

South Portland City Council
Position Paper of the Interim City Manager

Subject:

ORDER #47-16/17– Authorizing the City Manager or a designee to negotiate a power purchase agreement, any appropriate lease or license agreements, and to pursue necessary permits for siting a solar array at the City’s capped landfill at 929 Highland Avenue. Passage requires majority vote.

Position:

The generation of renewable solar energy on the City's capped landfill is one of South Portland's climate action goals. Under this joint project with the City of Portland, Revision Energy will install a 920 kW DC (660 kW AC) solar array consisting of 2,960 panels on South Portland's landfill at the same time they install an identical system on Portland's Ocean Ave landfill. The arrays will each generate 1.2 million kWh of clean, renewable electricity annually. This will offset approximately 12% of South Portland's (including schools) annual electricity consumption from the grid and will result in significant long-term cost savings for the City.

At a workshop on March 14, 2016, staff and Revision Energy introduced an initial proposal for the project. To maximize use of a federal investment tax credit and bring the overall project cost down, the City will not take ownership of the solar array for at least six years, but instead will enter into a power purchase agreement (PPA) with Revision Energy to purchase the electricity generated by the system. In year seven, the City has the option of buying out the system at a reduced cost. By partnering with Portland to combine our projects, Revision was able to reduce their initial construction costs by \$325,700 (or 12.5%) for each system. Revision offered an initial PPA rate of \$0.1245 per kWh of electricity, which would translate into an annual premium of approximately \$50,000 in the first six years. The City would recoup the overall cost of the project (ROI) in year 17. At this workshop staff discussed two key challenges to address before bringing the project proposal back to the City Council for approval. First, staff believed the City could do better on pricing. Second, staff were awaiting the outcome of regulatory processes that could impact this project.

With Council approval to move forward, staff worked with their counterparts in Portland and the Revision team to address these challenges by negotiating better financial terms.

At a subsequent workshop on August 22, 2016, staff and Revision Energy presented a revised proposal with more favorable financial terms that staff believe make this project

viable in spite of continued regulatory uncertainty. In the final attached proposal, Revision lowered the initial PPA rate to \$0.1056, reducing the annual premium in the first six years by half. With current assumptions, the project is expected to be revenue positive in year 7 and provide a full return on investment in year 11. Over the life of the project, the City would save over \$3 million.

Following discussion, it was decided to move forward with siting this solar array on the City's capped landfill under the attached terms presented by ReVision Energy.

Julie Rosenbach and staff from Revision Energy will be present at the meeting to answer any questions.

Requested Action:

Council passage of Order #47-16/17

A handwritten signature in cursive script that reads "Donald H. Gurish". The signature is written in black ink and is positioned above a horizontal line.

Interim City Manager



CITY OF SOUTH PORTLAND

THOMAS E. BLAKE
Mayor

DON GERRISH
Interim City Manager

SALLY J. DAGGETT
Jensen Baird Gardner & Henry

EMILY F. CARRINGTON
City Clerk

IN CITY COUNCIL

ORDER #47-16/17

District One
CLAUDE V. Z. MORGAN

District Two
PATRICIA A. SMITH

District Three
EBEN C. ROSE

District Four
LINDA C. COHEN

District Five
BRAD FOX

At Large
MAXINE R. BEECHER

At Large
THOMAS E. BLAKE

ORDERED, that the Interim City Manager, or his designee, is hereby authorized and directed to negotiate on behalf of the City a power purchase agreement, including related license and easement agreements, with ReVision Energy, LLC, or its nominee, for the installation of a photovoltaic array at the City's capped landfill located at 929 Highland Avenue (a portion of Tax Map 56, Lot 6) on substantially the same terms as outlined in the attached term sheet dated August 2, 2016; and

BE IT FURTHER ORDERED, that the final power purchase agreement, including related license and easement agreements, shall be subject to the approval of the City Council at a later date.

Fiscal Note: Less than \$1,000

Dated: September 7, 2016



Professional design, installation and service of solar energy systems

Julie Rosenbach, Sustainability Coordinator
City of South Portland
25 Cottage Rd.
South Portland, Maine 04106

August 2, 2016

Dear Julie,

On behalf of ReVision Energy, I am pleased to provide the following terms for a proposed Power Purchase Agreement (PPA) for a photovoltaic solar energy project at the former Highland Avenue landfill site.

Project Description: 920.7 kWdc solar array, with estimated production of 1,203,570 kwh/year.

- (2,970) Q-cell 310-watt solar electric modules, or equivalent, with 25-year performance warranty;
- (25) SMA STP24000TL-US-10 and (3) SMA STP20000TL-US-10 inverters, or equivalent, with 15-year performance warranty;
- Revenue grade electric metering and remote system monitoring to allow real-time online access to solar energy generation;
- Maine DEP approved site design with ballasted ground mounted array, wind rating of 120 mph;
- Balance of system components including all wiring, hardware and fittings needed to provide a National Electrical Code and NABCEP compliant installation.

Power Purchase Agreement: ReVision Energy and/or its financing partner will finance, build, own and operate the system for life of PPA. The City will provide for a line extension and new electrical service to access the landfill and will purchase all power produced under the following terms:

Power price: 10.56¢/kWh in year one, to increase by 2.5% annually.

Term: 25 years, with option to extend to 30 years. At end of term, City can elect to take over system or have it removed and the property restored to prior conditions at no cost

Buyout Options: The City will have an option to purchase in Year 7 or 10, and at regular intervals thereafter, at fair market value or the following schedule, whichever is higher.

Estimated Y7 Buyout: \$1,598,423

Estimated Y10 Buyout: \$1,365,670

ReVision Energy is the largest full service renewable energy contractor in northern New England. Since 2003, ReVision has installed more than 5,000 solar systems for commercial, residential, municipal, educational and non-profit clients. Our professional installation team includes master electricians and NABCEP certified solar installers and technicians, and is backed by a 24-hour service guarantee.

Sincerely,

Steve Hinchman, Director of Financing
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