## ESPC Sample Streetlight Project

### Sample of Savings Detail

This information is a *sample* of the kind of detail that might be presented by an ESCO for the customer to use in a cost/benefit analysis. Any values reported below could be expected to vary on a project-by-project basis.

### O&M Savings Estimates

The ESCO researched and documented the following information, which was confirmed by the city staff and consultants:

- 93 percent of the 6,500 street lighting fixtures owned and maintained by the city will be replaced with lighting technology that is significantly more efficient and has a 15-year manufacturer warranty.

- Due to the 15-year warranty on materials and the inherently longer life of this lighting technology, this lighting equipment will last in excess of 20 years, compared to the existing lamps, which have a one-year warranty and an average useful life of five years.

- The 15-year warranty will result in a 77 percent reduction in the city's existing average annual budgeted material costs for replacing street lighting equipment.

- Mileage for the two street lighting lift trucks will be reduced by slightly over 50 percent, which will reduce the annual vehicle replacement budget by 50 percent.

- The combined annual budgeted vehicle maintenance costs (which include fuel costs) for both vehicles will be reduced by approximately 80 percent, due to the significantly higher cost-per-mile to maintain the older truck, which has 97,000 miles on it and will be effectively eliminated for street lighting maintenance.

- There is an additional $3,420 in annual lighting material savings for exterior parks lighting, due to the replacement of fixtures with more-efficient technology that has a 15-year warranty and an expected useful life in excess of 20 years. The ESCO calculated the annualized lamp and ballast replacement factors and material costs of the old and new lighting systems.

- The four existing street lighting maintenance staff members should have a reduction in workload of more than 50 percent, due to the fact that 93 percent of street lighting fixtures maintained by the city will be replaced with equipment that has a 15-year equipment replacement warranty and a useful life in excess of 20 years.

### O&M Savings Estimates

City personnel and the ESCO agreed that, based upon the improvements to be installed by the ESCO, $15,000/year in repairs to the lighting power distribution system would be avoided. In addition, the ESCO calculated the annualized lamp and ballast replacement factors and material costs and documented $16,914 in annual lighting equipment material savings and $11,627 savings in annual contract labor to replace failed lighting equipment.