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SolarEdge provides DC-optimized PV system for Hartford Pike project

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Foster, RI SolarEdge Technologies has provided a DC-optimized PV system for a 12-acre solar farm. The Hartford Pike site is set to produce more than 6.2MW of clean, renewable energy each year, more than half of which will be made available to local residents and businesses via a community solar scheme. The site includes a mix of 15,800 bi-facial and mono-facial solar modules which are equipped with SolarEdge Power Optimizers to maximize energy production and reduce operating and maintenance (O&M) costs over the system lifetime.

Administered on behalf of Sunlight General Capital by renewable energy provider Arcadia, the community solar portion of the project is expected to produce around 4,384,800 kilowatt-hours[1] of solar energy in its first year – which in CO_2 emissions is equivalent to 3,434,592 pounds of coal burned or 51,000 trees grown[2] for 10 years. So far, it has attracted over 700 subscribers, who will

receive discounts on their energy bill.

James Pochez, director of project development at SunLight General Capital, the developer and owner of the Hartford Pike project, said, “Rhode Island has set ambitious goals for renewable energy, including solar. However, many Rhode Islanders cannot install solar on their property, either for economic reasons or because their home or business premises are not suitable. Community solar enables these people to benefit from cheaper renewable electricity with no upfront cost or long-term commitment, and with the help of SolarEdge we can maximize solar production and savings to the community.”

SolarEdge was selected for its ability to overcome traditional challenges to community solar projects, including undulating ground, which can restrict module placement, and shading from nearby trees. SolarEdge’s Power Optimizers attach directly to solar modules and enable independent operation, meaning the underperformance of one module, for example due to module mismatch, will not impact the others on the same string, ensuring maximized energy production. Plus, unlike traditional string systems, the SolarEdge solution can be placed at any pitch or orientation – including on uneven ground – increasing the number of modules that can be used and the amount of energy produced.

Pochez said “Another important goal is to reduce O&M costs over the system lifetime. To optimize energy production at the Hartford Pike project, we need to be able to monitor all 15,800 solar modules in real time and ensure we can pinpoint any issues quickly and efficiently. The equipment we use will impact our business for the next 25 years or more, so it is in our interest to choose the best quality solution available.”

Through its Power Optimizers, SolarEdge offers the ability to track each module individually. Should one start to underperform, the Sunlight team will automatically be alerted and directed to the exact unit at fault. This will enable personnel to resolve issues quickly and efficiently, reducing the cost of maintenance and helping to keep energy losses to a minimum.

Peter Mathews, general manager, North America, SolarEdge Technologies, said “We are happy to partner with Sunlight General on the Hartford Pike’s community project. Advances in solar technology – such as our DC-optimized solution and superior module-level monitoring – are crucial in unlocking the potential of community solar by making it more commercially viable for all stakeholders. Everyone should be able to benefit from the economic and environmental benefits of solar, and we are committed to making this happen in partnership with Sunlight General and other developers.”