



Howard County

Internal Memorandum

Subject: Council Bill No. 53-2014- Approving a multi-year Solar Power & Services Agreement with BITH Energy.

To: Lonnie R. Robbins,
Chief Administrative Officer

From: Joshua Feldmark,
Administrator, Office of Environmental Sustainability

Date: October 13, 2014

Bill 53-2014 supports approval of a multi-year Solar Power & Services Agreement with Bith Energy, Inc., for the construction of a canopy mounted solar photovoltaic array, with two electric vehicle charging stations powered by the solar canopy.

Background

On April 10, 2014, the Maryland Energy Administration issued a Notice of Grant Availability for a program titled “Parking Lot Solar PV Canopy with EV Charger.” The grant program provided for business, state/local governments, or nonprofits working with a qualified installation contractor to propose projects to install at least 125 kw of solar PV panels mounted on a canopy structure over a parking lot. Grant funds would be awarded to offset the costs of installing a solar canopy as opposed to a ground-mounted solar PV system.

The County submitted a proposal in partnership with Bith Energy, Inc. to install a system in the parking lot in the front of the George Howard Building and to the left of the Warfield Building. MEA awarded us the grant to build the 452 kw solar canopy PV system we proposed. Attached, you will find a concept drawing which depicts the proposed canopies.

As stated earlier, the grant funds cover the additional cost of building canopies, but we are still responsible for the cost of the solar array. As is common with projects such as this one and as was done with the solar system that we built on the New Cut Landfill, we are proposing to fund the construction through a multi-year solar power and services agreement.

Fiscal Impact

The advantage of financing a solar project through a multi-year solar power and services agreement is that it eliminates the necessity for the County to make any capital outlay for construction. We are, instead, committing to buy the electricity generated by the system at our specified price for 25 years. While it is impossible to predict the future energy prices, we believe the price will be competitive with what the County would pay through its participation in the

wholesale energy market through BRCPC. Below is a chart that estimates (based on expected energy output) the yearly cost of purchasing the electricity generated by the solar canopy.

Year	Electricity Cost to Host
Year 1	\$ 32,000.41
Year 2	\$ 56,439.30
Year 3	\$ 58,126.83
Year 4	\$ 59,864.82
Year 5	\$ 61,654.78
Year 6	\$ 63,498.26
Year 7	\$ 65,396.86
Year 8	\$ 67,352.22
Year 9	\$ 69,366.06
Year 10	\$ 71,440.10
Year 11	\$ 73,576.16
Year 12	\$ 75,776.09
Year 13	\$ 78,041.79
Year 14	\$ 80,375.24
Year 15	\$ 82,778.46
Year 16	\$ 85,253.54
Year 17	\$ 87,802.62
Year 18	\$ 90,427.92
Year 19	\$ 93,131.71
Year 20	\$ 95,916.35
Year 21	\$ 98,784.25
Year 22	\$ 101,737.90
Year 23	\$ 104,779.86
Year 24	\$ 107,912.78
Year 25	\$ 107,836.49

cc: Jennifer Sager
Ray Wacks
Stan Milesky