Solar project to bring energy to three D.C. institutions

June 24 2014

The George Washington University (GW), American University (AU) and the George Washington University Hospital (GWUH) announced Tuesday that they will create a renewable energy project that brings solar power from North Carolina to the D.C. institutions, showing that large organizations in an urban setting can meet energy needs while significantly reducing their carbon footprints by directly tapping offsite solar energy.

The project, named Capital Partners Solar Project and supplied by Duke Energy Renewables, comprises 52 megawatts (MW) of solar photovoltaic (PV) power, which is the equivalent of the electricity used in 8,200 homes every year. It is the largest non-utility solar PV power purchase agreement in the United States in total contracted megawatt hours and the largest PV project east of the Mississippi River.

"Thanks to this innovative partnership, the George Washington University will now derive more than half of all its electricity from solar energy," said GW President Steven Knapp. "This will greatly accelerate our progress toward the carbon neutrality target we had earlier set for 2025."

The project, orchestrated by CustomerFirst Renewables (CFR), will help GW, AU and GWUH meet their climate action plan commitments without incurring additional costs. The partners will break ground on the first site this summer and panels will begin to deliver electricity by the end of the year.

When fully operational at the end of 2015, Capital Partners Solar Project will generate 123 million kilowatt hours (kWh) of emissions-free electricity per year, drawn from 243,000 solar panels at three sites. That translates to eliminating roughly 60,000 metric tons of carbon dioxide per year or taking 12,500 cars off the road.

"American University is firmly on its way to achieving carbon neutrality by 2020," said AU President Neil Kerwin. "We are home to the largest combined solar array in the District, are resolved to growing green power through our purchase of renewable energy certificates and are now a partner to the largest non-utility solar energy purchase in the United States."

Under the agreement and once the project is complete, GW will receive roughly 86.6 million kWh, AU will receive 30 million kWh and GWUH will receive approximately 6.3 million kWh annually. The solar power will fuel more than half of GW's and AU's electricity needs and more than a third of GWUH's need.

"Duke Energy looks forward to working with these leading D.C. institutions on an innovative solar project that demonstrates their leadership in sustainability and, at the same time, provides them with low-cost energy at a stable price for years to come," said Greg Wolf, president of Duke Energy Renewables.

Solar power generated at the panel sites in North Carolina will move through a North Carolina electrical grid into the D.C. regional grid, increasing the amount of solar energy in the region.

"Great organizations define the future. They embrace new ways of thinking and become part of something bigger than themselves. It parallels our rich corporate heritage of serving others—like sponsoring wounded warriors and responding to the emerging mental health crisis.

We have a responsibility outside our four walls to the world beyond," said Barry Wolfman, CEO and managing director of GWUH. "Joining this partnership to embrace alternative power reflects our daily work as health advocates—caring, healing, teaching and birthing new generations. Our work and this project pave the way for a brighter future in the nation's capital and the world as a whole. It's simply the right thing to do, and we are proud to be a part of it."

The project also has economic benefits, both for the partners and North Carolina communities.

"We believe our support of solar energy is creating excitement about making investments in our community," said Jon Crouse, trustee for one of the parcels of land in phase one of the project. "The opportunities the project presents—hundreds of construction jobs, the sale of materials and consumables and an increase in the tax base—are huge for our county. For the landowners and farmers, it enables us to diversify from a fully agricultural portfolio, build economic sustainability and become part of a larger effort to be good stewards of the environment."

He will have panels on 25 percent of his acreage, while 75 percent of the land remains dedicated to agriculture.

For the partners, the 20-year agreement will provide fixed pricing for the solar energy at a lower total price than current power solutions and is expected to yield greater economic savings for the partners as traditional power prices are anticipated to increase at a higher rate over the same period.

"CustomerFirst Renewables was delighted to have the opportunity to play a central role in making this solar project happen and believe that together we have created a blueprint for other large electricity end-users who want access to renewables that can really move the needle," said

Gary Farha, president and CEO of CFR, the organization that designed and structured the end-to-end solution, including helping to select and negotiate the deal between the partners and Duke Energy Renewables.

This latest commitment is another step toward carbon neutrality for both universities, continuing the pledge the institutions made with D.C. Mayor Vincent Gray in 2012 to make D.C. the greenest college town in America.

GW works to integrate sustainability into practice, research, teaching and outreach. The university was the first in D.C. to sign the American College and University President's Climate Commitment, agreeing to reduce its total carbon footprint by 40 percent by 2025. The university also has eight LEED-certified buildings (with six more targeting certification) and four green roofs. Meanwhile, GW launched an interdisciplinary sustainability minor, and more than 120 faculty conduct research on sustainability initiatives. The university also recently hired Kathleen Merrigan, former U.S. Department of Agriculture deputy secretary, as executive director of sustainability. In this role, she is responsible for advancing GW's prominence as an academic leader in multidisciplinary sustainability. GW and Duke Energy also are finalizing a memorandum of understanding that will launch a multiyear research collaboration. Duke Energy will provide resources and share data that will provide GW researchers with the ability to describe and communicate the impacts of this landmark energy project.

AU's contributions to creating a sustainable D.C. are unparalleled, starting with its commitment to become carbon neutral by 2020. Sustainability carries throughout the university, through its academic centers, programs, degrees and courses. Faculty members research sustainability on and off campus, such as analyzing AU's 10 green roofs and others in the District for their environmental benefits. Students lead sustainability efforts through programs, clubs and an organic garden, and

participate in research, including in AU's carbon-offset project. New buildings are LEED Gold certified, and 25 existing buildings are also tracked for LEED, as AU is one of only three schools in the world using LEED Volume certification. In 2012, the U.S. Environmental Protection Agency recognized AU as one of four universities nationwide helping advance the development of the country's voluntary green power market through purchase of renewable energy certificates.

Last fall, GW Hospital initiated an internal "Healthier, Happier" campaign to highlight current sustainability efforts and also to garner the support and ideas of frontline staff. The campaign's combined focus is on healthier food, leaner energy, safer chemicals, less waste and smarter purchasing, and GW Hospital is proud to showcase achievements in all of these areas. From healthier food options in the cafeteria to installing more efficient lighting to increased use of "green" cleaning chemicals, GW Hospital strives to not only excel in clinical care but also in a commitment to sustainability and caring for the environment.

Duke Energy Renewables has invested more than $3 billion in renewable energy over the past seven years and currently owns and operates almost 1,800 MW of large-scale wind and solar energy facilities across the nation. In 2013, Duke Energy company-wide owned or contracted for 2,620 MW of renewable energy—wind, solar and biomass—and is on track to reach 6,000 MW of renewable energy by 2020. Two Duke Energy businesses were among the top 10 utilities in the nation in 2013 for adopting new solar energy, according to rankings released last month by the Solar Electric Power Association (SEPA). The company also recently completed a 10-year, $9 billion generation fleet modernization program that allowed the company to retire more than 3,800 MW of older coal-fired units and reduce its carbon emissions by 20 percent since 2005. For eight consecutive years, Duke Energy has been named to the elite Dow Jones Sustainability North America Index for excellence in environmental, social and financial performance.

Provided by George Washington University