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To: City Council and Mayor Bennett

From: City Administrator, Kim Downs

Date: July 10, 2019

RE: Rooftop Solar of City Facilities (Public Works and Library) Bid Review

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In 2017 and every year since, the City of Hiawatha has made sustainability one of its top priorities. The council-created definition of sustainability is, "a community's ability to meet the environmental, economic, and social equity needs of today without reducing the ability of future generations to meet their needs."

Sustainability for Hiawatha is a holistic approach to making the community more sustainable. "Hiawatha is a community that values moderate energy conservation and expanded use of renewable energy as a means to save money and protect the environment." In order to reduce dependence on fossil fuels, reduce utility bills, and reduce the community's greenhouse gases incrementally, the City has made it a priority to first focus on energy efficiency measures of its own facilities, and then explore opportunities for renewable energy generation.
The City considers the following goals when selecting strategies to meet the Sustainable Hiawatha vision:

1. Optimization of City owned facilities and property
2. Reduction of costs for operation of City facilities
3. Increased revenue to the City
4. Improved environmental performance of City facilities

Public Works Building-1410 Robins Road
Public Library-150 West Willman Street

Scope of Work
The City of Hiawatha solicited proposals from qualified vendors to design and install solar photovoltaic system(s) on the rooftop of each of the above facilities at the location described. Recommendations regarding sizing of potential arrays should be made based on current utility usage data.

The City recognizes that solar may not be a feasible opportunity for each facility. Responding made proposals only for the stations for which the firm believes there is a reasonable business case to be made, based on existing utility usage data and projected ROI.

The public works facility could be initiated approximately sixty (60) days after the award of contract with the successful firm.

The library facility could be initiated upon the complete construction of the library renovation and expansion project. The city and the successful firm will determine a date each party can agreed upon.

Facility Information			
Location	Public Works Bldg	Library	Total/Average
Current (kWh)	198,600	138,900	337,500
Solar (kWh)	127,463	80,967	208,430
% Solar Offset Allowance	64%	58%	61%

BIDS-Public Works	Moxie Solar-North Liberty IA.	Sunbelt Environ. - Springfield Ill.	Lifetime Solar-Kansas City Mo.
Purchase Power Agreement (PPA)	X	did not provide information	did not provide information
Savings kWh (%)	19.31%	did not provide information	did not provide information
PPA Buyout Year 15 (30%)	$44,193.60	did not provide information	did not provide information
Net PPA 25-Yr Savings	$318,830.16	no information	no information

For the purposes of utilizing a PPA-no upfront cost is required, a key component of savings to the City will allow for the investor to utilize both Federal and State tax credits till the end of 2019.

In order to take advantage of the State of Iowa tax credits, the solar project must be constructed and operational within 2019. Therefore, the library would not qualify for tax credits and we would need to purchase outright.

- Panels have a 25-year warranty with a 35- year life span. Maintenance cost is very low compared to other types of energy production equipment that have moving parts that lead to high maintenance cost.

- During the PPA of 15-years the dollars saved on the facilities electric bill would transfer to the investor of the panels and then when the 15-years is up that is when the city would buy out the contract with the investor (Moxie Solar-Sun Powered Solutions)

- ***Council has approved $80,000 LOSST toward this project.***

Direct Purchase BIDS	**Moxie Solar-North Liberty IA.**	**Sunbelt Environ.-Springfield Ill.**	**Lifetime Solar-Kansas City Mo.**
Public Works-Library			
Purchase Cost	$268,616.50	$575,000.00	$335,844.00
Gross 25-Year Savings	$888,943.72	no information	$1,191,304.57
Net 25-Year Savings	$602,327.22	no information	$ 855,460.57

Note: In review of the bids and reference to Alliant Energy's allowance Sunbelt Environment and Lifetime Solar have both oversized the solar panel system. Because of this it gives the impression of a higher payout but in reality, Alliant sets a maximum use.

Moxie Solar is the reasonable, responsibility and lowest bidder along with completing the RFP as requested. As city council you have a three options. See below.

Option 1:

- Award contract to Moxie Solar entering into a PPA agreement with Moxie Solar/Sun Powered Solutions for a 15-year buyout of $44,193.60 and not move forward with the library facility. Enter into a standard Interconnection agreement with Alliant Energy would be required.

Option 2:

- Award contract to Moxie Solar entering into a PPA agreement with a 15-year buyout of $44,193.60. Authorize an additional $85,498.10 of available LOSST funds to direct purchase solar panels outright for the library project. Enter into a Standard Interconnection agreement with Alliant Energy would be required.

Option 3:

- Award contract with Moxie Solar and direct staff to direct purchase solar panels in the amount of $268,616.50. Authorize an additional $188,616.50 of available LOSST funds. Enter into a standard Interconnection agreement with Alliant Energy would be required.

- Options 2 and 3 are consistent with the council's strategic goals to work toward sustainability by taking a holistic approach utilizing solar energy. Hiawatha values moderate energy conservation and expands our thought processes in the use of renewable energy as a means to save money and protect the environment.
- Option 3 does provide almost 3X's the savings and a 9-year payback vs. a 15-year payback.

The solar panel project is the City's next step in demonstrating it is a priority, focusing on energy efficiency measures of its own facilities, and its continuance to explore additional opportunities for renewable energy generation.

Thank you for your consideration.

Kim