UNITED STATES DISTRICT COURT DISTRICT COURT OF THE VIRGIN ISLANDS DIVISION OF ST. THOMAS AND ST. JOHN

| UNITED STATES OF AMERICA, |) |
|---|-----|
| Plaintiff, |) |
| v. |) |
| VIRGIN ISLANDS WATER AND POWER AUTHORITY |)) |
| Defendant. |)) |

Civil Action No. 3:14-cv-00086-CVG-RM

AMENDED CONSENT DECREE

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WHEREAS, Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint on October 30, 2014, pursuant to Sections 113, 110, 111, and 112, 114, 167, 502(a), of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. §§ 7413, 7410, 7411, and 7412, 7477, 7661(a), alleging that Defendant Virgin Islands Water and Power Authority ("VIWAPA"), violated the Virgin Island Air Pollution Control Act Rules and Regulations ("VI-APCAR&R") Section 204-22(a) and (b) that EPA approved pursuant to Section 110 of the Act, 42 U.S.C. § 7410, requirements of the New Source Performance Standards ("NSPS") promulgated pursuant to Sections 111(b)(1)(B) and 114(a) of the Act, 42 U.S.C. §§ 7411(b)(1)(B) and 7414(a), conditions in a permit issued pursuant to Section 206-20 of the VI-APCAR&R, conditions in permits issued pursuant to the Prevention of Significant Deterioration ("PSD") regulations and provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470 – 7492, conditions in permits issued pursuant to provisions of the VI-APCAR&R Sections 206-51 through 206-92, which is the EPA-approved U.S. Virgin Islands' ("VI") Title V Operating Permit Program, and provisions of Title V of the Act, § 7661a of the Act, 42 U.S.C. § 7661a at its Randolph Harley Generating Facility on the Island of St. Thomas in the U.S. Virgin Islands ("St. Thomas Facility"); and alleging VIWAPA violated National Emission Standards for Hazardous Air Pollutants and permits issued pursuant to 206-61(d) of the VI-APCAR&R and Title V of the Act, 42 U.S.C. § 7661a at its Cruz Bay Facility on the Island of St. John in the U.S. Virgin Islands ("St. John Facility").

WHEREAS, EPA issued two Notices of Violation ("NOV") for the St. Thomas Facility pursuant to Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), on November 10, 2010 and May 7, 2014 for violations of permits issued pursuant to the PSD provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470 – 7492.

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WHEREAS, the Complaint against Defendant alleges failures to operate required emission controls and monitoring systems, comply with emissions limits, perform required tests and audits, operate monitoring devices, maintain sufficient data availability, and accurately report noncompliance at the St. Thomas Facility; and alleges failures to perform required tests, comply with the St. Thomas Title V Operating Permit, and timely submit a Title V Operating Permit renewal application at the St. John Facility.

WHEREAS, on July 25, 2013, Defendant entered into a contract with Vitol Virgin Islands Corp. ("Vitol") with respect to the supply and storage of LPG and the conversion of Units 15, 18 and 23 to enable VIWAPA to burn LPG in addition to oil.

WHEREAS, the Vitol contract, subject to certain exceptions set forth therein, requires that after the conversion of a Unit is completed, when LPG is available, the units capable of burning LPG collectively shall burn LPG to generate no less than eighty-five percent (85%) of all kilowatt hours from converted units over the course of any given calendar year.

WHEREAS, if Defendant purchases Unit 25, it will convert the Unit to enable it to burn LPG as the primary fuel.

WHEREAS, Unit 18 is dismantled and Unit 22 is no longer operating at the St. Thomas Facility, and on November 3, 2016 VIDPNR issued a minor source construction permit in which VIWAPA identified Unit 26 as a replacement for Unit 22, and on May 8, 2017, VIDPNR subsequently issued a minor source construction permit for Unit 27 after VIWAPA identified it as a replacement for Unit 18. On or before July 1, 2018 VIWAPA filed a formal request with DPNR asking that Units 18 and 22 be removed from the St. Thomas Title V Operating Permit.

WHEREAS, Unit 26 replaced Unit 22 and Unit 27 replaced Unit 18.

WHEREAS, VIWAPA intends to install at least seven reciprocating internal combustion

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engines (RICE), which are capable of burning LPG/LNG, at the St. Thomas Facility.

WHEREAS, in accordance with the CD, to reduce visible emissions at Unit 14, VIWAPA installed a fuel atomizer. The fuel atomizer was damaged by Hurricane Maria in September 2017 and is currently inoperable.

WHEREAS, VIWAPA's PSD Permits no longer require COMS to be operated and VIWAPA requested removal of COMS requirements from the St. Thomas Title V Operating Permit in accordance with the CD entered on September 30, 2016, the COMS requirements in the Consent Decree prior to the Amended Consent Decree are no longer applicable.

WHEREAS, on October 5, 2016, in accordance with the CD, VIWAPA submitted to the VIDPNR a request to withdraw the St. John Facility Title V Operating Permit and a request to issue the St. John Facility a minor source state operating permit.

WHEREAS, VIWAPA's October 5, 2016 application, in accordance with the CD, requested that the St. John Unit be allowed to operate as an emergency unit, subject to SIP limitations, that 40 C.F.R. Part 63 Subpart ZZZZ be incorporated into the permit as an applicable requirement, and that a condition be added to the permit that requires that the St. John Unit use diesel fuel that meets the requirements of 40 C.F.R. § 80.510(b) for nonroad diesel fuel.

WHEREAS, Defendant does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint. The United States and the Defendant agree that settlement without further litigation and without admission or adjudication of any issue of fact or law is the most appropriate means of resolving the action.

WHEREAS, the Parties agree, and the Court by entering this Amended Consent Decree finds, that this Amended Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties regarding the St. Thomas Facility and the St. John

Facility, and that this Amended Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355 and 1367 and Sections 113(b) and 304(a) of the CAA, 42 U.S.C. §§ 7413(b) and 7604(a), and over the Parties. Venue lies in this District pursuant to Sections 113(b) and 304(c) of the Act, 42 U.S.C. §§ 7413(b) and 7604(c) and 28 U.S.C. §§ 1391 (b) and (c) and 1395(a), because the violations alleged in the Complaint occurred in this District. For purposes of this Amended Consent Decree, or any action to enforce this Amended Consent Decree, Defendant consents to the Court's jurisdiction over this Amended Consent Decree and any such action over Defendant and consents to venue in this judicial district.

For purposes of this Amended Consent Decree, Defendant agrees that the
 Complaint states claims upon which relief may be granted pursuant to Sections 113, 502(a), 167, 111 and 112 of the CAA, 7413, 7661(a), 7477, 7411 and 7412.

II. <u>APPLICABILITY</u>

3. The obligations of this Amended Consent Decree apply to and are binding upon the United States and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the St. Thomas Facility or the St. John Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Amended Consent Decree are

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implemented. At least 30 Days prior to such transfer, Defendant shall provide a copy of this Amended Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 2, the United States Attorney for the District of the Virgin Islands, and the United States Department of Justice, in accordance with Section XIII (Notices). Any attempt to transfer ownership or operation of the St. Thomas Facility or the St. John Facility without complying with this Paragraph constitutes a violation of this Amended Consent Decree.

5. Defendant shall provide a copy of this Amended Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Amended Consent Decree, as well as to any contractor retained to perform work required under this Amended Consent Decree. Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Amended Consent Decree.

6. In any action to enforce this Amended Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Amended Consent Decree.

III. <u>DEFINITIONS</u>

7. Terms used in this Amended Consent Decree that are defined in the CAA or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Amended Consent Decree. Whenever the terms set forth below are used in this Amended Consent Decree, the following definitions shall apply:

a. "Amended Consent Decree" shall mean the Amended Consent Decree lodged in 2018, which replaces the Consent Decree entered in 2016 and includes all appendices

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attached to that Consent Decree. Except where otherwise noted in the Amended Consent Decree, the requirements set forth in Section V (Compliance Requirements) of the Consent Decree entered in 2016 continue without interruption in the Amended Consent Decree.

b. "Capacity Performance Testing" shall mean testing used to evaluate the aero-thermodynamic performance of the gas turbine and to guarantee the machine's capacity and heat rate at specific conditions;

c. "CEMS" shall mean continuous emissions monitoring system;

d. "Clean Air Act" or "the Act" shall mean the federal Clean Air Act, 42
 U.S.C. §§ 7401 – 7671q, and its implementing regulations;

e. "Complaint" shall mean the complaint filed by the United States in this action;

f. "Consent Decree" shall mean the Consent Decree, entered on September30, 2016, and all appendices attached thereto which are listed in Section XXII (Appendices);

g. "Converted Units" shall mean Unit 15 and any other unit at the St. Thomas Facility that has achieved Substantial Completion.

h. "COMS" shall mean continuous opacity monitoring system;

i. "CGAs" shall mean cylinder gas audits as defined in 40 C.F.R. Part 60,
 Appendix F, Condition 5.1.2;

j. "2015 Date of Lodging" shall mean the date on which the Consent Decree was filed for lodging with the Clerk of the Court for the United States District Court for the District of the Virgin Islands Division of St. Thomas and St. John;

k. "2018 Date of Lodging" shall mean the date on which the AmendedConsent Decree was filed for lodging with the Clerk of the Court for the United States District

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Court for the District of the Virgin Islands Division of St. Thomas and St. John;

 "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Amended Consent Decree, where the last day would fall on a Saturday, Sunday, federal or U.S. Virgin Island holiday, the period shall run until the close of business of the next business day;

m. "Defendant" and "VIWAPA" shall mean the Virgin Islands Water and Power Authority;

n. "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

o. "Effective Date" shall have the definition provided in Section XIV ("Effective Date");

p. "HRSG 21" shall mean the heat recovery steam generator that recovers exhaust heat from Unit 15 and/or Unit 18 to produce steam;

q. "Malfunction" shall mean, as specified in 40 C.F.R. § 60.2, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions."

r. "Other Turbine Capable of Burning LPG/LNG" shall mean Units 26, 27 and/or any Replacement Turbine.

s. "Paragraph" shall mean a portion of this Amended Consent Decree identified by an Arabic numeral;

t. "Parties" shall mean the United States and Defendant;

u. "PSD Permits" refer to the St. Thomas Consolidated PSD Permit, issued

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by EPA on February 20, 2007 and modified on June 18, 2007 and September 23, 2013, for Units 15, 18, 22 and the Unit 23 PSD Permit, issued by EPA on September 8, 2004 and amended on October 21, 2004;

v. "Renewables" shall mean electricity produced from solar, wind, biogas, geothermal, biomass, low-impact hydro and any other emerging technologies that VIWAPA meters and that is fed to the St. Thomas power grid. Renewables shall not mean electricity produced from waste to energy facilities.

w. "Replacement Turbine" shall mean a turbine that is capable of burning LPG/LNG that replaces a facility turbine (currently Units 14, 15, 23, 25, 26 and 27) where that replacement turbine triggers PSD review and/or NSPS applicability and the replacement utilizes a water injection system and/or CEMS.

x. "RATAs" shall mean Relative Accuracy Test Audits;

y. "RICE Unit" shall mean a reciprocal internal combustion engine capable of burning LPG/LNG.

z. "Section" shall mean a portion of this Amended Consent Decree identified by a roman numeral;

aa. "Shutdown" shall mean the cessation of operation of equipment for any purpose;

bb. "St. John Facility" shall mean Defendant's Cruz Bay Facility located on the island of St. John, U.S. Virgin Islands;

cc. "St. John Synthetic Minor Permit to Operate" shall mean the Synthetic Minor Permit issued to the St. John Facility by the Virgin Islands Department of Planning and Natural Resources ("VIDPNR") on November 21, 2016;

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dd. "St. Thomas Facility" shall mean Defendant's Krum Bay Generating Facility located on the island of St. Thomas, U.S. Virgin Islands;

ee. "St. Thomas Title V Operating Permit" shall mean the Title V Operating Permit issued to the St. Thomas Facility by VIDPNR on December 31, 2003 and/or any renewal Title V Operating Permit(s) issued to the St. Thomas Facility subsequently;

ff. "Startup" shall mean the setting in operation of equipment for any purpose.

gg. "Substantial Completion" shall mean that a Converted Unit is capable and mechanically able to burn LPG, which shall be deemed to occur when: 1) storage tanks have been loaded with LPG, 2) LPG can be continuously supplied to the Converted Unit, and 3) the Converted Unit has successfully completed commissioning (as set forth in Sections 7.04 and 7.05 and Exhibit B of the July 25, 2013 contract with Vitol attached as Appendix A). Until termination of the Vitol contract, in order for commissioning to be deemed complete, VIWAPA and Vitol shall have certified completion, with only "non-critical" punch list items remaining to be addressed, and VIWAPA shall have issued a "Certificate of Substantial Completion," as provided in Sections 7.04 and 7.05 of that contract.

hh. Unit 14," "Unit 15," "Unit 18," "Unit 22," "Unit 23," and "HRSG 21" refer to the emission units identified as Units 14, 15, 18, 22, 23, and HRSG 21 respectively, in the St. Thomas Title V Operating Permit and the PSD Permits. "Unit 25" refers to the emission unit identified as Unit 25 in the Unit 25 Operating Permit;

ii. "Unit 25 Operating Permit" shall mean the permit VIDPNR issued onMarch 15, 2012 authorizing VIWAPA to construct and operate Unit 25; and

jj. "Unit 26" shall refer to the emission unit identified as the new TM 2500+

in the DPNR permit to construct dated November 3, 2016.

kk. "Unit 27" shall refer to the emission unit identified as the additional TM2500+ in the DPNR permit to construct dated May 8, 2017.

"Unit Capable of Burning LPG/LNG" shall mean any Converted Unit that
 has achieved Substantial Completion (currently Unit 15), Units 23, 26, 27, any Replacement
 Turbine and any RICE Unit.

mm. "United States" shall mean the United States of America, acting on behalf of the EPA.

IV. <u>CIVIL PENALTY</u>

8. Defendant paid the sum of \$1,300,000.00 as a civil penalty, together with interest accruing from the Effective Date.

9. Defendant provided financial information that demonstrated Defendant has a limited ability to pay civil penalties. Therefore, Defendant paid the penalty amount in four installment payments plus interest. Defendant made its final payment on January 30, 2018.

10. Defendant paid the civil penalty and has paid and will continue to pay stipulated penalties due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice, in accordance with written instructions provided to Defendant, following entry of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Virgin Islands. At the time of payment, Defendant shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for stipulated penalties owed pursuant to the Consent Decree or the Amended Consent Decree in *United States v. Virgin Islands Water and Power Authority*, and shall reference the civil action number 3:14 cv – 00086 and DOJ case number 90-5-2-1-10424, to the United States in

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accordance with Section XIII (Notices); by email to <u>CINWD_Acctsreceivable@epa.gov</u>; and by mail to:

EPA Cincinnati Finance Office 26 Martin Luther King Drive Cincinnati, Ohio 45268

11. Defendant shall not deduct any penalties paid under the Consent Decree or Amended Consent Decree pursuant to this Section or Section VII (Stipulated Penalties) in calculating its federal income tax.

V. <u>COMPLIANCE REQUIREMENTS</u>

12. <u>St. Thomas Facility</u>

a. With respect to the St. Thomas Facility, Defendant shall comply with all applicable provisions of the Act, all applicable requirements of the NSPS, and the Virgin Island State Implementation Plan ("VI SIP"), as well as conditions in the Unit 25 Operating Permit, the PSD Permits and the St. Thomas Title V Operating Permit.

b. If VIWAPA purchases Unit 25, which requires a water injection system, and VIWAPA is then required to install CEMS, Unit 25 shall be subject to the relevant requirements of Paragraphs 14, 15, 16, 17, 18 and 19 and relevant requirements in Sections VI (Reporting Requirements) and VII (Stipulated Penalties).

c. If VIWAPA refurbishes Unit 14 and the refurbishment triggers PSD review or NSPS applicability and the refurbishment results in Unit 14 becoming subject to a requirement to install a water injection system, CEMS, then Unit 14 shall be subject to the relevant requirements of Paragraphs 14, 15, 16, 17, 18 and 19 and relevant requirements in Sections VI (Reporting Requirements) and VII (Stipulated Penalties).

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d. If VIWAPA replaces Unit 14, 15, 23, 25, 26, and/or 27 with a

Replacement Turbine, and the replacement triggers PSD review and/or NSPS applicability and the replacement utilizes a water injection system and/or a CEMS, the Replacement Turbine shall be subject to the relevant requirements of Paragraphs 14, 15, 16, 17, 18 and 19 and relevant requirements in Sections VI (Reporting Requirements) and VII (Stipulated Penalties).

e. If VIWAPA refurbishes, replaces, or purchases a unit that burns LPG/LNG, that unit(s) shall be subject to the requirements of Paragraph 13.

f. Within 30 days of VIWAPA's decision to either purchase, refurbish or replace Units 14, 15, 23, 25, 26, 27, and/or any Replacement Turbine, VIWAPA shall a) send written notice to the United States in accordance with Section XIII (Notices), of the decision and b) include in Quarterly Reports required under Section VI (Reporting Requirements), documentation pertaining to bids, contracts, scheduling and implementation.

13. LPG/LNG Requirements at the St. Thomas Facility

a. <u>Requirements for Units Capable of Burning LPG/LNG</u>

i. Beginning on the first full month after more than one Unit Capable of Burning LPG/LNG begins to burn LPG/LNG, a minimum of eighty-five percent (85%) of the kilowatt hours ("kWh") that VIWAPA generates from units capable of burning LPG/LNG shall be from kWh generated from those units and kWh generated from Renewables.

ii. VIWAPA shall calculate monthly, the percent kWh it generates while burning LPG/LNG and from Renewables on a 12 month rolling average.

iii. Each additional Unit Capable of Burning LPG/LNG shall be included in the 12 month rolling average calculation beginning on the first full month after any additional Unit Capable of Burning LPG/LNG begins to burn LPG/LNG and for converted units

on the first full month after the unit achieves Substantial Completion and begins burning LPG/LNG.

iv. VIWAPA shall use the following equation to calculate the 12-

month rolling average percent kWh while burning LPG/LNG from all Units Capable of Burning

LPG/LNG and the kWh from Renewables:

$$P = \frac{kWh_{lpg} + kWh_r}{kWh_{lpg} + kWh_{fuel oil} + kWh_r} \times 100$$

Where:

P = Percent kWh generated while burning LPG/LNG during the past 12 months from Renewables and from all Units Capable of Burning LPG/LNG

 kWh_{lpg} = Total kWh generated while burning LPG/LNG during the past 12 months from all Units Capable of Burning LPG/LNG

*kWh*_{fuel oil} = Total kWh while burning LPG/LNG during the past 12 months generated from all Units Capable of Burning LPG/LNG

 kWh_r = Total kWh generated from Renewables during the past 12 months.

- b. <u>Requirement for each Converted Unit and each Other Turbine Capable of</u> <u>Burning LPG/LNG</u>
 - i. For Unit 15, beginning on the first Day of the first full month after

the 2018 Date of Lodging of the Amended Consent Decree, and thereafter on the beginning of the first Day of the first full month after Substantial Completion of each other Converted Unit and the first Day of the first full month of operation of any Other Turbine Capable of Burning LPG/LNG, for each 12-month rolling period, VIWAPA shall generate a minimum of sixty-five percent (65%) of kWh while burning LPG/LNG, from each Converted Unit and each Other Turbine Capable of Burning LPG/LNG.

ii. For Unit 15, beginning on the first Day of the first full month after the 2018 Date of Lodging of the Amended Consent Decree, and thereafter on the beginning on the first full month after Substantial Completion of each other Converted Unit, and the first Day

of the first full month of operation of a Replacement Turbine, VIWAPA shall calculate, monthly,

the 12-month rolling average percent kWh generated, while burning LPG/LNG, by each

Converted Unit and by any Other Turbine Capable of Burning LPG/LNG.

iii. VIWAPA shall use the following equation to calculate the 12-

month rolling average percent kWh generated, while burning LPG/LNG, from each Converted

Unit and from any Other Turbine Capable of Burning LPG/LNG:

$$P = \frac{kWh_{lpg}}{kWh_{lpg} + kWh_{fuel \ oil}} \ x \ 100$$

Where:

P = For each Converted Unit and for any Other Turbine Capable of Burning LPG/LNG, the percent kWh generated while burning LPG/LNG for the past 12 months.

 kWh_{lpg} = For each Converted Unit and for any Other Turbine Capable of Burning LPG/LNG, the total kWh generated while burning LPG/LNG during the past 12 months.

 $kWh_{fuel oil}$ = For each Converted Unit and for any Other Turbine Capable of Burning LPG/LNG, the total kWh generated while burning fuel oil during the past 12 months.

c. <u>Requirement for website identification</u>. At the fifteenth Day of each

month until termination of this Amended Consent Decree, on its website accessible through a

link on its home page, VIWAPA shall identify the kWh of power generated by Renewables and

the kWh of power generated while LPG/LNG and while burning fuel oil during the preceding

month at the St. Thomas Facility.

d. <u>Requirement for request to permitting authority</u>. No later than 150 Days

after the 2018 Date of Lodging, VIWAPA shall:

i. Submit a request to the permitting authority, VIDPNR, to include

in the Title V Operating Permit:

(1) the requirements included in 13.a and b above, until termination of the Amended Consent Decree;

(2) the requirement that Units 15, 23, 26, 27 and any Replacement Turbines be limited to burn 40 million gallons of fuel oil each 12-month rolling period after termination of the Amended Consent Decree as a state operating permit Title I requirement subject to force majeure and in a force majeure event, subject to other applicable permit limits; and

ii. Concurrently submit copies of the request, required by Paragraph d.i above, to the United States in accordance with Paragraph 78.

14. <u>St. Thomas Spare Parts Inventory Program for the Water Injection Systems and</u> <u>Continuous Monitoring Systems</u>

a. VIWAPA submitted, and on August 19, 2015, EPA approved the St.

Thomas Spare Parts Inventory Program for the water injection systems for Units 15, 18, and 23 and for the continuous monitoring systems (CEMS/COMS) for Units 15, 18, 23 and the HRSG 21. On April 25, 2017, VIWAPA submitted to EPA a start-up notification and provided an amended list of spare parts that were added to the inventory for Unit 26, which replaced Unit 22.

b. On or before the Startup of Unit 26, 27 and/or any Replacement Turbine, Defendant shall notify the United States in accordance with Section XIII (Notices) of its intent to Startup. Within 60 Days of Startup, Defendant shall submit amendments to the Spare Parts Inventory Program, obtain spare parts for these Units and comply with this Paragraph.

c. The St. Thomas Spare Parts Inventory Program¹ identifies spare parts

¹ The St. Thomas Spare Parts Inventory Program is similar to the St. Croix Spare Parts Inventory Program required by the Consent Decree in Civil Action No. 2013-CV-00028 for VIWAPA's St.

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necessary to be kept at VIWAPA's St. Croix Facility or St. Thomas Facility to enable the St. Thomas Facility to properly operate and maintain the water injection systems and the continuous monitoring systems.

d. The St. Thomas Spare Parts Inventory Program is designed to ensure minimum downtime in the event of a water injection system or continuous monitoring system failure.

e. The St. Thomas Spare Parts Inventory Program shall contain, at a minimum, the following: a computerized Spare Parts Inventory Tracking System ("SPITS") that indicates, for each Unit, the following information for each hardware component included in the St. Thomas Spare Parts Inventory Program:

i. the location of replacement components in the St. Thomas Spare Parts Inventory;

ii. the identification of the manufacturer(s) from whom each component can be procured;

iii. the lead time (which includes the delivery time) for procurement of the replacement component in the St. Thomas Spare Parts Inventory;

iv. the minimum quantity of each replacement component maintained in the St. Thomas Spare Parts Inventory at which the part must be reordered. This number shall be determined by evaluating, at the very least, the lead time for procurement and the frequency at which each component is required to be replaced in the equipment. VIWAPA shall procure spare parts at the time or before the inventory reaches this minimum quantity; and

v. VIWAPA shall also ensure that all necessary parts are always on

Croix Facility.

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hand at VIWAPA's St. Croix or St. Thomas Facilities. For purposes of this paragraph and Paragraph 14.i, a spare part shall be deemed to be "procured" when VIWAPA has placed the order for the part with the vendor, and has made all payments required by the vendor before the vendor will ship the part to VIWAPA.

f. From the 2015 Date of Lodging and thereafter until termination of the Amended Consent Decree, VIWAPA shall develop, maintain, and retain the following lists and/or logs with respect to the components in the St. Thomas Spare Parts Inventory:

i. a list/log of the frequency at which such hardware components are required to be replaced;

a list/log of the dates of procurement and dispatch for each
 component replaced from the 2015 Date of Lodging until termination of the Amended Consent
 Decree. Such list/log shall specify the reason for replacement (e.g., preventive maintenance,
 excessive wear, etc.);

iii. a list indicating components that may only be replaced during an outage;

iv. a list indicating components that can be replaced without conducting an outage of a Unit and specifying which of those components can be replaced without interference with a Unit's ability to comply with all applicable requirements during the process of replacement; and

v. a list of all spare part components covered under the St. Thomas Spare Parts Inventory Program that are maintained at VIWAPA's St. Croix or St. Thomas Facilities, which are required to maintain the water injection systems and continuous monitoring systems; and a list of which spare part components are not maintained at or above the minimum

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required by the St. Thomas Spare Parts Inventory Program at either the St. Croix or St. Thomas Facilities and the reasons why they are unable to be maintained at or above the minimum at either the St. Croix or St. Thomas Facilities.

g. From the 2015 Date of Lodging, VIWAPA shall maintain and track a spare parts inventory and provide training, as follows:

i. VIWAPA shall implement two modules of the IBM Maximo system, version 7.5, for the issuance of work orders for maintenance and inventory management for the spare parts for the water injection systems relating to Units 15, 23, 26, 27 and any Replacement Turbine and the CEMS relating to Units 15, 23, 26, 27 and/or for any Replacement Turbine;

ii. VIWAPA shall include basic data on the number and location of the components identified in Appendix B (spreadsheets containing essential parts for the water injection systems and the CEMS) in the Maximo Inventory Management module, which shall be available to EPA in electronic form upon request;

iii. VIWAPA shall ensure that the Maximo Work Order module accesses the Inventory Management module and records the spare part components that have been removed from the inventory;

iv. VIWAPA shall retain a contractor to train VIWAPA personnel on the two modules of the IBM Maximo system, Version 7.5, to help populate the Inventory Management module with the CEMS and NO_x water injection system parts data from the warehouse and storage yards inside of the plant(s) on either St. Croix or St. Thomas;

v. VIWAPA shall ensure that the part number/stock number, part description and combined quantity on hand as tracked in the water injection system Spare Parts

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Inventory Program and the CEMS Spare Parts Inventory Program spreadsheets (attached as Appendix B) are also tracked in Maximo;

vi. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall report on its compliance with the Spare Parts Inventory Program requirements based upon the information being tracked in the spreadsheets (attached as Appendix B) and provide the spreadsheets for the quarter in electronic form to EPA upon request;

vii. In instances, if any, where the Maximo tracking and spreadsheets (attached as Appendix B) are in disagreement, the data from the Maximo modules relevant to the discrepancy shall be provided in the Quarterly Reports required under Section VI (Reporting Requirements) along with the spreadsheets and an explanation as to the discrepancy; and

viii. VIWAPA shall continue the use of its SunGard software package or a comparable program for requisitions and purchase orders. The screen shots from SunGard on requisitions and purchase orders shall be available to EPA upon request in electronic format.

h. By signing this Amended Consent Decree, VIWAPA continues to certify, as it did under the Consent Decree, under penalty of law to EPA that all the replacement parts identified in the Spare Parts Inventory Program are on-site on either St. Croix or St. Thomas and are available for use on St. Thomas.

VIWAPA shall procure, at a minimum, replacement parts to ensure that
 each part is maintained at or above the minimum amount identified in the Spare Parts Inventory
 Program no later than sixty Days of the date when the part fell below the minimum.

j. VIWAPA shall maintain compliance with its EPA approved St. Thomas Spare Parts Inventory Program for the duration of this Amended Consent Decree.

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k. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall report on its compliance with the St. Thomas Spare Parts Inventory Program, identify the date any part fell below the minimum amount identified in the Spare Parts Inventory Program, and identify each instance and duration of time in which VIWAPA failed to procure a spare part within the sixty Days of the date when the part fell below the minimum amount, as required by the St. Thomas Spare Parts Inventory Program and this Paragraph.

15. St. Thomas Water Injection Systems

a. VIWAPA shall operate its water injection systems as required by the PSD Permits and the St. Thomas Title V Operating Permit.

b. On October 5, 2015, VIWAPA submitted a request to the permitting authority to include the water to fuel ratios that were established during EPA approved performance testing and approved by EPA for Units 15, 18 and 23 as enforceable standards in the St. Thomas Title V Operating Permit.

c. By signing this Amended Consent Decree, VIWAPA continues to certify, as it did under the Consent Decree, under penalty of perjury to EPA that it uses, and intends to continue to use, industrial grade water on its water injection systems.

d. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall:

i. report on any periods when industrial grade water was not available for the water injection system at any of the Units in operation;

ii. identify which unit, if any, was not utilizing industrial grade water during the reporting period;

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iii. identify which unit, if any, that is not currently receiving industrial grade water;

iv. explain why industrial grade water was or is not available; and

v. identify and explain the actions VIWAPA has or will take to make the industrial grade water available.

e. VIWAPA submitted to EPA for review and approval a Water Injection System Training Program for employees on the operation and maintenance of the water injection systems. EPA approved the Water Injection System Training Program on February 27, 2014, and the training program includes the following:

i. the frequency of training, which shall be no less than annual, for all employees who will be operating and/or maintaining the water injection systems, including plans to train any new employees hired during the calendar year;

ii. incorporation of the requirements of the Water Injection System Preventative Operation and Maintenance Plan developed pursuant to Paragraph 15.j below; and

iii. provision that requires that training be provided within thirty (30)days of any employee being assigned to operate and maintain the water injection systems.

f. From the 2015 Date of Lodging, VIWAPA shall continue to provide periodic training (at least annually) pursuant to the Water Injection System Training Program for all employees who will be operating and/or maintaining the water injection systems. VIWAPA shall thereafter provide training for all employees operating and/or maintaining the water injection systems pursuant to the schedule outlined in the Water Injection System Training Program.

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g. By signing this Amended Consent Decree, VIWAPA continues to certify, as it did under the Consent Decree, under penalty of law that it has available, on-site at the St. Thomas Facility at all times that the facility is operating, at least one technical person or engineer who has completed the Water Injection System Training Program and who is trained and experienced in operating and maintaining the water injection systems. Such person shall be able to respond by either i) correcting deficiencies, ii) shutting down the Unit, or iii) obtaining on-site, within two hours, a trained technical person, maintenance person, or engineer to correct deficiencies.

h. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall report any instances when a trained technical person or engineer is not available to correct any deficiencies or remove a unit from service, or obtain on-site, within two hours, a trained technical person, maintenance person, or engineer to initiate efforts to correct deficiencies, as required by sub-paragraph 15.g above, and provide an explanation as to why a trained technical person or engineer was not available to correct deficiencies.

i. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall:

i. report on the training that it has provided pursuant to the Water Injection System Training Program;

ii. identify the employees who have been trained pursuant to the Water Injection System Training Program in that reporting period;

iii. identify any employees, required to be trained that reporting period, who have not yet received their required training and indicate the dates that training for these employees is scheduled to occur; and

iv. indicate what training materials were utilized in the training conducted pursuant to the Water Injection System Training Program and make these materials available upon request.

j. On February 26, 2015, VIWAPA submitted the NO_x Control Water Injection System Preventative Operation and Maintenance Plan ("O&M Plan") for the St. Thomas Facility. EPA approved the O&M Plan on August 19, 2015. The purpose of the St. Thomas O&M Plan is to ensure that proper procedure and maintenance is followed in order to maintain the water injection systems and comply with the Act, the PSD Permits and the St. Thomas Title V Operating Permit, and all applicable regulations.

k. VIWAPA shall maintain compliance with the St. Thomas O&M Plan. Any changes VIWAPA proposes to the St. Thomas O&M Plan shall be submitted to EPA, for EPA review and approval, indicating the proposed change and the rationale for the proposed change.

1. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall submit to EPA a Water Injection System Data Sheet (similar in form to the data sheet attached to this Amended Consent Decree as Appendix C), which shall include, at a minimum, the following information for the previous quarter:

i. hours of water injection system downtime;

ii. water injection system downtime as a percent of total source operating time (for the quarter);

iii.

iv. proposed corrective actions for any water injection system downtime.

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explanations for any water injection system downtime; and

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m. By January 1, 2016, and continuing every 24 months thereafter until the Amended Consent Decree is terminated, a third party audit of the water injection systems shall be conducted for Units 15, 23, 26, 27 and for each Replacement Turbine, when operable, and where necessary when not operable ("Water Injection System Third Party Audit"). For any unit that is not operable at the time of a scheduled audit, Defendant shall conduct an audit of that Unit's operation within three months of Startup. The Water Injection System Third Party Audit shall mean a system wide audit to be conducted by a third party auditor, who could be, for this matter, a representative of the manufacturer of the turbine(s), if approved by EPA, that includes, but is not limited to, the following: determination of the integrity of the water injection system; evaluate, at a minimum, each component that is identified in Appendix D; identification of the causes of any system failure; and incidences, if any, in which VIWAPA operators switch the water injection pumps due to mechanical problem with a pump or when there has been a failure to meet the water injection limits.

n. At least 60 days before an audit is scheduled to commence, VIWAPA shall submit, to EPA for review and approval, the name and credentials of a proposed third party auditor who has experience in operation and maintenance of water injection systems for turbines at power plants. To satisfy the Water Injection System Third Party Audit requirements of this Amended Consent Decree, VIWAPA shall ensure that a third party auditor is approved by EPA at least forty-five days prior to commencement of the audit.

o. VIWAPA shall ensure compliance with, and include in its contract with the water injection system third party auditor, a condition requiring the auditor to concurrently submit to EPA any Water Injection System Third Party Audit Reports, including drafts, that it submits to VIWAPA. In addition, VIWAPA shall ensure that all correspondence between

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VIWAPA and the Third Party Auditor regarding any disagreements and a summary of any oral resolution of any disagreement is submitted to EPA.

p. By no later than 30 days after completion of a Water Injection System Third Party Audit, a Water Injection System Third Party Audit Report shall be submitted concurrently to VIWAPA and EPA.

q. Each Water Injection System Third Party Audit Report shall include, at a minimum, the following information:

i. auditor's recommendations for correcting system failure issues, including deadlines by which each corrective action will be implemented;

ii. any water injection system integrity issues identified by the third party audit and the auditor's recommendations to address these water injection system integrity issues;

iii. any issues with the redundant water injection pumps identified as a result of the audit; and

iv. a certification by the project manager for the audit, in accordance with Paragraph 32.

r. By no later than 60 days after completion of a Water Injection System Third Party Audit, VIWAPA shall submit, to EPA for review and approval, VIWAPA's responses to the Water Injection System Third Party Audit Report recommendations. VIWAPA's responses shall include dates that recommendations were implemented; plans to implement the recommendations and/or alternatives to the recommendations and/or any alternative dates for implementation.

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s. Where VIWAPA provides alternatives to the auditor's recommendations, it must provide, to EPA, for review and approval, an explanation and rationale for why VIWAPA believes the recommendation should be modified and/or is not necessary and/or not feasible for compliance with CAA requirements, applicable permits and/or this Amended Consent Decree.

t. VIWAPA shall either implement the third party auditor recommendation(s) and/or VIWAPA's alternative measure(s) by the date(s) recommended by the auditor or provided by VIWAPA, or if EPA does not approve of the recommendation(s) and/or alternative measure(s) and/or date(s) proposed, VIWAPA shall implement in accordance with EPA's comments, unless successfully challenged in Dispute Resolution.

u. No later than January 1, 2017, and continuing every 24 months thereafter until the Amended Consent Decree is terminated, VIWAPA shall conduct a self-audit of the water injection systems for each of Units 15, 23, 26, 27 and for each Replacement Turbine that is operable (Water Injection System Self-Audit). For any unit that is not operable at the time of a scheduled audit, Defendant shall conduct an audit of that Unit's operation within three months of Startup. The Water Injection System Self-Audit shall include, at a minimum, the following information:

i. evaluation of the integrity of the water injection system;

ii. evaluation of the integrity of, at a minimum, each component that is identified in Appendix D;

iii. identification of the causes of any system failure; and

iv. identification of incidences, if any, in which VIWAPA operators switch the water injection pumps and the reasons for, and circumstances behind, such incidences.

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v. By no later than 45 days after completion of a Water Injection System Self-Audit, VIWAPA shall submit, a Water Injection System Self-Audit Report to EPA. Each Water Injection System Self-Audit Report shall include, at a minimum, the following information:

i. any water injection system integrity issues identified during the audit;

ii. any issues with the redundant water injection pumps identified as a result of the audit;

iii. recommendations to implement remedial actions to address any integrity issues with the water injection system or issues with the redundant water injection pumps. Such recommendations shall include, for EPA review and approval, proposed dates to implement the recommendations; and

iv. a certification in accordance with Paragraph 32.

w. VIWAPA shall either implement the self-audit recommendation(s) by the date(s) recommended, or if EPA does not approve of the recommendation(s) and/or date proposed, VIWAPA shall implement in accordance with EPA's comments, unless successfully challenged in Dispute Resolution.

16. <u>St. Thomas NO_X and CO CEMS</u>

a. VIWAPA shall maintain and operate NO_X and CO CEMS at Units 15, 23,
26, 27 and/or any Replacement Turbine where required by permit.

b. For Units 15 and 23 VIWAPA shall continue to use, and within seven days of Startup of Unit 26, 27 and/or any Replacement Turbine, VIWAPA shall use the CEMS daily calibration data sheet ("CEMS Daily Calibration Data Sheet") for each CEMS. The CEMS

Daily Calibration Data Sheet shall include daily calibrations for the zero and high range for each CEMS.

c. By January 1, 2016, and continuing every 24 months thereafter until the Amended Consent Decree is terminated, a system wide third-party audit of the NO_X and CO CEMS ("CEMS Third Party Audit") shall be conducted for each of the Units that is operable. For any unit that is not operable at the time of a scheduled audit, the CEMS Third Party Audit shall be conducted within three months of Startup of the Unit. The CEMS Third Party Audit shall be conducted by a third party auditor approved by EPA, who has an expertise in operating, maintaining and repairing CEMS, and shall include, at a minimum, the following information:

i. identification and determination of the causes of any CEMS system failure, including Data Acquisition and Handling System ("DAHS") failures;

ii. evaluations of the integrity of, at a minimum, each component that is identified in Appendix E;

iii. identification of any untimely performance of any QA procedure (i.e., CGA and RATAs for CEMS, daily calibration drifts);

iv. evaluations of whether all personnel involved in the operation of CEMS operations have been timely trained on CEM procedures; and

v. evaluations of all technician/operator journals on daily operational status and maintenance to determine if it is maintained and up to date.

d. At least 60 days before an audit is scheduled to commence, VIWAPA shall submit, to EPA for review and approval, the name and credentials of a proposed third party auditor who has expertise in operation, maintenance and repair of CEMS. To satisfy the CEMS Third Party Audit requirements, VIWAPA shall ensure that a third party auditor is approved by

EPA at least forty-five days prior to commencement of the audit.

e. VIWAPA shall ensure compliance with, and include in its contract with the CEMS third party auditor, a condition requiring the auditor to concurrently submit, to EPA, any CEMS Third Party Audit Report, including drafts, that it submits to VIWAPA. In addition, VIWAPA shall ensure that all correspondence between VIWAPA and the Third Party Auditor regarding any disagreements and a summary of any oral resolution of any disagreement is submitted to EPA.

f. By no later than 30 days after completion of a CEMS Third Party Audit, a CEMS Third Party Audit Report shall be submitted concurrently to VIWAPA and EPA.

g. Each CEMS Third Party Audit Report shall include, at a minimum, the following information:

i. recommendations for correcting system failures, including deadlines by which each corrective action will be implemented;

ii. identification of any integrity issues with components of theCEMS identified by the third party audit and recommendations to address the integrity issues;and

iii. a certification by the project manager for the audit, in accordance with Paragraph 32.

h. By no later than 60 days after completion of a CEMS Third Party Audit, VIWAPA shall submit to EPA for review and approval, VIWAPA's responses to the CEMS Third Party Audit Report recommendations. VIWAPA's responses shall include dates that recommendations were implemented; plans to implement the recommendations and/or alternatives to the recommendations and/or any alternative dates for implementation.

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i. Where VIWAPA provides alternatives to the auditor's recommendations, it must provide, to EPA, for review and approval, an explanation and rationale for why VIWAPA believes the auditor's recommendation should be modified and/or is not necessary and/or not feasible for compliance with Clean Air Act requirements, applicable permits and/or this Amended Consent Decree.

j. VIWAPA shall either implement the third party auditor recommendations and/or VIWAPA's alternative measure(s) by the date(s) recommended by the auditor or provided by VIWAPA, or if EPA does not approve of the recommendation(s) and/or alternative measure(s) and/or date(s) proposed, VIWAPA shall implement in accordance with EPA's comments, unless successfully challenged in Dispute Resolution.

k. By January 1, 2017, and continuing every 24 months thereafter until the Amended Consent Decree is terminated, VIWAPA shall conduct a self-audit of the NO_X and CO CEMS ("CEMS Self -Audit") for each of the Units that is operable. For any Unit that is not operable at the time of a scheduled audit, Defendant shall conduct an audit of that Unit's operation within three months of Startup. The CEMS Self-Audit shall include, at a minimum, the following information:

i. identification and determination of the causes of any CEMS system failure, including DAHS failures;

ii. evaluation of the integrity of, at a minimum, each component that is identified in Appendix E;

iii. identification of any untimely performance of QA procedures (i.e.,CGA and RATAs for CEMS, daily calibration drifts);

iv. evaluation of whether all personnel involved in the operation of CEMS have been timely trained on CEMS procedures; and

v. evaluation of all technician/operator journals on daily operational status and maintenance to determine if it is maintained and up to date.

By no later than 45 days after completion of a CEMS Self-Audit,
 VIWAPA shall submit a CEMS Self-Audit Report to EPA. Each CEMS Self-Audit Report shall include, at a minimum, the following information:

i. identification of any integrity issues with components of the CEMS system components;

ii. identification of systems failures and evaluation(s) of the causes for such failures;

iii. recommendations, for EPA review and approval, to address the CEMS system integrity issues identified and recommendations to implement remedial actions to address the issues identified. Such recommendations shall include, for EPA review and approval, proposed dates to implement remedial actions to address the issues identified; and

iv. a certification in accordance with Paragraph 32.

m. VIWAPA shall either implement the self-audit recommendation(s) by the date(s) recommended, or if EPA does not approve the recommendation(s) and/or dates proposed, VIWAPA shall implement in accordance with EPA's comments, unless successfully challenged in Dispute Resolution.

n. On June 23, 2015, VIWAPA submitted to EPA for review and EPA approved a preventative maintenance and operations plan for its NO_x and CO CEMS, and COMS entitled Quality Assurance Plan for CEMS and COMS (hereinafter referred to as "QAP")

. Compliance with the QAP is designed to ensure the proper and continual operation and maintenance of the NO_X and CO CEMS and COMS.

o. VIWAPA shall maintain compliance with the QAP. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall report on its compliance with the QAP, and identify any instances where VIWAPA failed to comply with the QAP.

p. At all times the St. Thomas Facility is in operation, VIWAPA shall operate an audible alarm in the St. Thomas Facility's control room for the CEMS that indicates when any CEMS records emissions at levels that are approaching an emission limit. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall identify each instance when the audible alarm was not operating as required by this sub-paragraph.

q. From the 2015 Date of Lodging, at all times the St. Thomas Facility is in operation, VIWAPA shall operate, in the St. Thomas Facility's control room, an audible alarm for the water injection systems that is automatically activated to operate whenever any NO_X CEMS is not operating and manually activated to operate whenever any NO_X CEMS has not passed required CGAs and/or RATAs. The water injection system alarm will cause an audible alarm to sound whenever the water to fuel ratio is approaching the established water to fuel ratio for the unit for which the CEMS is not operating and/or for which the CEMS has not passed required tests.

r. On May 24, 2013, VIWAPA hired a qualified outside entity to provide onsite training for VIWAPA's employees on the proper operation and maintenance of the CEMS for a period of no less than three years. If after this three-year period VIWAPA is not able to demonstrate to EPA that its employees can maintain ongoing substantial compliance with its

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CEMS requirements, VIWAPA shall continue its retention of a qualified outside entity to provide training to its employees as described above until EPA determines that VIWAPA is operating its CEMS in substantial compliance with all applicable requirements.

s. From the 2015 Date of Lodging, VIWAPA shall have at least one trained and experienced technician and/or engineer who is dedicated to properly operating and maintaining the CEMS, that is available on-site at the St. Thomas Facility, 24 hours per day, 7 days per week, 365 days per year to operate and maintain the CEMS at the St. Thomas Facility. A person shall be on-site at all times who shall be able to within two hours respond either i) by correcting deficiencies on the CEMS, or ii) by obtaining on-site, a trained technical person, maintenance person, or engineer to correct deficiencies with the CEMS .

t. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall report any instances when a technician or engineer trained in proper operation and maintenance of the CEMS was not available on-site at the St. Thomas Facility, as required by sub-Paragraph 16.s. VIWAPA shall also provide an explanation in the Quarterly Report as to why a trained technician or engineer was not available.

u. In each Quarterly Report required under Section VI (Reporting Requirements), VIWAPA shall:

i. report on the training that it has provided to employees on the proper operation and maintenance of the CEMS pursuant to sub-paragraph 16.r;

ii. identify the employees who have been trained in the proper operation and maintenance of the CEMS that reporting period;
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iii. identify any employees, required to be trained that reporting period, who have not yet received their required training and indicate the dates that training for these employees is scheduled to occur; and

iv. indicate what training materials were utilized in the training on the proper operation and maintenance of the CEMS and make these materials available upon request.

17. <u>Video Camera System</u>

a. Within 60 Days of the 2015 Date of Lodging, VIWAPA installed a video camera system that included multiple video cameras that record and send video feeds to the control room of the emission outlets from the stacks associated with Units 14, 15, 18 and 23 and each of the HRSGs, to ensure that any visible emissions are observed and further evaluated for compliance with applicable SIP Opacity Rule. Units 26, 27 and any Replacement Turbines shall be included in this video camera system within 30 days of operation.

- b. The video camera system shall:
 - i. record the emission outlet of each of the stacks;
 - ii. record in digital format at a rate of no less than 10 frames per

second; and

iii. date and time stamp the recordings.

c. On any day on which the video system documents visible emissions from a stack, VIWAPA shall conduct visible emission readings for that stack, in accordance with Method 9, at least once that day for thirty (30) consecutive minutes. Readings shall be made at the emission outlet of the stack on any day that a video camera documents visible emissions from that stack for greater than three (3) minutes and when a video camera is not operable and there are any visible emissions from that stack for greater than three (3) minutes:

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i. In the event that any Method 9 reading indicates opacity levels averaging 20% or greater (excluding periods aggregating 3 minutes or less with opacities at or below 40% opacity), VIWAPA shall conduct Method 9 readings at least every three (3) hours for thirty (30) consecutive minutes, until Method 9 readings indicate opacity levels that do not exceed the applicable permit and SIP opacity limits, or for the remainder of that day it shall be presumed that opacity levels remained in excess of permit limits until Method 9 readings taken over thirty (30) consecutive minutes have averaged no more than the applicable permit and SIP opacity limits.

ii. In the event that a Method 9 reading indicates opacity levels in compliance with opacity limits, no further Method 9 readings need to be taken unless opacity levels increase during the day, in which case VIWAPA shall conduct additional Method 9 readings of at least thirty (30) consecutive minutes.

d. VIWAPA shall maintain recordings from the video camera system for at least 6 rolling months and make recordings available to EPA upon request.

18. <u>St. Thomas Facility Quality Assurance/Quality Control Evaluations</u>

a. Each calendar quarter, VIWAPA shall conduct either a RATA or a CGA, in accordance with 40 C.F.R. Part 60, Appendix F, 5.1.1. and 5.1.2., on the CEMs for Unit 15, 23, 26, 27 and for any Replacement Turbine , provided that a RATA is conducted once per calendar year. VIWAPA shall conduct these quarterly audits no closer than 2 months apart and shall conduct CGAs on quarters when a RATA is not conducted. If an annual RATA has not been conducted and a unit is not operational during the 4th quarter then the RATA shall be performed in the quarter in which the unit recommences operation. Required CGAs must be conducted even when the unit is not operational.

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b. Beginning in calendar year 2015, VIWAPA shall include the results of RATAs and CGAs in the Quarterly Reports required under Section VI (Reporting Requirements), and indicate completion of these tests in the annual Title V certification for the St. Thomas Facility.

19. <u>St. Thomas Stack/Performance Testing</u>

a. By April 20, 2019, and thereafter within 90 Days of the date that a Turbine is Capable of Burning LPG, provided LPG/LNG is available, VIWAPA shall conduct stack testing in accordance with all applicable permits and EPA approved protocols. All subsequent stack testing shall be completed in accordance with the St. Thomas Title V Operating Permit, applicable State Operating Permits and EPA approved protocols.

b. No later than 120 Days before stack testing is scheduled to begin, VIWAPA shall submit a protocol for stack testing to EPA for review and approval.

c. No later than 60 Days after completion of stack testing, VIWAPA shall submit to EPA copies of the stack test report on three compact discs.

d. No later than 90 Days after completion of stack testing, VIWAPA shall submit to EPA for review and approval a corrective action plan ("Corrective Action Plan") to address any emission exceedances documented during stack testing. The Corrective Action Plan must:

i. Propose corrective action measures (including repairs) to be made to address any emission exceedances;

ii. Provide an explanation for the specified corrective action measures;

iii. Propose a schedule for implementation of measures and repairs;

and

iv. Propose a date for follow-up stack testing to demonstrate compliance with any emission limits that were exceeded, to occur no later than sixty days from completion of corrective action measures and/or repairs.

e. No later than 45 Days after completion of any follow-up stack testing, VIWAPA shall submit to EPA copies of the stack test reports on three compact discs.

f. VIWAPA shall continue to submit to EPA for review and approval Corrective Action Plans to address any emission exceedances indicated in any follow-up stack testing and submit compact discs, in accordance with paragraphs 19.d and 19.e, until VIWAPA is able to demonstrate compliance.

g. If VIWAPA cannot demonstrate compliance with emission limits after the second stack test, VIWAPA shall not operate the unit using the type of fuel for the unit for which they have not demonstrated compliance, except for Startup, Shutdown, implementation of Corrective Action Plan and/or re-testing.

h. Within 60 Days of stack testing that demonstrates compliance with NO_X emission limit requirements, VIWAPA shall submit to DPNR a request to modify the St. Thomas Facility Title V Operating Permit to include the water-to-fuel ratios, established during stack testing, for Units 15, 23, 26, 27 and for any Replacement Turbine. Copies of submissions shall be submitted to the EPA in accordance with Section XIII (Notices).

20. <u>St. Thomas Unit 25</u>

a. VIWAPA shall submit semiannual excess emission and monitor downtime reports to EPA for Unit 25 as required by NSPS Subpart KKKK and NSPS General Provisions.

21. St. Thomas Facility Unit 14

a. VIWAPA shall install a new fuel atomizer on Unit 14 by no later than March 31, 2019.

b. VIWAPA shall tune-up and conduct evaluations of the new fuel atomizer operations during the first forty-five (45) Days after installation.

c. No later than 100 Days after the installation of the new fuel atomizer, VIWAPA shall submit a report ("Fuel Atomizer Progress Report") to EPA. The Fuel Atomizer Progress Report shall:

i. provide documentation confirming the date the new fuel atomizer was installed and the dates, if any, that Unit 14 operated;

ii. report any visible emissions and any noncompliance with the
Virgin Islands State Implementation Plan, VI-APCAR&R, Title 12, Chapter 9, Section 204-22(a)
and (b) ("VI SIP Opacity Rule") that occurred during the second forty-five Days (45) after the
installation of the new fuel atomizer;

iii. provide a schedule for permanently ceasing operations of Unit 14 on a date no later than two years after installation of the fuel atomizer, in the event that Unit 14 is unable to achieve compliance by that date; and

iv. Thereafter, in each quarterly report, provide, for EPA review and approval:

(1) recommendations and a schedule for any corrective action measures and further repairs if needed, to achieve compliance with the VI SIP Opacity Rule;

(2) and, if in any quarter the emissions from the unit are not in substantial compliance with the SIP Opacity Rule, provide for EPA review and approval a

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proposed schedule for permanently ceasing operation of Unit 14 within six months along with a proposal for corrective action to mitigate noncompliance that shall be implemented during that period. If by implementing corrective action the unit achieves substantial compliance, the Defendant will not be required to cease operation, as required by subparagraph e.i, below.

d. Upon receipt of EPA's approval of the schedule for corrective action measures and further repairs, if any, VIWAPA shall implement any necessary corrective action measures and further repairs in accordance with the approved schedule.

e. In the event that in a required quarterly report, VIWAPA has not demonstrated that Unit 14 is in has not achieved compliance with the SIP Opacity Rule within two years of installation of the fuel atomizer, VIWAPA shall:

i. permanently cease operation of Unit 14, no later than the date identified in the schedule submitted to EPA in accordance with a schedule as approved by EPA; and

ii. within 30 Days of permanently ceasing operation of Unit 14, submit a request to DPNR to remove Unit 14 from the Title V Operating Permit.

22. <u>St. John Facility</u>

a. By the 2018 Date of Lodging, until the St. John diesel engine ("St. John Unit") has either been removed from the Synthetic Minor Permit to Operate or dismantled, if VIWAPA operates this unit, it shall operate it in compliance with the requirements of 40 C.F.R. Part 63, Subpart ZZZZ ("RICE NESHAP").

b. In addition, if in operation, VIWAPA shall use diesel fuel at the St. John Unit that meets the requirements of 40 C.F.R. § 80.510(b) for nonroad diesel fuel.

23. <u>Approval of Deliverables</u>. VIWAPA shall immediately begin implementation of

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any plan, report, or other item submitted to EPA for review and approval. After EPA review of any plan, report, or other item that is required to be submitted pursuant to this Amended Consent Decree, EPA shall in writing: a) approve the submission; b) approve the submission upon specified conditions; c) approve part of the submission and disapprove the remainder; or d) disapprove the submission.

24. If the submission is approved pursuant to Paragraph 23.a, Defendant shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 23.b or 23.c, Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to Defendant's right to dispute only the specified conditions or the disapproved portions, under Section IX (Dispute Resolution).

25. If the submission is disapproved in whole or in part pursuant to Paragraph 23.c or 23.d, Defendant shall, if required, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the preceding Paragraph.

26. Any stipulated penalties applicable to the original submission, as provided in Section VII (Stipulated Penalties), shall accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material

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breach of Defendant's obligations under this Amended Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

27. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, subject to Defendant's right to invoke Dispute Resolution and the right of EPA to seek stipulated penalties as provided in the preceding Paragraphs.

28. <u>Permits</u>. Where any compliance obligation under this Section requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendant may seek relief under the provisions of Section VIII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

VI. <u>REPORTING REQUIREMENTS</u>

29. Defendant shall submit the following reports:

a. Within 30 Days after the end of each quarter (i.e., by April 30, July 30, October 30, and January 30) after lodging of this Amended Consent Decree, until termination of this Amended Consent Decree pursuant to Section XVII (Termination), Defendant shall submit to EPA, in accordance with Paragraph 78, a Quarterly Report for the preceding quarter that shall include all obligations required under this Amended Consent Decree including the following:

i. the amount of LPG/LNG used on an hourly basis;

ii. the amount of fuel oil used on an hourly basis;

iii. the number of operating hours for each Unit Capable of Burning LPG/LNG on an hourly basis;

iv. the calculations VIWAPA used to determine the 12-Month Rolling Average Percent kWh generated from each Converted Unit, and from each Unit Capable of Burning LPG/LNG while burning LPG/LNG;

v. the calculations VIWAPA used to determine the combined 12-Month Rolling Average Percent kWh from Renewables and kWh generated while burning LPG/LNG by Units Capable of Burning LPG/LNG;

vi. records of periods when LPG/LNG is or was not available and explanations;

vii. status of compliance with the St. Thomas Spare Parts Inventory Program required by Paragraph 14;

viii. records of periods when industrial grade water is or was not available for the water injection system at any unit and explanations as required by Paragraph 15.d;

ix. explanations of any instance when an on-site trained technical person or engineer is not available at the St. Thomas Facility as required by in Paragraph 15.g;

x. records of training provided pursuant to the Water Injection System Training Program, including the employees trained in that reporting period, identification of employees who have not been trained in the Program and scheduled training dates for those employees, and description of training materials utilized as required by Paragraph 15.i;

xi. Water Injection System Data sheet(s) as required by Paragraph

15.i;

xii. status of compliance with QAP and instances of failing to comply with QAP as required by Paragraph 16.0;

xiii. instances when the audible alarm did not sound but the CEMS indicated emissions exceedances as required by Paragraph 16.p;

xiv. explanations of any instance when an on-site technical person or engineer trained in the proper operation and maintenance of the NO_X and CO CEMS is not available at the St. Thomas Facility to respond as required by Paragraph 16.s;

xv. records of training required by Paragraph 16.u, including the identification of employees trained in that reporting period, identification of employees required to be trained who have not been trained, and scheduled training dates for those employees, as described in Paragraph 16.r;

xvi. identify any hours when a video camera and/or a video feed was not in operation as required by Paragraph 17.b;

xvii. identification of any violations of the VI SIP Opacity Rule, observed during Method 9 readings, as required by Paragraph 17.c;

xviii. indication of completion and results of RATAs and CGAs as required by Paragraph 18.b;

xix. any start and end dates for Unit outages (for purposes of this Paragraph an outage includes times when the Unit is not available to generate power and is taken offline to complete a repair) that lasted fourteen days or longer and a brief description of the work completed and/or anticipated to be completed on the Unit; and

xx. any anticipated start and end dates for Unit outages that are

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expected to last fourteen days or longer on the Unit and a brief description of the work that is planned for the Unit.

b. The Quarterly Reports shall also include a description of any noncompliance with the requirements of this Amended Consent Decree to the extent not previously addressed by Paragraph 29.a above, and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If Defendant violates, or has reason to believe that it may violate, any requirement of this Amended Consent Decree, Defendant shall notify the United States of such violation and its likely duration, in writing, within ten working Days of the Day Defendant first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Defendant shall so state in the report. Defendant shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section VIII (Force Majeure).

30. Whenever any violation of this Amended Consent Decree or of any applicable permits or any other event affecting Defendant's performance under this Amended Consent Decree, or the performance of its Facility, may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

- 31. All reports shall be submitted to the persons designated in Section XIII (Notices).
- 32. Each report submitted by Defendant under this Section shall be signed by an

official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

33. The reporting requirements of this Amended Consent Decree do not relieve

Defendant of any reporting obligations required by the Act or implementing regulations, or by

any other federal, state, or local law, regulation, permit, or other requirement.

34. Any information provided pursuant to this Amended Consent Decree may be used

by the United States in any proceeding to enforce the provisions of this Amended Consent

Decree and as otherwise permitted by law.

VII. <u>STIPULATED PENALTIES</u>

35. Defendant shall be liable for stipulated penalties to the United States for violations of this Amended Consent Decree as specified below, unless excused under Section VIII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Amended Consent Decree, including any work plan or schedule approved under this Amended Consent Decree, according to all applicable requirements of this Amended Consent Decree and within the specified time schedules established by or approved under this

Amended Consent Decree.

36. Late Payment of Civil Penalty

If Defendant fails to pay the civil penalty required to be paid under Section IV

(Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$750 per Day for each Day

that the payment is late.

37. Excess Emission Violations

| Hours of Excess Emissions per Unit per | Amount per hour |
|--|-----------------|
| Calendar Quarter | |
| 1-250 hours | \$50 |
| 251-750 hours | \$100 |
| Greater than 750 hours | \$250 |

If the NO_X CEMS are unavailable and/or not providing data that has been fully quality assured quality controlled (including, but not limited to, daily calibrations, CGAs, RATAs, etc.), the hours of excess emission shall be determined by the established water to fuel injection ratios.

Stipulated penalties for excess emissions will not accrue where emissions occurred during Capacity Performance Testing event after major maintenance or overhaul of the gas turbine unit for a period of up to but no greater than eight hours provided that: a) VIWAPA provides notice to EPA, at least 7-days in advance, of any Capacity Performance Test being conducted; and VIWAPA reports all excess emissions that occur during Capacity Performance Testing as excess emissions.

The hours of excess emissions for the PSD affected Units will be calculated in accordance with the specifications provided in the PSD Permits. Hours of excess emissions for all other Units will be determined in accordance with the specifications of the NSPS.

38. <u>12-month rolling average for Units Capable of Burning LPG/LNG</u>

| Failure to comply with the minimum of 85% | \$15,000 per 12-month rolling period |
|---|--------------------------------------|
| 12-month rolling average percent kWh | |
| generated burning LPG/LNG by all Units | |
| Capable of Burning LPG/LNG and kWh by | |

| Renewables for each rolling 12- month | |
|--|--|
| period, as required by Paragraph 13.a. | |

39. <u>12-month rolling average for each Converted Unit, and/or for any Other Turbine</u>

Capable of Burning LPG/LNG

| 12-month rolling average percent kWh | \$10,000 per 12-month rolling period |
|---|--------------------------------------|
| generated by burning LPG/LNG for each rolling 12-month period, as required by | |
| Paragraph 13.b. | |

If in a given 12-month rolling period, stipulated penalties are paid pursuant to Paragraph

38, then stipulated penalties under Paragraph 39 do not apply.

40. VI SIP Opacity Violations at Unit 14 detected by Method 9 Visible Emissions

Readings beginning forty-six (46) Days after installation of the fuel atomizer required by

Paragraph 21.a: for each violation of the VI SIP Opacity requirement, as recorded by Method 9,

\$400 per 6-minute average reading in excess of the limit up to a maximum of \$6,000 per day.

41. <u>NO_X and CO CEMS Violations</u>

| Percentage of Monitor Available per Calendar Quarter per Parameter for each Monitor on each Unit | Amount per Monitor |
|--|--------------------|
| 75%-89% | \$2,500 |
| 50%-74% | \$7,500 |
| 0%-49% | \$15,000 |

42. <u>Video Camera System</u>

Failure to continuously operate video camera(s) and/or video feed(s) when the unit associated

with the stack emission outlet is operating, as required by Paragraph 17:

| Percentage of Video Camera Availability per Calendar Quarter for each Video Camera on each unit while unit is operating | Amount per Camera |
|--|-------------------|
| 90%-95% | \$2,000 |
| 50%-89% | \$4,000 |
| 0%-49% | \$8,000 |

43. <u>Compliance Milestones</u>

a. The following stipulated penalties shall accrue per violation per Day for

each violation of the requirements identified in subparagraph b:

| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-------------------------|
| \$ 200 | 1st through 14th Day |
| \$ 500 | 15th through 30th Day |
| \$ 750 | 31st Day and beyond |

b. Violation of the following compliance milestones will result in penalties as described in the above paragraph.

i. written notification and documentation of the decision to either purchase, refurbish or replace Unit 25, as required by Paragraph 12.f;

ii. creation of the St. Thomas Spare Parts Tracking System, including the required lists/logs, as required by Paragraph 14;

iii. installation and utilization of two modules of the IBM Maximo system software that provides for monitoring of spare parts, as required by the Spare Parts Inventory Program and Paragraph 14;

iv. submission of request to permitting authority for water to fuel ratios established during performance testing as required by Paragraph 15.a;

v. operation and utilization of an industrial grade water system to

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supply the water injection system, as required by Paragraph 15.c;

vi. training of employees pursuant to the Water Injection System Training Program, as required by Paragraph 15.e and 15.f;

vii. hiring and retention of an on-site technical person or engineer, as required by Paragraph 15.g and 15.h;

viii. implementation of the O&M Plan, as required by Paragraph 15.j and 15.k;

ix. submission of the Water Injection System Data Sheet, as required by Paragraph 15.1;

x. completion of Water Injection System Third Party Audit every 24 months, as required by Paragraph 15.m;

xi. submission of Water Injection System Third Party Audit proposed auditor credentials, as required by Paragraph 15.n;

xii. submission of Water Injection System Third Party Audit Reports, including drafts, concurrently to EPA and VIWAPA, as required by Paragraphs 15.p and 15.q;

xiii. submission of VIWAPA's responses to the Water Injection System Third Party Audit Report, as required by Paragraph 15.r, 15.p and 15.s;

xiv. implementation of Water Injection System Third Party Audit and EPA approved recommendations, as required by Paragraph 15.t;

xv. completion of Water Injection System Self Audit every 24 months, as required by Paragraph 15.u;

xvi. submission of Water Injection System Self Audit Report and Defendant's recommendations, as required by Paragraph 15.v;

xvii. implementation of Water Injection System Self Audit and EPA approved recommendations, as required by Paragraph 15.w;

xviii. completion of CEMS daily calibration data sheet, as required by Paragraph 16.b;

xix. completion of CEMS Third Party Audit every 24 months, as required by Paragraph 16.c;

xx. submission of CEMS Third Party Audit proposed auditor credentials, as required by Paragraph 16.d;

xxi. submission of CEMS Third Party Audit Report, including drafts, concurrently to EPA and VIWAPA, as required by Paragraphs 16.f and 16.g;

xxii. submission of VIWAPA's responses to the CEMS Third Party Audit Report, as required by Paragraph 16.h and 16.i;

xxiii. implementation of CEMS Third Party Audit and EPA approved recommendations, as required by Paragraph 16.j;

xxiv. completion of CEMS Self Audit every 24 months, as required by Paragraph 16.k;

xxv. submission of CEMS Self Audit Report and Defendant's recommendations, as required by Paragraph 16.l;

xxvi. implementation of CEMS Self Audit and EPA-approved recommendations, as required by Paragraph 16.m;

xxvii. implementation and compliance with the QAP, as required by Paragraph 16.n and 16.0;

xxviii. installation and operation of an audible alarm in the St. Thomas

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Facility's control room that indicates when any CEMS records emissions at levels that are approaching an emission limit, as required by Paragraph 16.p;

xxix. installation and operation of an audible alarm in the St. Thomas Facility's control room that is automatically activated to operate whenever any NO_X CEMS is not operating and manually activated to operate whenever any NO_X CEMS has not passed required CGAs and/or RATAs, as required by Paragraph 16.q;

xxx. hiring of an outside entity to train VIWAPA employees on CEMS, as required by Paragraph 16.r;

xxxi. hiring, retention, and availability on-site of a technical person or engineer to properly operate and maintain CEMS and to respond, as required by Paragraph 16.s and 16.t;

xxxii. installation of the video camera system, as required by Paragraph 17.a and b.;

xxxiii. conducting Method 9 readings, as required by Paragraph 17.c;

xxxiv. maintenance of recordings from the video camera for at least 6 rolling months and make recordings available to EPA upon request, as required by Paragraph 17.d;

xxxv. completion of CGAs and RATAs on the CEMS for each Unit, as required by Paragraph 18;

xxxvi. completion of stack testing, and any follow-up stack testing as necessary, as required by Paragraph 19;

xxxvii. submission of stack testing protocol to EPA, as required by Paragraph 19.b;

xxxviii. submission of stack test results and Stack Test Corrective Action Plan, as required by Paragraph 19.c and 19.d;

xxxix. operation of a unit using fuel types that VIWAPA demonstrated comply with applicable emission limits, as required by Paragraph 19.g;

xl. submission of request to permitting authority for water to fuel ratios established during performance testing as required by Paragraph 19.h;

xli. submission of NSPS Subpart KKKK semiannual reports for Unit 25, as required by Paragraph 20.a;

xlii. installation of the new Unit 14 fuel atomizer, as required by Paragraph 21.a;

xliii. submission of Fuel Atomizer Progress Report, as required by Paragraph 21.c;

xliv. implementation of any necessary corrective action measures and further repairs, as required by Paragraph 21.d;

xlv. ceasing operation of Unit 14, pursuant to Paragraph 21.f.ii;

xlvi. submission of request for removal of Unit 14 from the St. Thomas Title V Operating Permit, as required by Paragraph 21.f.ii;

xlvii. compliance with requirements of the RICE NESHAP as required by Paragraph 22.a;

xlviii. use of diesel fuel at the St. John Unit that meets the requirements of 40 C.F.R. § 80.510(b) for nonroad engines, as required by Paragraph 22.b;

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c. For each instance in which a listed spare part is not procured within sixty Days of when it fell below the minimum quantity identified in the St. Thomas Spare Parts Inventory Program, where the failure to obtain the part did not result, after that sixty day period, in delays in repairing either the water injection system or any of the CEMS, the following stipulated penalties shall accrue per Day for each violation of the St. Thomas Spare Parts Inventory Program's procurement requirements as identified below:

| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-----------------------------------|
| \$ 75 | 1st through 30th Day |
| \$ 150 | 31 st through 90th Day |
| \$ 300 | 91st Day and beyond |

d. For each instance in which a listed spare part is not procured within sixty Days of when it fell below the minimum quantity identified in the St. Thomas Spare Parts Inventory Program, where the failure to obtain the part resulted, after that sixty (60) Day period, in delays in repairing either the water injection system or any of the CEMS, the following stipulated penalties shall accrue per Day of each resulting delay due to violation of the St. Thomas Spare Parts Inventory Program's procurement requirements as identified below:

| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-----------------------------------|
| \$ 150 | 1st through 30th Day |
| \$ 300 | 31 st through 90th Day |
| \$ 600 | 91st Day and beyond |

44. <u>Reporting Requirements</u>. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VI (Reporting Requirements):

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| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-------------------------|
| \$ 150 | 1st through 14th Day |
| \$ 300 | 15th through 30th Day |
| \$ 1,000 | 31st Day and beyond |

45. Except as in Paragraphs 37 – 42 above, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall be calculated at the end of each applicable calendar quarter and reported to the United States in the applicable Quarterly Report required under Section VI (Reporting Requirements). Stipulated penalties shall accrue simultaneously for separate violations of this Amended Consent Decree.

46. VIWAPA shall self-assess, without prior demand from the United States, stipulated penalties accrued and owing under this Section in accordance with the following procedures:

a. On or before the 30th day following the end of each calendar quarter (i.e., by April 30, July 30, October 30, and January 30 after the Effective Date), VIWAPA shall determine, and provide to EPA a detailed and accurate accounting of, the full amount of VIWAPA's stipulated penalty liability, pursuant to Paragraphs 38 through 45, for the preceding quarter pursuant to Paragraph 46.

b. Provided that VIWAPA timely follows the schedule and procedures set forth above with self-assessing and reporting its stipulated penalty liability, payment to the United States shall be reduced to 50% of the amount specified in the accounting referenced above. This reduced payment amount shall be deemed to discharge and settle VIWAPA's

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liability for stipulated penalties under this Section for the violations that are the subject of such payments. Discharge and settlement as provided in this Paragraph shall be available to VIWAPA only if VIWAPA makes timely assessment and payment with respect to a particular violation of the Amended Consent Decree within thirty (30) Days after the end of the quarter in question. In the absence of such timely action by VIWAPA, VIWAPA shall be liable for the full amount of the stipulated penalties for such violations for the quarter in question.

c. If any stipulated penalties are due in connection with a decision from EPA pursuant to Paragraph 55 of Section VIII (Force Majeure), and VIWAPA elects not to pursue dispute resolution under Paragraph 56 of Section VIII, VIWAPA may self-assess, report and pay those stipulated penalties in accordance with Paragraph 46a. and b. above, provided that VIWAPA makes this stipulated penalty payment within thirty (30) Days after the end of the quarter in which it received the decision under Paragraph 55.

47. The United States may in its unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Amended Consent Decree. If VIWAPA has not self-assessed and paid stipulated penalties in accordance with Paragraph 46 above, VIWAPA shall pay any stipulated penalty within 30 Days of receiving the United States' written demand.

48. Stipulated penalties shall continue to accrue as provided in Paragraph 46, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

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b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

49. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 10, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

50. If Defendant fails to pay stipulated penalties according to the terms of this Amended Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

51. Subject to the provisions of Section XI of this Amended Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Amended Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Defendant's violation of this Amended Consent Decree or applicable law. Where a violation of this Amended Consent Decree is also a violation of the Clean Air Act, Defendant shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

VIII. FORCE MAJEURE

52. "Force majeure," for purposes of this Amended Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors that delays or prevents the performance of any obligation under this Amended Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay or prevention of performance to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Amended Consent Decree.

53. If any event occurs or has occurred that may delay or prevent the performance of any obligation under this Amended Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice orally or by electronic or facsimile transmission to EPA personnel identified in Section XIII (Notices), within 72 hours of when Defendant first knew that the event might cause a delay, unless the event prevents notification within 72 hours, in which case notification shall be made as soon as feasible. Within seven days thereafter, Defendant shall provide in writing to EPA an explanation and description of the reasons for the delay or prevention of performance; the anticipated duration of the delay or prevention of performance; a lactions taken or to be taken to prevent or minimize the delay or prevention of performance; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or prevention of performance or the effect of the delay or prevention of performance; Defendant's rationale for attributing such delay or prevention of performance to a force majeure event if it

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intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay or prevention of performance was attributable to force majeure. Where the event is so severe that full compliance with the submission requirements within seven days is infeasible, the submission shall be amended within thirty days of the event. Failure to comply with the above requirements shall preclude Defendant from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay or prevention of performance caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

54. If EPA agrees that the delay/prevention of performance or anticipated delay/prevention of performance is attributable to a force majeure event, the time for performance of the obligations under this Amended Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

55. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.

56. If Defendant elects to invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any

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such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay/prevention of performance or anticipated delay/prevention of performance has been or will be caused by a force majeure event, that the duration of the delay/prevention of performance or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay or prevention of performance, and that Defendant complied with the requirements of Paragraphs 54 and 55, above. If Defendant carries this burden, the delay or prevention of performance at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Amended Consent Decree identified to EPA and the Court.

IX. <u>DISPUTE RESOLUTION</u>

57. Unless otherwise expressly provided for in this Amended Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Amended Consent Decree. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States to enforce any obligation of Defendant arising under this Amended Consent Decree.

58. <u>Informal Dispute Resolution</u>. Any dispute subject to Dispute Resolution under this Amended Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 10

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Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

59. <u>Formal Dispute Resolution</u>. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

60. The United States shall serve its Statement of Position within 60 Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

61. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Amended Consent Decree.

62. The United States shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent

permitted by the Local Rules.

63. <u>Standard of Review</u>

a. <u>Disputes Concerning Matters Accorded Record Review</u>. Except as otherwise provided in this Amended Consent Decree, in any dispute brought under Paragraph 59 pertaining to adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Amended Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.

b. <u>Other Disputes</u>. Except as otherwise provided in this Amended Consent Decree, in any other dispute brought under Paragraph 59, Defendant shall bear the burden of demonstrating that its proposal will achieve compliance with the terms and conditions of this Amended Consent Decree, its permits, and the Act in an expeditious manner.

64. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Amended Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 49. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

X. INFORMATION COLLECTION AND RETENTION

65. The United States and its representatives, including attorneys, contractors, and

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consultants, shall have the right of entry into any facility covered by this Amended Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Amended Consent Decree;

b. verify any data or information submitted to the United States in accordance with the terms of this Amended Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess Defendant's compliance with this Amended Consent Decree.

66. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.

67. Until five years after the termination of this Amended Consent Decree, Defendant shall continue to retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under the Consent Decree and this Amended Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

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68. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Defendant shall deliver any such documents, records, or other information to EPA. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information created or generated pursuant to the requirements of the Consent Decree and this Amended Consent Decree shall be withheld on grounds of privilege.

69. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

70. This Amended Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XI. <u>EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS</u>

71. The Consent Decree and after the 2018 date of lodging, this Amended Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the 2015 Date of Lodging. As of September 30, 2016, Defendant is no longer be required to respond to the recordkeeping and reporting requirements created by the outstanding CAA Section 114 information requests applicable to the St. Thomas Facility, as those obligations will be addressed through Quarterly Reporting requirements of this Amended Consent Decree.

72. Except as expressly stated in Paragraph 71, the United States reserves all legal and equitable remedies available to enforce the provisions of this Amended Consent Decree, including but not limited to seeking the appointment of a monitor or receiver if the United States determines that the Defendant is not complying with the terms and/or Objectives of this Amended Consent Decree. This Amended Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 71. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's St. Thomas Facility or St. John Facility, whether related to the violations addressed in this Amended Consent Decree or otherwise.

73. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the St. Thomas Facility or the St. John Facility, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion,

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claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 72 of this Section.

74. This Amended Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Amended Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Amended Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Amended Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7401 *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

75. This Amended Consent Decree does not limit or affect the rights of Defendant or of the United States against any third parties, not party to this Amended Consent Decree, nor does it limit the rights of third parties, not party to this Amended Consent Decree, against Defendant, except as otherwise provided by law.

76. This Amended Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Amended Consent Decree.

XII. <u>COSTS</u>

77. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated

penalties due but not paid by Defendant.

XIII. NOTICES

78. Unless otherwise specified herein, whenever notifications, submissions, or

communications are required by this Amended Consent Decree, they shall be made in writing

and addressed as follows:

To the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Re: DOJ No. 90-5-2-1-10424

and

Robert Buettner Air Compliance Branch Division of Enforcement and Compliance Assistance U.S. Environmental Protection Agency, Region 2 290 Broadway, 21st Floor New York, New York 10007-1866 (212) 637-5031 Buettner.Robert@epa.gov

and

Flaire Mills Associate Regional Counsel U.S. Environmental Protection Agency, Region 2 Office of Regional Counsel 290 Broadway, 17th Floor New York, New York 10007-1866 (212) 637-3198 Mills.Flaire@epa.gov

To Defendant(s):

Kevin Smalls Director of Plant Production Virgin Islands Water and Power Authority Richmond Power Plant #1 Penitentiary Land St. Croix, VI 00821 (340) 773-2796 Kevin.smalls@viwapa.vi

John Woodson St. Thomas Plant Superintendent Virgin Islands Water and Power Authority P.O. Box 1450 St. Thomas, VI 00804-1450 (340) 774-3553 Ext. 2204 John.Woodson@viwapa.vi

Maxwell George Environmental Affairs Manager Virgin Islands Water and Power Authority P.O. Box 1450 St. Thomas, VI 00804-1450 (340) 774-3553 Ext. 2274 Maxwell.george@viwapa.vi

Lorelei Farrington, Esq. General Counsel Virgin Islands Water and Power Authority P.O. Box 1450 St. Thomas, VI 00804-1450 (340) 715-6561 Lorelei.farrington@viwapa.vi

79. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

80. Notices submitted pursuant to this Section shall be deemed submitted upon

mailing, unless otherwise provided in this Amended Consent Decree or by mutual agreement of

the Parties in writing.

XIV. <u>EFFECTIVE DATE</u>

81. The Effective Date of this Amended Consent Decree shall be the date upon which this Amended Consent Decree is entered by the Court or a motion to enter the Amended Consent

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Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Defendant hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Amended Consent Decree before entry, or the Court declines to enter the Amended Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XV. <u>RETENTION OF JURISDICTION</u>

82. The Court shall retain jurisdiction over this case until termination of this Amended Consent Decree, for the purpose of resolving disputes arising under this Amended Consent Decree or entering orders modifying this Amended Consent Decree, pursuant to Sections IX (Dispute Resolution) and XVI (Modification), or effectuating or enforcing compliance with the terms of this Amended Consent Decree.

XVI. MODIFICATION

83. The terms of this Amended Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Amended Consent Decree, it shall be effective only upon approval by the Court.

84. Any disputes concerning modification of this Amended Consent Decree shall be resolved pursuant to Section IX (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 63, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVII. TERMINATION

85. After Defendant has completed the requirements of Section V (Compliance Requirements), has maintained satisfactory compliance with its applicable permits for a period of three years, has satisfactorily complied with all other requirements of this Amended Consent Decree, and has paid any accrued stipulated penalties as required by this Amended Consent Decree, Defendant may serve upon the United States a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

86. Following receipt by the United States of Defendant's Request for Termination, the Parties shall confer informally concerning the request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Amended Consent Decree. If the United States agrees that the Amended Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Amended Consent Decree.

87. If the United States does not agree that the Amended Consent Decree may be terminated, Defendant may invoke Dispute Resolution under Section IX (Dispute Resolution). However, Defendant shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 59 of Section IX (Dispute Resolution), until 90 days after service of its Request for Termination.

XVIII. PUBLIC PARTICIPATION

88. This Amended Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding
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the Amended Consent Decree disclose facts or considerations indicating that the Amended Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Amended Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Amended Consent Decree by the Court or to challenge any provision of the Amended Consent Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Amended Consent Decree.

XIX. <u>SIGNATORIES/SERVICE</u>

89. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of the Amended Consent Decree and to execute and legally bind the Party he or she represents to this document.

90. This Amended Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Amended Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XX. <u>INTEGRATION</u>

91. This Amended Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Amended Consent Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Amended Consent Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes

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any part of this Amended Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Amended Consent Decree.

XXI. FINAL JUDGMENT

92. Upon approval and entry of this Amended Consent Decree by the Court, this Amended Consent Decree shall constitute a final judgment of the Court as to the United States and Defendant. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXII. <u>APPENDICES</u>

93. The following appendices are attached to and part of this Amended Consent Decree:

"Appendix A" is a copy of Sections 7.04 and 7.05 and Exhibit B of the July 25, 2013 contract with Vitol;

"Appendix B" are examples of the spreadsheets required to be used to track the Spare Parts Inventory Program for the water injection systems and continuous monitoring systems;

"Appendix C" is an example of the Water Injection System Data Sheets;

"Appendix D" is the list of water injection system components to evaluate during audits; and

"Appendix E" is the list of continuous monitoring system components to evaluate during audits.

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Dated and entered this ____ day of _____, ____.

CURTIS V. GÓMEZ UNITED STATES DISTRICT JUDGE DISTRICT OF THE VIRGIN ISLANDS Case: 3:14-cv-00086-CVG-RM Document #: 63-1 Filed: 10/25/18 Page 76 of 91

FOR PLAINTIFF UNITED STATES OF AMERICA:

Dated:

ELLEN M. MAHAN Deputy Section Chief Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice

Dated: 10/25/2018

MYLES E. FLINT, II Senior Counsel LAURA J. ROWLEY Senior Attorney Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice P.O. Box 761 1 Ben Franklin Station Washington, D.C. 20044-7611 myles.flint@usdoj.gov laura.rowley@usdoj.gov

GRETCHEN C.F. SHAPPERT United States Attorney District of the Virgin Islands

JOYCELYN HEWLETT

Assistant United States Attorney Federal Building and U.S. Courthouse 5500 Veterans Drive Room 260 St. Thomas, Virgin Islands 00802 joycelyn.hewlett@usdoj.gov Case: 3:14-cv-00086-CVG-RM Document #: 63-1 Filed: 10/25/18 Page 77 of 91

FOR PLAINTIFF UNITED STATES OF AMERICA:

Dated: 19/25/18

ERIC SCHAAF

Regional Counsel U.S. Environmental Protection Agency, Region 2

FLAIRE MILLS Associate Regional Counsel Office of Regional Counsel U.S. Environmental Protection Agency, Region 2 290 Broadway New York, New York 10007 Case: 3:14-cv-00086-CVG-RM Document #: 63-1 Filed: 10/25/18 Page 78 of 91

FOR DEFENDANT VIRGIN ISLANDS WATER AND POWER AUTHORITY:

Dated: 10/19/18

Sul

LAWRENCE J. KUPFER Executive Director Virgin Islands Water and Power Authority P.O. Box 1450 St. Thomas, VI 00804-1450

EXECUTION VERSION

AGREEMENT FOR (1) THE CONSTRUCTION, OWNERSHIP, OPERATION, MAINTENANCE AND TRANSFER OF LPG FACILITIES, (2) LPG SUPPLY AND (3) MANAGING THE REPOWERING OF CERTAIN COMBUSTION TURBINE UNITS

between

VIRGIN ISLANDS WATER AND POWER AUTHORITY

and

VITOL VIRGIN ISLANDS CORP.

Dated July 25, 2013

Article 7 CONSTRUCTION SCHEDULE

<u>Section 7.01</u> <u>Commencement of Work</u>. After satisfaction of all of the Construction Conditions and WAPA's delivery of the written notice to proceed with the Work, Seller shall commence performing the Work.

Section 7.02 Creation of Punchlist. When Seller believes that the Constructed and Converted Facilities are ready for Commissioning and Testing and the Project Facilities are capable of delivering LPG to the Delivery Point at the Harley Plant and the Richmond Plant, Seller will prepare and submit to WAPA a working outstanding items list, which list (a "Working Outstanding Items List"), may include those items of Work remaining to be completed with respect to the Constructed and Converted Facilities. Initially, such Working Outstanding Items List may serve as a working tool for Seller to track all outstanding Work for the Constructed and Converted Facilities. Following receipt of the Working Outstanding Items List, Seller and WAPA shall jointly walk-down the Constructed and Converted Facilities and confer together as to the items from the Working Outstanding Items List which should be included on the finalized punchlist. Seller shall then update the Working Outstanding Items List or create a new list to reflect the result of such joint walk down and deliver the same to WAPA for its review and approval, which submitted list shall be explicitly designated as the "Proposed Punchlist" for the Constructed and Converted Facilities. If WAPA does not deliver any changes to the Proposed Punchlist to Seller within five (5) Business Days after receipt from the Seller, then such Proposed Punchlist shall be deemed approved. The Proposed Punchlist that is ultimately approved or deemed to have been approved by WAPA shall be referred to as the "Punchlist". If the Punchlist is not finalized by the Substantial Completion Deadline, the Proposed Punchlist as modified by WAPA shall be deemed the Punchlist for the Constructed and Converted Facilities for all purposes hereunder until the Parties resolve such dispute and otherwise finalize the Punchlist. Seller shall note on such Punchlist the items under dispute.

Section 7.03 Completion of Punchlist. Seller shall proceed promptly to complete and correct all items on the Punchlist. On a monthly basis after Substantial Completion, Seller shall revise and update the Punchlist to include the date(s) that items listed on such Punchlist are completed by Seller and accepted by WAPA. Notwithstanding any of the foregoing, the items listed on such Punchlist shall not be considered complete until WAPA shall have inspected such items and acknowledged, by notation on the updated Punchlist, that such item of Work is complete. If WAPA does not so inspect and deliver such notations on the updated Punchlist to Seller (or dispute completion of the applicable items of Work if not accepted) within a reasonable period of time, and Seller has actually completed and corrected any Punchlist item listed on such Punchlist, such Punchlist item shall be deemed completed on the date that is ten (10) days after Seller submits the updated Punchlist containing such Punchlist item to WAPA.

<u>Section 7.04</u> <u>Substantial Completion</u>. The following are the conditions precedent for the Constructed and Converted Facilities to achieve Substantial Completion:

(a) the Constructed and Converted Facilities have achieved Mechanical Completion;

(b) Commissioning and Testing has been completed successfully as certified by duly authorized representatives of WAPA and Seller;

(c) the Constructed and Converted Facilities have been constructed in accordance with Seller's Specifications, other than Punchlist items;

(d) the Punchlist shall be in final form or be deemed approved as provided for in <u>Section 7.02</u> and only Non-Critical Deficiencies remain on the Punchlist;

(e) all storage tanks in the Delivery Infrastructure have been loaded with the necessary quantity of LPG to enable Seller to comply with its obligations hereunder;

(f) Seller is capable of commencing the continual delivery of WAPA's requirements of LPG to the Delivery Points and vaporized LPG to the headers of the turbines as set forth herein;

(g) Seller shall have delivered the Notice of Substantial Completion to WAPA.

<u>Section 7.05</u> <u>Notice of Substantial Completion</u>. When Seller believes that it has satisfied the provisions of <u>Section 7.04</u>, Seller shall deliver to WAPA written notice that it has achieved Substantial Completion (a "Notice of Substantial Completion"). WAPA shall, as promptly as reasonably practicable but in no case no longer than three (3) business days after receipt of such Notice of Substantial Completion, issue a certificate confirming achievement of Substantial Completion (the "Certificate of Substantial Completion") dated to reflect the Substantial Completion Date, or if WAPA rejects Seller's Notice of Substantial Completion, respond in writing giving its reasons for such rejection and Seller shall take the appropriate corrective action. Upon completion of such corrective action, Seller shall provide to WAPA a new Notice of Substantial Completion for approval. This process shall be repeated on an iterative basis until WAPA accepts the Notice of Substantial Completion and issues a Certificate of Substantial Completion at which point "Substantial Completion" shall have been achieved.

<u>Section 7.06</u> <u>Final Completion</u>. "Final Completion" shall be deemed to have occurred only if all of the following have occurred:

- (a) Substantial Completion shall have been achieved;
- (b) all items on the Punchlist shall have been completed by Seller;

(c) all Seller's and Subcontractor's personnel shall have left WAPA's Facilities, and all surplus materials, waste materials and rubbish shall have been removed from therefrom;

(d) Seller shall have delivered the Notice of Final Completion to WAPA;

(e) all final lien waivers have been obtained; and

(f) all red and blue versions of manuals, drawings and other documents expressly required to be delivered by Seller hereunder have been delivered to WAPA.

<u>Section 7.07</u> <u>Notice of Final Completion</u>. Seller shall deliver to WAPA written notice that it has achieved Final Completion (a "Notice of Final Completion") that it has achieved Final Completion. Within two (2) Business Days after receipt of the Notice of Final Completion, WAPA shall issue a certificate confirming achievement of Final Completion ("Certificate of Final

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Appendix A

Exhibit B Commissioning and Testing Standards and Procedures

[TO BE COMPLETED AS AN IMMEDIATE CONDITION]

<u>Draft – Exhibit B</u>

Commissioning and Testing Standards and Procedures for the LPG Terminal facilities scope

The Seller will be responsible for the commissioning of the terminal. Commissioning will be undertaken by the Sellers operational team after the facilities have been handed over by the Sellers project team upon mechanical completion and commissioning readiness check as described below.

Commissioning Readiness Check

Upon reaching Mechanical Completion a Commissioning Readiness Check will be conducted as per VTTI procedure VTTI-21.10.PR.001

in,

The objective of this audit is to verify that the terminal is ready for commissioning and any shortcomings have been properly addressed. A positive result from the commissioning readiness audit is required to proceed with the actual commissioning. The "independent" audit teams make use of standardized checklists that cover all required items and hold points; this provides an effective and efficient assessment.

Among other the following subjects are covered by the checklists:

- Roles and Responsibilities
- Planning and Schedule
- > Preparation
- Process Safety Management
- ➢ Safety systems
- > Risk Mitigation
- > HAZOP implementation
- License to operate
- > Technical completion
- > Punch items
- As-built documentation
- > Operator training
- > Operational philosophy / Work instructions
- > Maintenance of critical elements
- > Spares / Operational equipment
- > Commissioning Plan
- ≻ Handover
- > Procedures
- > Minimal required documentation
- > Reporting
- > Communication

A full version of VTTI procedure VTTI-21.00.PR.001 can be made available on request.

Handover and Commissioning Plan

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Appendix A

Handover and Commissioning will be carried out as per VTTI procedure VTTI-21.10.PR001.

This document lays out VTTI requirements for developing a proper Handover and Commissioning Plan. For developing this plan the terminal operating party will appoint a Commissioning Manager (which in turn will be responsible of setting up a commissioning team). Th commissioning plan shall be developed as soon as possible but no later than 1 month prior to start up. The plan must be approved by the Terminal Manager and the Project Director.

The commissioning plan describes in detail roles and responsibilities and procedures throughout the commissioning process. The followings subjects are covered:



- Commissioning team
- Roles and Responsibilities
- Commissioning Organization
- > Preparation
- Progress overview
- > Training of terminal personnel
- > Mechanical Completion (MC) and Handover
- > Work sequence from MC to Handover
- > Operations witnessed testing and MC activities
- > Punch list
- Commissioning sequence per (sub)system
- > Handover schedule
- As-built documentation
- > Commissioning procedures for:

- o Buildings
- o CCR
- Substation
- Electrical & Instrumentation
- o Automation
- o Utilities
- \circ Sewer system
- o Potable water
- Service water
- o Nitrogen system
- o LPG
- o Secondary systems
- o Fire Fighting system
- Communication
- > Contractor assistance during commissioning 3
- Start-up procedures
- Performance tests
- Emission tests

A full version of VTTI procedure VTTI-21.10.PR.001 can be made available on request.

Commissioning and Testing Standards and Procedures for the Turbine modification scope:

After mechanical completion has been achieved and all punch items related to safe operation of the plant cold commissioning can commence, once cold commissioning is successfully completed hot commissioning will take place.

Commissioning will be executed based on a commissioning planning which will be composed by the subcontractor in close alignment with Vitol Project and operations, WAPA and other stakeholders. Manufacturers and subcontractors commissioning procedures will be taken into account complemented by WAPA power plant procedures. All commissioning the results are recorded in a commissioning report.

During the cold commissioning the following activities take place:

- From the instrument cables, instruments, and control cables all loops are tested from the faceplate/object till the instrument. A record is kept to have the overview and expedite progress.
- > The power cables are Mega Ohm (M Ω) checked and a bump test of the electrical motors will be done.
- A motor Uncoupled Running Test (MURT) will be done. Items such as , power consumption per phase, temperatures of the bearing housing, vibration will be monitored and recorded.
- Pipelines will be flushed in order to remove debris from the construction/lay down time or removal of corrosion preventive measures.

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Appendix A

- > Valves will be stroke tested.
- > Interface communications will be tested.

During the Hot Commissioning the following activities take place:

- > All trips and interlocks are tested from the operating system (Some of them will be life tested in a later stage as well).
- > Software will be functionally tested.
- > Systems are tested.
- > Test operations starts
- Performance testing
- > Emission Testing

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| | THIS WEEK'S CHA | NGES IN BLUE | Inventory Edits in Y | Date Updated: 7/24/2015 | | | | Actual Q | ty On Hand | Re-Order Determination | | | Purchases | | | | | | | | | | | Parts Replacements | | | | | | |
|------------------------------|--|--|--|--|---|--------------------------|----------------------------|--|----------------------------------|------------------------|----------------------------------|---------------------------------------|--|--------------------------|---|----------------------------|--|--------------------------------|--------------------------|-------------------------|---|-----------------------|--------------------------|------------------------|-------------------------|----------------------------|-----------------|-----------------------|---|---|
| System | Parts Number | Name | Part Description | Manufacturer/ Supplier | Storage Location (STX, STT, or STX/STT) | Replacement Frequency | Order Lead Time Days | Minimum Required Inventory Quantity | St. Croix St. Th Facility Fac | ility Total | Re-Order Required (Yes/No) | Determination Da Re-Order Requires | te Minimum Re- Order Quantity? (to > min.) | Requisition No. | Date PO/Contract Required? (End Next Month) | Date PO/Contract Issued | Date PO/Contract Accepted by Vendor | PO/ Contract No. | No. Parts on Order | No. of Parts Ordered | | ate Parts expected | No. Parts Received | Date Parts Received | No. Parts Dispatched | Date d Parts Dispatcher | d Unit Serviced | Reason for Service | Replacement Requires Unit Outage? (Yes/No) | Compliance Maintained During Replacement? (Yes/No) |
| NOx | 58020100 | Motherboard | PCA, Motherboard, E Series, Gen 5-1 | Tel. ML/QA Support | STX/STT | As Needed | 63 | 1 | 1 | 1 2 | N | | | AC20479-1 | | | 06/29/15 | RN006360.001 | 1 | | | 07/30/15 | | | | | | | | |
| NOx NOx | 42680100 OR0000039 | A-zero Valve O-Ring 39 | Assy Valve O-rine, For Flow Control, OR 39 | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 63 | 3 | | 3 5 4 7 | N | 2 | | | | | | | | | | | | | | | | | | |
| NOx | 940500 | 7 Mil Orifice | Orifice, 7 Mil, Ozone Flow/Exhaust Manifold | Tel. ML/QA Support | STX/STT | As Needed | 63 | 3 | 0 | 6 6 | N | c | | | | | | | | | | | | | | | | | | |
| NOx | 940100 | 3- MilOrifice | Orifice, 3 Mil, By Pass Flow Manifold | Tel. ML/QA Support | STX/STT | As Needed | 63 | 3 | | 8 9 | N | | | | | | | | | | | | | | | | | | | |
| NOx NOx | 2730000 940400 | Optical Filter 4 Mil Orifice | Optical Filter, 665nm Orifice, 4 Mil, Perma Pure Dryer | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 63 | 1 | | 2 4 6 7 | N | | | | | | | | | | | | | | | | _ | | | |
| NOx | 1761800 | Ozone Dryer | Assy, Flow Ctl, 90CC, Ozone Dryer | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 3 4 | | | | | | | | | | | | | | | | | | | | |
| NOx | 40030800 | Sensor Board | Flow/Pressure Sensor PCA | Tel. ML/QA Support | STX/STT | As Needed | 63 | 3 | | 1 4 | | | | | | | | | | | | | | | 1 | 6/26/2015 | U19 | Failure | NO | YES |
| NOx | 45230200 41800500 | Relay Board Pre Amp Board | Relay Card W/Relays, Relay Board PCA, PMT Pre Amp, TML41 | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed | 63 63 | 2 | | 3 4 2 3 | N | 2 | | AC20479-1 | | | 05/00/45 | RN006360.0018 | | VEC | | 7/20/45 | | | | | | | | |
| NOx NOx | 14080100 | HVPS | Assy, High Voltage Power Supply | Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 | 2 | | 2 3 4 5 | TES N | 2 | - | AC20479-1 | | | 06/29/15 | NN006360.0018 | 2 | YES | | 07/30/15 | | | | | | | | |
| NOx | 11930000 | PMT | Photo Multiplier Tube | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 3 4 | N | | | | | | | | | | | | | | | | | | | - |
| NOx | KIT000019 | Cooler Assembly | Replacement Cooler Assy | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 0 | 3 3 | N | 0 01/14/15 | | NA | 2/28/2015 | 2/27/2015 | 2/27/15 | 20148REV | 2 | | | 4/10/15 | 2 | 4/7/15 | | | | | | |
| NOx | 40420200 | Ozone Generator | Assy, O3 Generator | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 6 7 | N | | | AC20479-1 | | | 7/29/15 | RN006360.0018 | 1 | | | 7/30/15 | | | | | | | | |
| NOx | 18720100 | Moly Converter | Moly Converter, w/O3 Destructor | Tel. ML/QA Support | STX/STT | 3 years | 63 | 3 | 0 | 5 5 | N | D C | | | | | | | | | | | | | | | | | | - |
| NOx | 884-017300 | NOx Pump | Pump Assy, External, 115V/60 HZ, Thomas | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 2 5 | N | с | | | | | | | | | | | | | | | | | | |
| NOx | 98000242 | NOx Pump Rebuild Kit | KIT, Pump Service, Thomas Pump | Tel. ML/QA Support | STX/STT | Quarterly/As Needed | 63 | 3 | | 3 3 | YES | | 1 | AC20479-1 | | | 06/29/15 | RN006360.0018 | 2 | YES | 1 | 07/30/15 | | | | | | | | |
| NOx NOx | 13140000 10003894 A | Cooler Fan Power Supply | Assy, Cooler Fan 5,+-15 VDC Power Supply | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 63 | 2 | | 3 4 3 4 | N | | | | | | 1 | | | | | | | | | + | + | | | |
| NOx | 10003546 F | Power Supply | 12 VDC Power Supply | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 1 | 3 4 | N | D | | | | | İ | | | | | | | | | | | | | |
| NOx | 49310100 | TCE Control Board | PCA, TCE Control, E Series | Tel. ML/QA Support | STX/STT | As Needed | 70 | 2 | 3 | 1 4 | YES | 2 | | 1000.000 | | | 00100100 | BH0051 | | 1000 | | 1001/- | | | | - | - | | | |
| NOx | QT-TML-RBK | NOx Rebuild Kit | NOx Rebuild Kit | Tel. ML/QA Support | STX/STT | Quarterly/As Needed | 63 | 3 | 0 | 3 3 | YES | 1 | 1 | AC20479-1 | | | 06/29/15 | KNUU5.950.0018 | 2 | YES | | 0//30/15 | | | | 1 | 1 | | | |
| CO | 58021100 | Motherboard | PCA, Motherboard, E Series, Gen 5-1 | Tel. ML/QA Support | STX/STT | As Needed | 63 | 1 | | 4 5 | N | | | | | | | | | | | | | | | | | | | · |
| C0 C0 | 37860000 9560301 | O-ring 58 Filter Wheel | OR 58 Viton O-Ring, for Particulate Filter | Tel. ML/QA Support | STX/STT STX/STT | As Needed | 63 63 | 3 | | 8 10 3 4 | N | | | _ | | | | | | | | | | | | - | - | | | |
| co | 9560301 40030100 | Filter Wheel Sensor Board | Gas Filter Wheel PCA Flow/Pressure Sensor Board | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 | 2 | | 3 4 8 9 | N | 2 | | | | | | | | | | | | | | | | | | |
| co | 41350000 | Relay Board | PCA Relay Board M300E | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 3 4 | N | 5 | | | | | | | | | | | | | | | | | | - |
| CO | PS0000025 | Power Supply | Power Supply, +12V | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 3 4 | N | | | | | | | | | | | | | | | | | | | |
| CO | 9550500 | IR Source | IR Source,TML 30 S/N > 65 | Tel. ML/QA Support | STX/STT | As Needed | 63 | 3 | | 7 8 | N | | | | | | | | | | | | | | | | | | | |
| CO CO | KIT000178 PS0000011 | Sync Dmod Power Supply | Retrofit, Sync Dmod with Detector, TML30 Power Supply, +5/+-15V | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 63 | 3 | | 1 8 3 4 | N | | | | | | | | | | | | | | 1 | 1/29/2015 | 1118 | Repairs | NO | YES |
| CO | PU0000022 | Internal Pump Rebuild kit | Internal Pump, Sensor E Series, Rebuild kit PU022 | Tel. ML/QA Support | STX/STT | As Needed | 63 | 3 | | 12 15 | N | | | | | | | | | | | | | | | -,, | | pune | | |
| co | PU1752-N05-5.05 | Internal Motor | Internal Motor, 100-230/50-60Hz, 115/60Hz | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 1 | 1 2 | YES | 01/14/15 | 1 | NA AC20479-1 | 02/28/15 | 02/27/15 | 2/27/2015 06/29/15 | 20148REV RN006360.0018 | 2 | YES | | 4/10/15 | 2 | 4/7/2015 | | | | | | |
| CO | 52830100 | Motor | Assy Motor(MR7) E Series | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 1 | 3 4 | | | | AC20475-1 | | | 00/29/13 | 1000000000 | | | | // 30/13 | | | | | | | | |
| CO | OP0000030 | O2 Sensor | 02 Transducer | Tel. ML/QA Support | STX/STT | As Needed | 63 | 1 | 2 | 2 4 | N | C . | | | | | | | | | | | | | | | | | | |
| Opacity | 528873 | Purge Filter | Purge Filter | Tel. ML/QA Support | | As Needed | 63 | 3 | 0 | 5 5 | N | o l | | | | | | | | | | | | | | | | | | |
| Opacity | 528312SP | Purge Switch | Purge Switch 1 Inch Diameter, Purge Hose, feet | Tel. ML/QA Support Tel. ML/QA Support | STX/STT | As Needed | 63 63 | 3 | | 2 10 33 38 | N | | | | | | | | | | | | | | | | | | | |
| Opacity Opacity | 980536 980142 | Purge Hose Blower motor | Blower Motor | Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 | 2 | | 6 6 | N | 2 | | | | | | | | | | | | | 1 | 5/21/2015 | H21 | Repairs | NO | YES |
| Opacity | 1860-0400-01 | Optical Amp Board | Optical Amp PCB | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 4 6 | N | c | | | | | | | | | | | | | | | | | | - |
| Opacity | 1860-0600-01 | Display Board | Display Control Board | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | | 5 5 | N | | | | | | | | | | | | | | | | | | | |
| Opacity Opacity | 1860-0500-015P 1860-0190-01 | Mother Board Key Pad | 560 Mother Board PCB Key Pad | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 70 63 | 2 | | 3 3 2 4 | N | | | NA AC20479-1 | 02/28/15 | 02/27/15 | 02/27/15 06/29/15 | 20148REV RN006360.0018 | 3 | | | 04/10/15 | 3 | 04/07/15 07/15/15 | | | | | | |
| Opacity | 527418 | 1.25A, Fuse | 1.25A, Fuse | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 0 | 8 8 | N | D C | | | | | ,, | | | | | | - | 0.1/20/20 | | | | | | - |
| Opacity | 527438 | 2.0A, Fuse | 2.0A, Fuse | Tel. ML/QA Support | STX/STT | As Needed | 63 | 2 | 0 | 6 6 | | | | | | | | | | | | | | | | | | | | |
| Opacity Opacity | 1860-1100-02 545441 | Power Supply Control Module | Power Supply PCB Flash Control Module, Communication Module | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 63 63 | 2 | | 1 3 3 9 | N | 2 2 | | AC20479-1 | | | 06/29/15 | RN006360.0018 | 1 | | | | 1 | 07/15/15 | | | - | | | |
| Councils Mana | Q740-SCD_DIL_PT_PCB | Pressure Board | Pressure Transducer Board | Tel. ML/QA Support | STX/STT | As Needed | 42 | | | 2 3 | N | | | AC20479-1 | | | 06/29/15 | RN006360.0018 | 1 | | | 9/30/15 | | | | 1 | 1 | | | |
| Sample Plate Sample Plate | Q740-AD-SSR6M12-DC-200D | Solid State Relay 2 | Relay, Solid State, 100 VDC | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | | 3 5 | N | | | ACLOSIST | | | 00/25/15 | 1000000000 | - | | | 13/ 30/ 13 | | | | | | | | |
| Sample Plate | Q740-AD-SSR810-DC-28Z | Solid State Relay 1 | Relay, Solid State, 280 VDC | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 1 | 3 4 | N | D | | | | | | | | | | | | | | | | | | |
| Sample Plate | Q740-52X01061GM-24VDC | CVx | Calibration Gas 2-Way Solenoid 24VDC, 100 PSI | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed | 42 42 | 2 | | 7 20 | N | | | | | | | <u> </u> | | | | | | | | 1 | | L 1 | | |
| Sample Plate Sample Plate | Q740-56LI8XGM-24VDC UA 1050 | GBV,CPV,GDV Sample Chiller | Gas Direct 3-Way Solenoid 24 VDC, 50 PSI Mini Chiller, Sample Chiller | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 42 | 2 | | 10 13 4 8 | | 5 | | | | | 1 | | | | | | | | | + | + | | | |
| Sample Plate | Q740-9464K17 | 012 Viton O-ring | O-ring, -012 Viton, CG Solenoid Bank | Tel. ML/QA Support | STX/STT | As Needed | 42 | 6 | 1 : | 15 16 | N | с | | | | | İ | | | | | | | | | | | | | |
| Sample Plate | Q740-LPH-125-0A-A-NO-A9011 | Flow Switch 50 CC | Flow Switch, 50CC/Min (Block Bleed) | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 1 | 4 5 | N | | | | | | 1 | | | | | | | | | 1 | | | | |
| Sample Plate Sample Plate | Q740-8286-179A Q740-74C-123G081-113810 | CG Pressure Regulator Sample/bypass Flow Meter | CG Pressure Regulator 3 PSID Flow Meter Cal Sample/Bypass, 2 SLPM | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 | 2 | | 3 4 3 15 | N | | | | | | | | | | | | | | | + | + | | | |
| Sample Plate | Q740-74C-123G081-113810 Q740-74C-214G021-213810 | Cal Gas Flow Meter | How Meter Cal Sample/Bypass, 2 SLPM Flow Meter Cal Gas, 9.2 SLPM | Tel. ML/QA Support | STX/STT | As Needed As Needed | 42 | 2 | 9 | 3 12 | | | | | | | 1 | | | | | | | | | 1 | + | | | |
| Sample Plate | Q130-005-K | Membrane Filter | Membrane Filter | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 1 3 | 20 21 | N | | | | | | | | | | | | | | | | | | | |
| Sample Plate | Q90P1008 | Peristaltic Tube | Peristaltic Tube for PP1-1 | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 | 6 | | 22 29 4 7 | N | | | | | | 1 | | | | | | | | | + | + | | | |
| Sample Plate Sample Plate | Q01P1300 29000204-52 | Peristaltic Pump Probe Filter | Peristaltic Pump Sample Probe Filter | Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 42 | 2 | | 4 7 0 7 | N | D | - | | | | 1 | | | | | | | | | + | 1 | - | | |
| Sample Plate | Q740-J161-BP-PJ0 | Single Head DC Pump(Sample Pump) | Single Head brushless DC Pump | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | | 3 9 | N | 0 | | | | _ | | | | | | | | | | | | | | |
| Sample Plate | Q740-11711 | Mini DC Pump Kit | Rebuild kit for Mini Single Brushless DC Pump | Tel. ML/QA Support | STX/STT STX/STT | As Needed | 42 | 3 | | 3 3 | YES | | 1 | AC20479-2 | | | 06/29/15 | RN006360.0018 | 2 | YES | | 07/30/15 | | | | 7/7/2015 | | Development | NO | 1000 |
| Sample Plate Sample Plate | Q02F1500 Q9F0016 | WCOF Water Slip Filter | WCOF Water Sip Filter | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 42 | 2 | | 7 10 8 11 | N | | | | | | | | | | | - | | | | 7/7/2015 | 015 | Replaced | NU | YES |
| Sample Plate | Q03E1001 | Water Sip Flice | Water Slip Filter Electrode (LA 15) | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 3 | 6 9 | N | | | | | | | | | | | - | | | | 1 | | | | |
| Sample Plate | Q740-70105523 | Fan | Fan, 115VAC, 172X150mm, md, 230CFM | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 1 | 3 4 | N | С | | | | | | | | | | | | | | | | | | - |
| Sample Plate | Q740-70104889 | Axial Fan | Axial Fan 2.4W , 27.1 CFM | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | | 3 4 | N | | | | | | | | | | | | | | | | - | | | |
| Sample Plate Sample Plate | Q03E2006D Q740-WMZT1C10 | Water Slip Electronics 10A Circuit Breaker | Water Slip Electronics, Model LA 1.4, 24VDC Breaker, Grcuit 120VAC 10A, DIN | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 | 2 | | 5 6 3 4 | N | | | | | | | | | | | - | | | | + | + | | | |
| Sample Plate Sample Plate | Q740-70069759 | 24VDC Supply | Power Supply, 24VDC @ 20A | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | | 3 10 | N | 0 | | | | | | | | | | - | | | | 1 | | | | |
| Sample Plate | Q740-70160887 | 15VDC Supply | Power Supply, 15VDC @ 0.5A | Tel. ML/QA Support | STX/STT | As Needed | 42 | 2 | 1 | 3 4 | N | с | | | | | | | | | | | | | | | | | | - |
| PLC | 1769-IF 16C | Allen & Bradley Analog Input Module | AB 1769-Analog Input 16 Ch | Tel. ML/QA Support Tel. ML/QA Support | STX/STT | As Needed | 42 | 1 | | 1 1 | | | 1 | AC20479-2R | | | | RN006360.0018 | | YES | | | 1 | | | | - | | | |
| PLC | 1769-OW16 1769-IQ32 | Allen & Bradley Relay Module Allen & Bradley Digital Input Module | Micro800, Expansion Module, 16 Ch Relay AB 1769-Digital Input 32 Ch | Tel. ML/QA Support Tel. ML/QA Support | STX/STT STX/STT | As Needed As Needed | 42 42 | 1 | | 4 7 1 2 | N | 5 | | AC20479-2R AC20479-2R | | | 06/30/15 06/30/15 | RN006360.0018 RN006360.0018 | | YES | | | 1 | 07/15/15 07/15/15 | | + | + | | | |
| PLC | None | Spare AI & Br PLC Process Prog. Flash Card | 1 GB SD Chip | Tel. ML/QA Support | STX/STT | As Needed | 42 | 1 | 1 | 1 2 | N | 5 | | | | | | | | | | | | | | | | | | |
| Column Key | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spare Parts Inventi | bry Program - list of critical parts maint | ained in-stock supporting timely repairs and preve | ntive maintenance of CEMS and COMs. Parts are m | aintained at both plants for | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| se at either plant | Reference to specific sections of draf | t Consent Decree in column headings. Spreadshee | t will be updated each week and saved. Inventory (| will be undated as | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Spare Parts Inventory Program - list of critical parts maintained in-stock supporting timely repairs and preventive maintenance of CEMS and COMs. Parts are maintained at both plants for |
|---|
| use at either plant. Reference to specific sections of draft Consent Decree in column headings. Spreadsheet will be updated each week and saved. Inventory will be updated as |
| purchased parts are received and as inventory parts are dispatched. |
| Date Updated - date inventory updated based physical count from weekly inventory check, purchase data, and use/dispatch data |
| System - CEMS or COMs monitoring system requiring part |
| Parts Number - number assigned to part as unique identifier |
| Parts Name - shorthand name for part |
| Parts Description - identity of part based on name, size, material of construction, or other specification |
| Manufacturer/Supplier - source for parts purchased or to be purchased |
| Storage Location - physical location of parts - either at St. Croix Plant (STX), at St. Thomas Plant (STT) or parts stored at both plants. Parts can be transferred from plant to the other within four working hours if needed. |
| Replacement Frequency - Expected frequency of repair or replacement of the individual components; "As Needed" indicates replaced at point of failure |
| Order Lead Time - Expected lead time for the ordering, purchasing, and delivery of parts, i.e., from initiation of procurement to receipt onsite |
| Minimum Required Inventory Quantity - minimum number of units required to be in stock to ensure parts are always on-hand; when actual inventory on both Islands is at or below minimum, re-order initiated |
| Actual Quantity On-Hand - at each Plant and in Total - Verification of inventory of parts in storage based purchase and usage records and check by physical inventory at each plant |
| Re-Order Required - Spreadsheet determination as to whether re-ordering is required: "YES" if TOTAL quantity on-hand is equal to/less than the Minimum Inventory Quantity TOTAL for |
| both Plants |
| Determination Date Re-Order Required - date when deficiency determined and re-order required |
| Minimum Re-Order Quantity - Spreadsheet determination as to the number of parts that must be ordered to increase the inventory level to above the minimum required |
| Requisition Number - WAPA Number for Requisition requesting issuance of Purchase Order |
| Date PO/Contract Required - Based on Consent Decree 14.e for inventory deficiency determination in previous month allows for purchase to be completed - within 60 days in St. |
| Thomas/end of next month in St. Croix |
| Date PO/Contract Issued - date purchase order issued for ordering of parts OR repairing of parts, i.e., purchase date |
| Date PO/Contract Accepted by Vendor - date vendor receives contract, funding is in place, and proceeds with filling order, i.e., no contractual issues |
| PO/Contract Number - identification number assigned to Purchase Order |
| No. Parts on Order - Number of replacement parts on order listed separately for each PO date |
| Va. of Parts Ordered Adequate? - Spreadsheet determination as to whether a sufficient number of parts were ordered to eliminate the inventory deficiency; basis for issuance of penalties. "YES" means sufficient parts were ordered |
| Date Parts Required - estimated date that parts must be received to avoid inventory falling below minimum |
| Date Parts Expected - date when parts expected to be delivered |
| No. Parts Received - number of parts received |
| Date Parts Received - date parts received |
| Date Received CD Compliant? - Spreadsheet determination whether parts were received |
| No. Parts Dispatched - number of parts withdrawn from inventory for repairs or maintenance |
| Date Parts Dispatched - date parts withdrawn from inventory for use in repairs or maintenance |
| Unit Serviced - Turbine or HRSG unit number for CEMs or COMs system serviced with dispatched parts |
| Reason for Service - reason for unit servicing and parts replacement; e.g., parts failure, maintenance |
| Replacement Requires Unit Outage? - Must the unit be taken out of service to complete parts replacement - YES or NO? |
| Compliance Maintained During Replacement? - Can compliance with all requirements be maintained during parts replacement - YES or NO? |

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| | inventory Progra | m for St. Thomas Water Injection Sys | | | Below Min | | A | <mark>t Minimu</mark> | | | ate Updated | | | | | | PUKCHASI | | | | | | | | Part | s Replacements | 1 |
|------------------------------------|--|--|--|--|--|--|---|--|---------------------------------|---|--------------------|--|--|-----------------|--|--|----------------|--|--------------------------------------|--|----------------|--------------------------------------|-------------------------------------|--|-----------------------------|--|---|
| | | | | | | | | | | | | | | PURCHASES | | | | | | | | | | | | | |
| Unit | Part/ Stock # | Part Description (14.c & 14.1(v)) | Manufacture (14.e(iii)) | Supplier(s) (14.e(iii)) | STT Storage Location (14.e(i)) | Replacement Frequency (14.e(iv)) | Order Lead Time Days (14.e(iii)) | Minimum Inventory Qty (14.c & e(iv)) | Quantity y On Hand (14.a) | Re-Order Required (Yes/No) (14.f(ii)) | Re-Order Require | < Minimum Re- Order Quantity to > Minimum? (14.f(ii)) | Date PO/Contract Required? (Within 60 days of Determination < Minimum) (14.g) | Requisition# | Date PO/Contract Issued (14.f(ii)) | Date PO/Contract Accepted by Vendor (14.f(ii)) | No. | No. Parts on Order (14.f(ii)) | No. of Parts Ordered Adequate? | Date Parts Expected? (Within 30 days of leadtime) | Parts Received | Date Parts Received (14.f(ii)) | No. Parts Dispatched (14f(i)) | Date d Parts Dispatched (14.f(i)) | Unit Serviced (14.f(ii)) | Reason for Service (14.f(ii)) | Replacement Requires Ur Outage? (Yes/No) (14.f(iii)) |
| 15 15 | | FILTER (PUMP SUCTION) FILTER (PUMP DISCHARGE) | CULLIGAN | ACE | TRAILER | AS NEEDED AS NEEDED | 28 28 | 10 | | NO NO | | | | | | | | | | | | | | | <u> </u> | | |
| 15 | | RELIEF VALVE (600lb) RELIEF VALVE (700lb) | ANDERSON GREENWOOD ANDERSON GREENWOOD | ANDERSON GREENWOOD ANDERSON GREENWOOD | TRAILER / WAREHOUSE TRAILER / WAREHOUSE | AS NEEDED | 28 | 2 | 8 | NO | | | | | | | | | | | | | | | | | |
| 15 | | PRESSURE SWITCH (CPD) | ALLEN BRADLEY | EPS | TRAILER / WAREHOUSE TRAILER | AS NEEDED AS NEEDED | 28 49 | 2 | 2 | NO NO | | | | | | | | | | | | | | | | | |
| 15 | VARIOUS PARTS 650010000701003 | INJECTION PUMP (REBUILD KIT w/multiple parts)* LUBRICATOR MODEL P55U (INJECTION AUXILIARY) | WHITLEY PREMIER | EPS EPS/CONTROL ASSOCIATES | TRAILER | AS NEEDED AS NEEDED | 84 184 | 1 | 1 | YES | 2/20/15 2/20/15 | 1 | 04/21/15 04/21/15 | 30398 31012# | 3/16/2015 6/29/2015 | | 65514 66042 | 2 2 | YES | 09/22/15 | | | | | <u> </u> | | |
| 15 | 3BF1J9A0 | SUPPLY PUMP (13 STORAGE) | GOULDS | EPS | TRAILER | AS NEEDED | 56 | 1 | 2 | NO | | | | | | | | | | | | | | | <u> </u> | | |
| 15 | 5HP/3/60/230-460V VARIOUS SPARES | MOTOR, SUPPLY FRAME 184JM (13 STORAGE) SUPPLY PUMP REBUILD KIT (w/multiple parts) | BALDOR GOULDS | EPS | TRAILER | AS NEEDED AS NEEDED | 56 56 | 1 | 2 | NO NO | | | | 30670 | | | 65763 | 1 | YES | | 1 | 07/15/15 | | | <u> </u> | | |
| 18 M | VARIOUS PARTS | INJECTION PUMP* ** INJECTION PUMP REBUILD KIT (w/multiple parts)** | GOULDS | EPS EPS | TRAILER | AS NEEDED AS NEEDED | 184 112 | 1 | 1 | YES | 5/18/15 | 1 | 07/17/15 | 30395 | 5/22/2015 | | 65824 | 1 | YES | 10/07/15 | | | | ' | | | |
| 18 | A00368C-4 | COUPLING FOR MPV40 FRAME TSD** | REXNORD | EPS | TRAILER | AS NEEDED | 56 | 2 | 3 | NO | | - | 071715 | 30333 | 3/22/2013 | | 03024 | - | 125 | 10/01/15 | | | 1 | 5/12/2015 | 18 | broken coupling | no |
| 23 | | INJECTION MOTOR FRAME 326TSD** 2/2 WAY 316/300# (STOP VALVE) | BALDOR COAX | EPS/CORTES/HUDSON COAX | TRAILER | AS NEEDED AS NEEDED | 184 112 | 2 | 3 | NO NO | | | | | | | | 1 | YES | | 1 | 05/11/15 | | + | <u> </u> | | |
| 23 23 | | SWITCH, DIFFERENTIAL (PUMP SUCTION) SWITCH, GAUGE (PUMP DISCHARGE) | CUSTOM CONTROL SENSORS | CUSTOM CONTROL SENSORS CUSTOM CONTROL SENSORS | TRAILER | AS NEEDED AS NEEDED | 98 98 | 1 | 2 | NO NO | | | | | | | | | | | | | | | <u> </u> | | |
| 23 | 646DZEM1009 | SWITCH, DIFFERENTIAL (FILTER) | CUSTOM CONTROL SENSORS | CUSTOM CONTROL SENSORS | TRAILER | AS NEEDED | 98 | 1 | 2 | NO | | | | | | | | | | | | | | | | | |
| 23 | PH720-01-CGVSSN MODEL 23 | FILTER CARTRIDGE STRAINER TYPE 304SS | HILCO MUELLER | HILLARD EPS | TRAILER | AS NEEDED AS NEEDED | 49 49 | 6 | 13 | NO NO | | | | | | | | | | | | | | ^j | <u> </u> | | |
| 23 | P2-EGS-60T | INJECTION PUMP * | SUNFLO | SUNFLO/PHOENIX/ATLANTIC | AER PUMP SHOP | AS NEEDED | 56 | 2 | 1 | YES | 6/15/15 | 2 | 08/14/15 | 30672 | 6/4/2015 | | 65880 | 3 | YES | ## | | | 1 | 06/15/05 | 23 | repaired pump failed under warrenty | no |
| 23 | 37kW/3565rpm | INJECTION MOTOR | LEROY SOMER/BALDOR | CORTES | AER PUMP SHOP | AS NEEDED | 84 | 2 | 2 | | 5/18/15 | 1 | 07/17/15 | 30672 | 6/4/2015 | | 65880 | 2 | YES | ## | | | | <u>† </u> | <u> </u> | | |
| 23 EZ/ 23 | CL300RF/667/30/DVC6200 DVC6200 | CONTROL VALVE (REBUILD KIT) FIELDvue SMART POSITIONER (VALVE AUXILIARY) | FISHER FISHER | CONTROLS ASSOCIATES CONTROLS ASSOCIATES | TRAILER | AS NEEDED AS NEEDED | 84 84 | 1 | 2 | NO NO | | | | | | | | | | + + | | | | + | <u> </u> | | |
| 23 | 67CF | AIR REGULATOR (VALVE AUXILLARY) LIMIT SWITCH (VALVE AUXILLARY) | FISHER | CONTROLS ASSOCIATES CONTROLS ASSOCIATES | TRAILER | AS NEEDED | 70 | 1 | 2 | NO | | | | | | | | | | | | | | | <u> </u> | | |
| | CL600RF/667/34/DVC6200 | CONTROL VALVE (PRESSURE AND FLOW) | FISHER | Controls Associates | TRAILER | AS NEEDED 4-6 years | 70 | 1 | 2 | NO NO | | | | | | | | | | | | | | <u>+</u> | | | |
| | | CONTROL VALVE: AIR TO OPEN - FAIL CLOSE CONTROL VALVE: AIR TO CLOSE - FAIL OPEN | VALTEK VALTEK | PHARMACEUTICAL PROCESSES SYSTEMS PHARMACEUTICAL PROCESSES SYSTEMS | TRAILER | AS NEEDED AS NEEDED | 56 84 | 1 | 2 | NO NO | | + | | | | | | | | + | | | | +7 | <u> </u> | | |
| /18 | | CONTROL VALVE (REPAIR KIT) | VALTEK | PHARMACEUTICAL PROCESSES SYSTEMS | TRAILER | AS NEEDED | 49 | 2 | 4 | NO | | | | | | | | | | | | | | | <u> </u> | | |
| /18 /18 | NT3000 T1200-30A7 | VALTEK BETA POSITIONER (VALVE AUXILIARY) INJECTION NOZZLE | VALTEK DELAVAN | PHARMACEUTICAL PROCESSES SYSTEMS JOHNSTONE SUPPLIES | TRAILER | AS NEEDED AS NEEDED | 49 56 | 4 80 | 6 200 | NO NO | | | | | | | | | | | | | | | <u> </u> | | |
| /18 | MODEL 1719 1502-9 (1719 REPAIR KIT) | CHECK VALVE (FUEL) CHECK VALVE (REBUILD KIT) | KEPNER KEPNER | KEPNER KEPNER | AWAITING PARTS AWAITING PARTS | AS NEEDED AS NEEDED | 49 49 | 10 | 20 20 | NO NO | | | | | | | | | | | | | | | <u> </u> | | |
| | | TRANSMITTER, PUMP DISCHARGE PRESSURE | EMERSON | ROSEMOUNT | TRAILER | AS NEEDED | 49 56 | 2 | 3 | NO | | | | | | | | | | | | | | | | | |
| 8/23 | 9834864 9834898 | Gauge, 0-200 psig Gauge, 0-600 psig | WIKA WIKA | EPS EPS | TRAILER | AS NEEDED AS NEEDED | 49 49 | 2 | 9 | NO NO | | | | | | | | | | | | | | | + | | |
| 8/23 | 9834910 | Gauge, 0-1000 psig | WIKA | EPS | TRAILER TRAILER | AS NEEDED | 49 | 2 | 4 | NO | | | | | | | | | | | | | | | <u> </u> | | |
| 18/23 18/23 | 9834082 9834090 | Gauge, 0-1500 psig Gauge, 0-2000 psig | WIKA WIKA | EPS | TRAILER | AS NEEDED AS NEEDED | 49 49 | 2 | 4 | NO NO | | | | | | | | | | | | | | | <u> </u> | | |
| 18/23 18/23 | RCCS36-A02A1SL/BG RCCF31-AH2A/BG/AP | ROTAMASS FLOW DETECTOR** ROTAMASS FLOW CONVERTER** | YOKOGAWA | MICROTECH SYSTEMS & CONTROLS MICROTECH SYSTEMS & CONTROLS | TRAILER | AS NEEDED AS NEEDED | 70 70 | 1 | 2 | NO NO | | | | | | | | | | | | | | | | | |
| 18/23 | 10' | ROTAMASS FLOW CABLE** | YOKOGAWA | MICROTECH SYSTEMS & CONTROLS | TRAILER | AS NEEDED | 70 | 1 | 2 | NO | | | | | | | | | | | | | | | | | |
| 3/23/25 Mi 3/23/25 | VARIOUS PARTS | SUPPLY PUMP (22 STORAGE) SUPPLY PUMP REBUILD KIT (22 STORAGE) | GOULDS GOULDS | EPS EPS | TRAILER | AS NEEDED AS NEEDED | 70 | 2 | 4 | YES NO | 6/17/15 | 1 | 08/16/15 | 31078 | 6/17/2015 | | | 2 | YES | 09/25/15 | | | | ^j | <u> </u> | | |
| .8/23/25 .8/23/25 | WES4 DURAFLEX 15HP/3/60/230-460V | COUPLING, SUPPLY PUMP (22 STORAGE) MOTOR, SUPPLY FRAME 254T (22 STORAGE) | TB WOODS BALDOR | EPS | TRAILER | AS NEEDED AS NEEDED | 70 70 | 2 | 2 | YES NO | 5/18/15 | 1 | 07/17/15 | 30803 | 6/19/2015 | | | 1 | YES | 08/26/15 | | | | | | | |
| 8/23/25 | VARIOUS PARTS | CONTROL VALVE RE-BUILD W/ AUX (22 STORAGE LEVEL) | FISHER | CONTROLS ASSOCIATES | TRAILER | AS NEEDED | 70 | 1 | 2 | NO | | | | | | | | | | | | | | + | | | |
| | | TRANSMITTER, STORAGE TANK LEVEL | EMERSON | ROSEMOUNT | TRAILER | AS NEEDED | 56 | 1 | 2 | NO | | | | | | | | | | | | | | | <u> </u> | | |
| , = 0, = 0 | | | | | | | | | | | | | | | | | | | | | | | | + | <u> </u> | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | pump in place on pump rack. ponent also maintained in St. Cr | roix Spare Parts Inventory Program | | | | | | | | | | | | | | | | | | | | | | ' | + | | |
| rted procureme | ent process with new vendor as | s a result of issues with initial vendor. motor for rebuild; includes faile pump under warranty. | | | | - | <u> </u> | 1 | - | | - | | | | | | | | | | | | | — | | | |
| nn Key | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ry Program - list of critical pa e inventory and purchased of | arts maintained in-stock supporting timely repairs and preve quantities were updated | ntive maintenance of NOx Water Inje | ction Systems for Gas Combustion Turbines. Refere | nce to specific sections of draft C | Consent Decree in colu | umn headings. | | | | | | | | | | | | | | | | | | <u> </u> | | |
| Combustion to | turbine unit(s) requiring part | t | | | | | | | | | | | | | | | | | | | | | | | L | | |
| | WAPA part identification i identity of part based on nan | number ne, size, material of construction, or other specification | | | | | | | | | | | | | | | | | | | | | | | | | |
| | t manufacturer ir parts purchased or to be p | urchased | | | | | | | | | | | | | | | | | | + | | | | + | <u> </u> | | |
| ge Location - p | physical location of parts | | | | | | | | | | | | | | | | | | | | | | | <u>† </u> | L | | |
| | | of repair or replacement of the individual components; "As N rdering and delivery of parts, i.e., from initiation of procurem | | t tailure | | | | | | | | | | | | | | | | | | | | +' | <u> </u> | | + |
| um Inventory | Qty - minimum number of - Verification of inventory of | units required to be in stock to ensure parts are always on-h | and; when inventory is at this level r | e-ordering is initiated | | | | | | | | | | | | | | | | | | | | — | <u> </u> | | |
| der Required? | - Spreadsheet determination | on as to whether re-ordering is required: "YES" if TOTAL qua | ntity on-hand is less than the Minimu | im Inventory Quantity | | | | | | | | | | | | | | | | | | | | <u>† </u> | L | | |
| num Re-Order (| Quantity - Spreadsheet dete | when deficiency determined and re-order required; default de ermination as to the number of parts that must be ordered t | o increase the inventory level to abo | ve the minimum required | | | | | | | | | | | | | | | | | | | | <u> </u> | <u> </u> | | |
| PO/Contract Re | Required - Based on draft Con | nsent Decree allows for purchase to be completed within 60 sition requesting issuance of Purchase Order | days of determination inventory belo | ow minimum | | | | | | | | | | | | | | | - | ++ | | | | + | + | | |
| PO/Contract Iss | ssued - date purchase order, | /contract issued | h Olliss and as the | | | | | | | | | | | | | | | | | | | | | 1 | L | | |
| ontract Number | er - identification number as | | n ming order, i.e., no contractual iss | Jes | | | | | | | | | | | | | | | | | | | | <u>+</u> | <u> </u> | | |
| arts on Order - | Number of replacement pa | arts on order listed separately for each PO date determination as to whether a sufficient number of parts we | re ordered to eliminate the inventor | v deficiency: basis for issuance of nenalties "VEC" ma | ans sufficient parts were ordered | d | | | | | | | | | | | | | | | | | | | <u> </u> | | |
| Parts Expected | d - date when parts expected | d to be delivered | i e ordered to emiliate the inventor | y occurrency, basis for issuance of penalties. YES mi | sans sumcient parts were ordered | • | | | | | | | | | | | | | | | | | | <u>† </u> | | | |
| | number of parts received b date parts received | by corresponding purchase order date | | | | | | | | | | | | | | | | ├ ── | | + | | | | + | <u>+</u> | + | |
| | ompliant? - Spreadsheet det | termination whether parts were as received within 30 days on somn from inventory for repairs or maintenance | of order lead time from date invento | ry determined to be below required minimum | | | | | | | | | | | | | | | | | | | | | <u> </u> | | |
| | d - number of parts withdra | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |
| arts Dispatchea Parts Dispatche | ed - date parts withdrawn f | rom inventory for use in repairs or maintenance e., replacement with dispatched parts | | | | | | | | | | | | | | | | | | | | | | | | | |

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APPENDIX C

VIWAPA RANDOLPH HARLEY GENERATING FACILITY ST. THOMAS

WATER INJECTION DATA SHEET*

MONTH _____ YEAR _____

| | Unit Op. | | Water Injection System Downtime | | | | | | | | | | | | | |
|----------|-------------------|-------------------|---------------------------------|----------------|-------------------|---------------------|--|--|--|--|--|--|--|--|--|--|
| Unit No. | Hrs. per Month | Downtime Hours | % Downtime | Downtime Cause | Corrective Action | Correction Schedule | | | | | | | | | | |
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*These data sheets are to be submitted to EPA as part of the quarterly reports required by the Consent Decree

APPENDIX D

LIST OF WATER INJECTION SYSTEM COMPONENTS TO EVALUATE DURING AUDITS

Units 15, 18, and 23 - On-Turbine Base Components

- \Box Water injection manifold
- \Box Ten combustors, each with water injection nozzles

Units 15, 18 and 23 - Off-Base Components on Skid

- □ Redundant pumps and drive motors
- □ Inlet water strainer and pressure switch (Unit 23 only)
- \Box Water filters
- □ Differential pressure gauge
- □ Flowmeters
- □ Flow control valve (Unit 15 and Unit 18)
- □ Flow pressure regulating valve (Unit 23)
- \Box Fuel nozzle assemblies
- □ Check valves, hand operated valves, temperature gauges and pressure gauges.

The following calibrations / checks must be performed during audit

- □ Calibration Electronic Circuits
- □ Calibration of Control Valve Circuits
- □ Calibration of Flowmeter Circuits
- □ Check Flowmeter Accuracy
- \Box Check Control Valve for Leakage
- \Box Check Stop Valve Operation
- \Box Check Stop Valve for Leakage
- □ Check Forwarding Pump Oil Level
- □ Check that Water Flow Is per Control Specifications
- \Box Check Accumulator Precharge
- □ Check Water Spray Nozzles for Plugging & Spray Pattern

APPENDIX E

LIST OF CONTINUOUS MONITORING SYSTEM COMPONENTS TO EVALUATE DURING AUDIT

- 1. NO_X , O_2 and CO_2 analyzers
- 2. External NOx Analyzer vacuum pump
- 3. High voltage power supply for heated sample line
- 4. DC power supply
- 5. Water Slip Filters
- 6. Sample Lines
- 7. Sample Probe Straw
- 8. Sample Probe Gaskets and Filters
- 9. Programmable Logic Controllers (PLC)
- 10. Flow Monitors
- 11. Dilution Air System
- 12. Calibration Gas Systems
- 13. Indicator Lights and Alarms
- 14. Sample Chiller
- 15. AC System
- 16. DAHS Server
- 17. Air cleaner assembly
- 18. Peristaltic pump
- 19. COMS Blower filter