WAPA Transition Cluster Report

EXECUTIVE SUMMARY

Virgin Islands Water and Power Authority (WAPA)

In 1964, the Authority was created as an instrumentality of the Government of the U.S. Virgin Islands (the "Government") pursuant to Chapter 5 of Title 30 of the U.S. Virgin Islands Code, as amended by Act 4108, approved on March 1978 and Act 4497 approved on October 23, 1980 (the "Virgin Islands Water and Power Authority Act" or the "Act"), for the purpose of developing an adequate electric and water supply for the Virgin Islands.

Electric Generation

Pursuant to the powers established by the Act, the Authority owns, operates and maintains electric generation, distribution, and general plant facilities that supply electric power and energy to over 55,000 customers in the U.S. Virgin Islands, which include the islands of St. Thomas, St. Croix, and St. John. The Authority also provides electric service to Hassel Island and Water Island, which are located near the St. Thomas harbor.

All references to the number of customers, sales and loads on the island of St. Thomas include data associated with the island of St. John, Hassel Island, and Water Island.

Except for a few commercial entities that produce electricity for their own use, the Authority is the only electric utility serving the Virgin Islands.

Water Production

The Authority also operates and maintains a system to produce and supply potable water to over 13,000 customers in the USVI, through reverse osmosis facilities. The Water System is accounted for and financed separately from the Electric System, although certain common facilities and costs necessary to produce electricity and water, as well as for general administration, are shared by the two systems and allocated between them.

Governance

WAPA has a Governing Board of nine members appointed by the Governor, three governmental appointees and six of whom require the consent of the Legislature. The Board Chair is Elizabeth Armstrong whose term expires April 2021.

- Presently seven of the nine seats on the board will be up for the Governor to appoint.

Management and Personnel Information

The Authority is managed by an Executive Director and 16 senior management staff. In March of 2018 Lawrence J. Kupfer was selected as the Executive Director and Chief Executive Officer. Total salary for the management staff is $2,025,516. **(See Attachment #1)**

WAPA Employees

- 499 full-time permanent employees
- 76 open positions
- 31temporary employees
- 399 employees are union members - contract negotiations are ongoing
- WEA (WAPA Employees Association) Union - 269 members
- P&T (Professional & Technical) Union - 68 members
- VIWU (V.I. Workers Union) Supervisors Union - 58 members

Total salary for other employees is $39,173,183.

* WAPA management states that due to financial constraints and to the greatest extent possible, attempts will be made to maintain permanent staffing at current levels for Fiscal Year 2019

** Salary from submitted WAPA budget.

Management and Personnel Challenges

- *Union Negotiations* – Post hurricane efforts have amplified the lack of negotiated contracts for WAPA employees.
- The vast disparity in pay between WAPA employees and contractors' employees has exacerbated the situation.
- Similarly, the re-shuffling of executive staff positions and implementation of new executive positions, which included pay raises, has ruffled many of the rank and file.
- Members of the unions stated that WAPA has not negotiated in good faith and are distrustful of executive staff as relates to union negotiations.
- Management stated that Customer Service Department is facing challenges and they are aware of the many complaints of poor service.
- Management also stated that staff morale is at an all-time low on a scale of 1 to 10 (1 being the lowest) the overall morale is at 3. The Water Department stated their staff was at 1.
- Management recognizes that WAPA needs Rebranding to improve their image in the community.

Transition Team Recommendation

Management and staff at WAPA are facing tremendous problems. Financial issues, management issues and low morale places WAPA in dangerous need of immediate attention. They will need management, staff, the Government, and the community to be successful.

- Postpone or stop any raises or additional positions for executive staff.
- Refrain from hiring new staff to fill vacancies unless essential.
- Retain a negotiation professional (ie similar to an arbitrator) to resolve the apparent impasse between the authority and the unions.
- Pay immediate attention to reorganizing the Customer Service Department.
- WAPA has to commit to rebranding in order to improve morale and their community image,

Financial Information **FY 19 Budget: $228,509,754**

	APPROVED BUDGET	AUSTERITY BUDGET
OPERATING REVENUES		
Base Rate/Surcharges	$ 121,151,205	$ 121,151,205
LEAC	107,358,549	107,358,549
TOTAL OPERATING REVENUES	228,509,754	228,509,754
OPERATING EXPENSES		
Personnel Costs	41,198,698	34,706,164
OPEB	1,133,025	1,133,025
Training & Education	3,420,783	2,611,942
Fuel	107,358,549	107,358,549
Purchased Power	1,457,071	1,457,071
Material & Office Supplies	1,544,388	1,388,741
Maintenance & Repairs	38,592,802	33,498,906
Depreciation	15,276,709	15,276,709
Legal Services	1,010,000	1,010,000
Engineering Services	1,096,200	740,631
Other Professional Services	3,316,700	3,316,700
Allocation to Water System	(3,723,441)	(3,723,441)
Other Operating Expense	19,520,045	17,234,722
EPA Expenses	1,220,000	1,220,000
Allocation to Capital	(3,250,097)	(3,250,097)
LPG O&M (Operating & Maintenance	8,654,292	8,654,292
Pension Expense	14,901,791	14,901,791
TOTAL OPERATING EXPENSES	252,727,515	237,535,705
Net Operating Revenue/(Loss)	$ (24,217,762)	$ (9,025,952)

- FY19 Budget submitted by WAPA Director 12/28/18

	APPROVED BUDGET	AUSTERITY BUDGET
Net Operating Revenue/(Loss)	$ (24,217,762)	$ (9,025,952)
Adjustments (Add-Backs)		
Depreciation	15,276,709	15,276,709
Pension Expense	14,901,791	14,901,791
Bad Debt Expense	901,676	901,676
BAB Interest Subsidy	825,320	825,320
Accrued OPEB Liabilities	1,133,025	1,133,025
Other Income	5,218,483	5,218,483
Total Adjustments	38,257,003	38,257,003
Net Revenues Available for Debt Service	14,039,241	29,231,051
Debt Service/Vitol Payments		
Debt Service	27,044,264	27,044,264
Vitol Capital Lease Payments	31,200,000	31,200,000
Total Debt Service/Vitol Payments	58,244,264	58,244,264
Surplus/(Deficit)	$ (44,205,022)	$ (29,013,212)

- FY19 Budget submitted by WAPA Director 12/28/18

Financial Liabilities

Operating Liabilities - $770 Million

Pension & OPEB - $396 Million

Total - $1.16 Billion

WAPA Bonds $252m

- Includes both senior and subordinated revenue bonds and BANs
- Inclusive of $13m RUS Loan

Considerations

WAPA has no market access or additional debt capacity

CDL $94m

- Total CDL balance of $94.5m based on revenue loss calculations provided to FEMA/US Treasury.
- No further CDL funding is expected, as the one year post-storm period has passed.

Considerations

Proceeds used to fund fuel purchases. Loan secured by lien on Electric and Water revenues with repayment beginning 2022.

Vitol Capital $160m

- Represents principal portion of infrastructure project
- Annual lease payments are $30m annually over 10 years

Considerations

- Facility is completed and in operation
- WAPA is not making lease payments and owes $53 million and growing

Wartsila /Aggreko $70m

- Represents remaining $19m payment on first three Wartsila units and projected total cost of Aggreko lease with a 48month term

Considerations

These projects are committed and in-process of delivery, but a funding source remains unidentified.

Fuel Vendors $78m
• Includes balances due to Vitol (Fuel/O&M), Glencore, and Trafigura
Considerations
WAPA has no trade credit and has to pay for fuel with "cash in advance"

Non-Fuel Vendors $83m
• Includes all other A/P balances that are not anticipated to be reimbursed by FEMA
Considerations
Pre-hurricane accounts payable have increased by 70% from $99m to $171m

Credit Lines $33m
• Unsecured lines of credit with Banco Popular and First Bank
Considerations
Currently negotiating to extend maturity beyond 2018

Pension & OPEB $396m
• Represents balance sheet liability (both Electric and Water system) for pension and OPEB
Considerations
WAPA has only been making current pension payments

Principal Financial Challenges

Critical Financial Issues

• WAPA's liquidity is severely constrained, putting unsustainable pressures on daily operations and delivery of water and electricity to its customers.
• WAPA is running weekly deficits in excess of its $15 million bank overdraft account.
• WAPA is deferring all non-critical expenses and its fuel deliveries are cash on delivery.
• WAPA has no cash reserves to deal with emergency repairs or outages.
• Without an increase in electric sales or rates, WAPA projects a Fiscal Year 2019 operating deficit of at least $35 million.

Transition Team Recommendation

The current situation at WAPA is beyond dire and indicates the utility is on the brink of receivership. The present entanglement of debt and financed initiatives is complex with possible interdependencies that may be in conflict.

In order to properly assess the complete financial picture, longer term involvement and examination against assets and forecasted revenue is needed. This is key to achieving the stated strategic goals, as current attempts have not been examples of the level of success required to stop the decent into insolvency.

- Strategic Financial Assistance from utility experts needs to be contracted immediately.

- It is apparent that the advisory support that WAPA has received over the past 20 years has not been able to prevent the extreme financial hardships the utility currently faces. As a result, the various consultancy groups that WAPA maintains do more to extend the list of financial liabilities to utility with limited positive financial returns.

- WAPA should explore Public-Private Partnership opportunities with qualified utility experts.

- Organizations like the National Rural Electric Cooperative Association or other utility organizations may be able to provide assistance.

- In 2018 Overtime wages accounted for 27% of total wages. Some consideration due the fact 2018 was a hurricane recovery year is certainly in order. However, workforce utilization efficiency needs to be stressed to ensure that this trend does not continue.

Structural Challenges

- Due to hurricane outages, Fiscal Year 2018 electric sales were 37% below Fiscal Year 2017.
- Fiscal year 2019 electric sales are projected to remain 13% below pre-storm levels.
- Currently-approved base rates do not include the rental costs of all generating units.

- The LEAC rate has consistently produced lower electric revenues than forecast.
- WAPA's residential electric rates of \$0.38/kWh are already among the highest in the Caribbean and 50% more than Puerto Rico.
- WAPA has an unsustainable level of debt and no longer has access to the capital market.

Transition Team Recommendation

WAPA needs to increase its revenue. Presently their solution as always is an increase in residential and commercial electric rates. This may increase their revenue, but it comes with a catch 22. Increased rates will encourage more residents and businesses to look for alternative sources of energy and to get off the grid. This is already an increasing problem for WAPA that they seem to be in denial about. WAPA officials have stated that there is a 14% drop in electrical consumption below Pre-Storm levels. This is a loss in \$20 Million in revenue annually.

We recommend WAPA:

- Work closely with the PSC and with technical assistance from the U.S Dept. of Energy to develop regulations for a Feed-In-Tariff and a Stand-by Power Tariff. These will both bring in new revenue by requiring residents and businesses that come off the grid to still pay something to WAPA for the reassurance that a grid will always be there if they need it.

- Make it a high priority to complete the "Cost of Service Study" which has not been done for over 10 years and will give the Authority the true cost for the service they are providing. WAPA has received a grant from the U.S. Dept. of Interior to conduct the study.

- Securing the \$.14/gallon Fuel Tax is crucial. This Fuel Tax was legislated to the Authority but has been threatened by past administrations to be cut in half to assist in the repair of roads. Support from the Governor and the Legislature for this tax to be fixed and untouchable will ensure the financiers and give WAPA a guaranteed source of revenue that can be used to obtain financing for much need equipment. These funds are specifically for the Wartsila 7MW Generator for STT. WAPA officials stated there is \$19 million shortfall in the capital required to satisfy the vendor and to bring these assets online. The cost of engineering and infrastructure have been completed and it would be self-defeating to have these assets not commissioned in March. WAPA's Bond Counsel has already drafted a proposed legislation to secure the Fuel Tax. (See Attachment #)

- Efficiency must be the battle cry for WAPA. Efficiency saves money. Cutting cost through examining all of its operations for ways to save money in their administrative service, electric generation plants, water production, and transportation fleets.

Payable Challenges

- WAPA owes its current fuel suppliers approximately $42 million (Vitol $27 million and Glencore $15 million)
- Both suppliers require payment before delivery and have threatened to cut off WAPA for non-payment
- In addition, WAPA is unable to pay its $30 million annual infrastructure lease payment to Vitol
    - This delinquency is currently at $58 million and growing
- WAPA owes other vendors over $110 million and its pension and OPEB liability to the Government Employees Retirement System is $396 million
    - WAPA's non-retirement indebtedness has increased by 90% since 2016.
    - Including its retirement benefit liabilities, WAPA's total debt exceeds $18,000 per customer.
    - WAPA's ability to raise rates further may be limited, as residential rates are already at the high end of the comparable rates for other Caribbean islands.

Transition Team Recommendation

WAPA titers on the brink of insolvency daily. Literally robbing Peter to pay Paul. The VI is dependent on fossil fuel to generate electricity and we owe these venders $78 million due to our inability to meet our daily operating debts. This alone would be a major red flag but WAPA'S total liabilities add up to $1.16 Billion when you include its retirement benefit liabilities.

This makes WAPA's total debt exceed $18,000 per customer. This did not happen overnight, and it cannot be fixed without serious assistance. Once again WAPA's ability to raise rates further may be limited, as residential rates are already at the high end of the comparable rates for other Caribbean islands. **(See Attachment #2)**

We recommend WAPA:

- Immediately an abstract should be created for each and every financial obligation that WAPA currently has. This document would include a brief history of the obligation, the initial amount, the current outstanding balance, interest rates (including any fluctuating rates), the due dates of the notes/obligations and when these documents are executed and by whom.
- WAPA's total debt exceed $18,000 per customer making the debt per capita rate 6 times greater than Puerto Rico's which is $2,697 per customer.

Government Receivables Challenges

The Government is one of WAPA'S largest Customers and as of November 2018:

- the Semi-Autonomous agencies owe WAPA $22,209,069 for electricity and $4,354,794 for water.
- Central government owes $4,961,124 for electricity and $1,108,525 for water.
- Presently both hospitals are

Below is a listing of Semi-autonomous receivables due to WAPA and a detailed listing of all receivables for the central government is attached. **(See Attachment # 3)**

Agency	Electric St. Thomas	Electric St. Croix	Electric Total
Juan F. Luis Hospital		$ 10,362,731	$ 10,362,731
Roy L. Schneider Hospital	$ 9,777,180	$ -	$ 9,777,180
Waste Management Authority	$ 961,863	$ 813,444	$ 1,775,307
Housing Authority, VI	$ 19,492	$ 8,094	$ 27,586
University of the Virgin Islands	$ 239,529	$ 120,633	$ 360,162
Port Authority	$ (99,509)	$ 5,612	$ (93,897)
Total Semi-Autonomous	$ 10,898,555	$ 11,310,514	$ 22,209,069

Transition Team Recommendation

If the Government paid its utility bills monthly as all other WAPA customers are expected to WAPA cash flow would improve and assist in debt reduction.
The central and autonomous agencies strict adherence to Act 7562 the Single payer Utility Fund is crucial to controlling WAPA'S government receivables. Creation of a Government Energy Savings program implemented by the VI Energy Office would also assist government agencies especially the semi-autonomous agencies in saving energy and reducing their bills.

- Monitor adherence to Act 7562
- Create the Government Energy Savings program and mandate government agencies to participate.

Capital Needs

- WAPA requires at least $300-$400 million of immediate capital funding to modernize and upgrade its aging, costly and dirty generation facilities.
- In addition to suspending its Vitol lease payments, WAPA does not have sufficient funds to pay for and take delivery of its committed Aggreko and Wartsila new generating units.
- WAPA does not have sufficient reserves or operating cash flow to make urgently required capital repairs to some of its existing facilities.
- WAPA does not have capital market access and higher electric rates would be required even if it could borrow funds to complete these projects.

Transition Team Recommendation

WAPA's needs to modernize its aging electric generation facilities and water pipeline infrastructure. V.I. should lobby HUD for a greater share of the $2 billion Congress allocated for electric projects in Puerto Rico and the Virgin Islands (V.I. has received approximately 3%). However, both FEMA and CDBG-DR programs restrict funding to replacement of damaged assets or newly procured projects limiting their use for WAPA's immediate needs

Recovery – FEMA Funds

Hurricanes Irma and Maria in September2017 resulted in the devastation of 90% of the WAPA's electrical distribution systems.
Major setback in the development of various projects.
Significant depletion of all operational resources.

In December 2018, WAPA began working with FEMA to request mitigation funding to permanently harden our electrical system. WAPA is eligible to receive approximately $625 million in mitigation funding to permanently harden the electrical distribution system. WAPA states that of the $625 million approved by FEMA, $480 million is for underground and submarine transmission, distribution and service drops directly to customer's meters. These funds would not cover any of the renewable projects, utility scale battery storage or replace aged generating units

The problem is that a local match of 10% is needed for WAPA to receive the FEMA funds. At this time WAPA does not have the $62.5 million needed. The only solution is to request that the VI government approve WAPA receiving the $62.5 million of HUD Community Development Block Grants (CDBG) for disaster recovery. The CDBG funds are the only federal funds that can be used to match FEMA funds. However, there will be great competition for the CDBG funds to match other projects within the government, especially since the VI government is in the same position of being unable to make the 10% match with local funds.

The territory has approximately $1.8 billion of HUD-CDBG funds allocated. WAPA wants the government to allocated $135 million from first and second tranches of HUD funding to WAPA.

Transition Team Recommendation

At present there is only one solution the government to approve the use of CDBG funds for the 10% match for the $625 million of mitigation projects. However, can the government afford to allocate more money to WAPA for the other projects under the $1.8 billion CDBG funds that are slated for many other projects within the government. WAPA recommends that the government further lobby HUD for a greater share of the $2 billion that Congress allocated for electrical projects in Puerto Rico and the V.I. Presently the V.I. has received only $67million or about 3%

of this HUD funding. These funds would pay for renewable projects, utility scale battery storage or replace aged generating units.

- The VI Government approve WAPA'S request for the 10% match for $625 million in FEMA funded projects or suggest they trim their budget to meet 5% of the match.
- The government should lobby for a larger share of the $2 billion that Congress allocated for electrical projects in Puerto Rico and the V.I.

Fiscal Recovery Plan

- WAPA has begun development of a multi-year Fiscal Recovery Plan to guide its return to fiscal solvency and to provide safe, reliable, clean, and affordable electricity to the Virgin Islands.
- WAPA is immediately moving to put in place a near-term emergency liquidity plan of revenue enhancements and spending cuts to assure continued operations.

This liquidity plan includes resumption of its customer "disconnect policy" for non-payment and a request for temporary rate surcharges from the PSC.

Transition Team Recommendation

WAPA has liabilities that appear to be so numerous we need to create a baseline to more easily view what all of the outstanding obligations are at the moment, along with what additional obligations are currently being contemplated. Therefore, we need a series of documents provided to our team/and to GOV that would contain the totality of the document for further review and analysis into the future. However, the immediate need would be that an abstract is created for each and every financial obligation that WAPA currently has. This document would include a brief history of the obligation, the initial amount, the current outstanding balance, interest rates (including any fluctuating rates), the due dates of the notes/obligations and when these documents are executed and by whom.

We need to create a pragmatic and realistic view of what are the actual liabilities, assets and potential cash outflows. We must assess what are the actual values of the current assets that WAPA has. I am saying the actual market value, if any, not what is on a financial statement.

We have been continuously living in a world for many years where WAPA has operated from a paradigm that “a rolling loan gathers no loss”. Unfortunately, the people of the Virgin Islands continue to suffer in so many ways too numerous to mention as a result of having expensive, unreliable and lack of quality electrical power. After we have all the information in a synopsis, we must convene a meeting with all of the financial stakeholders of WAPA including bondholders, leaseholders, and anyone that WAPA has a written financial obligation. The harsh reality is that WAPA is, and has been for a long time basically insolvent. We must do a complete re-boot and negotiate with all of those organizations and institutions and companies that WAPA is expected to pay. The plain fact is WAPA cannot pay all of its obligations and never will be able to do this. We must stop postponing the inevitable and do it as soon as possible. In order for WAPA to be viable we must totally change the business model, as this utility was founded on the basis of a model that connected all of the dots to a $25 per barrel cost of fuel.

We should immediately terminate virtually all of the consultants that have continuously received money from WAPA and the PSC as little to none of their advice has produced positive results for the VI’s. These consultants have continued to receive the hard-earned money of virgin islanders, while delivering nothing helpful. Frankly it is shameful on them and WAPA to continue paying for advice that has only let do paying for more of the same.

Electric System Information

WAPA’s major generating facilities are located on St. Thomas and St. Croix, with limited backup facilities on St. John.

- Except for emergencies, electrical power to St. John is provided by generating facilities on St. Thomas and transmitted to St. John by two underwater cables. Customers on Hassel Island and Water Island are also provided power from St. Thomas through underwater cables.
- St. Thomas and St. Croix are 36 miles apart and have no electrical interconnectivity due to the topography of the ocean floor.
- St. Thomas generating facilities are located at the RHPP in Krum Bay, on the southwestern end of the island.
- The St. Croix generating facilities are located at the ERPP along the north shore of the island, near Christiansted.

- Currently, three of six WAPA-owned generating units can operate with LPG as a primary fuel source. The units can also operate on #2 fuel oil as a secondary fuel source. WAPA also has three leased units at the RHPP, two of which are dual fuel. At the ERPP, WAPA is preparing to install 20 megawatts of leased Reciprocating Internal Combustion Engines that can generate electricity with LPG as the primary fuel source.
- On St Croix, there are four megawatts of utility scale solar.
- St. John will have eight megawatts of new generating equipment with battery storage for emergency use in November 2019. Funding is provided by the FEMA/HUD Hazard Mitigation Project.

Electric System Challenges

WAPA's current plan looks to reduce generation cost and diversify sources and fuels without questioning if the Authority has the ability to effectively implement these projects or if the utility might be better served by separating the Generation function from the Transmission and Distribution (T&D) Dept. The impression of staggering debt and job loss has been used for the last decade to preclude investigation of the efficiencies to be gained by outsourcing this service. This is directly counter to the present industry decoupling.

The current FEMA funded initiatives are an exciting opportunity to strengthen our electricity distribution territory wide. Support for these initiatives will only increase reliability and harden infrastructure.

The infusion of money sounds great but WAPA also must change some of it ways and long term habits. Energy Efficiency should start at WAPA. For years the question of how efficient is WAPA's electric system, generators, plants and offices. WAPA must look at innovative ways to become more efficient.

WAPA must start looking at how it can become the utility of the future. The burden of high energy cost is resulting in grid defection from every sector including all semi-autonomous agencies within the gov't. This is viewed as an insult to injury with the existing gov't debt to WAPA. However, this amount is a "drop in the bucket" against the bigger picture.

If WAPA does not want to see the loss of more customers they will have to get serious and putting more renewables on the grid owned by WAPA is not enough, we have to take a holistic approach to solving our problems. What does this community want WAPA to look like is the question?

Transition Team Recommendations

- Hosting a conference for setting a vision for what a utility of the future would look like is vital. This should be a working session for policy makers, legislators, regulators and stakeholders.
- The VI Government assist WAPA, in advocate, lobbying and finding funding for the repair and purchase of equipment for electric generation is vital. Such as the steam boiler supplying 20MW of power to STX which is down and too expensive to repair. A lease of a 19.1 MW Aggreko Generator from Aggreko is currently underway.

  Also, there are 3, 20+ megawatt Turbine generators leased from APR in STT. These are being retrofitted to accommodate LPG fuel but the company is having difficulty in getting this completed. Internally it is felt that the outstanding AP of $7 million dollars is impacting the progress.

Water System Information

The water system has over 13,000 customers with an average demand of two million gallons of water per day (MGD) per district.
In April 2012, WAPA signed at twenty-year agreement with Seven Seas Water Corporation to build, own and operate a seawater reverse osmosis plant (SWRO) on St. Thomas and on St. Croix.

- Water is produced through reverse osmosis with the capability to provide approximately 3.3MGD for each district and up to 4MGD if needed.
- Existing water storage capacity provides twelve days of water service for the St. Thomas –St. John district and eight days for St. Croix.
- Because of the historical development of the water system and certain characteristics unique to the V.I., the water system serves approximately 35-40%of the potential customers in the V.I.

- The electric system and water system share certain costs of WAPA which are paid by the electric system and later reimbursed by the water system.
- WAPA completed its Strategic Plan in the second quarter of 2017.
    - The goal is to update the projected operating results associated with strategies to achieve financially viable and sustainable operations.

As such, a five-year capital improvement plan was developed with major emphasis on reducing line losses, particularly on St. Croix and evaluating areas for distribution system expansion. The system expansion will be based on the feasibility of serving new residential and large users.

Water System Challenges

- The Potable Water System is plagued with many problems.
- WAPA officials state that replacement of the cast iron piping in the entire distribution system is the only solution to the on-going problem with the system.
- At this point there is no way that the revenue generated by the water system could finance the replacement of the aging pipes and facilities.
- The estimated cost is $250- $300 million per district
- This matter appears separate from the other looming failures and is not include on the Current Liabilities page in WAPA'S transition report.

Transition Team Recommendation

A crumbling aging water pipe distribution system is that needs replacement is a crucial problem. Especially with a price tag of $250- $300 million per district. Where is the money for this going to come from and when are we going to place it as a top priority is the question?

- A major disruption of the water pipe distribution system can happen any day and if it had to be replaced immediately it could add $300 million per district to WAPA'S looming liabilities. Identifying a funding source for this project is critical to avoiding a financial disaster.

Integration of Renewables and Energy Efficiency in the Revision to the IRP

Based on the report provided by WAPA: Hurricanes Irma and Maria in September 2017 resulted in major setbacks in the development of various projects but improved overall funding opportunities. This necessitated the need for updates to the 2016 IRP, inclusive of modified and new projects approved and funded by FEMA/HUD. Projects include transmission and distributive upgrades, renewables, energy efficient and new dual-fuel generating units and battery storage to transform the power systems.

WAPA seeks to own and operate all utility scale grid interactive renewable energy assets. WAPA's intent is to utilize FEMA/HUD grants to contract a third-party E.P.C. to install to develop, and commission the Renewable Energy projects. Upon completion of these projects, the operation of the renewable energy assets will be transferred to WAPA.

Transition Team Recommendation

The inclusion of these projects in the IRP are certainly a positive step forward for the utility, however the transition team believes that there are some considerations that should be addressed to ensure these projects come to fruition and provide the long-term benefits to VIWAPA and the Virgin Islands community.

Strategic Approach
It is very clear that VIWAPA as an institution has struggled to manage utility owned assets to this point. As a result, the Transition Team recommends the following strategic approach to Renewable Energy Assets:

- The Utility should continue to engage in Renewable Energy Power Purchase Agreements with developers that specialize in relative projects and have a proven track record of success.
- The Utility needs to develop a framework of technical parameters that will allow for an efficient RFP process that yields competitive bids from the various solicitations.
- The Utility should promote the development of an internal workforce that is experienced in Renewable Energy technology, operation, and project management.

Funding

WAPA's dependence on Federal funding to drive the development of Renewable Energy projects is potentially problematic. The variability in accessibility to these funds will in all likelihood seriously delay the implementation of Utility Scale Renewable Energy projects in the Virgin Islands:

- WAPA's should reallocate FEMA/HUD funds from WAPA-Owned Renewable Energy projects to efficient generating units and grid infrastructure hardening to ensure the improvement of service provided to the Virgin Islands community.

Collaboration with Regulatory Agencies and Government Agencies

Public Service Commission (PSC)

The relationship with the PSC is contentious and adversarial at times. The WAPA board feels that PSC's only mandate is to reduce rates and that they appear to dictate how the utility is to operate, which out of their purview. This further negatively impacts their existing bonding and credit rating. There has been discussion in the past about making changes to the structure of the PSC. Senators have proposed bill that have not gone on to become laws. The VI Energy Office has also looked at other structures for the PSC in other states.

The PSC'S ongoing relationship with Georgetown Consultants is also a growing financial problem not only for the PSC but also, the agencies that it regulates who must pay a portion of their fees. In FY19 WAPA will pay $1,242,136 to Georgetown and between 2015 – 2018 they have paid $6,058,222. The table below represents what WAPA pays the PSC for the Georgetown Consultants.

Summary of PSC Payments to Georgetown Consulting -January 3, 2019

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Totals
289 - LEAC	$760,000	$135,000	$290,569	$119,132	$84,000	$1,388,701
651 - Electric System Rate Case	-	-	$451,879	$103,471	$5,692	$561,042
652 - Water System Rate Case	-	-	$88,120	$7,720	-	$95,840
Total Georgetown Consulting	$760,000	$135,000	$830,568	$230,323	$89,692	$2,045,583
Annual Assessment and Other Dockets	$1,073,385	$977,230	$1,039,903	$1,011,813	$1,152,444	$5,234,775
Total Payments	$1,833,385	$1,112,230	$1,870,471	$1,242,136	1,242,136	$7,300,358

Note 1 - Annual Assessment for FY2019 is full year projection. Docket expenses are year to date.

Transition Team Recommendation

- There should be other considerations given to what the PSC should function as there are many models.
- One recommendation is a Utility Commission that represents all stakeholders. This would funnel all concerns to a central entity that would coordinate with the utility as a quasi-judicial body outside of the political process. This would require a legislative remedy but would also protect the utility from ad hoc policy developed out of political posturing.

- The government needs to explore other models for the PSC.
- The government needs to revisit the PSC contract with Georgetown Consultant and evaluate whether it meets the needs of the Virgin Islands.

VI Energy Office

The Energy Office is developing an Energy Assurance Plan which every state is required to have but has not been done for the VI. This plan identifies all the critical infrastructure dependent on energy and effectively addresses the response of the Territory to an energy emergency event, as well as mitigation measures for reducing the risk of emergency events occurring. The WAPA director and Energy Office Director will need to work for this plan.

The VI Energy Office has worked with WAPA in the past and VIenergize was one of the first projects. VIenergize goal is to support the territory's goal of 60% reduction of fossil fuels by 2025, which is now only 6 years away. This is a goal the VI Energy has also. Working together is something that has not happened for the last four years and would be a positive move. VIenergize has not gotten the attention it needs and could be better utilized if WAPA and the Energy Office worked together specially to promote energy efficiency.

The VI Energy Office also facilitates an MOU between the U.S. Dept. of Energy and VI Government. This MOU provides technical assistance to WAPA from the U.S. Dept. of Energy and the national labs. Presently, they are working on several projects. This assistance has been very valuable to WAPA and definitely should continue.

Transition Team Recommendation

- The VI Energy Director should be appointed to the WAPA Board.
- WAPA and the Energy Office should work together to revitalize the VIenergize program.
- WAPA, the VI Energy Office and the U.S. Dept. of Energy should revisit the MOU signed in 2016.

Public Works

WAPA utility installation appears to be lagging behind DPW's asphalt and road construction project roll out. Limited coordination could cause/is causing "double work" as DPW is completing projects and WAPA is planning utility installation where DPW has completed projects. This will result in an expenditure of project funds that are already in short supply and lacking for rework.

WAPA, DPW and VIYA have utility agreements in place for project coordination. WAPA stated the efforts have been much improved post hurricanes, however, those efforts still appear to be lacking as DPW is actively engaged in road construction. There should be a more integrated effort with regards to projects and specifically road reconstruction projects.

Transition Team Recommendation

- Assign a project coordinator from the DPW, who is responsible for ensuring that all utilities are fully coordinated with WAPA prior to project implementation

Department of Planning and Natural Resources (DPNR)

VIWAPA and DPNR have exhibited a non-transparent relationship that has existed since the Net-Meter Program. The lack of transparency was emphasized during the Power Restoration Initiative that followed the 2017 Hurricanes. The inability of the two agencies to efficiently collaborate resulted in homeowners struggling to get repaired electrical service entrances inspected prior to power restoration. There has also been a severe lack of clear communication between the two agencies in regards to the status of the distributed energy policy throughout the Virgin Islands. Without a clearly defined policy hundreds of community members have taken it upon themselves to integrate distributed energy systems without the seeking permits or approval.

Transition Team Recommendation

- A clear line of communication relative to distributed energy systems needs to be reestablished between DPNR's Building Permits division and WAPA.
    - This line of communication can be moderated by Virgin Islands Energy Office.

  DPNR should be involved with WAPA and PSC in the development of the Stand-By Tariff program.

Conclusion

The Virgin Islands Water and Power is in financial peril, and it is important to remember that the dire situation, in which WAPA finds themselves, did not develop overnight. And as a result, the resolution of the fundamentals issues that have plagued the WAPA will require a long road to recovery. This extensive report has provided an outline that seeks to effectively and objectively communicate the major challenges facing the WAPA. This report also highlights the Virgin Islands community's burden as a result of the Utility's deteriorating financial and operational condition. The information provided in this report is critical to successfully paving the road to recovery, however this is only the first step achieving WAPA's goals of:

1. Fiscal Solvency
2. Hardening of Transmission and Distribution Infrastructure
3. Efficiency Optimization of Generation Assets
4. Increased Renewable Energy Integration
5. Improved Customer Service & Quality of Service Provided
6. Restored Public Brand Recognition
7. Improved Employee Morale

WAPA has sought the aforementioned goals in the past, however, little has progress has been made to date. It is clear that now more than ever a major disruption to the "business as usual" approach is mandatory. One area of immediate disruption must begin at the Board level, where misinformed decision-making has plagued WAPA for years. The appointment of qualified, experienced, and industry competent board members is an absolute necessity especially at this critical juncture.

The appointment of a qualified and solution-oriented Board of Directors will provide an incremental forward step towards WAPA regaining fiscal solvency. The financial woes of WAPA are a looming problem that will only get worse without a progressive Board of Directors that is willing to make disruptive changes to positively impact WAPA's financial recovery. Currently the only solutions presented by the existing Board of Directors is to raise electricity rates, and this is just not acceptable. WAPA's financial and operational problems will not be solved by simply throwing more money at the issues. The mere fact that simple solutions such as these are being proposed to solve complex problems is an insult to the Virgin Islands community.

No additional assessment is needed to express the overall disdain the Virgin Islands community has for WAPA as a whole. While traditionally Utilities are not heralded as altruistic stewards of the community, WAPA's brand throughout the community is exceptionally tarnished. As a result grid defection has increased steadily as distributed generation technology has advanced and prices for said technology have fallen. WAPA's current belief is that public perception will not improve until electricity costs are lowered. However, the dire financial conditions of WAPA indicate that rate decreases will not be realized in the near term. As a result, WAPA's brand will continue to suffer, and this does not only cause additional grid defectors, but also will make it more difficult for WAPA to attract the local talent needed to effectively manage the Utility. The transition team believes that complacency in regard to WAPA's Brand Perception is not acceptable. The team suggests that if the Government is to continue lobbying for WAPA to receive additional funds, that WAPA needs to develop a Brand Restoration Plan as well.

It is imperative that WAPA succeeds so we must all work toward solving these issues.

This report is submitted by the WAPA Transition team cluster and is a compilation of data gathered in meetings and discussions with WAPA officials, review of documents and the VI WAPA Transition Report (Dated 12-21-2018). The critical issues that have been identified and are recommendations for the new administration.