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Andrew Amorosi - Consider Solar Power For Replacement Lighting

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As your building ages, there will come a point in time when the building lighting will need to be replaced. Your capital reserve analysis should include funds and a time frame for these replacements.

A lighting replacement project can be a good opportunity to upgrade the building using new, aesthetically appealing, light structures and fixtures and/or increasing available lighting for security purposes or site appearance. It also can be an opportunity to install solar powered fixtures to save energy and reduce operating costs.

Solar power technology has advanced substantially in the past few years and the cost to implement this type of lighting has been reduced such that it is now a possible alternative to standard electrical lighting.

Exterior building lighting can be designed and installed to work off solar panels located on a rooftop or other structure or as standalone fixtures or spotlights.

There are many advantages to installing a solar powered system at the time of lighting replacement, including:

- * The installation of solar powered lighting is an accepted "green" activity which is recognized by LEED certification programs. It also may allow for some tax incentives or rebates.
- * The initial cost is something that was already partly, mostly or completely budgeted for in your building's reserve funding plan. You were replacing the lights anyway.
- * Solar powered lighting is not susceptible to power failures. Your building will remain illuminated which is comforting security.
- * There will be the elimination of electricity costs for lighting. This will reduce your annual operating budget.
- * There is no need for installation of underground conduits and wiring. The lights are merely installed at the locations that are selected. This cost can be in the magnitude of \$20 per linear foot, dependent upon what is being disturbed.
- * Adding locations to existing lighting does not require relocation of power source(s) or the installation of new conduits and wiring. This makes it possible to install new lighting in dark areas or create nicer aesthetics by illuminating buildings, landscaping or entrance signs, etc.
- * The Light Emitting Diodes (LED) lighting technology used with these systems can last for up to 100,000 hours (20-25 years) without needing replacement. As a reference, standard bulbs can last 1500 - 3000 hours.
- * The LED lights use less than 1/2 the energy of conventional lights and are more direct with light which avoids illumination of unwanted locations.
- * Solar powered lighting does not emit carbon dioxide or any other hazardous gases to provide

efficient "green" lighting.

* The cost of the standards and fixtures is becoming closer to that of conventional lighting. While the structures themselves are more costly than a conventional light, the future cost savings needs to be considered.

In this era of striving for energy efficiency and the desire to go "green", solar site or building lighting offers the potential of obtaining both needs with a positive result.

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