## City Council Work Session

**Green Team Solar Circle** 

8:00 p.m. Monday, December 19, 2016

Council Room
Municipal Building

Memo to:

Mike McLaughlin, City Manager

Cc:

David Moran, Assistant City Manager

From:

Solar Circle, City of Greenbelt Green Team

Date:

December 6, 2016

Re:

Solar Energy for Greenbelt: Proposal transmittal, and work session agenda

The Green Team Solar Circle is pleased to submit, for distribution to members of City Council, the City Manager and Assistant Manager, nine (9) bound copies of a proposal from Standard Solar, Inc. to provide solar-generated electricity for the City of Greenbelt. This proposal is an unsolicited, sole-source offer, containing offeror's proprietary information, and as such we request it be considered confidential executive material, not to be published or made public at this time.

In preparation for the December 19, 2016 work session with the Green Team's Solar Circle and City Council, we respectfully offer the following draft agenda to focus and guide the discussions to be held that evening. Your review and changes will be most welcome.

## Work session agenda for Monday, December 19, 2016

<u>Attendees</u>: Green Team Solar Circle, City Council members, City Manager and Assistant Manager, Director of Public Works, City Clerk, Standard Solar technical representative(s)

## Discussion:

- I. Introductions and background
  - 1. Recap of previous work session of August 12, 2015
  - 2. City's policy goal for renewable energy
  - 3. Growth of solar energy in US, Maryland, and Prince George's County
- II. Presentation of Standard Solar's proposal for an off-site, ground-mount solar generating system to offset nearly 100% of City's annual electrical energy needs
  - 1. Q&A
  - 2. Next steps for consideration/approval of project
- III. Update on previously submitted proposal from SolarCity for a ground-mount solar generating system at Greenbriar Condominiums
  - Redesign of project for direct connection at Greenbriar H&C Plant (no offset of City electricity use)
  - 2. Consideration of agreement for Greenbriar to utilize City-owned Mandan Road right-of-way
- IV. Pursuit of roof-mounted solar generating systems for selected City buildings; possible grant funding source(s) and desired locations
  - 1. Q&A
  - 2. Next steps for pursuit of grant funding
- V. Open discussion
- VI. Adjournment

Respectfully submitted, City of Greenbelt, Green Team Solar Circle Steve Skolnik, Matt Dirksen, John Lippert, Jeannie Bellina (Green Team 'friend')

Staff liaisons Luisa Robles, Erin Josephitis WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, August 12, 2015, to receive a Green Team Solar Briefing.

Mayor Jordan started the meeting at 8:00 p.m. The meeting was held in Room 201 of the Greenbelt Community Center.

PRESENT WERE: Councilmembers Judith F. Davis, Konrad E. Herling, Leta M. Mach, Edward V. J. Putens, Rodney M. Roberts and Mayor Emmett V. Jordan. Councilmember Silke I. Pope was unable to attend due to illness.

STAFF PRESENT WERE: David Moran, Assistant City Manager, Jim Sterling, Acting Director of Public Works, and Cindy Murray, City Clerk.

ALSO PRESENT WERE: Steve Skolnik, Matt Dirksen, John Lippert and Luisa Robles, Green Team's Solar Task Force; Susan Barnett, Green Team; Michael Hartman, Greenbelt Advisory Committee on Environmental Sustainability; Jim Giese, Greenbelt News Review; John Mason, Molly Lester and Lore Rosenthal.

Mayor Jordan said the Public Works Department staff has been involved in discussions regarding the placement of solar panel arrays on City facilities for approximately five years through the Council of Governments (COG). The proposal with Solar City which Mr. Skolnik will reference has been developed by Montgomery County in part as a lead agency for COG. Other firms in the solar business have expressed interest to the City.

Mr. Moran stated that the primary goal of the work session was to hear presentation from Green Team's Solar Task Force related to the Solar City proposal. Mr. Skolnik said while the Solar Task Force is only talking this evening about municipal solar projects, there are many opportunities in the City for residential and commercial solar projects also.

Mr. Skolnik advised that the State of Maryland has more than doubled its amount of installed solar capacity in 2014 and is currently placed in the top 10 states in development of solar facilities. In addition, Maryland also had nearly half of its new electrical capacity last year come from solar energy.

Mr. Skolnik said the current proposal from the Green Team Solar Task Force came from Solar City. He advised Solar City is one of the largest solar developers and generally are not interested in small jobs. Mr. Skolnik said through conversations with the Task Force, Solar City did provide a proposal to place solar panel arrays on the roof of the Public Works facility and Green Ridge House and on the ground of the undeveloped Mandan Road right-of-way (ROW) between Greenbriar Phase II and III.

Mr. Skolnik said the proposal also uses an open area adjacent to the Mandan Road ROW which is Greenbriar property. He said the Solar Task Force has met with the property manager at Greenbriar and also with the Greenbriar Board of Directors and they are very interested in the project.

Mr. Skolnik said some other potential sites that could be considered for solar panel arrays in the future include the Springhill Lake Recreation Center, the Greenbelt Theater, the Youth Center,

the Police Station and the Greenbelt Aquatics and Fitness Center. Mr. Roberts said that new roofs would be required on many of these facilities prior to the installation of solar panel arrays. Mr. Skolnik provided a PowerPoint presentation on Solar Energy for Greenbelt.

The components of a Photovoltaic Energy System (PVES) were discussed. Mr. Skolnik said the solar modules are made from silica, with aluminum frames and glass surfaces for structural integrity. He notes some of the benefits of Solar Energy Systems include:

Lowering power bill

Creates solar Renewable Energy Credits

PVES does not harm roofs and in fact, can extend roof life by blocking harmful UV rays Reduces coal consumption – less mining, mountain top removal, and diesel for coal transportation to generating systems

Reduces electricity transmission losses

Reduces carbon footprint (lowers greenhouse gas emission)

Involvement and incentives at federal and state level provide clear long-term commitment Demonstrates environmental stewardship while reducing taxpayer energy costs.

Mr. Skolnik reviewed the options of self-ownership of PVES, power-purchase agreement and lease/purchase agreement.

In response to a question from Mr. Roberts, Mr. Skolnik said the solar panels are guaranteed for 20 to 25 years but are expected to last 30 years.

There was discussion regarding the solar energy project at Greenbelt Baptist Church that was commissioned in January 2012. It was noted that since that time, the system has generated over 92,000 kWh of power and the church anticipates savings of nearly \$50,000 over the twenty year Power Purchase Agreement.

Mr. Skolnik reported there currently is a huge backlog for installation of solar systems in the area. Mr. Lippert added that it normally takes several months for design and permitting approvals.

Ms. Davis said some Greenbriar residents will have the view of a solar field from their residences and thought this may be a problem. Mr. Roberts said he would prefer to see more gardens at the space at the end of Mandan Road.

After discussion, Council requested this item be included on its agenda for the September 15, 2015, regular meeting for referral to staff for review and recommendation.

Molly Lester, 6-M Hillside, spoke in support of the solar energy project.

Mr. Sterling said Solar City is not interested in proceeding with its proposal without the ground panels on Mandan Road being included. He advised there are other companies that would be interested in doing the work.

Mr. Sterling said a Request for Proposals could be issued but that would require a good deal of time. He noted that the Solar City award from Montgomery County is a very good contract and had been vetted through legal counsel and legal concerns identified had already been addressed.

Mr. Sterling added that staff recently became aware of a Maryland National Capital Park and Planning Commission solar bid that will be explored.

Mr. Roberts said he would like to have solar panels on as many City buildings as possible. He added that he wanted to be sure staff evaluated other companies and make the best possible decision and not just go with Solar City because of the Montgomery County bid. Mr. Sterling assured Mr. Roberts that was how staff was planning to proceed.

In response to a question from Ms. Davis, Mr. Sterling said it would take approximately two months for staff to thoroughly review the proposal. Mr. Skolnik said he and other members of the Solar Task Force were available to assist staff.

Lore Rosenthal asked and was provided answers to several questions.

Bill Orleans, Greenbelt, suggested the City purchase the solar equipment and train staff to handle in-house. Mr. Skolnik said that was not economically feasible. He explained the benefits of the City operating as the general contractor for sub-contractors for this work.

After further discussion, Council requested this item be included on its agenda for the September 15, 2015, regular meeting for referral to staff for review and recommendation.

Informational Items

Several informational items were discussed.

The meeting ended at 10:48 p.m.

Respectfully submitted,

Cindy Murray City Clerk