**PREPARED STATEMENT OF
LAWRENCE J. KUPFER, EXECUTIVE DIRECTOR/CEO,
VIRGIN ISLANDS WATER AND POWER AUTHORITY
TO THE COMMITTEE OF THE WHOLE,
33rd LEGISLATURE OF THE VIRGIN ISLANDS
Bill 33-0072
June 5, 2019**

Good day Honorable Novelle E. Francis Jr., Senate President, other Honorable Senators present, testifiers, and the listening and viewing audiences. I am Lawrence J. Kupfer, Executive Director/CEO of the Virgin Islands Water and Power Authority (hereinafter "VIWAPA" or the "Authority"). With me to assist in this presentation are members of the Authority's management team.

Mr. Chairman, I have been asked to testify on Bill No. 33-0072:

> An act appropriating $39,476,909 that was awarded to the Virgin Islands Medical Assistance Program as a result of a multi-year account reconciliation and review of several of the Territory's health care agencies to various governmental entities.

Per the Bill, the sum of $9,903,746 is to be appropriated directly to the Authority for payment of the services owed by the Governor Juan F. Luis Hospital and Medical Center ("JFL"). Further, the sum of $4,312,454 is appropriated to be paid directly to Authority for services owed by the Schneider Regional Medical Center ("SRMC"). The total combined amount allotted per the Bill is $14,216,200. For the record, the combined total owed by the hospitals for water and power services to the Authority is approximately $22.9 million, which is the amount that the Authority was anticipating. On an annual basis, the Authority bills the JFL and the SRMC Hospitals $2.8 million and $ 3.7 million respectively. However, for many years both hospitals rarely fully paid their WAPA bills, allowing the hospitals' outstanding receivables to VIWAPA to grow to approximately $23 million.

The $14,216,200 that Bill No. 33-0072 proposes to appropriate to the Authority to pay down the outstanding receivables owed by the territory's hospitals leaves the Authority with a still substantial arrearage of $8,673,800 for utility services, which amount can only increase as the budgetary appropriations to both facilities for utility services are insufficient. The Authority requests consideration from the Legislature to pay this balance of $8,673,800 from the program.

Any amount appropriated from the Medicare Program will be utilized by the Authority to pay some of the its current outstanding obligation to its vendors, most of whom have been amazingly patient. The $22.9 million the hospitals currently owe the Authority is approximately 10% of the Authority's outstanding $202 million of payables from operations, not including long term debt.

The $202 million of payables has built up as a result of the hospitals and other GVI entities not fully paying their bills and an under collection of revenues due to inadequate LEAC and Base Rates.

Many critical vendors have indicated that they will no longer continue to provide their services to the Authority if the amounts owed are not addressed. Should this occur, the Authority will not be able to continue to provide certain necessary services.

In addition to testifying on the Bill regarding the appropriation of the money awarded the VI Medical Assistance Program, I have also been asked to provide the rationale behind VIWAPA's intent to request a rate increase considering the public's belief that cost savings from utilizing less expensive propane would reduce rates. I would like to thank you for the opportunity to address a matter that has been a major topic on the minds of many residents of the Territory. To respond herein, it is necessary to place things into perspective as to how the project and projections came about. In Fiscal Year 2014, rates for utility services were at an all-time high due to the global fuel oil crisis. At this time, VIWAPA's residential electrical rate was 52 cents per kWh. At that time, fuel oil was approximately $136.00 per barrel. To place things into further perspective, if HOVENSA, LLC, our long time fuel supplier had been in operation, the price would have been approximately $100.00 per barrel. Fuel at the time was approximately 75% of the customer bill, and due to rapidly escalating prices, VIWAPA was incurring a massive under-recovery in paying for the cost of fuel as the LEAC was not keeping pace with fuel costs. This resulted in the deferral of major maintenance needed for the plants.

VIWAPA sought to address this problem by pursing a range of projects. Some, such as its solar initiative, were successful and resulted in approximately 8 MW of solar being placed on the grid. Others such as the Interconnection to the Puerto Rico Grid, Alpine Waste to Energy Project and Tibbar Energy, to name a few, never made it to fruition.

Undoubtedly the largest, most expeditious and environmentally favorable project VIWAPA undertook at that time to bring relief to reduce the rates was the conversion of its generating units to burn LPG. VIWAPA entered into a contract with VITOL Virgin Islands Corp to: (1) construct, own and operate the LPG Facilities, (2) supply the LPG and (3) and manage the repowering of certain combustion turbine units. VITOL provide $160 Million of its own capital to fund the construction of propane terminal and gas processing facilities on St. Thomas and St. Croix as follows:

- $122 million was spent to build 2 new storage and propane processing facilities with state-of-the-art technology and industry safe parameters.
- $13 million was spent to upgrade VIWAPA's jetty facilities and other marine infrastructure to facilitate operations that were compliant with US Coast Guard regulations.
- $25 million to finance the conversion of VIWAPA's generating units to propane.

The $160 million provided by VITOL is to be reimbursed under a Build, Own Operate and Transfer agreement with VIWAPA.

The VITOL project was estimated to reduce fuel cost, based on the cost per barrel of fuel vs the cost of propane by approximately 30%, when all generators were fully operational. When the Authority commenced the VITOL Project the spread between the cost of fuel oil vs. the cost of propane was approximately 30%, supporting the Authority's initial assertion of a 30% decrease in the fuel cost. However, by 2017 the spread had decreased to 12% and in 2018, 22%. Today the spread has increased to approximately 33%. Allow me to focus on the issue of the reduction in fuel cost for one moment. The proposed 30% decrease that was to be brought about by the VITOL project was on the LEAC, which as everyone is aware by now is the fuel cost. The 30% decrease was not on the all-in rate for power, which would be the base rate and the LEAC rate combined.

As you may know, not all VIWAPA units were converted to propane on a long-term basis. Several, storm and non-storm related activities affected the conversion of various units, which were a vital component in the LEAC reduction. For example, Unit 18 on St. Thomas, which had been converted, was damaged by the hurricanes, forcing its permanent removal from service. Also, Unit 22, also on St. Thomas, incurred a catastrophic failure during the development of the LPG project, making it no longer viable for conversion. Further, it was determined not to convert Unit 19 on St. Croix since it was not tied to a HRSG (waste heat). Unit 23 is still pending conversion and has not been available for dispatch since 2014.

As you are aware, on May 20, 2019, the Authority filed a base rate case with the Public Services Commission ("PSC"). In the year since the last PSC electric rate investigation concluded in July 2017, the Authority has sustained substantial declines in its customer base, which translated to a decline in its overall sales, and has great affected its ability to pay its fixed costs and debts. Based on current available data, electric system sales have declined from approximately 641,000 MWh to 523,000 MWh annually. Most of this decline can be attributed to Hurricanes Irma and Maria, which resulted in a sixteen percent (16%) decline in sales. Following the 2017 Hurricanes, the Authority took significant steps to address the critical juncture in which it found itself. It implemented an Austerity

Budget for FY2019 that was approximately $15.5 million lower when compared to the Adopted Budget. Even though the Authority has taken steps to reduce its non-fuel operating expenses, the present forecast of revenues and non-fuel operating expenses will exceed the Authority's ability to pay.

Among the substantive steps taken by the Authority to reduce its operating costs is the reduction of total staffing positions by approximately 17.5%, represented by a total of 104 positions from FY2014 to FY2019. The financial impact of this reduction is a reduction of total personnel costs by 18.3% or approximately $7.4 million per year. This reduction in personnel costs was generally achieved through attrition, as originally proposed by the Authority in its response to the Management Audit findings.

The Authority's forecasted non-fuel operating expenses for the current year at approximately $30.8 million less than the Adopted Budget. Even at this level, the Authority is still at risk of being unable to pay one hundred percent of its existing debt service payments (and operating expenses) for the current year without the requested rate relief.

The failure of the Authority's base revenues to keep pace with operating and capital costs have created a revenue deficiency which continues to threaten the operational and financial integrity and sustainability of WAPA's Electric System. The Authority has determined that the existing base rates of the Electric System for the Fiscal Year 2020 Test Year are insufficient to cover operating expenses and debt service payments by more than $43.2 million. When near term capital improvement needs are factored in, the Authority's existing Electric System base rates are deficient by more than $55.1 million.

In closing, I would like to note for the record that attached to the testimony as Exhibit A are the Authority's responses to 24 requests which were posed to us in the invitation we received to testify.

I wish to thank you for allowing the Authority the opportunity to testify on Bill No. 33-0072. My staff and I are available to answer any questions you may have on this matter.

# # #

1. The number of GE Gas Turbines and which units were converted to burn LP Gas on both islands.

- Five (5) GT's were converted to burn LPG Unit's 16, 17, & 20 on STX, and Unit's 15, & 18 on STT

2. Status of the Wartsila Gas Turbine project on St. Thomas.

- The Wartsila RICE are Commercially Operational & will be in Operation June 4th, 2019

3. Status of the Heat Recovery Steam Generation (HRSG) unit that was bought for over $4 million for the Krum Bay Power Plant back in 2014, to include installation and status of the equipment (if not installed).

   Both the Integrated Resource Plan and the Management Audit recommended the Authority move to smaller, more efficient generating units. As a result the HRSG was no longer useful to the Authority's operation.

4. Number of these Gas Turbine units that were converted to burn LPG that are currently operational.

- Unit's 17 & 20 in STX and Unit 15 on STT

5. Status of the Heat Recovery Steam Generation System (HRSG) that was installed back in 2007-2008 at a cost $35 million to generate free steam for the steam turbines.

- HRSG #24 is operational. However, both Unit's 10 and 11 are unavailable for operation in conjunction with this Boiler.

6. If the HRSG is still being used, the percentage of operational hours monthly that it is being used.

- The HRSG is currently unavailable

7. The last usage date of the HRSG, if it is not being used.

- Unit #24 HRSG last time spinning a steam turbine was October 12, 2018

8. The status of the steam turbines at the St. Croix Power Plant and the last utilization date.

- As stated both steam units (10 & 11) are unavailable. They were last in operation on October 12, 2018

9. Factors contributing to frequent breakdowns of power generating turbines.

- There are many factors that contribute to frequent outages to include: lack of funding to perform maintenance, procure parts and materials and pay vendors; surges on the grid that feed back to generation, and interruptions associated with the LPG systems.

10. Details of any preventative maintenance program in place for the power plants.

- All Preventive Maintenance ("PM") activities are done through the MAXIMO – Software, a computerized maintenance management system (CMMS). The PM triggers are defined within the software and can be summarized within 5 categorizes as listed below:

  1. Time - Time based triggers are instructed by the Original Equipment Manufacturer (O.E.M.). Time is one of the most frequently used maintenance triggers. It incorporates daily, weekly, monthly, yearly checks to ensure assets are functioning properly with a minimal amount of unplanned downtime. Using time triggers, small problems can be caught and fixed before they grow into bigger ones and lead to costly equipment failure.

2. Usage - Usage-based maintenance triggers occur when an asset requires maintenance after operating at a certain output. For example, Gas Turbine PM's are generated based on fired hours and Steam Turbines PM's are generated based on hours online.

3. Event - This type of maintenance is triggered based on an event happening. Event-based triggers are used on critical assets that are prone to impact by external forces. For example, equipment at a facility susceptible to hurricanes.

4. Condition – This occurs when a certain element of an asset is not working the way it's supposed to. When a condition-based maintenance trigger is in place, it identifies the problem areas and alerts the Maintenance Department that a PM needs to be performed These methods can range from inexpensive visual inspections to more expensive, technically demanding ones such as vibration, oil samples and thermographic analysis, which are conducted at both facilities.

5. Breakdown - As its name suggests, a breakdown maintenance trigger occurs when a piece of equipment breaks down and can't be used anymore. The moment an asset stops working, an alert is triggered, and maintenance is scheduled to fix the problem and return the equipment to operation.

VIWAPA's goal is to standardize the Preventive Maintenance Programs thought out the Territory. The Maintenance Department develops Preventive Maintenance Programs for all existing equipment, new generation and all future generation. This allows the Authority to achieve maximum efficiency and reliability at its facility. Increased PM's will reduce unscheduled force outages. This process is, however, contingent on the financing. Not having funds to purchase spare parts and consumables directly impacts the Authority's ability to maintain the equipment to peak efficiency and meet industry standards.

11. Criteria or basis used to determine whether to repair or permanently retire a turbine.

- The IRP is used as a guideline for making the decision to repair or retire a unit. PROMOD and Portfolio Optimizer are tools that are also used.

12. The number of APR Gas Turbines VIWAPA currently being leased.

- The Authority is currently leasing three (3) units on St. Thomas from APR Energy.

13. The monthly rental cost (per unit) to rent the APR units.

- Monthly rate for Unit #25 _ $400/Fired Hour. No minimum offtake obligation shall apply.
- Monthly rate for Units #26 - $475,000.00 per month
- Monthly rate for Units #27 - $475,000.00 per month

14. The length of time that VIWAPA has been renting these units, with a breakdown per unit.

Unit 25 – February 2012
Unit 26- November 2016
Unit 27-April 2017

15. The rental cost per APR unit paid thus far.

The total paid to date for rental of APR units is $36,249.19.

16. The projected length of time that VIWAPA will continue renting these units.

The term of the current agreement expires December 31, 2020 provided that VIWAPA may terminate the agreement at anytime upon 30 days written notice after May 1, 2020.

17. The point at which "temporary" solutions becomes "permanent".

- If the question relates to the APR Units, these units are not anticipated to become a permanent part of the Authority's operation.

18. All Internal Audits conducted from January 2016 to present.

The Authority is currently reviewing and is in the process of obtaining a legal opinion regarding the release of the internal audits reports, to determine whether such release could subject the Authority to attendant civil litigation and damages. As such, the Authority is unable to produce the requested materials without first obtaining and reviewing the legal consequences surrounding such a release.

19. All American Express statements (detailed) for company issued cards for the period from January 2016 to present.

    The Authority requires additional time to provide the requested information. We anticipate responding on or before June 10, 2019.

20. The outstanding amount due and owed to VITOL to date under contract, to include the amount for propane already consumed, O&M costs and financing of infrastructure.

    The outstanding balance due to Vitol to date is $104,759, 662.89.

21. Explain the status of projects that will allow WAPA to transform to more efficient power generation with attention to how efficiency gains convert into fuel savings.

- 36 MW Wartsila Project for Harley Plant, Additional Rental Units in STX or 20 MW of RICE units in STX and renewable energy projects.

22. The amount of monthly fuel savings (at current propane prices) due to use of more efficient generation units.

    SEE ATTACHED CHART

23. Prepare to explain the rationale behind VIWAPA's intent to request further rate increases, considering the public's belief that cost saving from utilizing cheaper propane would be transferred to rate payers.

    This response is contained in the Authority's testimony.

24. Explain the shortfall in current rates approved by PSC to cover payments due under VITOL contracts and the basis for the large amount currently owned VITOL.

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On December 1, 2015, the Authority filed two petitions with the PSC seeking permanent Electric and Water Systems base rate relief effective on bills issued on or after July 2016. The Electric System requested rate increase of $30.1 million was to pay for the cost of the lease generation units, salary increases for employees and the infrastructure and maintenance cost of the VITOL project. These petitions were not addressed in a timely manner.

Given the financial problems facing the Authority and knowing the length of time it would take to get an approved order, the Authority on May 13, 2016 petition the Public Services Commission for a temporary rate increase to fund a working cash reserve fund in the amount of $34 million dollars, a rate increase of .026783 per kwh for two years. This fund would be used to pay operating expenses. The petition outlined the following:

- failure to provide funding would further impact the Authority's liquidity problems;
- inability by the Authority to pay its bills would result in its Investment rating being downgraded;
- ability to provide quality and reliable electric services would be affected
- relationship with its vendors would be affected;
- funding was needed to upgrade the Authority's generation fleet in the near future, required more borrowing and a credit rating downgrade would impair the Authority's future borrowing by increasing the cost which would reduce the benefits of implementing its capital program;
- the Authority needed at a minimum 45 days on cash on hand to be attractive to investors.

When the petition was filed, the Authority's unrestricted cash balance was $3.8 million which can only fund 5 days of operating expenses. A primary cost of the cash shortfall was the failure of several government agencies to pay bills timely. Some agencies made no effort at all to pay for the cost of their current usage of electric service. As a result, Government receivables had increased to an unacceptable level of $31,131,360 even though the Authority had received $52,309,533 from the Government in July 1, 2015 to reduce its receivables.

The petition for the temporary cash reserve surcharge was never approved and the Authority continued to owe its vendors and as predicted the investment ratings were severely downgraded by all the rating agencies. This impacted our ability to borrow money at a low interest rate to finance capital projects.

On January 12, 2017, The PSC approved an interim rate to yield $14,585,216 in eleven months.to be implemented on bills rendered on or after February 1, 2017. After extensive meetings with the PSC, requesting re-consideration of the amount, the PSC on June 27, 2017 made the interim rate yielding $14.5 million permanent. The amount was insufficient to cover the Authority's operating cost, the cost of the lease generation units and the payments to VITOL for the construction of the propane plant and the operating and maintenance cost associated with its operations.

	FY 2020												
	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	TOTAL
STT Projected Fuel Cost (w/ Changes)	$4,555.35	$4,522.38	$4,536.52	$4,369.30	$4,143.06	$4,276.72	$4,170.68	$3,895.22	$4,135.80	$4,177.22	$4,399.86	$4,514.12	$ 51,696.23
STT Projected Fuel Cost (w/o Changes)	$6,525.91	$6,483.92	$6,489.83	$6,271.60	$5,928.60	$6,141.15	$6,027.22	$5,592.89	$5,975.98	$6,021.98	$6,363.88	$6,516.89	$ 74,339.84
Delta ($000)	$1,970.56	$1,961.54	$1,953.31	$1,902.30	$1,785.54	$1,864.43	$1,856.54	$1,697.67	$1,840.18	$1,844.76	$1,964.02	$2,002.76	$ 22,643.62

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	TOTAL
STX Projected Fuel Cost (w/ Changes)	$3,635.23	$3,625.77	$3,574.10	$3,653.72	$3,408.08	$3,481.83	$3,109.41	$2,902.05	$2,941.13	$2,855.04	$3,004.95	$3,028.33	$ 39,219.64
STX Projected Fuel Cost (w/o Changes)	$5,250.20	$5,192.33	$5,175.28	$5,237.48	$4,659.40	$4,751.37	$4,703.19	$4,384.15	$4,361.00	$4,237.24	$4,490.78	$4,589.61	$ 57,032.02
Delta ($000)	$1,614.97	$1,566.56	$1,601.18	$1,583.75	$1,251.32	$1,269.54	$1,593.78	$1,482.10	$1,419.87	$1,382.20	$1,485.83	$1,561.29	$ 17,812.39

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	TOTAL
Net Projected Fuel Savings ($000)	$3,585.53	$3,528.11	$3,554.49	$3,486.05	$3,036.86	$3,133.97	$3,450.31	$3,179.77	$3,260.05	$3,226.97	$3,449.84	$3,564.05	$ 40,456.00