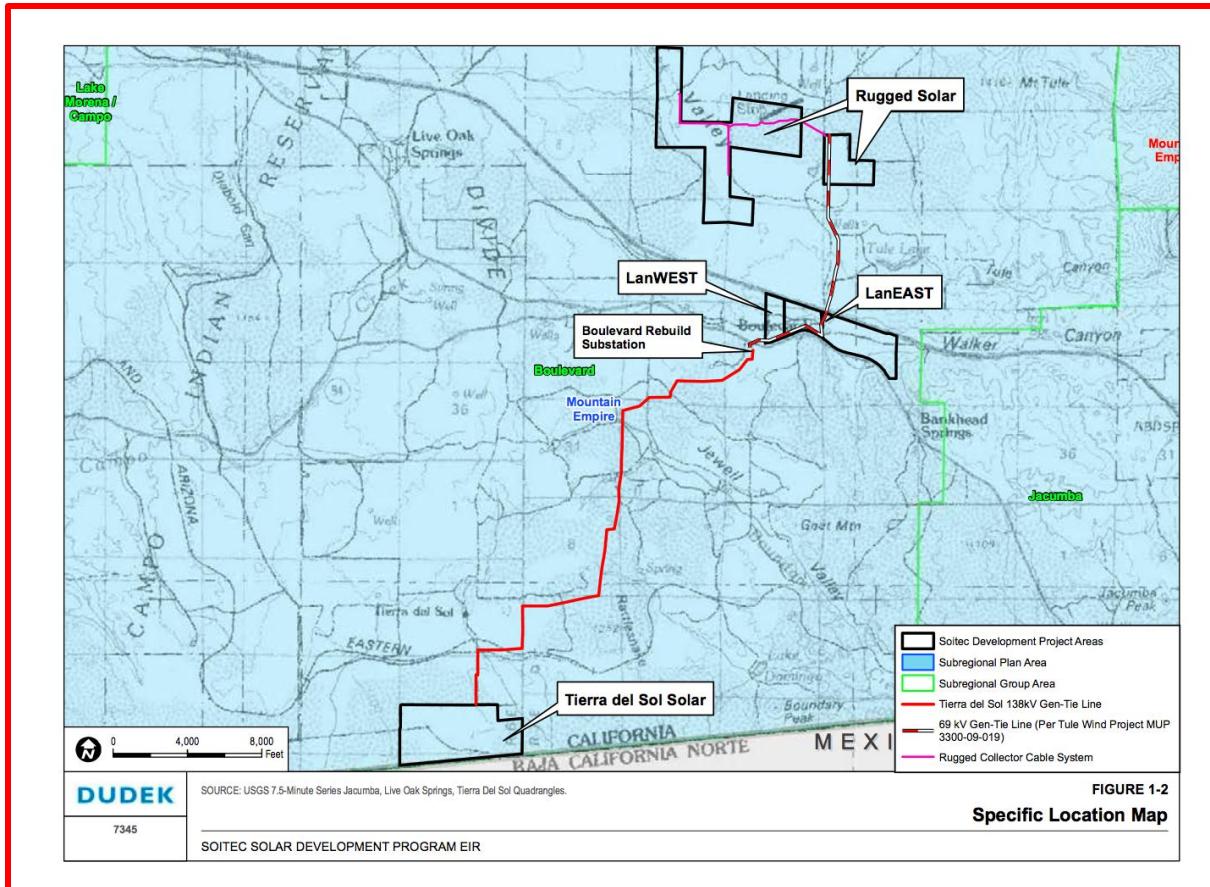
# **Soitec secured EUR 21.3 million for funding CPV research *due to market failure***

[http://www.compoundsemiconductor.net/csc/detail-news/id/19737131/name/-Soitec-secures-EUR-21.3-  
million-funding-for-Guepard-R&D-projec.html](http://www.compoundsemiconductor.net/csc/detail-news/id/19737131/name/-Soitec-secures-EUR-21.3-million-funding-for-Guepard-R&D-projec.html)

- **12-29-13 article (emphasis added)**
  - “In the absence of state aid, the company’s R&D efforts would have been considerably reduced: *it would for example have abandoned development of high-efficiency cells, considered to be an excessive risk.* This would undoubtedly have affected the development of the CPV sector.”

**Soitec's "Proposed Project" includes: 80 MW Rugged Solar; 60 MW Tierra Del Sol Solar; 22MW LanEast Solar; 6.5MW LanWest Solar & 10 miles of new high voltage lines**

***~Homes as close as 100 feet to 30' tall CPV units~***



# **Glare @ Soitec's controversial Newberry Solar—next to homes just like Boulevard**

**@ sunset (left) (8-20-13) @ mid-day (right) (12-8-13)**

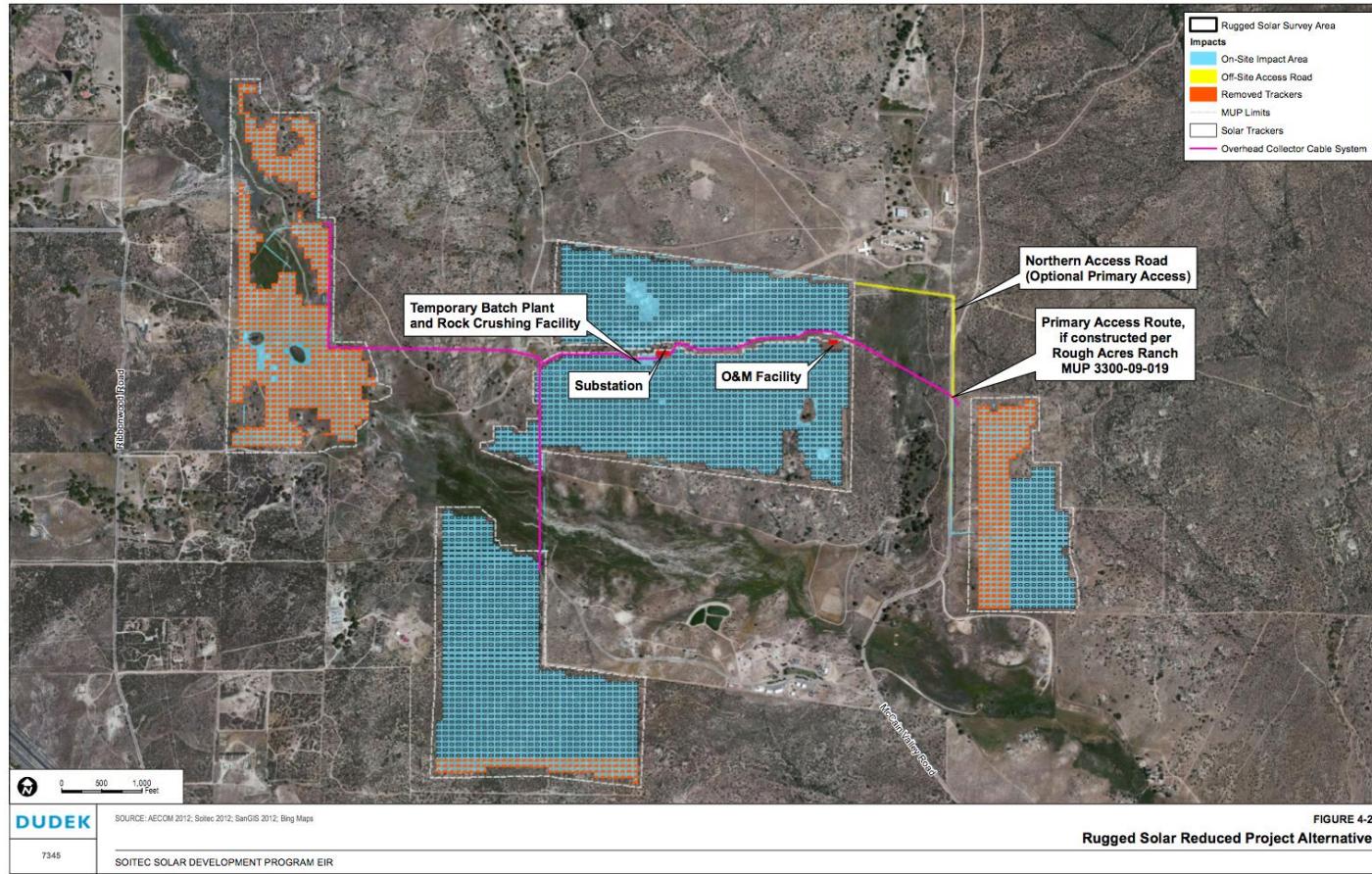


**80 MW Rugged Solar site**, on almost 800 acres of Hamann Companies Rough Acres Ranch, will impact adjacent homes and wells; Tule Creek floodplain/wildlife corridor; Tule Lake, McCain Valley Recreation & Wildlife Management Area and substandard sole access neighborhood roads: Ribbonwood Road and McCain Valley Road.

***Local wells are already stressed***



# Reduced Rugged Solar alternative still represents significant adverse impacts for adjacent home owners, groundwater and other natural resources



Already stressed giant oaks and spring-fed oasis next to Soitec's Rugged Solar are at risk from reduced groundwater resources-- but were not included in Draft PEIR



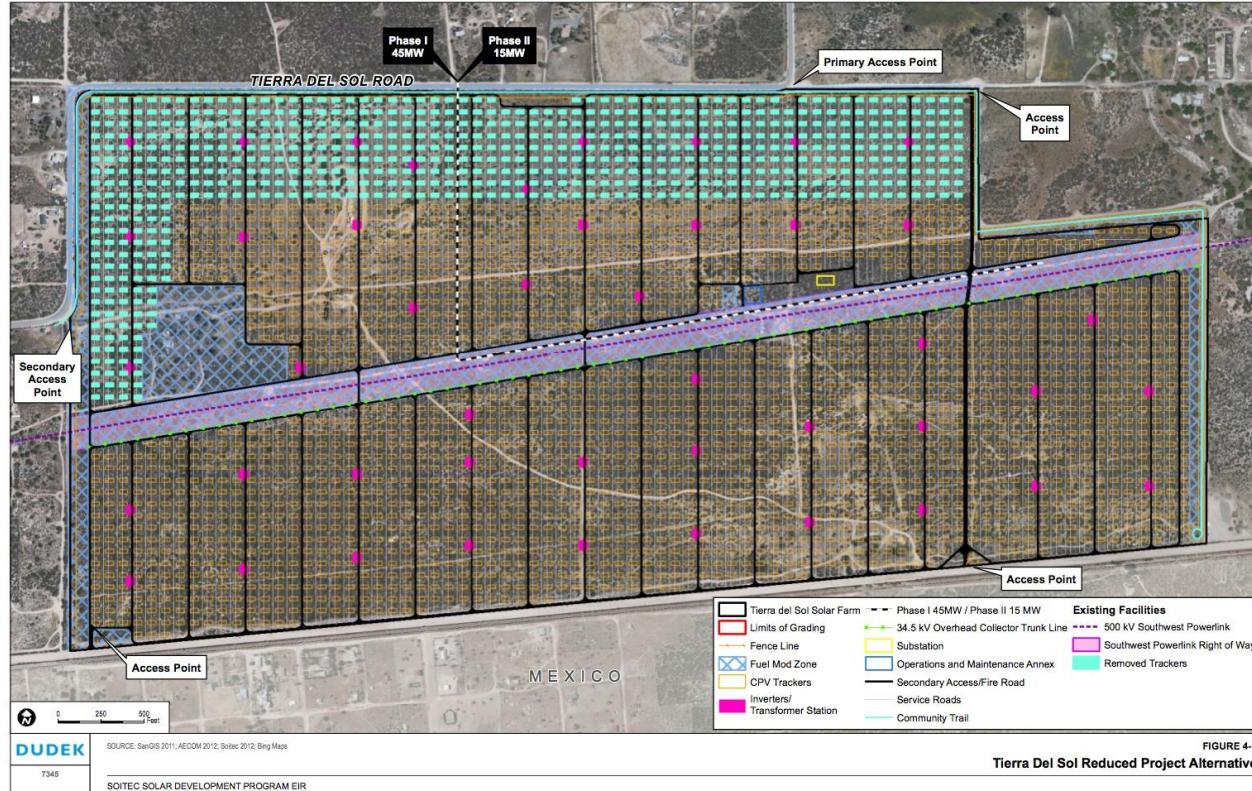
**Five cumulative impact projects propose using the same wells located on Hamann Companies**

**Rough Acres Ranch – *Existing domestic water users and springs that wildlife relies on were not addressed***

1. Tule Wind: **19 million gallons of water *estimated***
2. Soitec's Rugged Solar: **15 million gallons for construction & 140 million gallons for O&M; revised report is pending**
3. Rough Acres Ranch Conference Center & Campground: **8.8 million gallons per year estimated**
4. New- Rough Acres Ranch Road: 6300 cubic yards cut and fill
5. New-Rough Acres Water Company has controversial plans to sell water

**60MW-420 acre Tierra Del Sol Solar and new high voltage lines represent major problems for neighbors on both sides of the border.**

***Homes, livestock, and wells are as close as 100'***  
***Soitec is requesting waiver to 150' border setback***



**Soitec's 6.5 MW LanWest and 22MW LanEast sites  
impact homes (within 200'), Walker Creek floodplain,  
wetlands, cultural, biological resources  
and scenic Historic Rt 80**



# Only two Major Use Permits for four Boulevard projects in Programmatic EIR

- Soitec *has withdrawn* their MUP application for their LanWest project in Boulevard.
- Soitec *never applied* for a MUP for their LanEast project in Boulevard.
- Soitec has misrepresented that Planning Commission hearing will on Programmatic EIR for all four projects be held in December.

# Absentee owner of Soitec's LanWest, LanEast & Los alternative Robles sites filed \$100 million suit

- August 1<sup>st</sup>: Greg Lansing filed a \$100 million lawsuit against the County, Supervisor Dianne Jacob, Donna Tisdale, the Boulevard Planning Group and others...claiming in part that his deals with Soitec and Enel Green Power fell through...
- Motions to strike have been filed in response...
- *If Lansing's Soitec deals fell through, why is the County still reviewing them?*

**The Draft Programmatic EIR lists significant impacts**

**--THEY LEFT OUT WATER & FIRE!!**

- Boulevard is 100 % groundwater dependent, with no access to imported water to replace well water.
- Groundwater resources are highly stressed and failing with little to no recharge during extended drought and predicted climate change
- Some wells are already failing – it costs tens of thousands to drill deeper with no guarantee of finding more water.
- *Large-scale projects use millions of gallons of our precious water to clear grade carbon sequestering chaparral and soil—which increases dust and degrades air quality.*

# **Soitec had to revise their inadequate groundwater report for Boulevard projects to include the following uses:**

- Roads & trenching for underground electric
- Substation construction
- O&M buildings
- Fencing, drainage, and culvert construction
- Electrical equipment foundation (other than trackers and substation)
- 10 acre cement and rock crushing plant (Rugged Solar)
- 7-miles of new 138 kV line for Soitec's Tierra Del Sol Solar project
- 3-4 miles of new Rugged Solar high voltage line to Boulevard Substation

**SDSU's Dr. V.M. Ponce, his grad student,  
and Soitec neighbor Bob Maupin, study project  
impacts to water and oaks in Tierra Del Sol.**

***Ponce has taught hydrology @ SDSU for 40 years***



# Dr. Ponce's Soitec report conclusion

(excerpt) Full report available at: <http://ponce.sdsu.edu/boulevardsoitec.html>

- “To remain comprehensive, sustainable (water) yield must include hydrological, ecohydrological, and socioeconomic considerations...”
- *“Other considerations notwithstanding, the Boulevard Soitec projects must resort to imported water to satisfy their needs”*

**New projects require new infrastructure and high-voltage lines:**

*SDG&E's 85-acre \$435 million ECO Substation project has used over 83 million gallons of water so far...when they estimated it would only use 30 million gallons...*

Soitec estimates use of 50 million gallons or so, but the County has required them to revise their vastly inadequate groundwater report



**For SDG&E's ECO Substation, over 12 million gallons of groundwater was exported from controversial wells on the Campo Reservation next to the Tisdale's Morning Star Ranch July-November 2013...soon after, a centuries old oak died.** The majestic old oak had accessed water from the same fracture zone as Campo wells, where groundwater resources were already stressed by the drought. Private wells were also impacted.



# Increased electrical projects increase electrical hazards & fire risk in designated Wildfire Corridor

Hazardous voltage sign @ solar project—  
solar cannot be turned off during daylight  
for firefighters



Kumeyaay Wind turbine/brush  
fire in Boulevard (12-16-13)



# CPV trackers = high maintenance & cost

PV Insider Magazine article Oct 28, 2014

[http://news.pv-insider.com/print/27223?utm\\_source=http%3A%2F%2Fuk.csptoday.com%2Fc\\_csp\\_pvlz%2F&utm\\_medium=email&utm\\_campaign=PV%20eBrief%2028%20October&utm\\_term=Kuwaiti%20firms%20roll%20up%20their%20sleeves%20for%20PV%20installations&utm\\_content=272299&gator\\_td=dCEHcBz9w7aYz6Q9MD0OtUHWIlgQ%2FGQE%2FwFbtIU8%2Fd%2BkSX%2BeV6YAiEh74XqOXSiLhc87RwDT9AfI6cVzrkhvFBk7%2Fu%2Bs%2BDfgYalxg%2Bf0hs7wNSYxL20Gne%2BDpBjimPw%2Fea6lsvfPVCeKVsEPs7tcBVPHSSoedltOGwp%2F0lZ%2FWI9DNYl6ctcZ04TTO7WiY15yJ7E9YSJ0tfHHTggwB6uWzcswsTQWb4XnzVP8UxNC7GbaL2j04%2FxAZBQ2dQXKK](http://news.pv-insider.com/print/27223?utm_source=http%3A%2F%2Fuk.csptoday.com%2Fc_csp_pvlz%2F&utm_medium=email&utm_campaign=PV%20eBrief%2028%20October&utm_term=Kuwaiti%20firms%20roll%20up%20their%20sleeves%20for%20PV%20installations&utm_content=272299&gator_td=dCEHcBz9w7aYz6Q9MD0OtUHWIlgQ%2FGQE%2FwFbtIU8%2Fd%2BkSX%2BeV6YAiEh74XqOXSiLhc87RwDT9AfI6cVzrkhvFBk7%2Fu%2Bs%2BDfgYalxg%2Bf0hs7wNSYxL20Gne%2BDpBjimPw%2Fea6lsvfPVCeKVsEPs7tcBVPHSSoedltOGwp%2F0lZ%2FWI9DNYl6ctcZ04TTO7WiY15yJ7E9YSJ0tfHHTggwB6uWzcswsTQWb4XnzVP8UxNC7GbaL2j04%2FxAZBQ2dQXKK)

- “...maintenance costs for CPV trackers could be roughly double those for single-axis PV arrays...If they fail production stops”
- “Unlike standard PV...with CPV a deviation beyond 0.1° off the angle of the sun can start to have a significant impact on CPV performance.”
- “another challenge for CPV O&M is keeping systems clean...where there is plenty of dust and sand in the air”

Comment:

*There is plenty of dust and sand in Boulevard and there will be more when Soitec clears the native chaparral and soils that currently sequester carbon above and below ground*

# Soitec reported total consolidated sales...

## October 20, 2014

<http://www.soitec.com/en/news/press-releases/soitec-reports-total-consolidated-sales-of-106-0-million-euros-for-h1-2014-2015-1549/>

- “...Solar and Lighting revenues totalled 36.5 million Euros and represented 34% of consolidated sales”
- ***The first half current operating loss is expected to be around (75.0) million*** ***(emphasis added)***
- H1 results for the financial year 2014-2015 will be published on 19 November 2014 before the opening of the Paris Stock Exchange.

## **Better Alternatives:**

### **NAVY SIGNS 20 MW DEAL FOR SOLAR ON 6,000 HOMES**

**27 neighborhoods around county will get rooftop systems**

<http://www.utsandiego.com/news/2014/nov/13/tp-navy-signs-deal-for-solar-on-6000-homes/all/?print>

#### **Nov 14, 2014:**

- SolarCity and Navy announced a deal for roof top solar on 6,000 homes San Diego area homes.
- \$60 million in savings over the 20-year term of the power-purchase agreement.
- Across the country, the U.S. military is seeking to reduce its dependence on the local electrical grid through the installation of renewable sources, energy storage and autonomous micro-grids.

# **Point-of-use—rooftop solar is the future with battery storage and clean inverters**

November 17, 2014: UT article:

<http://www.utsadiego.com/news/2014/nov/17/bright-future-solar-energy/3/?#article-copy>

- In October, a record-breaking 1,616 households went solar in SDG&E territory
- Total of grid-connected solar homes now roughly 44,000.
- SDG&E and other utilities are trying to block solar competitors who grow their base by undercutting utility rates.

# SDG&E seeks 7.5% rate increase for 2016

<http://www.utsandiego.com/news/2014/nov/17/utility-seeks-rate-increase/>

## Nov 17 UT article:

- Costs under consideration include payments and upkeep on infrastructure investments, safety compliance programs, employee benefits, wildfire insurance premiums, legal items and government fees.

## comment:

- *SDG&E prefers utility scale rural projects over roof-top solar so they can get a guaranteed rate of return on billions in new and upgraded infrastructure costs -- instead of losing customers who are going solar...*

Thank you for listening....

*Please reject /defer Soitec's current request for support until the Final EIR is released next year & contact me if you have any questions*

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