

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

333



**FROM:** Economic Development Agency

**SUBMITTAL DATE:**  
September 24, 2015

**SUBJECT:** Progress Report Regarding the OpTerra Solar Project—October 2015, All Districts, [0\$]

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Receive and file this Progress Report regarding the OpTerra Solar Project

**BACKGROUND:**

**Summary**

On October 28, 2014, the Board of Supervisors approved an Energy Services Agreement with OpTerra Energy Services and a tax-exempt lease-purchase Agreement with Bank of America Public Capital Corporation for the purpose of installing 12.25 MW of solar photovoltaic systems at county-owned sites. Construction is well underway, with completion of the Net Energy Metering (NEM) solar systems rapidly approaching.

NEM/Departmental Concurrence

(Continued)

Robert Field  
Assistant County Executive Officer/EDA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 0	\$ 0	\$ 0	\$ 0	Consent <input checked="" type="checkbox"/> Policy <input type="checkbox"/>
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0	

**SOURCE OF FUNDS:** N/A

**Budget Adjustment:** No

**For Fiscal Year:** 2015/16

**C.E.O. RECOMMENDATION:**

APPROVE

BY:   
Rohini Dasika

**County Executive Office Signature**

**MINUTES OF THE BOARD OF SUPERVISORS**

- A-30
- 4/5 Vote
- Positions Added
- Change Order

**Prev. Agn. Ref.:** 9.1 of 10/28/14, 3.22 of 5/20/14

**District:** All

**Agenda Number:**

**2-10**

**SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

Economic Development Agency

**FORM 11:** Progress Report Regarding the OpTerra Solar Project—October 2015, All Districts, [0\$]

**DATE:** September 24, 2015

**PAGE:** 2 of 3

**BACKGROUND:**

**Summary** (Continued)

Shown below is a list of the NEM sites and updated construction information.

- 1) Temecula CAC (198 KW—solar shade structures):
  - a) Construction completed
  - b) Power shutdown for tie-in to Edison grid scheduled for 9/5/2015
- 2) Perris Coroner (272 KW—solar shade structures):
  - a) Construction completed
  - b) Tie-in to Edison grid completed on 8/8/15
  - c) Waiting for final Edison inspection and permit to operate
- 3) Palm Desert Sheriff Station (688 KW—solar shade structures):
  - a) Construction completed
  - b) Tie-in to Edison grid completed on 8/22/15
  - c) Waiting for final Edison inspection and permit to operate
- 4) Perris Sheriff Station & Health Clinic (718 kW—solar shade structures):
  - a) Construction completed
  - b) Power shutdown for tie-in to Edison grid scheduled for 9/20/2015
- 5) Western Riverside Animal Shelter (505 KW—solar shade structures):
  - a) Construction 75% completed.
  - b) Power shutdown date for tie-in pending response from Edison
- 6) Ben Clark Fire/Sheriff (1.1 MW—solar shade structures):
  - a) In design phase

The next and largest phase of work will involve construction of the solar generating sites allowed under Edison's Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) program and tariff. Listed below are the RES-BCT sites and status updates.

- 1) San Jacinto Animal Shelter (1.2 MW—ground mount solar and solar shade structures):
  - a) Construction began 7/13/15
  - b) Shade structure systems have been completed
  - c) Electrical work on the panels is underway
  - d) Ground mount solar field has been fenced and prepared
  - e) Underground electric work for the ground mount field is underway
- 2) Ben Clark Training Center (1.2 MW—solar shade structures):
  - a) Construction begins 8/31/15 at parking lot south of Sheriff Administration Building
- 3) Riverside County Regional Medical Center (1.1 MW—solar shade structures):
  - a) Due to development of new hospital master plan, the solar planned for the hospital will be relocated next to the Ben Clark Training Center system
  - b) Redesign of this system has begun.
- 4) Brookside Materials Yard (4.4 MW—ground mount solar):
  - a) Civil engineering underway to confirm boundaries of the solar field

(Continued)

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**BACKGROUND:**

**Summary** (Continued)

Schedules are being developed with the goal of having construction completed on the remaining systems (except Brookside Materials Yard) by the end of December 2015. Construction on the Brookside Yard will continue through the first quarter of 2016.

**Impact on Citizens and Businesses**

The impact of this project will result in greater availability of shaded parking at county facilities. Also, this project is expected to generate 19,034,548 kWh per year which will remove 13,125 metric tons of Carbon Dioxide (GHG equivalent) annually from Riverside County air. This will help improve the air quality of the county.



OPTERRA  
ENERGY SERVICES



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## Status of Solar PV Project on County Properties

October 1, 2015



OPTERRA  
ENERGY SERVICES

# Construction Schedule

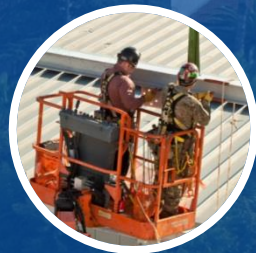


Location	kW	Mobilize Site	Project Duration	SCE Energize	Percentage Completed
Temecula CAC	187	4/20/2015	7 wks	9/5/2015	99%
Palm Desert Sheriff Campus	655	4/20/2015	14 wks	8/22/2015	99%
County Coroner	252	5/4/2015	9 wks	8/8/2015	99%
Perris Sheriff & Health Clinic	738	6/1/2015	11 wks	9/20/2015	80%
Western Riverside Animal Shelter	547	6/8/2015	11 wks	Q4	50%
San Jacinto Animal Shelter	1,184	7/13/2015	17 wks	Q4	1%
Ben Clark--BCT site	1,145	8/31/2015	10 wks	Q4	0%
Brookside Materials Yard	4,543	11/1/2015	20 wks	Q1-2016	0%
Ben Clark - NEM Site	1,145	TBD	10 wks	-	0%
Riverside County Regional Medical Ctr	1,195	TBD	10 wks	-	0%
Riverside County TLMA Bldg.	536	TBD	6 wks	-	0%
<b>Total:</b>	<b>12,127</b>				

**Building a Sustainable Future for Riverside County**



# Economic Development Overview for Riverside County



**\$54.4mm**  
Comprehensive  
Program

Impact on  
Workforce

**17**

# of Companies

**60**

Max Daily Workforce

**80%**

Workers from  
Riverside County

Economic Impact  
from Construction

**287**

Direct Jobs

**\$41.2mm**

Household Income From  
Direct & Indirect Jobs

**\$33.4mm**

Local Spending

Notes:

- Jobs refer to average annual Full Time Equivalents (FTEs)
- Calculations based on Regional Input-Output Multipliers from the Bureau of Economic Analysis (RIMS II)



# OpTerra Energy Projects In Riverside County



Under Construction	Energy Efficiency kWh	Renewable kW	Expected Completion
Jurupa Unified School District, Phase 3	1,110,000	-	Sep-15
Lake Elsinore Unified School District	-	1,100	Oct-15
City of Palm Springs	1,914,799		Dec-15
County of Riverside	-	12,128	Mar-16
Breaking Ground 2015	Energy Efficiency kWh	Renewable kW	Expected Completion
City of San Jacinto	420,590	770	Feb-16
Perris Union High School District	2,567,728	-	Aug-16
Completed Since 2012	Energy Efficiency kWh	Renewable kW	Completed
Jurupa Unified School District, Phase 1 & 2	3,420,707	4,339	Jul-14
Nuview Union School District	570,696	622	Dec-14
Desert Sands Unified School District	1,515,201	940	Jan-15

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# Continuous Solar Performance Monitoring



Enlighten Manager

SYSTEMS

ACCOUNT

SUPPORT

My Account Help

MyEnlighten View

Maintained by PCN3,INC.

Systems List

Jurupa Sheriff Station - Evidence Warehouse Full System

View

Graph

Reports

Devices

Events



Past 7 Days Energy

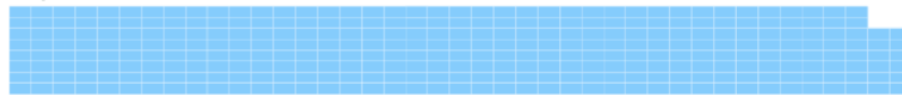
Energy Graph

Environmental Benefits

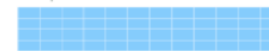


12.0 kWh  
0 kWh

Jurupa Evidence Warehouse



Jurupa Bike Rack Structure



372 Microinverters  
3 Envoy Ethernet  
Riverside, CA

93°F

System Normal

Full System

Energy

Status

Today

**337 kWh**

Peak Power: 68.3 kW at 12:25 PM  
Latest Power: 8.44 kW at 1:55 PM

Past 7 Days

**3.53 MWh**

Month To Date

**1.98 MWh**

Lifetime

**320 MWh**

System Energy  
**3.53 MWh**

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# Continuous Solar Performance Monitoring



[e] Enlighten Manager

SYSTEMS

ACCOUNT

SUPPORT

MyE

Systems List

Jurupa Sheriff Station - Evidence Warehouse

Full System

View

Graph

Repo

Past 7 Days Energy

Energy Graph

Environmental Benefits

Energy Produced

320 MWh

You could power the following for 1 day:



Carbon Offset

221 tons

You have offset the equivalent of:



Calculations based on the U.S. EPA Clean Energy Equivalencies Calculator

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# Temecula Administrative Center



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# Palm Desert Sheriff



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# Palm Desert Sheriff



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# Perris Coroner



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# Perris Coroner



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# Perris Sheriff



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# Perris Health Clinic



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# Western Riverside Animal Shelter



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# Western Riverside Animal Shelter



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# San Jacinto Animal Shelter



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# San Jacinto Animal Shelter Ground Mount Site



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# Brookside Materials Yard Ground Mount Site



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