



# Power Generation and Electric Reliability in the U.S. Virgin Islands

**Corrie E. Clark**

Analyst in Energy Policy

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Two and a half years after Hurricanes Irma and Maria damaged 80% to 90% of the power transmission and distribution systems across the U.S. Virgin Islands (USVI), financial and infrastructure issues continue to challenge the U.S. Virgin Islands Water and Power Authority (WAPA). A combination of infrastructure needs and cash flow challenges has impacted electricity rates. As of February 1, 2020, [electricity rates](#) were approximately \$0.40 per kilowatt-hour (kWh) for residential customers (for the first 250 kWh) and approximately \$0.47/kWh for commercial customers. In 2017, prior to the hurricanes, [electricity rates](#) were above \$0.32/kWh. In comparison, the [U.S. average price of electricity](#) in December 2019 was approximately \$0.13/kWh for residential customers and \$0.10/kWh for commercial customers.

In addition, cash flow challenges limit WAPA's ability to improve resiliency and operate reliably. According to the [U.S. Virgin Islands Disaster Recovery Action Plan](#), which proposes programs to address the USVI's unmet needs across various sectors, the energy sector infrastructure needs stemming from the hurricanes totaled nearly \$2.3 billion. The Bipartisan Budget Act of 2018 (P.L. 115-123) appropriated additional \$28 billion in Community Development Block Grant-Disaster Recovery (CDBG-DR) funds to the most "impacted and distressed areas" affected by presidentially declared disasters occurring between 2015 and 2017, directed the Department of Housing and Urban Development (HUD) to allocate at least \$12 billion for mitigation activities among those CDBG-DR grantees, and included a \$2 billion CDBG-DR appropriation "to provide enhanced or improved electrical power systems" for Puerto Rico and the USVI. USVI's Action Plan—[approved](#), with fiscal controls, by HUD in March 2019—details how USVI would use their funds. HUD allocated \$67.7 million (approximately 3%) to the USVI for electric power systems. [Governor Bryan reportedly asked HUD in April 2019](#) to "acknowledge that the Virgin Islands needs at least \$350 million of these funds to make a meaningful impact in strengthening the grid and lowering the high cost of electricity in the Virgin Islands." On September 16, 2019, HUD allocated \$774 million in mitigation funds (CDBG-MIT funds) to the USVI; however, [HUD announced](#) that

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[T]he grantee is prohibited from using CDBG-MIT funds for mitigation activities to reduce the risk of disaster related damage to electric power systems until after HUD publishes the *Federal Register* notice governing the use of the \$2 billion for enhanced or improved electrical power systems. This limitation includes a prohibition on the use of CDBG-MIT funds for mitigation activities carried out to meet the matching requirement, share, or contribution for any Federally-funded project that is providing funds for electrical power systems until HUD publishes the *Federal Register* notice governing the use of CDBG-DR funds to provide enhanced or improved electrical power systems.

To date, HUD has not published the notice.

The prohibition on the use of CDBG-MIT funds, combined with WAPA's cash flow challenges, limits WAPA's ability to make improvements to the island's two electric power grids. Without sufficient available funds, [WAPA is unable to meet federal funding matching requirements](#) to make use of eligible mitigation funding from FEMA to harden the electrical power systems and improve resiliency. In October 2018, in response to concerns that WAPA would exceed its debt ceiling of \$500 million, the [USVI Senate raised WAPA's debt limit to \\$750 million](#).

WAPA's cash flow challenges have led to fuel supply issues and contract disputes. On June 3, 2019, concerns over payment for fuel reportedly led Vitol Inc. to send a letter to USVI Senate President Novelle Francis demanding a payment of \$20 million to be paid by June 30, 2019, to prevent a fuel cutoff. On March 10, 2020, [WAPA reportedly received notification from APR Energy](#) that the company would suspend power generation service to WAPA, in response to a default in payments. [APR Energy suspended power generation service](#) on March 11, 2020. [APR Energy has](#) provided power generation on the island of St. Thomas since 2013. In response, WAPA will rely on two less efficient generation units to continue providing power to St. Thomas and St. John. Although [WAPA issued a press release](#) stating that "the actions by APR Energy will have no effect on WAPA's ability to provide continuous electrical service," a district-wide electrical service interruption alert was also [reportedly issued by WAPA](#). While the service interruption may not be related to the generation capacity loss and was resolved on the same day, it may be indicative of the challenges WAPA continues to face in providing reliable electric power services.

WAPA reportedly is facing several lawsuits from employees, including one that [alleges that WAPA shipped materials](#) provided by the Federal Emergency Management Agency (FEMA) for hurricane recovery to the British Virgin Islands.

The fiscal and infrastructure challenges facing WAPA raise several potential issues for Congress. Insular areas face unique challenges for electric power system reliability. Congress might consider proposals to support initiatives to lower energy costs. [Mainland electrical power generation](#) has largely shifted to using more natural gas as a fuel in recent years. Construction of a liquefied natural gas (LNG) import facility and accompanying generation plants could lead to lower energy prices and an [enhanced capacity](#) to employ renewable energy sources. Increasing renewable energy and energy storage may be an option. While WAPA has taken some steps to modernize its generating units, some major investments may be needed. For example, while construction of a LNG facility and further conversions of generating units could lead to lower electricity rates in the future, significant financial commitments for these projects would likely challenge the fiscal capacity of the USVI government and WAPA. Also, LNG supply contracts typically extend over decades due to the scale of required investments, arrangements that could be difficult to negotiate given the WAPA's fiscal situation. Congress may expand oversight of federal agencies that administer disaster assistance programs, including FEMA and HUD, to ensure the timely receipt of assistance by grantees. Congress could also examine the interplay among federal agencies or consider changes to existing authorizations addressing federal assistance for energy planning and rebuilding or modernizing the electric power systems of insular areas.



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