

The Virgin Islands Consortium

Hodge Tells U.S. Senate Committee On Energy 'Tangible Relief Is Finally On The Horizon' For Virgin Islands

Business / **Published On July 14, 2015 09:43 PM /**

Staff **July 14, 2015**



At the invitation of the chairman of the U.S. Senate Committee on Energy and Natural Resources, Virgin Islands Water and Power Authority Executive Director Hugo V. Hodge, Jr. appeared before the committee Tuesday to offer testimony on remote and isolated energy systems, including energy and infrastructure challenges and opportunities, according to a press release WAPA issued today.

Hodge provided an overview of WAPA's challenges being significantly dependent on fuel oil in generating electricity and outlined numerous initiatives now underway to bring about

relief to the utility's customers.

"While the territory has received some relief in recent months due to the recent decline in oil prices, which has reduced the current electric rate to 32 cent per kilowatt hour for residential customers, and 35 cents per kilowatt hour for commercial customers, analysts are divided on how long this respite from high fuel prices will last. One thing is certain however, prices will elevate again, and so the urgency remains the same," Hodge told the committee today.

He noted that like most other islands in the Caribbean, the Virgin Islands has no conventional energy resources to meet its energy needs.

"While U.S. mainland utilities can connect to grids to purchase power from other utilities, island utilities are small, isolated and are not interconnected to a grid comprised of other utilities. This is primarily due to their separation by water and the depth of the ocean floor, which makes interconnection via underwater electric cables technologically and economically unfeasible. As a result, island utilities have historically purchased small simple-cycle generating units that are oil-fueled." Hodge further explained WAPA's operation of two separate generation systems, one in each island district.

Hodge told the committee that since fuel prices began to skyrocket more than ten years ago, WAPA has pursued every option to reduce the cost of electric services to the people of the Virgin Islands.

"We have pursued alternative and renewable sources tirelessly for almost 10 years now, and tangible relief is finally on the horizon." WAPA could not, however, have made the advances that it has without a number of strategic public and private partnerships.

Hodge testified that WAPA's primary supporters have been the Executive and Legislative Branches of the V.I. Government, and on the federal level, the Department of Interior, the Department of Energy through its National Renewable Energy Laboratory, the Federal Emergency Management Agency and the Department of Agriculture's Rural Utilities Services. Together they have provided the following assistance:

- DOE, through NREL, helped to identify the territory's baseline energy use and identify how the Virgin Islands could best meet its goal of achieving a 60% reduction in the use of fossil fuel by 2025.
- WAPA, as an EDIN project partner, has been able to tap into a broad spectrum of technical assistance and project development support from DOE and NREL.
- DOI provided a \$500,000 grant to prepare an Integrated Resource Plan (IRP) that will provide the roadmap for determining future generation needs.
- FEMA has funded hazard mitigation projects which have assisted with burying power lines that serve critical areas in the territory.
- RUS has approved a loan that will allow WAPA to implement distribution automation technology, including the development of a smart electric grid, as well as advanced metering infrastructure (AMI) and automated meter reading (AMR).

Hodge also provided an overview of various initiatives WAPA has embarked on to reduce the cost of electricity in the territory:

- Until October 2014, WAPA was 100% dependent on fuel oil to produce power. Since that time, WAPA has placed on its grid approximately 8.2 megawatts of solar power through partnerships with Toshiba International Corp, and Mainstreet Power Company/Morgan Stanley. The result is that approximately 8% of WAPA's peak demand generating capacity now comes from renewable resources. The cost to the Authority to purchase power from these sources is 15 cents and 17 cents per kilowatt hour respectively.

In December of 2014, WAPA issued a Request for Proposals for six more megawatts of solar power on St. Croix and three more megawatts of power on St. Thomas. In January, 2015, the Authority signed contracts for the additional solar capacity for St. Croix, with St. Croix Solar and St. Croix Solar II. The purchase price is 13 cents per kilowatt hour. This project is anticipated to be operational in fifteen months. With regard to the three megawatt solar facility for St. Thomas, the WAPA has selected a bidder and contract negotiations are substantially completed. An executed power purchase agreement is anticipated in the upcoming months.

WAPA has entered into a contract with Tibbar Energy, USVI, LLC, a qualified facility approved by the Public Services Commission (PSC) via the territory's Cogeneration and Small Power Production Act. Tibbar will design, construct, and operate a king grass-fed anaerobic digester facility capable of producing up to 7 megawatts of power. Tibbar is anticipated to be in commercial operation by December, 2016.

WAPA, in conjunction with the Virgin Islands Energy Office, has completed wind studies to determine the economic feasibility of wind power development in the territory. WAPA is currently in negotiations with several qualified facilities proposing wind projects that were approved by the PSC pursuant to the Cogeneration and Small Power Production Act.

One of the pivotal actions taken by the V.I. Government to aid WAPA was the passage of Act 7360. The Act established the Virgin Islands Water and Power Authority Generating Infrastructure Fund which contains the proceeds from the gasoline tax which has been increased from 7 cents to 14 cents per gallon. The monies will fund new power generating units and/or heat recovery steam generators. This legislation is a significant component of the Authority's plan to reduce the cost of energy, and will be the source, after completion of the Integrated Resource Plan, to purchase the first new generation in approximately 11 years.

WAPA has partnered with the VITOL Group, a Swiss-based, Dutch-owned multinational energy and commodity trading company to supply lower cost and cleaner burning LPG for power generation, with an anticipated 30% reduction in fuel costs. WAPA's combustion turbines are now being converted to enable them to burn LPG and LNG in addition to fuel oil.

In his testimony today, Hodge said, the propane project has not been without its challenges as there have been a number of unforeseen circumstances that have forced adjustments to the project completion schedules.

“The obstacles include: adverse weather conditions, undocumented soil conditions and underground obstacles, challenges in coordinating the conversion of the power plants to safely burn propane while simultaneously operating power generating facilities to meet daily electricity demand.”

Hodge told the committee that despite the challenges, the projects have realized many accomplishments since their inception two years ago.

“I am pleased to report that the St. Croix power plant will be operating on LPG within the next 30 days. The St. Thomas project is, however, lagging behind. This is due to remaining work that is directly linked to the issuance of the U.S. Army Corps of Engineers Permit, which the island of St. Thomas has not yet received. The Corps of Engineers is doing its utmost to process the permit, however its permitting staff is inundated with other requests.”

Hodge was among representatives of Guam, Alaska and Hawaii outlining the challenges remote island electric system operators such as WAPA, face in the generation of electricity. Also testifying before the committee was the Assistant Secretary of the Department of Interior for Insular Areas.

Feature Image: WAPA Executive Director Hugo V. Hodge, Jr. testifying before the U.S. Senate Energy and Natural Resources Committee in Washington, D.C. today.

Image Credit: WAPA.