

WAPA Structural Reform

Economic Development Impact Assessment

How the Territorial Energy Authority Act Creates a New Economic Development Framework for the United States Virgin Islands — Including Unlocking Submarine Fiber Infrastructure and Devolving Water Customer Services to Community Rural Electric Cooperatives

Prepared for USVI Senate Candidate Review — June 2026

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I. Executive Summary

The proposed restructuring of the Virgin Islands Water and Power Authority — establishing a Territorial Energy Authority, separating generation from distribution, transitioning distribution to member-owned Community Rural Electric Cooperatives (CRECs), and devolving water customer services to CRECs — is fundamentally an economic development initiative as much as it is a utility reform.

The USVI's electricity rates, historically ranging from 35 to 50 cents per kilowatt-hour, are among the highest in the United States. That single fact suppresses virtually every category of economic development in the Territory. A second and equally important constraint: the USVI sits at the intersection of multiple major submarine fiber optic cable systems — yet that capacity does not reach most homes and businesses. A third constraint: WAPA's centralized, chronically dysfunctional water billing and customer service operation imposes administrative burdens and financial uncertainty on households and businesses throughout the Territory.

Together, the reform creates seven distinct and compounding economic development benefits:

- Direct rate reduction as renewable energy penetration displaces fossil fuel generation
- Last-mile fiber deployment connecting existing world-class submarine cable infrastructure to 45,000+ homes and businesses
- Knowledge economy activation — remote work attraction, digital business formation, and data infrastructure

- Water customer services accountability — accurate billing, local dispute resolution, and elimination of WAPA arrearage accumulation dynamics
- Local capital formation through cooperative ownership structures that accumulate member equity and recirculate surplus revenues locally
- Federal investment leverage across multiple agencies
- Workforce development in clean energy, cooperative management, broadband, water systems, and Water Customer Services

II. Energy Cost: The Master Constraint on USVI Economic Development

Jurisdiction	Avg. Residential Rate (¢/kWh)	Avg. Commercial Rate (¢/kWh)
USVI (WAPA)	35–50¢	35–48¢
U.S. National Average	~16¢	~12¢
Puerto Rico (PREPA)	~22¢	~20¢
Hawaii	~40¢	~37¢
Florida	~14¢	~11¢

Manufacturing is structurally nonviable. Tourism investment is suppressed. Small business formation is discouraged. Residential disposable income is systematically drained. Every entrepreneur's pro forma includes an electricity line item that is two to three times larger than mainland comparables.

III. Direct Rate Relief: The Foundation of Every Other Benefit

Utility-scale solar power purchase agreements are now routinely executed at 4 to 8 cents per kilowatt-hour on the mainland. As CRECs build out microgrid capacity, the TEA Act's declining rate schedule translates those savings directly into lower wholesale rates — automatically, without regulatory petition or political negotiation.

What Rate Relief Means Economically

- For households: A 20% rate reduction for a household paying \$300/month frees \$720 annually. Across 45,000+ residential accounts, that is roughly \$32 million per year recirculating locally rather than leaving as fuel imports.
- For small businesses: A restaurant paying \$2,000/month saves \$4,800 annually per 20% reduction.
- For tourism properties: A mid-size resort with a \$50,000 monthly electricity bill saves \$120,000 annually per 20% reduction.
- For new investment: Below approximately 15–20 cents per kilowatt-hour, categories of business currently nonviable in the Territory become feasible.

Rate relief is not just a utility benefit — it is the single most powerful economic stimulus available to the Territory, and it is self-funding through the renewable transition rather than requiring GVI appropriations.

IV. The Submarine Fiber Opportunity: Unlocking Existing Infrastructure

The USVI sits at the intersection of multiple major submarine fiber optic cable systems. The bottleneck is not offshore — it is on land, in the last mile between cable landing stations and homes and businesses that need connectivity. Incumbent telecommunications providers have had limited competitive incentive to build it out comprehensively.

Why CRECs Are the Precise Solution

- Existing pole infrastructure. WAPA's distribution poles run to every residential and commercial address. CRECs inheriting this infrastructure can deploy fiber at dramatically lower cost than any new entrant.
- Existing member billing relationships. Adding a broadband service line to an existing CREC billing relationship has minimal additional overhead.
- IRU agreements on submarine cables. CRECs can negotiate Indefeasible Rights of Use on submarine fiber systems — collectively, as a CREC Broadband Consortium — to access backbone capacity without owning submarine infrastructure.
- Open access middle-mile. Federal broadband funding programs increasingly require open access middle-mile infrastructure, creating an opportunity for federally funded CREC middle-mile fiber connecting landing stations to distribution networks.

The USVI's problem is not a lack of offshore fiber capacity. It is the absence of the last-mile infrastructure that connects that capacity to the people who live and work here — and CRECs, using inherited WAPA pole infrastructure, are perfectly positioned to build it.

V. The Broadband Multiplier: What Connectivity Makes Possible

Genuine broadband access — fiber-delivered gigabit connectivity backed by submarine cable capacity — unlocks economic development opportunities simply not available to the Territory today.

- Remote Work Attraction: The USVI has extraordinary natural advantages. The primary barrier is inadequate broadband. Reliable gigabit fiber makes the Territory genuinely competitive for high-earning remote workers — each household earning mainland wages and spending them locally is a significant net economic import.
- Digital Business Formation: Technology startups, creative agencies, fintech firms, and digital marketing companies require reliable high-speed connectivity as a basic operational requirement.
- Telemedicine, Education, and Digital Government: Specialist medical care via telemedicine, broadband-enabled distance learning, and digital government services reduce off-island travel burdens and improve quality of life.
- Data Centers: The combination of reliable submarine fiber access, improving electricity costs, and US jurisdiction makes the USVI a potential location for Caribbean-serving data centers.

VI. Water Customer Services Devolution: A Direct Economic Benefit

The devolution of water customer services from WAPA to CRECs is not merely an administrative reform — it has direct economic development implications for households and businesses throughout

the Territory.

Eliminating Billing Dysfunction as an Economic Burden

WAPA's centralized water billing operation has produced chronic billing errors, estimated meter readings, and unresolved arrearage accumulation that impose real financial costs on residents and businesses. The uncertainty of an estimated water bill creates budgeting difficulties for households and cash flow unpredictability for small businesses. A CREC operating locally, reading meters directly, and billing transparently eliminates this dysfunction.

Local Dispute Resolution

Currently, a water billing dispute with WAPA requires navigating a centralized bureaucracy with limited local presence. CRECs, governed by elected member boards with local offices, provide direct, accessible dispute resolution — including mandatory independent meter testing rights and binding billing adjustment requirements built into CREC bylaws.

Water Arrears Amnesty

The combined electric and water account purchase mechanism allows CRECs to acquire both electric and water arrearage balances from Disco at a negotiated discount and seek federal grant funding to extinguish them. Every member-customer — electric and water — starts with a \$0 balance. This eliminates a debt burden that has suppressed household economic activity and deterred small business formation for years.

Unified Billing Simplicity

CRECs may issue a single unified bill covering electricity, water, and broadband service — replacing multiple WAPA billing streams with a single, transparent cooperative member statement. This administrative simplification has measurable value for households and businesses managing cash flow.

VII. Local Capital Formation and Cooperative Wealth

The cooperative structure creates something that has never existed in the USVI utility sector: locally owned, community-governed essential infrastructure. Every USVI customer who becomes a CREC member-owner begins accumulating equity through the cooperative capital credit system — allocated from electric, water, and broadband service surpluses — and periodically retired as cash payments.

When a well-managed CREC generates operating surpluses from electricity, water, and broadband services, those surpluses return to members as capital credit retirements, fund community programs, or support infrastructure investment — all locally. This is a fundamental shift from the current model, in which utility revenues flow to WAPA's centralized bureaucracy and fuel imports.

VIII. Tourism Sector Competitiveness

- Resort and hotel investment decisions involve detailed financial modeling of operating costs over decades. A credible structural path to lower electricity costs, reliable water billing, and genuine connectivity changes the investment calculus for resort developers.

- Sustainability differentiation. Community-owned renewable energy infrastructure provides a substantively true sustainability story that resonates with the high-value tourism demographic.
- Marina and boating services benefit directly from CREC microgrid and fiber deployment.
- Reliable power, reliable water billing, and broadband connectivity in tourist areas directly affect visitor satisfaction and the Territory's competitive reputation.

IX. New Industry Attraction

- Data centers and digital infrastructure. Energy-intensive digital infrastructure locates near cheap, reliable, renewable power with robust connectivity. The reformed USVI utility landscape competes far more effectively than the current one.
- Light manufacturing and food production. Below approximately 15–18 cents per kilowatt-hour, craft brewing, specialty food production, and maritime supply industries have plausible business cases.
- Financial services and Act 60 investment. Better infrastructure — including reliable utility billing — strengthens the Territory’s competitiveness for high-net-worth Act 60 participants.
- Green hydrogen production. As CREC renewable capacity grows, surplus generation creates options for green hydrogen production.

X. Federal Investment Leverage

The TEA Act positions the Territory to access federal capital across energy, broadband, water, and economic development programs. The aggregate federal investment potential, conservatively estimated, ranges from \$300 million to over \$700 million over the transition period.

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USDA RUS Electric	CREC formation, electric and water grid infrastructure	\$50M–\$200M
USDA ReConnect	Broadband last-mile and middle-mile	\$20M–\$80M
FCC Broadband Programs	Last-mile deployment	\$15M–\$60M
FEMA BRIC	Microgrids, grid hardening	\$30M–\$100M

DOE Grid Resilience	Transmission and distribution upgrades	\$25M–\$75M
DOE LPO Title XVII	Clean energy loan guarantees	\$100M+
IRA Direct Pay	Solar, storage, clean energy tax credits	\$40M–\$150M
HUD CDBG-DR	Electric and water debt resolution, community dev.	\$20M–\$50M
EDA Investments	Economic infrastructure	\$10M–\$40M
New Markets Tax Credits	CREC capitalization	\$15M–\$50M

XI. Workforce Development

- Clean energy trades: Solar installation, battery storage integration, microgrid operation, and electrical maintenance for distributed energy systems
- Broadband and network operations: Fiber deployment, network installation, field service, and network operations center staffing
- Water systems operations: Distribution maintenance, meter operations, and water quality management at the CREC service territory level
- Water Customer Services administration: Billing operations, dispute resolution, low-income assistance program administration
- Cooperative management and finance: Utility management, cooperative finance, member services, and regulatory compliance
- University of the Virgin Islands partnership: Curricula in cooperative utility management, clean energy technology, broadband network operations, and water systems management

XII. Economic Development Risk Factors

Risk 1: Rate relief delayed by legacy capital burden. If the Prudence Review is not completed promptly and imprudent propane conversion costs remain in the rate base, the rate reductions that drive most economic development benefits will be delayed.

Risk 2: CREC financial fragility. Undercapitalized CRECs that cannot finance microgrid, water infrastructure, or fiber buildout will fail to deliver rate relief, water services improvements, or broadband access.

Risk 3: Water Customer Services transition gap. CRECs must establish metering, billing, and customer service capabilities before assuming water customer services. The 18-month CREC formation timeline must be coordinated with Water Customer Services transition planning.

Risk 4: Submarine cable access barriers. Incumbent cable operators may resist IRU negotiations or seek terms that make last-mile CREC broadband deployment uneconomic.

Risk 5: Incumbent broadband provider opposition. Existing telecommunications providers will likely oppose CREC broadband entry as competitive disruption.

XIII. Summary: The Economic Development Case for Reform

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Rate Relief	CREC renewable buildout + declining rate schedule	Years 3–10
Import Substitution	Solar replaces diesel/propane fuel imports	Years 3–15
Last-Mile Fiber	CREC deployment on WAPA pole infrastructure	Years 2–7
Submarine Fiber Access	IRU agreements + open access middle-mile	Years 2–5
Remote Work Attraction	Broadband + rate improvement	Years 4–10
Water Services Accountability	CREC water billing, dispute resolution, amnesty	Years 2–5
Tourism Investment	Rate relief + reliability + sustainability	Years 3–10
New Industry Attraction	Rate + broadband below viability threshold	Years 5–15
Local Wealth Building	Member equity + local procurement	Years 5–30
Federal Investment	CREC + TEA legal standing for grants	Years 1–10
Workforce Development	Clean energy + broadband + water + cooperative mgmt	Years 2–10

The USVI already has world-class fiber in the water. It already has poles in every neighborhood. It already has sunlight that rivals anywhere in the United States. What it has lacked is the institutional structure that connects these assets to the people who live here. Community Rural Electric Cooperatives are that structure.

The reform creates a self-reinforcing cycle: lower energy costs, reliable water billing, and genuine broadband attract investment, investment grows the tax base, a stronger tax base funds better public services, and better infrastructure attracts more residents and businesses. That cycle does not start without solving the energy, water services, and connectivity problem together — and the TEA Act solves them together, using the same institutions, the same infrastructure, and the same federal funding relationships.

Part of a four-document series: (1) The Reform Proposal; (2) The Territorial Energy Authority Act (Final Draft); (3) This Economic Development Impact Assessment; (4) Letter to the Editor

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