

---

## CITY COUNCIL REPORT

---

### CONSENT AGENDA

---

TO: Rick Naimark  
Deputy City Manager

AGENDA DATE: April 21, 2009

FROM: Carolyn F. Bristo  
Acting Public Works Director

ITEM:2

SUBJECT: PROPOSED UTILITY-SCALE SOLAR PLANT AT SR-85 LANDFILL

---

---

Staff requests City Council approval to proceed with the issuance of a Request for Proposal (RFP) for a utility-scale solar plant development at the SR-85 Landfill.

#### THE ISSUE

The City of Phoenix has a long-standing commitment to energy efficiency, energy management and renewable energy resources. Over the past fifteen years the City has engaged a number of different financing and partnership mechanisms to install solar photovoltaic (PV) systems and landfill gas to energy systems on City facilities. They include park security lighting, canopy lighting, PV systems on facilities like a Transit Park & Ride, the Phoenix Convention Center and a community center, as well as a gas turbine project for the closed Skunk Creek Landfill.

The City wishes to lead by example in promoting clean energy generation, investment and local job creation in renewable energy by industries in this region through its Policy goals:

- Renewable energy target of 15% by 2025, through sponsorship, partnership or ownership of renewable generation through solar, landfill and/or digester gas resources available to the City.
- Climate Action Plan (GHG reduction goal) which calls for reduction of GHG emissions for City operations to 5% below the 2005 levels by 2015.

The City of Phoenix is now interested in developing a large-scale (utility-scale) solar plant and/or combined with a landfill gas to energy project on available land owned by the Public Works Department at the SR-85 Landfill. The SR-85 is the City's only active landfill and is located in Buckeye, Arizona. The successful developer must work closely with the Town of Buckeye on all local requirements and should also partner with local educational institutions to promote renewable energy education and research and development opportunities.

#### OTHER INFORMATION

The City of Phoenix Public Works Department is proposing to offer an area not to exceed 1,200 acres at the SR-85 Landfill site for a solar project and/or landfill gas project development for a period of 25-30 years. Depending on technology used for the generation of renewable energy, the City estimates a plant output of 150 to 200 megawatts (MW). The successful bidder will develop and own the solar/and or landfill gas to energy plant and its output, with the City receiving monetary benefit from this arrangement. The City seeks to maximize revenue over the life of the project and at its option may elect to participate in plant ownership and/or power output of the plant, including but not limited to renewable energy credits (RECs) and future carbon credits. The economic benefit to the City over the plant's lifetime will be analyzed using present worth analysis.

Some of the key points for the development of this plant include:

- Available land is in the utility corridor with electric transmission lines and gas pipeline in the vicinity.

retrofit benefits (kWh reduction) and incorporate customer education.

3. **Continue Funding LED Traffic Signal Conversions (\$2.5 million):** Conversion of traffic signals to LED technology. Leverage existing energy conservation CIP funds with Street Transportation funding and/or performance based contracting for LED conversions.
4. **Install Renewable Energy Capacity/ Solar PV (\$10 million):** Provide at various City facilities for renewable energy on-site. Current Citywide target is at 1.12 MW. Leverage other renewable energy capacity being installed on City facilities as a result of on-going utility company RFPs.

#### Discretionary/ Competitive Funding

In addition to formula funding, the City will be applying for competitive funding. DOE has allocated \$400 million of block grant funding for discretionary/competitive grants. The guidelines for use of these funds have yet to be released. In the meantime, staff is identifying potential projects that may be eligible for these funds. Upon issuance of the guidelines the projects will be identified, prioritized and recommendations forwarded.

Other non-formula competitive grants are available. Plans are underway to apply for the following grants: \$400 million Transportation Electrification for large-scale electrification projects (Aviation/\$28 million to support the Electric Sky Train and Public Works/plug-in hybrid vehicles); \$300 million EPA Clean Diesel Program (Public Works and Transit/emissions retrofits); and Alternative Fueled Vehicles Pilot Program (Public Works/Clean Cities/Alternative Fueled Vehicles).

Staff is also researching whether the City will be eligible to apply for the following funding: \$300 million in discretionary funding for Consumer Rebates, \$1 billion in competitive grants for Institutional Entities for Energy Sustainability and funds for Development of Clean American Energy.

#### ACTION REQUIRED

Staff requests City Council approval of the projects recommended for the City's \$15.2 million EECBG formula funding as outlined above. Additionally, request approval to apply for the following discretionary/ competitive grants is requested: 1) Transportation Electrification, 2) Clean Diesel Program, and 3) Alternative Fueled Vehicles Pilot Grant Program.

#### CONCURRENCE

This item was recommended for Council approval by the Economy, Commerce and Sustainability Subcommittee at its April 16, 2009 meeting.