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Assistant Superintendent of Business Services

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# MEMORANDUM

**DATE:** January 15, 2016

**TO:** Superintendent, Board of Trustees

**RE:** Friday Update Regarding Electrical Energy Summary

### Overview

This memorandum was developed to address questions regarding the manner in which the District secures electricity service. Below is a description and summary of the methods the district uses to secure electricity service.

The District purchases electrical energy in three methods:

1. From San Diego Gas and Electric Company (SDG&E) (the traditional utility method)
2. From Direct Energy (a commodity purchase)
3. Through Power Purchase Agreements (PPA)

The District has over 100 electrical meters on various rate schedules. Most of the SDG&E rate schedules are time-of-use metering where the cost of electricity varies by time of day. The rate schedules have both a cost for energy per kilowatt hour (kWh) and for peak demand (higher peak usage pays a higher rate). Some of our meters are on the Critical Peak Power program (CPP) where we receive a discounted rate throughout the year in return for a very high rate during CPP events and the District is notified the day before an event is called.

Some of our meters qualify for a commodity purchase and the current vendor is Direct Energy Business. We pay Direct Energy for the electricity purchased and we pay SDG&E the transmission fees to ship the power. The District has issued a Request for Proposals (RFP) for the acquisition of energy from direct commodity providers.

Our solar power is secured through the Power Purchase Agreements (PPAs) and affects both SDG&E meters and Direct Energy meters. Following the summary is a more detailed explanation of the PPAs. The lower end to the "Without Solar" rates are for the SDG&E "A" rate code which is for very small sites. The vast majority of our sites pay the upper end of the range.

**Table 1**

	<b>Rates Without Solar</b>	<b>Rates With Solar</b>
SDG&E meters	\$0.2516 – \$0.2779 per kWh	\$0.2438 per kWh
Direct Energy meters	\$0.2076 – \$0.2531 per kWh	\$0.2082 per kWh

*The Sweetwater Union High School District will fulfill the promise of 100% student success.*

Sweetwater Union High School District programs and activities shall be free from discrimination based on gender, sex, race, color, religion, ancestry, national origin, ethnic group identification, marital or parental status, physical or mental disability, sexual orientation or the perception of one or more of such characteristics.

SUHS Board Policy 0410.

**Attachment #2**

## Power Purchase Agreements

The first ten major projects constructed under the Proposition O Bond Program were designed to meet the United States Green Building Council's LEED Gold standard for energy efficiency and sustainability at a minimum (Board Resolution 3794 on March 10, 2008). Rather than purchasing the solar panels which would have diverted bond funds away from classroom projects, the Board of Trustees approved a power purchase agreement as part of the green building initiative. The cost for power shown below is for the commodity purchase only, and does not include other costs by SDG&E that are included in monthly utility bills. LEED credits generated by this renewable energy project were given to the first Prop O projects for solar installations throughout the district with the result that six of the projects were elevated to LEED Platinum. The Solar Projects webpage is:

<http://buildingpropo.sweetwaterschools.org/project-information/solar-project-ppa/>

The first PPA (Project 1) was originally planned to provide over 5 megawatts (mWp) of clean solar power on ten campuses. Unfortunately, the roof mounted installations could not be approved by the Division of State Architect and the project was reduced to six school sites (about 3.6 mw). Construction was completed in late 2013.

Rate:	\$0.15194/kWh
Term:	20 years
Escalator:	3.0% per year

Project 2 (this is described further below) was developed to complete Project 1 (phase 1B replaced the roof mounted units on Project 1 with carports) and expand solar to most of the remaining school campuses (phase 2). Construction was complete in 2014 and the total 9.3mWp of solar power from both PPAs produces about 16 kWh of power (about 50% of the electrical energy used in the district).

Rate:	\$0.1475/kWh
Term:	20 years
Escalator:	3.0% per year

Each PPA has a purchase option on the 9<sup>th</sup> anniversary of the start of operations for each system. If the option is not exercised the systems will revert to District ownership after the 20 year term. Each PPA was analyzed by a 3<sup>rd</sup> party for feasibility. The reports are on these webpages:

<http://buildingpropo.sweetwaterschools.org/files/2012/08/SUHSD-Solar-Final-Recommendations-3.10.11.pdf>

<http://buildingpropo.sweetwaterschools.org/files/2012/08/Solar-Project-Analysis-1B-and-2.pdf>

### Power Purchase Agreement (PPA1)

The agreement for PPA1 encompasses nine school sites. Three of the sites were cancelled because the intended roof installations were becoming problematic. The final sites included are:

- |                   |                 |
|-------------------|-----------------|
| • Bonita Vista HS | • Montgomery HS |
| • Castle Park HS  | • Otay Ranch HS |
| • Chula Vista HS  | • Southwest HS  |

### Power Purchase Agreement 2 (PPA2)

Originally 17 separate agreements were created for the second round of projects also known as Project 1B/2. Project 1B was completion of the 3 schools from project 1 and Project 2 was the additions of other school sites. Ultimately the PPA for Montgomery MS was cancelled because SunPower would not comply with the Division of State Architect testing requirements for a ballasted roof system. The final project

included 16 school sites.

- Bonita Vista MS
- Castle Park MS
- Chula Vista MS
- Eastlake MS
- Granger Jr Hi
- Hilltop MS
- Mar Vista Academy
- Rancho Del Rey MS
- Southwest MS
- Eastlake HS
- Hilltop HS
- Mar Vista HS
- Olympian HS
- Otay Ranch HS
- San Ysidro HS
- Sweetwater HS

All of the PPA documents are on this webpage:

<http://buildingpropo.sweetwaterschools.org/project-information/solar-project-ppa/ppa-agreement-documents/>

For further questions or comments, please contact the Office of the District Architect at (619) 585-4441 or at [Paul.Woods@sweetwaterschools.org](mailto:Paul.Woods@sweetwaterschools.org).