

STAFF REPORT

City of Lancaster

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MVB

Date: June 23, 2009

To: Mayor Parris and City Council Members

From: James R. Williams, Director of Public Works

Subject: **Agreement with eSolar, Inc. to Supply Recycled Water for Solar Electricity Generation and for Lancaster's Groundwater Recharge Project or other Direct Uses of Recycled Water for Regional Benefit**

Recommendation:

Approve an agreement with eSolar, Inc., 130 West Union Street, Pasadena, CA, to work cooperatively and in limited partnership with the City of Lancaster to construct solar-powered electricity generating facilities and to construct significant improvements to the City's recycled water supply system and future water supplies for the Antelope Valley.

Fiscal Impact:

The full fiscal impact is yet to be determined, but will, over the 50-year term of the proposed agreement, return tens of millions of dollars to Lancaster and the region in increased water supplies. Approximately \$35 million of recycled water distribution/transmission pipelines will be designed and constructed by eSolar to later be dedicated to the City of Lancaster. The agreement will also benefit Lancaster and other customers of Sanitation District No. 14, by reducing the operating expense of the wastewater treatment facilities, and thereby the rate for service that is levied upon each property connected to the sewage system for the District, for the 50-year duration of the agreement. At current recycled water prices and for the term of this agreement, District 14 customers will realize a reduction in their cumulative rates of approximately \$160 million. eSolar has also committed to contribute \$500,000.00, commencing with its first installment payment thirty (30) days following the signing of the agreement, toward preparing the environmental impact documents and the design for the Lancaster Recycled Water Recharge Pilot Project. eSolar will also pay up to an additional \$1.5 million to extend and retrofit an existing recycled water pipeline to service the Recharge Pilot Facility which is to be located at 60th Street West and Avenue F.

This agreement does not obligate Lancaster to any financial outlay beyond what has already been planned and approved for recycled water infrastructure separate from eSolar's program. The agreement will actually reduce Lancaster's planned obligation for the recycled water infrastructure by as much as \$10 million. In addition, up to 1,000 megawatts of electricity generating capacity is planned as part of this agreement together with an increase of up to 8,000 acre-feet (2.6 billion gallons) per year of water supply for Antelope Valley water users.

Background:

Several officers of eSolar, Inc. first met with Lancaster City staff on October 11, 2007, and again on October 24, 2007, to discuss their desire to site a thermal solar electricity generating plant in the Antelope Valley. Their first plant was proposed to be of demonstration project size and would include a visitors' center to showcase their "new technology" for this type of a solar-powered electricity generating facility, thereby making it possible to market their plant to others. Less than 14 months later, construction of the demonstration plant, located at Avenue G and Division Street in Lancaster, is nearly complete. eSolar has been so pleased with the progress of the plant and the results of the many tests that they have conducted that their current business plan calls for building 1,000 megawatts of generating plant in the Antelope Valley. Perhaps, more importantly, eSolar wants to be a premier member of the Antelope Valley community and asked to meet on October 14, 2008, to "brainstorm" with Lancaster City staff how eSolar could directly benefit the region and especially Lancaster.

eSolar was encouraged by the City at the outset of discussions to use recycled water for their operations. They were quick to agree as eSolar's business plan focuses on environmental stewardship through renewable energy.

The City Council has been emphatic in recent months that providing adequate and reliable long-term water supply for Lancaster citizens and doing so with regional interests in mind are a top priority. Directing City staff in December of 2004 to pursue a recycled water system to use what otherwise has been a wasted local supply of water was an important first step. It naturally followed that eSolar and City staff should jointly consider how eSolar could assist to improve the water supply future for Lancaster and our neighbors in the Antelope Valley.

In addition to designing and constructing what will likely become approximately 30 miles of recycled water transmission/distribution pipeline and appurtenance facilities which will be dedicated to the City for operations and maintenance, eSolar has agreed to purchase and turn over to the City of Lancaster for direct reuse – or preferably for groundwater recharge – a like amount of recycled water as they will use to generate electricity. The proposed agreement provides this assurance by eSolar and will improve the water supply picture in the Valley by approximately 8,000 acre-feet (2.6 billion gallons) each year of the agreement once the full complement of currently planned generating capacity has been placed into operation.

JRW:vp

Attachment:

Agreement to be distributed separately