

07/22/2024-SPECIAL ORDERED

BILL NO. 35-0311

Thirty-Fifth Legislature of the Virgin Islands

July 22, 2024

An Act mandating the Virgin Islands Water and Power Authority to seek technical assistance from the United States Department of Energy, the United States Army Corps of Engineers, and relevant federal government agencies to modernize its electrical grid and water systems, improve reliability, enhance efficiency, and incorporate advanced technologies

PROPOSED BY: Senators Donna A. Frett-Gregory, Milton E. Potter,
Dwayne M. DeGraff, Marvin A. Blyden, Alma Francis Heyliger,
Novelle E. Francis, Jr., Marise C. James, Diane T. Capehart,
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WHEREAS, the existing electrical grid infrastructure of the Virgin Islands is outdated and in need of modernization; and

WHEREAS, modernizing the grid is essential for improving reliability, reducing outages, and enhancing overall efficiency; and

WHEREAS, advanced technologies, including smart grids, renewable energy integration, and energy storage solutions, are necessary for a sustainable and resilient electrical system; and

WHEREAS, the United States Department of Energy, the United States Army Corps of Engineers, and other federal agencies possess the expertise and resources needed to assist with the modernization of the electrical grid of the Virgin Islands; and

WHEREAS, the United States Department of Energy, the United States Army Corps of Engineers, and other federal agencies possess the expertise in assessing the true condition of the WAPA’s infrastructure and identifying areas in need of repair or replacement, and developing long-term infrastructure improvement plans; and

WHEREAS, the United States Department of Energy, the United States Army Corps of Engineers, and other federal agencies can provide technical assistance in implementing energy efficient measures and renewable energy solutions to help Virgin Islands Water and Power Authority (WAPA) reduce its operational costs, improve system reliability, and reduce its environmental impact; and

WHEREAS, the United States Department of Energy, the United States Army Corps of Engineers, and other federal agencies can provide technical assistance in modernizing the WAPA’s electrical grid to respond to natural disasters, or other emergencies; and

WHEREAS, the United States Department of Energy, the United States Army Corps of Engineers, and other federal agencies can provide training and capacity-building support to help WAPA staff acquire the necessary skills and expertise to manage and maintain its infrastructure effectively; and

WHEREAS, by leveraging technical assistance from the United States Department of Energy, the Army Corps of Engineers, and other federal agencies, WAPA can access expertise, resources, and best practices to address its infrastructure challenges, improve operational efficiency, and enhance its financial sustainability; Now, Therefore

Be it enacted by the Legislature of the Virgin Islands:

SECTION 1. The Virgin Islands Electrical Grid Technical Assistance and Modernization Act

SHORT TITLE

This act may be cited as the " Virgin Islands Electrical Grid Technical Assistance and Modernization Act."

PURPOSE

This act mandates that the Virgin Islands Water and Power Authority seeks technical assistance from the United States Department of Energy, the United States Army Corps of Engineers, and relevant federal government agencies to modernize its electrical grid, improve reliability, enhance efficiency, and incorporate advanced technologies.

DEFINITIONS

For the purposes of this Act:

(a) "WAPA" means the Virgin Islands Water and Power Authority, established as a semiautonomous agency pursuant to title 30 the Virgin Islands Code, chapter 5.

(b) "Virgin Islands Energy Office" or "VIEO" means the agency established pursuant to Title 3 Virgin Islands Code, chapter 1, charged with the planning, oversight, and coordination of energy programs according to federal law.

(c) "Department of Energy" (USDOE) means the United States Department of Energy.

(d) "Army Corps of Engineers" means the United States Army Corps of Engineers.

(e) "Federal Government Agencies" means any relevant federal entities with expertise in electrical grid modernization.

IMPLEMENTATION

(a) Not later than 60 days of the enactment of this act, the Virgin Islands Water and Power Authority shall initiate contact with the Department of Energy, the Army Corps of Engineers, and other relevant federal agencies to begin the process of seeking technical assistance as required under this act.

(b) Not later than 270 days of the enactment of this act, the Virgin Islands Water and Power Authority shall submit a proposed modernization plan to the Legislature of the Virgin Islands outlining the steps and timeline for implementing recommended upgrades and improvements to their electrical grid infrastructure.

TECHNICAL ASSISTANCE REQUIREMENT

(a) The Virgin Islands Water and Power Authority shall seek technical assistance and collaboration from the United States Department of Energy and the United States Army Corps of Engineers, and other relevant federal agencies as the United States Department of Energy considers necessary, for the purpose of modernizing its electrical grid infrastructure.

(b) The technical assistance to be sought must include:

(1) conducting a thorough assessment of current electrical grid infrastructure to include vulnerabilities, shortcomings, and areas in need of repair or replacement;

(2) developing a comprehensive plan for grid modernization to enhance efficiency, reliability, and resilience, incorporating recommendations and best practices provided by the federal agencies;

(3) prioritizing the integration of renewable energy sources, energy storage solutions, and smart grid technologies

(4) developing a cost-benefit analysis regarding the feasibility of providing WAPA residential customers small scale home battery backup, using solar power, to lower grid costs for all customers while giving customers reliable, sustainable electricity during grid disruptions or electric outages;

(5) seeking technical assistance regarding the feasibility of establishing a home battery pilot program similar to that first offered by Vermont's Green Mountain Power to its residential customers in 2015;

(6) implementing advanced technologies for monitoring, control, and response to grid disruptions; and

(7) Creating training programs for utility personnel on modern grid management techniques and technologies, and capacity-building support to help WAPA staff acquire the necessary skills and expertise to manage and maintain its infrastructure effectively.

REPORTING REQUIREMENTS

(a) The Virgin Islands Water Power Authority shall provide an annual progress report to the Legislature of the Virgin Islands detailing the status of its modernization efforts, including:

(1) technical assistance received;

(2) milestones achieved;

(3) challenges encountered; and

(4) expenditures related to modernization activities.

BILL SUMMARY

This bill mandates that the Virgin Islands Water and Power Authority seeks technical assistance from the United States Department of Energy, the United States Army Corps of Engineers, and relevant federal government agencies to modernize its electrical grid and water system, improve reliability, enhance efficiency, and incorporate advanced technologies.

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