



Public Hearing

CDBG-DR Electrical Power System Enhancement & Improvements Action Plan Overview

Tuesday
December 6, 2022





Purpose Of Today's Public Hearing

Give community members the opportunity to:

Learn about VIHFA's proposed CDBG-DR Electrical Power System Improvements Action Plan

Understand VIHFA's goals and objectives to stabilize power systems and encourage innovative investments

Identify expectations for the Action Plan review process

Ask questions and provide feedback to VIHFA regarding the Action Plan

At the end of this presentation:

Formal comments will be accepted at the hearing or in writing. Written comments can be sent to the following address:

- Email: media@vihfa.gov or InfrastructureTeam@vihfa.gov
- Please label your comments: ***CDBG-DR Electrical Power System Improvements Action Plan***



Action Plan Outline

Action Plan Overview

Introduction

Chart

Unmet Needs

Project Allocations –Estate Richmond

Community Innovation Application

Planning

Administration

Coordination

General Requirements

Timeline

Next Steps



Introduction

The U.S. Virgin Islands Action Plan for Community Development Block Grant Disaster Recovery (CDBG-DR) Funds for Electrical Power System Enhancement and Improvements (EPSEI) proposes the use of funds for specific projects and activities that provide enhancements and improvements to the territory's electrical power system. This Action Plan describes how projects will address unmet needs, which were determined by:

(1) evaluating:

- damages to the system from 2017 Hurricanes Irma and Maria,
- risks to the system from future disasters,
- costs of incorporating resilience features and mitigating risks from future disasters, and

(2) identifying needs not covered by other sources of funding.



Unmet Needs 1: Impacts of Irma and Maria

Significant impacts to the territory's energy networks:

- Over 90% of all above-ground power lines were damaged and over 1,100 miles of transmission and distribution lines impacted
- 13,478 utility poles damaged and more than 50% of all wooden utility poles knocked down
- Over 20% of power-generating capacity was lost for almost a month
- By January 2018 (four months later) electricity was restored to 99% of active customers

The CDBG-DR EPSEI funds are to address the remaining cost for systems restoration and improvements, not already covered through other sources of funding.



Unmet Needs 2: Prioritization/Methodology

Preparation of the unmet needs assessment involved:

- Gathering data and key information
- Updating existing information, including data gathered as part of the CDBG-DR and CDBG-MIT Action Plans process
- Consulting with and fostering relationships with WAPA, Department of Energy (DOE), members of the TCT, other stakeholder organizations
- Utilizing plans, studies, reports, resource materials

Initial component of the unmet needs assessment is to establish a total need based on the following:

- Damages on the grid as sustained from 2017 hurricanes
- Evaluation of components at the greatest risk from future disasters
- Costs of incorporating resilience measures to mitigate impacts from future extreme weather events and the effects of global climate change
- Accounting for the costs associated with addressing long-term carbon reduction goals

Building on this base-need, the next step in the unmet needs assessment process is to look at funding from other sources outside of CDBG-DR electric grid funding.



Unmet Needs 3: Overall Funding, In Context

Programs	Amount	Use/Project Investments
CDBG-DR	\$1.075 billion	Specific investments for utility infrastructure: <ul style="list-style-type: none">• \$417,750,000 - Non-Federal Share (Match) which includes some CDBG-DR funding for electrical system improvements and energy needs• \$60,750,000 - Infrastructure Repair and Resilience• \$95,903,330 - Electrical Power Systems Enhancement and Improvement currently identified for the Randolph Harley Power Plant
CDBG-MIT	\$774.188 million	The award includes the relevant earmarks: Infrastructure & Public Facilities \$102,500,000 - Community Resilience & Public Facilities Program \$315,700,000 - Critical & Natural Infrastructure Resilience Program Economic Resilience & Revitalization \$40,962,500 - Commercial Hardening and Financing Program \$35,787,500 - Small Business Mitigation Program
CDBG-DR EPSEI	\$67.653 million	Details to be provided in the forthcoming Action Plan. All proposed investments benefit the electrical grid.



Unmet Needs 4: Other Funding Considerations

- **FEMA Assistance:** The most recent analysis of FEMA PWs (project worksheets) for WAPA as of Summer 2022 captures approximately \$900 million
- **Insurance:** Deducted from FEMA approved PWs due to WAPA insurance proceeds as the identified available funding, totaling \$2.5 million.
- **WAPA Finances:** Costs associated with power production and transmission, and distribution, \$6,250,000 for power production and \$1,518,237, for electric system improvements.
- **Other Sources:** Private, philanthropic and community support sources:
 - Bloomberg Partners, the Clinton Global Initiative, and the Expedia Group to provide funding in the form of \$500,000



Summary of Unmet Needs

Energy Sector Funding			
Funding Source	Total Need (CDBG-DR Action Plan v.3, p. 92)	Total Available	Current Unmet Need (Total Need – Total Available)
FEMA-406 Public Assistance		\$807,783,127	
FEMA-404 HMGP		\$255,299,405	
Insurance		\$2,533,924	
CDBG-DR Electrical Power System Enhancement & Improvement		\$95,903,330	
CDBG-DR Local Match Awarded		\$87,927,156	
CDBG-MIT (CDBG-MIT Action Plan, p. 129)		\$30,000,000	
WAPA Internal Capital (FY 2023)		\$ 7,768,237	
Total	\$2,282,000,000	\$1,288,215,179	\$993,784,821

This remaining Unmet Need incorporates damages sustained by the 2017 hurricanes, the costs of resilience and mitigation measures to address components of the system at risk from future disasters, the costs of long-term carbon reduction goals, and available funding from other sources besides the CDBG-DR electrical system improvements grants.



Proposed Use of Funds

Activity	Action Plan Allocation	Percent of Total Allocation	Estimated LMI Benefit
EPSEI Richmond Estate Generating Facility	\$53,000,000	78.34%	100%
EPSEI Community Innovations Application Program	\$10,000,000	14.78%	May Vary Must meet 51% LMI
Planning	\$1,270,350	1.88%	N/A
Administration	\$3,382,650	5.00%	N/A
TOTAL	\$67,653,000		

\$67,653,000 allocation for CDBG-DR EPSEI

\$53,000,000 allocated towards the Richmond Estate generating facility on St. Croix.

\$10,000,000 allocated toward the competitive application program for community organizations with innovative and smaller-scale electrical grid improvement projects

\$1,270,350 for Planning

\$3,382,650, for Administrative costs, 5% of the total award



Renewable and Alternative Plans/Goals

CDBG-DR Electrical Power System Improvement funds also advance goals of incorporating mitigation and resilience into project scope, promoting the use of renewable energy, and reducing greenhouse gas emitting sources of fuel.

Many of these goals are consistent with those of local policy.

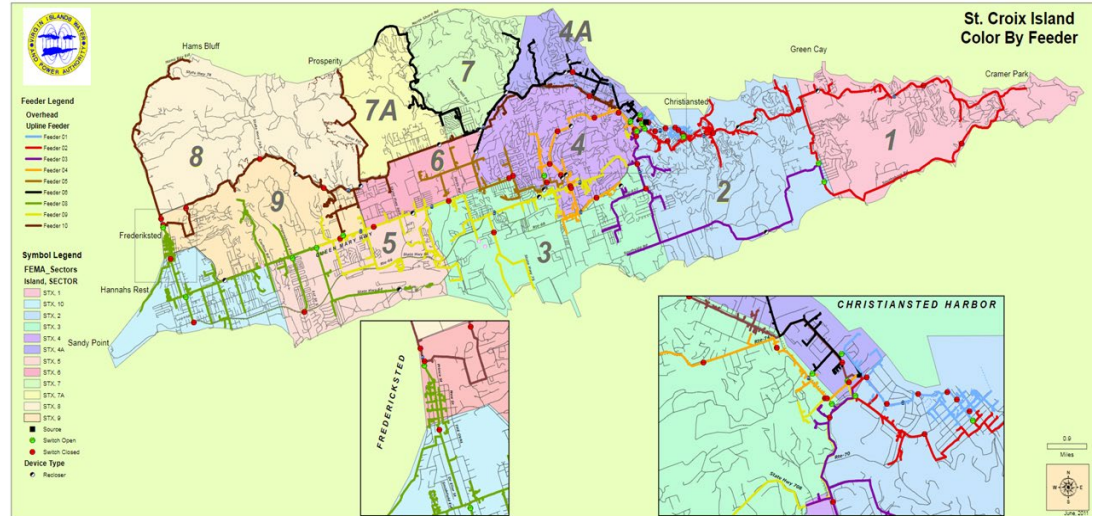
US Virgin Islands Renewable and Alternative Energy Act of 2009 (Act 7075) established plans to reduce usage of fossil fuels by 60% by the year 2025.

These funds present the opportunity for community investments, distributed generation, solar, wind, and localized power projects throughout the territory.

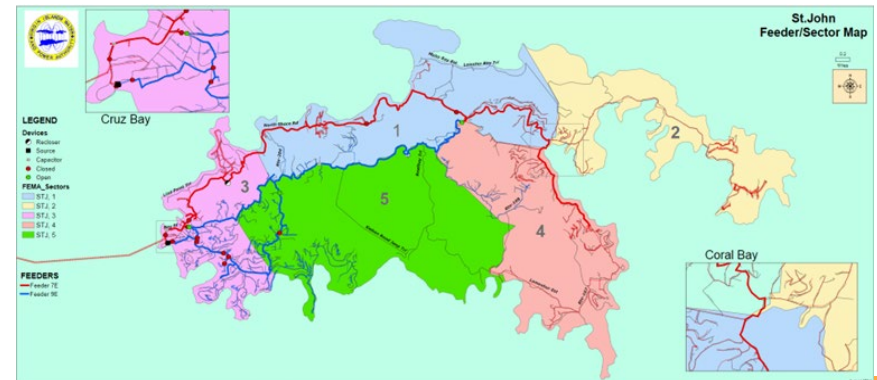
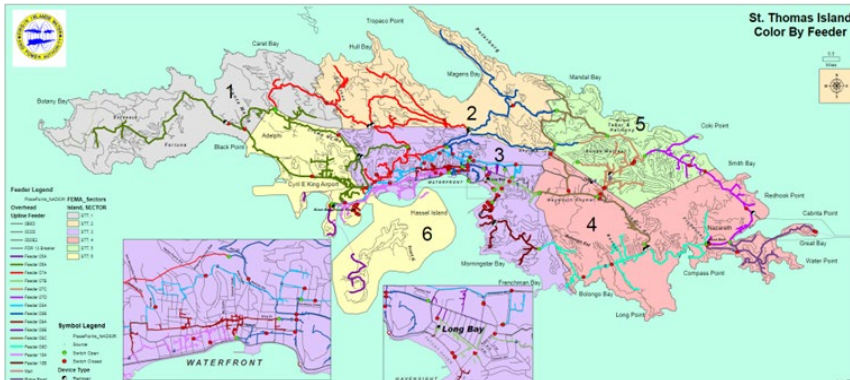
VI Electrical Power System

There are two separate power systems in the Territory.

One with generation based on St. Croix and distributing power to the Island cross 10 different feeder zones.



The second power system has primary generation on St. Thomas with power distributed to St. Thomas and St. John via 13 feeders





Rate Structure

The two grid systems that power the territory do not each have their own rate structure.

- There is one set of rates charged to customers across the entire territory, which covers different rates for residential and commercial customers.

The most significant component of the rate structure is the Levelized Energy Adjustment Clause (LEAC), which is used to cover the cost of fuel sources for power generation and adjusted periodically.

Virgin Islanders pay amongst the highest electric utility prices in the Caribbean, and significantly more than the U.S. mainland.

Coordination with WAPA

2019 WAPA Integrated Resource Plan

Objectives “to identify the mix of incremental resources that will achieve

- a safe, adequate, and reliable supply of power at the lowest reasonable cost and
- in an environmentally acceptable manner”

Proposes recommendations on next steps for the development of a rate study and a transmission study, refinement of cost and performance information on renewable energy, and the creation of detailed timelines for project development.

2020 WAPA Strategic Transformation Plan

Focuses on three key areas:

- Financial & System Stabilization, System Resiliency
- Generation Sector Transformation, with specific recommendations of expanding fuel sources beyond fuel oil, undergrounding utility lines and installing composite poles
- Replacing inefficient generating units and promoting renewable energy generation.

WAPA’s Finances

- With extremely limited internal funds, WAPA is required to be strategic in its use of resources to support fuel procurement, operating expenses, internally funded capital expenditures and debt service, all in context of not pursuing electric rate adjustments and in the pursuit of transformational reform.
- In its 2023 budget was adjusted to reduce projected expenditures for personnel costs, operating expenses, and capital expenditures so that the budget would balance with projected revenues.



Proposed Use of Funds: Richmond Estate Generating Facility

The Richmond Estate Generating Facility is the primary source of generation for St. Croix has a **current configuration with total capacity of approximately 80 mW**

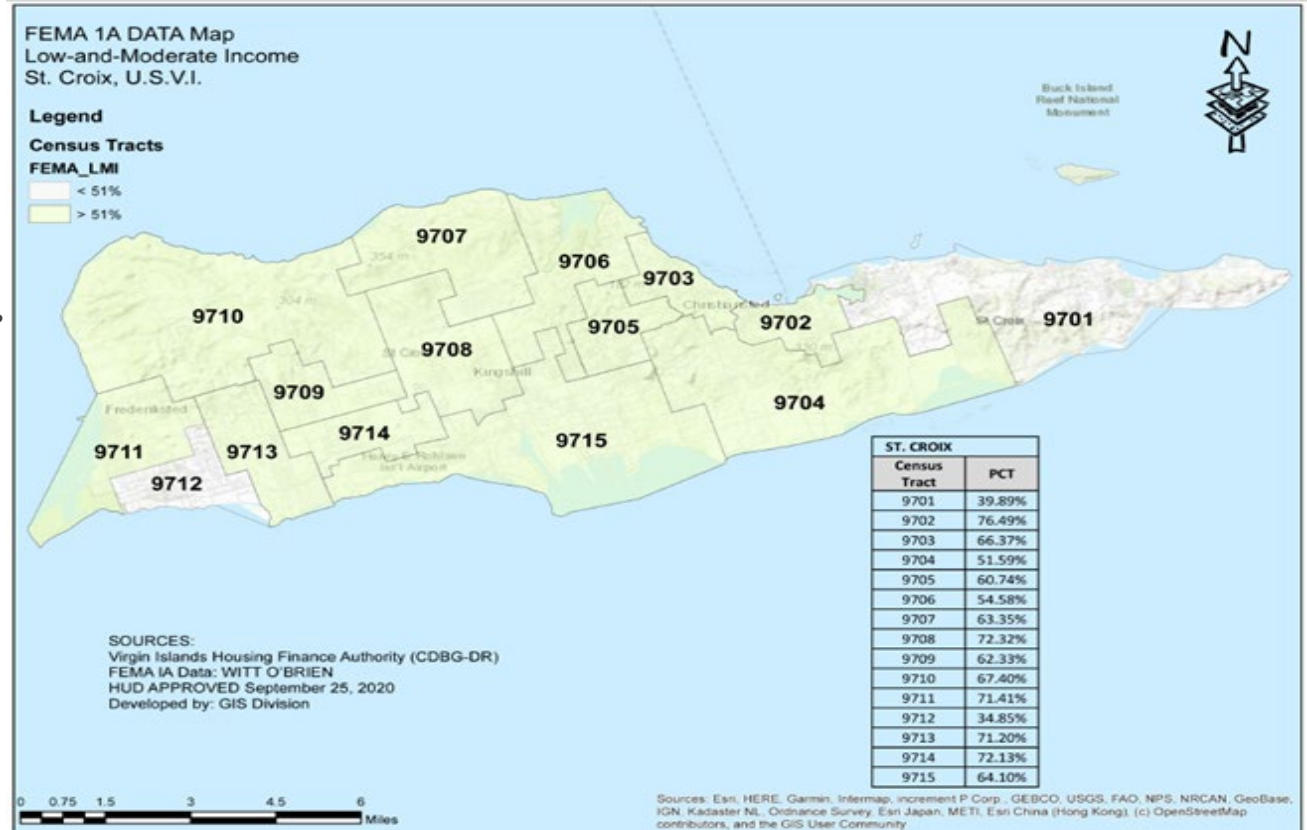
The Proposed Use of Funds improve reliability and resiliency of the overall system.

The investment of CDBG-DR electric grid funding is based on the overall availability of funds, vulnerability to storms, alignment with reliability, cost savings, environmental goals, and benefits to LMI populations.

Proposed Use of Funds: Richmond Estate Generating Facility

The Richmond Estate Generating Facility serves all of St. Croix via **10 feeders** serving approximately **28,632 customers**.

13 of 15 census tracts, have greater than 51% of the population designated as LMI with the **average LMI composition** on the island of **61.9%**, as shown:





Low- and Moderate-Income Benefits

VIHFA will ensure that at least 70% of the CDBG-DR EPSEI provide benefits to low- and moderate-income persons.

This National Objective is achieved through the demonstration of:

EITHER

- **Rate Savings:** Provide at least 51% of low- and moderate-income residents with either a subsidized rate for electricity below that charged to other residential ratepayers or a lower rate for electricity than was charged prior to complete implementation of the CDBG-DR funding electrical power system improvements;

OR

- **Reliability:** Improve the reliability of the electrical power system in low and moderate-income areas that are primarily residential.



Community Innovations Program

VIHFA will administer an application program.

The Community Innovation Program's primary focus is to foster community partnerships by identifying organizations that are best positioned to address local needs.

Program goals:

- Address ongoing electrical power grid needs in the Territory.
- Allow other interested groups—non-profits, small businesses and, educational institutions, etc., to demonstrate innovate ideas that strategically address improvements and vulnerabilities in the Territory's electric grid.
- Enhance other existing electrical power system improvement projects being implemented with other financial investments.
- If identified as a need, make available technical assistance and capacity building resources to selected organizations to ensure they have the capacity and knowledge to manage the CDBG-DR funding and meet requirements.



Community Innovations Program

VIHFA will manage a competitive process for eligible applications based on:

- **National Objective & Grant Objective.** Will activities benefit low- and moderate-income persons?
- **Electrical Service.** Will activities address duration and frequency of outages in the project area?
- **Schedule.** Will the overall schedule, (environmental, permitting, design, construction), be completed in the grant cycle?
- **Sustainability.** To what degree will green or sustainable methods be measures will be incorporated into the project?
- **Resilience.** How are resilience and mitigation measures incorporated?
- **Project Requirements.** What degree of specialized equipment, or innovative technology is incorporated?
- **Institutional Capacity.** Does the agency have capacity to carry out the project, including staff, budget, ROI, and leverage, etc.?
- **Cost Reasonableness.** How reasonable are the costs?



Planning and Administration

- Planning \$1,270,350
 - VIHFA can utilize up to 15% of the CDBG-DR EPSEI funds for eligible pre-award planning activities undertaken prior to the signing of the Grant Agreement. It intends to use 1.88% of its CDBG-DR EPSEI funds for eligible planning activities and 14.78% for the Community Innovation Program.
- Administration \$3,382,650
 - VIHFA will use 5% of its CDBG-DR funds for eligible Administration costs.



Roles and Responsibilities

VIHFA:

- Administrator of the territory's CDBG-DR Electrical Power System Improvements funds
- Lead coordinator with territorial and federal agencies and community stakeholders

HUD:

- Awards CDBG-DR funds to grantees
- Conducts federal oversight of rules and requirements

WAPA:

- Territory's regulated public utility generation, distribution and servicing.
- Partner to VIHFA in making improvements and upgrades to power systems

Other Local & Federal Stakeholders

- Virgin Islands Energy Office
- Public Services Commission
- Office of Disaster Recovery
- Department of Energy
- Federal Emergency Management Agency
- UVI Caribbean Green Technology Center



Coordination: Technical Coordination Team

During the development of the Action Plan, VIFHA consulted with the federal Energy TCT, which was established to:

- Coordinate across local and federal agencies on the use of various forms of federal assistance provided for electrical power system improvements
- Review the Action Plan and provide feedback and input
- Provide support through technical assistance and other planning resources

The TCT established an Action Plan Working Group at VIFHA's request.



Coordination: Broader Disaster Recovery Efforts

In Electrical Power Improvements, the territory is receiving funding across multiple territorial agencies including FEMA and HUD for Hurricane Irma and Maria recovery needs for electrical power system repairs, upgrades, and hardening work

- FEMA identified approximately \$900 million in eligible Public Assistance project costs for WAPA for:
 - the repair of damaging utility poles
 - undergrounding electric power lines
 - restoration of electrical generation and distribution facilities
- WAPA identified two mitigation projects for \$255 million in FEMA Section 404 Hazard Mitigation Grant Program funding
 - \$125 million for the microgrid project at Estate Bovoni on St. Thomas
 - \$130 million for the microgrid project at Adventure on St. Croix

While during the unmet needs assessment, these various funding sources were identified, still WAPA has significant recovery and sustainability needs with no source of funding currently identified.



Coordination: Long Term Infrastructure Plan

Key Reports Summary

1. Potential Options for Electric Power Resiliency in the U.S. Virgin Islands
Congressional Research Service (02/14/2018)
2. Recovery in the U.S. Virgin Islands: Progress, Challenges, and Options for the Future
RAND Corporation for the Homeland Security Operational Analysis Center (2020)
3. 2019 WAPA Integrated Resource Plan
Black & Veatch for Virgin Islands Water and Power Authority (11/15/2019)
4. WAPA Strategic Transformation Plan
Virgin Islands Water and Power Authority (June, 2020)
5. Interdependent Infrastructure Resilience in the U.S. Virgin Islands: Preliminary Assessment
Naval Postgraduate School (December, 2018)



General Requirements

In the Action Plan, VIHFA will address the Public Law as described in the FRN requirements of the EPSEI and other requirements of law, along with a variety of conditions. The plan includes the following conditions (this list is not all inclusive):

Grantee Compliance

- Addressing Needs of Vulnerable Populations
- Economically Distressed & Underserved Communities
- Fair Housing & Civil Rights Protection Classes
- Federal Accessibility
- Overall LMI Benefit
- Geographic Concentrations
- Minimizing Displacement

Administration

- Action Plan Amendments
- Reporting
- Website
- Program Income
- Fraud, Waste and Abuse
- Financial Controls

Subrecipient Management

- Cost Verification
- Pre-Agreement Costs
- Administrative Capacity
- Environmental Review
- Monitoring & Compliance
- Operations & Maintenance Plans
- Section 3



Public Engagement Schedule

SEP THU 15	1st Pre-Plan Public Hearing	SEP TUE 20	2nd Pre-Plan Public Hearing
NOV TUE 09	Pre-Publication Announcement	NOV FRI 11	Publication of Action Plan to Official DR Website 45-Day Public Comment Period
DEC TUE 06	Public Engagement	TBA	Draft Action Plan Submitted to HUD for Approval HUD approval is expected in March 2023, with funding availability occurring shortly thereafter.





PUBLIC COMMENTS

People who wish to provide public comments at one of the hearings will each be given three minutes to speak.

Those wishing to speak are encouraged to provide a written copy of their comments to VIHFA staff.

All written comments can be submitted by:

- Email: **media@vihfa.gov** or **InfrastructureTeam@vihfa.gov**
- Please label your comments: ***CDBG-DR Electrical Power Improvements Action Plan***
- For additional information, please visit VIHFA's website at: <https://cdbgdr.vihfa.gov/home/cdbg-electrical/>



Thank You!



cdbg Funding Our Future
DISASTER RECOVERY