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City of La Quinta

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DATE: January 6, 2015

SUBJECT: ALTERNATIVE ENERGY STRATEGY FOR CIVIC CENTER CAMPUS

Over the past few years, the City has evaluated and implemented a number of cost recovery initiatives to reduce overall expenses ensuring long term fiscal solvency. City Hall has undergone a number of energy efficiency projects recently including LED conversion of lighting and energy efficient air conditioning systems. To further expand upon these cost efficiency efforts, the City may contemplate a photovoltaic (PV) or solar power system. While these systems have a sizable upfront cost, government agencies have put a number of incentives in place to offset the high costs for both residential and commercial applications. It is recommended that the City pursue an in-kind grant through the California Energy Commission's Energy Partnership Program. The action item required to pursue this grant will be presented to City Council on January 20, 2015.

La Quinta's Civic Center Complex is geographically located within the Imperial Irrigation District (IID) service area. IID provides electrical service for the area including City Hall. Historically, and to date, IID operates with unadjusted utility service rates. These rates will eventually require increases in order to keep pace with inflation and other factors. Some estimates include at least an 8 percent initial increase with future increases added annually. To put this in perspective, La Quinta's electricity billings in the last 12 months equaled \$96,326.67. An 8 percent increase for electricity would result in an overall increase of \$7,706.13 per year. By considering a self-contained PV system, the benefit may be seen in two ways: first, as energy

rates continue to rise, solar energy rates are effectively frozen (insulating the City from rate increases); and second, upon retiring the debt for a PV system, energy costs that are eliminated become direct cost savings.

The California Energy Commission currently administers a program to assist local government agencies in reducing overall energy consumption. The Energy Partnership Program provides in-kind technical services up to \$20,000 to perform energy audits. In the audit, pre-selected consultants will evaluate existing facilities and make energy efficiency recommendations, including feasibility studies for alternative energy projects. In order for the Commission to consider a project under this program, the following are required:

- City Council approved non-binding resolution committing to following the outlined recommendations of the energy audit;
- Completed program application; and
- Twelve months of electricity billing statements that identify peak usage.

Once the application has been submitted and deemed complete, the Commission will dispatch a consultant from their pre-approved list to conduct the audit. The entire process from application submission to receipt of the energy audit is estimated at approximately three months. The final energy audit report may include, at the request of the local agency, sizing of a PV system based upon energy consumption and space availability at the site.

The California Energy Commission has set aside funds in the wake of disappearing solar power incentives for non-residential structures. In particular, local agencies (non-school district entities) may apply for one percent interest loans to construct PV systems up to 100 percent offset of its energy consumption. Loans made for projects in this program may include hard and soft costs and any part of the structure securing the PV system (i.e. carports). In terms of cost estimation, construction of a PV system cannot exceed electricity consumption costs over a 20-year period (year one frozen as the base year), with a simple payback period of 17 years. The primary limiting factor for project financing is the combined last 12 months of electric billing statements (utilized as an amount to act as annual debt service on the loan). Based upon the last 12 months of billing statements, La Quinta's City Hall could qualify for a project with a maximum cost of \$1.7 million.

Due to its popularity and the rapid reduction of PV incentives, the one percent loan program, while fully funded, is accepting projects on a 'wait

list' basis due to all currently allocated funding encumbered with previously submitted projects. The waiting period could be up to two years.

In order to seek funding for this program, a non-binding resolution is required by the governing board to demonstrate intent to pursue the loan program.

Recommendation

Apply to the California Energy Commission for the Energy Partnership Program. The audit provides the City with energy efficiency recommendations and the foundation for calculating the cost of a PV system for City Hall. Next, implement recommendations from the audit (as funding is available) and then submit an application for the PV one percent loan program.

Upon completion of the City Hall PV system, an additional audit and subsequent loan may be considered for the Library and/or Wellness Center. Overall, utilizing the Energy Partnership Program may provide recommendations for efficiencies to reduce energy consumption and curtail long term operational costs. The sizing component of a solar system from the energy audit would provide initial savings to the City by eliminating the need to perform a feasibility study.