

RES# 21-22

ACTION

Office of the Superintendent of Schools
MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

January 13, 2022

MEMORANDUM

To: Members of the Board of Education

From: Monifa B. McKnight, Interim Superintendent of Schools

Subject: Award of Contract—Solar Photovoltaic Power Purchase Agreements at Various Locations

Background

Since 2008, as part of our systemwide commitment to sustainability and supporting the transition to clean energy sources, Montgomery County Public Schools (MCPS) awarded contracts for rooftop photovoltaic (PV) Power Purchase Agreements (PPAs) for 17 rooftop systems. These systems currently generate approximately 4.1 Megawatts of alternating current (MWac) with an estimated production of 4,700 megawatt-hours (MWh).

A basic rooftop solar PV PPA is a system that the solar developer finances, designs, constructs, owns, operates, and maintains. MCPS agrees to “host” the solar PV system on individual school rooftops for a period of 20 years. MCPS also agrees to purchase the electric output of the solar PV system at a fixed price provided in the PPA. The solar developer is able to combine the tax incentives for solar energy; the sale of the Solar Renewal Energy Credits, also known as environmental attributes; and to offer MCPS electric power significantly priced less than the cost of conventional electricity.

The departments of Facilities Management and Materials Management conducted a public solicitation process for solar PV PPAs that generated significant interest from the solar developer industry, resulting in the submission of nine proposals. The evaluation committee unanimously selected the Standard Solar proposal due to its competitive prices and ability to perform. The scope of this project includes rooftop-mounted solar PV systems at eight schools, to be completed no later than the fall of 2023. Additional scope includes the potential to purchase off-site ground mounted PV output on non-MCPS sites, and PPA agreements for the installation of parking lot canopies and new light pole-mounted PV.

Eight schools have been selected for new rooftop solar PV PPA projects. Six of the schools have relatively new roofs or sections of roofs and two schools are newly constructed. The schools with new roofs include Sherwood Elementary School, Julius West and Shady Grove middle schools, and Rockville and Springbrook high schools. Clarksburg High School has a partial new roof and existing solar. Additional solar PV will be added to the new roof section. The two newly constructed schools to receive solar panels—Maryvale Elementary/Carl Sandburg Schools and Tilden Middle/Rock Terrace Schools—were selected because they did not have expansive vegetative

roofs supporting the stormwater management system, which would preclude the ability to use the roof to host solar PV systems. Technology has improved since our original solar installations; therefore, we anticipate higher production than at previous installations. The electric generating capacity of the systems proposed at these schools is estimated at 6.2 MWac with an estimated annual production of 9,392 megawatt-hours, for a fixed aggregate price of \$0.0765 per kilowatt, resulting in an annual cost avoidance estimated at approximately \$400,000.

This resolution also introduces three additional solar-related programs for MCPS—the purchase of off-site ground-mounted PV output to supply electricity to other MCPS facilities; and two additional pilot PPA demonstration programs to be included in the base PPA at two of the selected sites. The first pilot program is to install solar PV parking lot canopies at Rockville High School, and the second pilot program is to install a system of new parking lot light pole-mounted solar PV collectors at Springbrook High School.

I recommend the following resolution for your approval.

WHEREAS, The expansion of solar photovoltaic systems hosted by Montgomery County Public Schools and the purchase of the electricity through Power Purchase Agreements furthers the goals of Montgomery County Public Schools commitment to sustainability; and

WHEREAS, Staff in the departments of Facilities Management and Materials Management solicited proposals for solar photovoltaic Power Purchase Agreements; and

WHEREAS, Standard Solar was selected as the contractor, based on a competitive process in compliance with applicable procurement requirements; and

WHEREAS, Standard Solar proposed to finance, install, own, and operate solar photovoltaic systems of a rated capacity of approximately 6.2 megawatts-alternating current on the rooftops at eight Montgomery County Public Schools facilities that were found to be suitable for the installation of solar photovoltaic systems; and

WHEREAS, The Power Purchase Agreements with Standard Solar for the rooftop installations will provide the benefits described previously including purchasing electricity at a significant discount resulting in approximately \$400,000 per year in cost avoidance; and

WHEREAS, The Power Purchase Agreements secure a stable source of electricity at a fixed price of \$0.0765 per kilowatt for 20 years; now therefore be it

Resolved, That the Board of Education authorize the Board of Education president and the interim superintendent of schools to negotiate and execute Power Purchase Agreements with Standard Solar and all other necessary documents to develop and install solar photovoltaic systems and demonstration projects, where applicable, at Maryvale Elementary/Carl Sandburg Schools and Sherwood Elementary School; Julius West, Shady Grove, and Tilden Middle/Rock Terrace Schools; and Clarksburg, Rockville and Springbrook high schools; and to purchase solar-produced electricity from off-site ground-mounted photovoltaic output from non-Montgomery County Public Schools sites.

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