

Government of the Virgin Islands of the United States VIRGIN ISLANDS ENERGY OFFICE COW 2025 "Cost of Living" Testimony Monday, March 3rd, 2025



Good afternoon, I am Kyle Fleming, Director of the Virgin Islands Energy Office and VIWAPA Governing Board Planning & Economic Development Committee Chair. On behalf of my agency I'd like to extend sincere thanks and gratitude to Senate President Milton Potter, and the Committee of the Whole for inviting me to expound on Factors Affecting the Cost of Energy.

There is no greater factor right now impacting the cost of energy in the territory than the longstanding spectrum of challenges associated with generating electricity on a remote island. Our legacy dependence on inefficiently burning fossil fuels to generate enough energy to match our electrical demand has delayed the Virgin Islands clean energy revolution to date. Despite the delay, significant strides are being made on the Utility front through optimizing our centralized power system. And I am excited to discuss several ways in which the Virgin Islands Energy Office is developing & deploying energy solutions with a focus on the decentralized or consumer-facing front to improve the cost of living in the territory.

One durable solution, that builds on years of VIEO energy policy and the efforts of the Bryan Roach Administration, is a Virtual Power Plant that can meaningfully reduce WAPA's operating costs all while making its grid more stable. According to a VIEO commissioned study undertaken by the Rocky Mountain Institute, (RMI) establishing a Virtual Power Plant in the territory could save WAPA as much as \$22.5 million annually by strategically offsetting its fossil fuel use. Before I get into how VPPs work and why having one, or several, in the territory could unlock the potential of renewable generation to meaningfully drive down base rates, you need to understand VIEO's holistic approach to meeting the territory's unique energy challenges. On the one hand we have our consumer focused model that helps homeowners and residents invest in common sense innovations like solar, energy efficient appliances, and battery energy storage solutions (BESS) through direct rebates, low to no interest loans, and free upgrades of their existing appliances. Initiatives like the Weatherization Assistance Program (WAP), the Energy Star Rebate Program, Virgin Islands Battery Energy Storage Rebate, Net Energy Billing, Solar Plus Financing and others have touched thousands of Virgin Islanders.

We also support critical infrastructure, like the construction of the St. Croix Educational Complex (SCEC) Emergency Shelter Microgrid last April or our proposed microgrid for WTJX's Mountain Top tower site. The former facility not only helps supply the energy that supports the daily education of nearly 900 students, but also stands ready to provide power to the to the wider community in the event there is a need for emergency shelter mobilization.

In the coming months VIEO has plans to build out community microgrids - small electrical grids that are tied into, but can act independently of, a larger municipal energy distribution grid- as part of our Solar For All program. These proposed grids will be constructed similarly to the SCEC Microgrid, which meshes a solar array with a robust BESS. By strategically investing the \$62.5 million of funding the EPA has granted to the territory for SFA into these microgrid projects, VIEO will help to strengthen the grid in ways that will benefit all Virgin Islanders, not just those communities and entities directly in the vicinity of the projects. The Solar for All program will also support the deployment of affordable rooftop solar and battery systems to homes across the territory. This will build upon the VIEO's Solar Plus Financing program which offers low interest loans to customers who install solar or solar & battery. The Solar Plus Program has already closed the first two loans and currently has over 25 more applicants that are ready to close this month.

Twenty-twenty-five promises to be a banner year for the penetration of solar generation in the Virgin Islands, with large-scale solar farm energy production on St. Croix expected to surpass 20 MW before the end of the year. The energy generated by these installations can offset the use of WAPA generators operating on costly fossil fuels.

A VPP can bolster the impact of the rapid increase in renewable energy on the grid. VPPs are not brick and mortar power plants of the kind that Virgin Islanders have become accustomed to. Rather, they consist of widely distributed assets like residential rooftop solar arrays and battery energy storage solutions (BESS), electric vehicle charging infrastructure, smart thermostats, and other systems that can remotely coordinate with a central command center that actively works to balance demand for energy against supply.

As advances in consumer-oriented distributed generation and BESS systems have come to market, VIEO has been at the forefront of financial incentive and policy efforts to create pathways that give homeowners the financial leverage they need to adopt these technologies. Thanks in large part to these efforts, there is currently more than 30 MW of solar, and 52 MWh of BESS spread out between an estimated 2,928 distributed energy systems on St. Croix, St. Thomas, and St. John. Currently, these existing systems exclusively serve the WAPA customers' homes and businesses where they've been installed. However, as a VPP, the network of distributed solar and BESS could mimic the functionality of utility-scale assets and respond in real-time to the varying demands of the territory's electrical grids.

To bring about a VPP in the territory and create an energy market where everyone benefits from lower rates and amble carbon free electricity, VIEO needs the senate's help. Federal tax incentives and rebates have helped many Virgin Islanders realize their dream of installing solar and BESS on their homes. Investments that at present largely solely benefit the installer. We ask that you help create a local incentive program that encourages residents to install BESS at their homes, against a pledge that those batteries will be dispatchable by a VPP to help WAPA meet baseload, store renewable energy, or perform other grid forming tasks as necessary.

We cannot fail to act with urgency. VPP's have revolutionized how energy grids in Europe, the U.S. and Puerto Rico function, creating solutions to some of the most challenging limitations that have plagued the Virgin Islands' electrical grid for decades. The technology's ability to act in parallel with a utility's grid management system could materially stabilize the grid, creating the kind of reliable service that many of the biggest consumers who have left WAPA have cited as vital to their businesses' viability.

In conclusion, the VIEO remains focused on the creative problem solving required to reduce the cost of living the territory. The VIEO has been well funded in recent years by the Federal government to expand the impact of the customer focused energy solutions. However, the tumultuous federal funding climate at the moment highlights the importance of working together with the senate to ensure the necessary local policies are in place to ensure momentum is maintained. I stand ready to respond to any questions you may have.