



VIWAPA Transformation Plan

RECOVER . REBUILD . RESTORE

March 25, 2022



VIWAPA 5-Year Transformation Plan FY 2020-2024

The Authority's 5-year transformation plan is designed to improve the reliability and efficiency of our operations by continuing our disaster recovery initiatives, rebuilding and improving our electrical and water infrastructure, and restoring our commitment to the community.



Transformation Plan (FY 2020 - 2024)

Improved Resiliency

Greater Renewable Penetration

Improved Efficiency

Mitigation Projects

- Underground projects - 50% of customers will have underground power.
- Composite pole projects in STX, STJ, STT and Water Island.
- Substation Upgrades, Submarine Cables, AMI Network Hardening.
- St. John Emergency Generators and Microgrid Projects.

Maximize Renewables with Battery Storage

- Currently 4 MW Utility Scale (STX)
- Target 25% Renewable Penetration by FY2024
- 5 MW Utility Scale Solar Generation (STT)
- 20 MW of solar generation on STX and 20 MW of battery storage
- 15 MW of wind generation on STT and 30 MW of battery storage

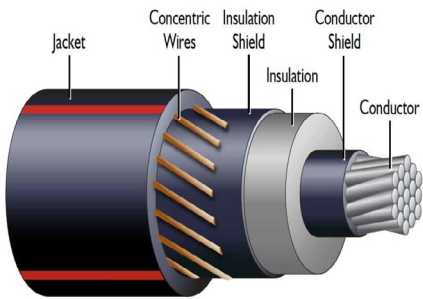
Efficient Generation

- The Authority's generation fleet will be upgraded to smaller, more efficient and renewable compatible generators using clean burning propane as primary fuel.



Hazard Mitigation Projects

Underground Infrastructure



STX / STJ / STT

- Primary Backbones
- Critical Facilities
- Densely Populated Areas

Composite Poles

STX / STJ / STT / WI

- Harden Remaining Overhead System
- Lightly Populated Areas
- Terrain Prohibitive Areas



New Generation



STX / STT

- Replace aging units with smaller more efficient generators per IRP
- Install Battery storage at Generation Site

Renewable Energy

STJ / STT / STX

- Integrate solar & wind
- Install smart controls
- Install Battery Storage



Disaster Recovery Funding to Date

FED AGENCY	PROGRAM	OBLIGATED AMOUNT	EXPENDED	AVAILABLE
FEMA	406	\$ 1,442,724,250.09	\$ 1,032,467,149.33	\$ 410,257,100.75
FEMA	404	\$ 7,217,444.00	\$ -	\$ 7,217,444.00
HUD	CDBG-DR	\$ 84,152,141.20	\$ 42,112,457.06	\$ 42,039,684.14
TOTAL		\$ 1,534,093,835.29	\$ 1,074,579,606.39	\$ 459,514,228.90



REVENUE ESTIMATE SNAPSHOT

VIWAPA - Electric System

FY23 and FY24 Total Estimated Revenue

FY23: \$18,686,902.40

FY24: \$ 4,303,685.93

Revenue Summary

Highlight 1: Composite Pole Installation

Highlight 2: Randolph Harley New Generation

Highlight 3: Undergrounding

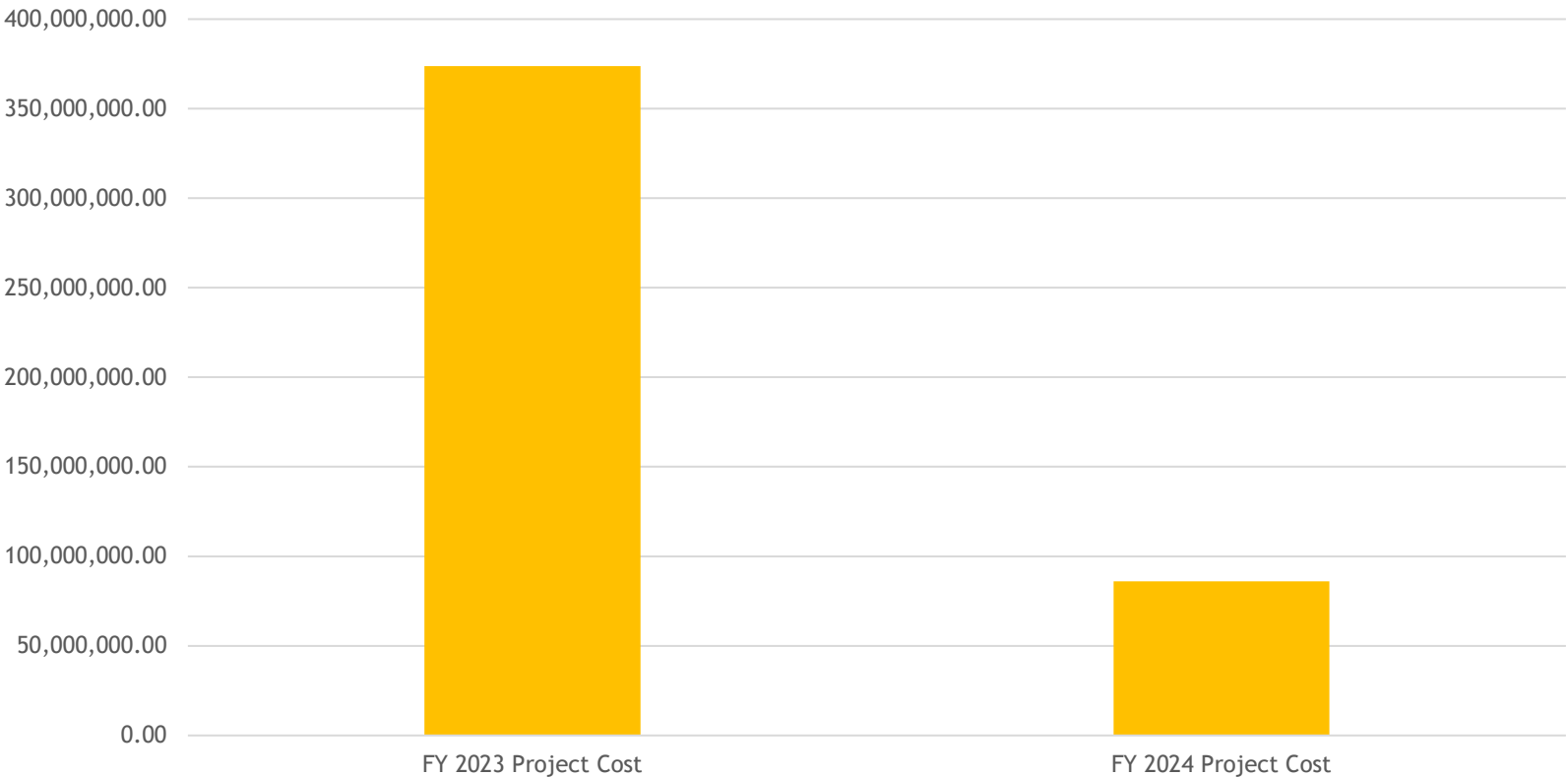
Highlight 4: Microgrid

REVENUE BREAKDOWN

Revenue Category	Project Count (If Applicable)	Est. Revenue	Fiscal Year
Randolph Harley New Generation Project	1	\$ 862,650.00	2023
Composite Pole Installation	3	\$4,001,334.12	2023
Microgrid Projects	3	\$5,291,821.99	2023
Composite Pole Installation	3	\$ 426,805.61	2024
Undergrounding Projects	5	\$3,345,630.32	2024
Undergrounding Projects	8	\$5,077,971.29	2024



Electric System Budgeted/Forecasted Capital Projects



** Includes internal capitalized labor*



Electric System Major Capital Projects

Projects	Proposed Start Date	Reliability	Efficiency Improvements	System Improvements	Fiscal Year 2023 Project Cost	Fiscal Year 2024 Project Cost
Composite Poles Installation STT	January-24	x		x	15,749,868.98	1,312,489.08
Composite Pole Installation STJ	May-24	x		x	23,476,774.92	7,223,623.06
Composite Pole Installation STX	December-23	x		x	40,800,038.55	
Randolph Harley New Generation - Phase II	January-23	x			17,253,000.00	
Cruz Bay 8E Undergrounding	March-24	x		x	17,898,889.03	14,913,333.66
St. John Underground 9E	May-24	x		x	44,750,000.00	35,800,000.00
STJ Microgrid Phase II PV Array and BESS	March-23	x	x	x	9,990,000.00	
Estate Richmond New Generation	April-24	x	x		69,062,500.00	10,625,000.00
STX West Microgrid - Solar, BESS and Wind	October-23	x		x	82,105,263.20	
STT East Microgrid - (Wind) and BESS	May-23	x		x	13,741,176.52	
Hannah's Rest Undergrounding Project	January-23	x		x	4,214,285.71	
Smithfield Undergrounding Project	January-23	x		x	12,642,857.10	
STT Feeder 5A Undergrounding	June-23	x		x	1,876,666.66	
STT Feeder 9A Undergrounding	July-23	x		x	4,704,000.00	
STT Feeder Ridge Road/L#-0D0E2 Undergrounding	June-24	x		x	5,545,454.55	6,654,545.46
STT Feeder 7B/9B Undergrounding	April-21	x		x	720,000.00	1,872,000.00
STT Feeder 7C Undergrounding to Cassi Hill	June-24	x		x	9,207,272.73	7,672,727.27
Totals					\$ 373,738,047.95	\$ 86,073,718.53





TERRITORY MITIGATION & REHABILITATION PROJECTS -WATER



■ **St. Croix**

- Christiansted & Frederiksted Rehabilitation
- Clifton Hill Rehabilitation
- Hannah's Rest Rehabilitation
- Campo Rico Rehabilitation
- Strawberry & Baron Stop Waterline
- System Wide Water Line Replacement
- Concordia to Kingshill Waterline Rehabilitation
- Richmond to Concordia Waterline Rehabilitation
- Kingshill Waterline Rehabilitation

■ **St. Thomas**

- Anna's Retreat Waterline Extension
- Slope Stabilization
- Smith Bay & Frydendahl Waterline Extension
- Nazareth Waterline Extension
- Bolongo Waterline Extension
- Wintberg Waterline Extension



REVENUE ESTIMATE SNAPSHOT

VIWAPA - Water System

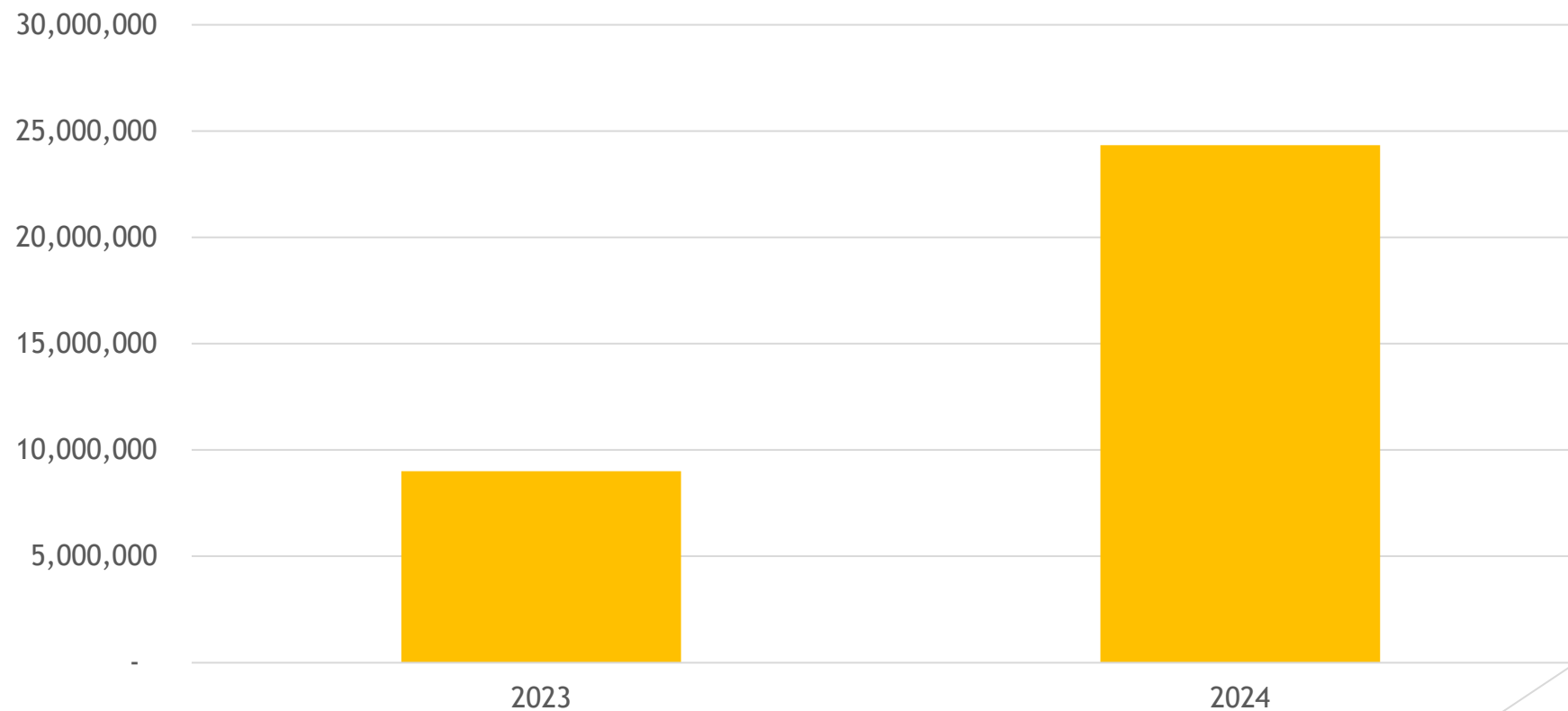
FY23 and FY24 Total Estimated Revenue	
FY23:	\$ 450,000.00
FY24:	\$1,217,054.00

Revenue Summary
Highlight 1: EPA Drinking Water Capital Improvement Project (DWCIP) Grant
Highlight 2: American Rescue Plan Act (ARPA)
Highlight 3: Housing & Urban Development (CDBG - MIT)
Highlight 4:

REVENUE BREAKDOWN			
Revenue Category	Project Count (If Applicable)	Est. Revenue	Fiscal Year
DWCIP	5	\$450,000.00	2023
DWCIP	5	\$134,012.00	2024
ARPA	2	\$400,000.00	2024
CDBG-MIT	2	\$683,042.00	2024



Water System Budgeted/Forecasted Capital Projects



Water System Major Capital Projects

Projects	System Improvements	Fiscal Year 2023 Project Cost	Fiscal Year 2024 Project Cost
Clifton Hill Waterline Rehabilitation (DPNR)	Rehabilitation	2,000,000.00	480,250.00
Hannah's Rest Waterline Rehabilitation (DPNR)	Rehabilitation	2,000,000.00	700,000.00
Campo Rico Waterline Rehabilitation (DPNR)	Rehabilitation	2,000,000.00	750,000.00
Blackbeard's Hill Waterline Rehabilitation (DPNR)	Rehabilitation	2,000,000.00	250,000.00
Mahogany Estate Waterline Rehabilitation (DPNR)	Rehabilitation	1,000,000.00	500,000.00
Annas Retreat PH 2 Waterline Extension (HUD CDBG)	Extension		5,760,850.00
Smith Bay & Frydendahl Waterline Extension (HUD CDBG)	Extension		7,900,000.00
Veteran's Drive Rehabilitation (ARPA)	Rehabilitation		4,000,000.00
Nazareth Waterline Extension (ARPA)	Extension		4,000,000.00
Totals		\$ 9,00,000.00	\$24,341,100.00

