

Alternative Energy Use and Conservation at the Oso Conservation Interpretive Park

Project Description: Performing Party is undertaking the acquisition and development of a 162-acre nature park and the construction of a nature center on the shores of Oso Bay. The Oso Conservation Interpretive Park will include a 15,270 square-foot nature center building, interpretive trails, and significant habitat for wildlife. Wetland and habitat improvements are described in Exhibit 1 of this Agreement.

Performing Party shall develop the nature center to the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design (LEED) Green Building Rating SystemTM) standards. For example, the nature center will use photovoltaic panels to supply electricity, solar panels to heat water, and energy saving measures such as industrial light tubes to supply daytime lighting to classrooms and heat pumps to supply cooling and heating.

Exhibit 2 of this SEP supports the development of the "green" elements that are to be incorporated in the nature center. Performing Party shall use SEP Funds for engineering the energy-saving measures, particularly the use of the building's solar elements, and for the incremental cost of acquisition and installation of:

- Photovoltaic cells and batteries for storage of electricity versus regular electric-powered lighting for both the nature center's and the park's parking lot lighting;
- Solar panels versus regular electric water heating at the facility;
- Heat pumps using deep thermal wells versus regular electric heat pumps for heating and cooling;
- Industrial light tubes versus regular lighting for passive lighting during the day; and
- Green roofing (for insulation and to reduce the urban "heat island" effect) versus regular roofing materials.

Many building elements, such as the use of photovoltaic cells and green roofing, can be phased in or expanded over time, allowing for incremental additions as funding becomes available.

Performing Party shall use SEP Funds for the direct cost of implementing this project and no portion will be used for administrative costs. Performing Party certifies that it has no prior budgetary commitment to perform the portion of the project being funded with SEP Funds and that it will not receive or use duplicate funding.

Environmental Benefit:

Determination of exact energy load reductions is based on a number of factors including architecture, building orientation, the number of days open to the public, and the number of visitors. Performing Party shall calculate and report to TCEQ on a quarterly basis the energy conservation and air quality benefits from these factors, beginning upon completion of construction of the project and continuing for one year after the equipment has been in use.

The installation of photovoltaic cells in the nature center is estimated to decrease energy consumption by 20 percent per year. That energy savings is expected to reduce the emission of carbon dioxide. Additionally, the use of photovoltaic cells is anticipated to reduce nitrogen oxides and mercury emissions each year.

Additional energy savings are expected from the use of solar water heating panels, heat pumps and associated deep wells, industrial light tubes, and green roofing. Energy savings from these elements have not been precisely calculated in advance but are expected to be significant.

Eligible Counties: Nueces and San Patricio

Minimum Contribution: \$5,000