

**Attachment - B**

**Project Cost Off-set**

	Cost	Percentage of Project Cost
Avoided Maintenance Costs	\$185,000	18%
Reduced Maintenance over 10 years	\$406,600	39%
Seattle City Light Incentive	\$200,000	19%
Reduced Energy costs over 10 years*	\$569,206	55%
<b>Total</b>	<b>\$1,360,806.00</b>	<b>131%</b>

Notes:

1. The current status of the existing fixtures requires extensive maintenance and repairs which have not been included in the 2014 budget. Avoided Maintenance Costs: Estimated costs for replacing ballasts and lamps for all high mast lighting at both piers and replacement of fixtures which are failing.
2. Reduced Maintenance: The lifespan of HPS lamps is rated at 5-7 years. Light levels diminish after the first year and at 5-years the lamp is considered due for replacement. Ballasts typically last 6-8 years. Maintenance practice is to replace ballasts when performing lamp replacement as the cost of performing the work justifies the cost of replacement. Over the anticipated life of a LED fixture; two lamp and ballast replacements would be performed.
3. Seattle City Light Energy Conservation Incentives: Seattle City Light distributes incentives for energy conservation projects. Incentives are calculated on the kilowatt savings proven at the completion of a project. Added incentive is given for conversion from inefficient equipment to super-efficient equipment such as LED lighting. Calculations are performed using the Seattle City Light funding worksheet.
4. Reduced Energy Cost: A 55% savings in energy use is a conservative estimate. Furthermore, the Port's ability to accurately identify energy usage for each fixture or group of fixtures serving customers will enable the Port to bill with confidence. The Port's responsibility may only be to provide lighting for safety and access. Safety lighting will respond to situational needs by dimming lights when the piers are unoccupied and sensing presence to respond by increasing light levels. Access lighting will be dimmed between specific hours or when operationally appropriate.

\*Reduced energy costs estimate is based on current rates (+) reported increases per Seattle City Light forecasts. Seattle City Light reports that energy rates will increase 30% over the next six years. <http://www.seattle.gov/light/accounts/rates/Rates2013.asp>