



Request for City Council Committee Action From the Department of Public Works

Date: July 28th, 2008

To: Honorable Scott Benson, Chair Health, Energy and Environment Committee

Referral: Honorable Paul Ostrow, Chair Ways & Means Committee

Subject: **Solar Photovoltaic Project – Convention Center**

Recommendation:

a) Authorize City officers to accept Minnesota Public Utilities Commission (Renewable Development Fund) grant funds in the amount of \$2,000,000 to be utilized in partnership with EyeOn Energy, LLC. for the purchase and installation of 600 Kw of solar photovoltaic panels to be installed on the Minneapolis Convention Center (1301 2nd Avenue South).

b) Authorize City officers to enter in respective agreements with the EyeOn Energy, LLC, and/or the Minnesota Public Utilities Commission as needed to obtain such grant awards.

c) Authorize City officers to negotiate and execute a new twenty-year Power Purchase Agreement with EyeOn Energy, LLC for the purchase of renewable electric energy produced by EyeOn Energy, LLC at the Minneapolis Convention Center. The purchase of the renewable electric energy will be paid for from Fund 08650 Department 8650100. No additional appropriation is required.

Previous Directives:

None

Prepared by: Greg Goeke, Director of Property Services

Approved by:

Steven A. Kotke, P.E., City Engineer, Director of Public Works

Steven Bosacker, City Coordinator

Presenters: Greg Goeke, Director of Property Services

Reviews

Permanent Review Committee (PRC):	Approval	Yes	Date July 17, 2008
Civil Rights Affirmative Action Plan	Approval	NA	Date
Policy Review Group (PRG):	Approval	NA	Date

Financial Impact (Check those that apply)

- No financial impact - or - Action is within current department budget (If checked, go directly to Background/Supporting Information)
- Action requires an appropriation increase to the Capital Budget
- Action requires an appropriation increase to the Operating Budget
- Action provides increased revenue for appropriation increase
- Action requires use of contingency or reserves
- Business Plan: Action is within the plan. Action requires a change to plan.
- Other financial impact (Explain):
- Request provided to department's Finance Dept. contact when provided to the Committee Coordinator

Community Impact

Neighborhood Notification: Not Applicable
City Goals:
Comprehensive Plan: Not Applicable
Zoning Code: Not Applicable

Background/Supporting Information

In July of 2007, Property Services, at the request of the City Coordinator, submitted a grant application to the Minnesota Public Utilities Commission (PUC) requesting grant funding from the Renewable Development Fund (RDF) for financial assistance in the development and installation of a large scale solar photovoltaic system in the urban core of Minneapolis. Due to the time constraints involved, Property Services partnered with an experienced solar developer, EyeOn Energy, LLC of Boulder, Colorado (EyeOn) and submitted a grant proposal on July 12, 2007. The City and EyeOn's proposal for \$2,000,000 in grant funding was given preliminary approval on March 20, 2008. The City and EyeOn are fulfilling the due diligence requirements at this time to formally receive final grant approvals.

The Proposed Project

The proposed project will install up to 600 kW of direct current (DC) photovoltaic (PV) panels on the roof of the Minneapolis Convention Center and will be the largest PV installation in the state of Minnesota and the Upper Midwest region. The system will have approximately 3,000 panels and has the potential to produce 770,000 Kw of renewable electric energy on a yearly basis.

The research goal of the project is threefold, with three separate groups of PV panels to arranged to accomplish one goal each: 1.) to produce the maximum kWh production, 2.) to produce the maximum Xcel Energy system peak power purchase reduction, and 3.) to produce the maximum City of Minneapolis Currie demand charge savings. The reasoning for these goals is to capture the data for optimizing future PV installations in the state of Minnesota and to efficiently use the RDF funding in a way that provides the greatest benefit to all ratepayers.

This project has several unique features in its approach:

1. Build the largest solar installation in Upper Midwest.
2. Develop solar expertise to facilitate and drive future innovative solar installations in Minneapolis.
3. Initiate a major renewable venture in an urban environment.
4. Achieve cost effectiveness by installing the maximum amount of PV capacity to capture the economies of scale, thus lowering the cost/kWh of energy produced.
5. Use a third party PV Developer (EyeOn) to fully-utilize the federal tax incentives (investment tax credit and accelerated depreciation) to minimize cost per kWh of solar energy generated. These federal tax incentives are set to expire December 31, 2008.
6. The renewable energy will be purchased by the City and utilized for its own internal operations on-site.
7. The City will have an option to purchase the PV installation from EyeOn at a future date at a fair market value.
8. Xcel Energy will own the Renewable Energy Credits for the project as stated in the RDF guidelines.
9. EyeOn will endeavor to utilize Minnesota-based PV installers and/or provide training for new workers.

The project has received preliminary approval for \$2,000,000 from the PUC to support this project. EyeOn must attain solar kWh production goals in order to receive payments. The payments will be performance-based over the first two project years, thus lowering the impact to the overall RDF and providing incentive for successful and efficient project completion and energy production.

The project will be completed no later than December 15, 2008, and is contingent on final project funding approval by no later than September 1, 2008 to ensure full utilization of the federal tax incentives, now set to expire December 31, 2008.

Due to the favorable impact of the solar installation, the following annual environmental benefits (vs. power generation from coal) can be anticipated (assuming a 600 kW installation). The source is the Environmental Protection Agency website.

Material	#/MWh of Energy	Project #/year
Carbon dioxide	2,249	1,735,328
Sulfur dioxide	13	10,031
Nitrogen oxides	6	4,630

Summary

The PV panels will be owned, operated, and maintained by EyeOn Energy LLC. Payments from the RDF will be directed to EyeOn as solar kWh targets are met during the first two project years. The City of Minneapolis will have the option to purchase the PV panels at a future date, but not before the end of Projects sixth year of production and for a fair market price. EyeOn will either maintain the PV panels or contract with a local entity to do same.

EyeOn and the City of Minneapolis will enter into a new twenty-year Power Purchase Agreement for the delivery and sale of the solar energy produced onsite. The Permanent Review Committee (PRC) has granted Property Services a waiver from the Request for Proposals (RFP) process and Property Services has received guidance from the PRC on City Requirements that will need to be met in the Power Purchase Agreement. It is projected that

the cost of the Power Purchase Agreements will be approximately \$46,000 per year. The costs will be offset by a reduction in yearly electrical charges normally paid to Xcel energy.

The City will be subject to all applicable retail tariffs specifically including the Standby Service Rider which will provide backup services to the site.

The project will file all local, state, and federal permits, licenses, or regulatory approvals and complete upon written notice from the RDF that this project has been accepted and funding has been assured.

Attachments: None

Cc: Chris Larson, Convention Center
Lane Carlson, Convention Center
Corey Conover, City Attorney's Office
Cara Letofsky, Mayor's Office
Gayle Prest, Sustainability Manager