

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
1947 Galileo Court, Suite 103, Davis, CA 95618
(530)757-3650

**TITLE V OPERATING PERMIT
PROPOSED RENEWAL**

Permit Number: F-05409-2

ISSUED TO:

CalPeak Power - Vaca Dixon, LLC
7365 Mission Gorge Road, Suite C
San Diego, CA 92120

PLANT SITE LOCATION:

PG&E Vaca-Dixon Substation
5157 Quinn Road
Vacaville, CA 95688-9452

ISSUED BY:

	_____	_____
	Mat Ehrhardt, P.E., Air Pollution Control Officer	Date
PROPOSED	November 10, 2010	
EFFECTIVE	PROPOSED	
EXPIRATION	PROPOSED	

Nature of Business: Utility Power Generation

SIC Code: 4911

Responsible Official:

Name: Jeff Paul
Title: General Manager
Phone: (619) 229-3770

Site Contact Person:

Name: Ramiro Gonzalez
Title: Site Supervisor
Phone: (619) 229-3770

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APPENDIX A: Title IV - Acid Deposition Control, Permit Number: ARP-05409-A

I. FACILITY EMISSION UNITS AND EQUIPMENT LISTS:

A. Insignificant Emissions Units

Insignificant emissions units or exempted equipment may be supplemented, replaced or modified with non-identical equipment without notice provided exemption status has not changed as defined in current district or federal rules. The equipment listed in Table 1 is a partial listing of equipment currently identified as exempt or insignificant and not required to obtain an operating permit pursuant to Rule 3.2 (Exemptions) of the Yolo-Solano Air Quality Management District.

Table 1: Exempted And Insignificant Emissions Units (partial listing)

Insignificant Equipment Description	Basis for Exemption
Motor Vehicles	District Rule 3.2, Section 101
Stationary Internal Combustion (IC) Engine less than 50 Brake-horsepower	District Rule 3.2, Section 105.1
Misc. Storage and Transfer Tanks	District Rule 3.2, Section 109
Maintenance Solvent Cleaning	District Rule 3.2, Section 110
Maintenance Coating Operations	District Rule 3.2, Section 110

B. Significant Emissions Unit Information

Each of the following emission units has been constructed pursuant to the requirements of an approved Authority to Construct (ATC) that has been issued in accordance with District Rule 3.1 (General Permit Requirements) and District Rule 3.4 (New Source Review).

Identification Number: P-44-02, Emergency IC Engine

Equipment Description: 60 BHP diesel fired John Deere IC engine, Model No. JU4H-UF20, Serial No. PE4045D181225, Model Year 2002, Non-Certified Engine

Control Equipment: None

Identification Number: P-45-02(a1), Utility Power Generation

Equipment Description: Pratt & Whitney FT-8 Twin Pac unit, consisting of two (2) natural gas fired, simple cycle, combustion turbines (500 MMBtu/hr total heat input), Serial No.'s P728615 and P728616, driving a common generator (nominal electrical output 49.5 MW at ISO conditions)

Control Equipment: Dry low-NO_x combustors, Haldor Topsoe Selective Catalytic Reduction (SCR) system, Englehart oxidation catalyst, and a Continuous Emission Monitoring System (CEMS)

II. SPECIFIC UNIT REQUIREMENTS

A. Emission Limits

Emission Limits for P-44-02

- A.1 The VOC emissions from the emergency engine of P-44-02 shall not exceed 0.5 lb/day, 4 lb/1st calendar quarter, 4 lb/2nd calendar quarter, 4 lb/3rd calendar quarter, 4 lb/4th calendar quarter, and negligible tons/year. [District Rule 3.4/C-02-78]
- A.2 The CO emissions from the emergency engine of P-44-02 shall not exceed 2.6 lb/day, 22 lb/1st calendar quarter, 22 lb/2nd calendar quarter, 22 lb/3rd calendar quarter, 22 lb/4th calendar quarter, and 0.01 tons/year. [District Rule 3.4/C-02-78]
- A.3 The NO_x emissions from the emergency engine of P-44-02 shall not exceed 20.0 lb/day, 167 lb/1st calendar quarter, 167 lb/2nd calendar quarter, 167 lb/3rd calendar quarter, 167 lb/4th calendar quarter, and 0.08 tons/year. [District Rules 2.16 and 3.4/C-02-78]
- A.4 The SO_x emissions from the emergency engine of P-44-02 shall not exceed 0.6 lb/day, 5 lb/1st calendar quarter, 5 lb/2nd calendar quarter, 5 lb/3rd calendar quarter, 5 lb/4th calendar quarter, and negligible tons/year. [District Rules 2.12, 2.16, and 3.4/C-02-78]
- A.5 The PM₁₀ emissions from the emergency engine of P-44-02 shall not exceed 0.4 lb/day, 3 lb/1st calendar quarter, 3 lb/2nd calendar quarter, 3 lb/3rd calendar quarter, 3 lb/4th calendar quarter, and negligible tons/year. [District Rules 2.11, 2.12, 2.16, and 3.4/C-02-78]

Emission Limits for P-45-02(a1)

- A.6 The VOC emissions from the two combustion turbines of P-45-02(a1) shall not exceed 34.3 lb/day, 2,550 lb/1st calendar quarter, 2,550 lb/2nd calendar quarter, 2,550 lb/3rd calendar quarter, 2,550 lb/4th calendar quarter, and 5.10 tons/year. [District Rule 3.4/C-06-66]
- A.7 The CO emissions from the two combustion turbines of P-45-02(a1) shall not exceed 240.0 lb/day, 13,389 lb/1st calendar quarter, 13,389 lb/2nd calendar quarter, 13,389 lb/3rd calendar quarter, 13,389 lb/4th calendar quarter, and 26.78 tons/year. [District Rule 3.4/C-06-66]
- A.8 The NO_x emissions from the two combustion turbines of P-45-02(a1) shall not exceed 123.2 lb/day, 7,332 lb/1st calendar quarter, 7,332 lb/2nd calendar quarter, 7,332 lb/3rd calendar quarter, 7,332 lb/4th calendar quarter, and 14.66 tons/year. [District Rules 2.16 and 3.4, 40 CFR Part 60.332(b)/C-06-66]
- A.9 The SO_x emissions from the two combustion turbines of P-45-02(a1) shall not exceed 33.8 lb/day, 2,511 lb/1st calendar quarter, 2,511 lb/2nd calendar quarter, 2,511 lb/3rd calendar quarter, 2,511 lb/4th calendar quarter, and 5.02 tons/year. [District Rules 2.12, 2.16, and 3.4, and 40 CFR Part 60.333(a)/C-06-66]
- A.10 The SO₂ emissions from the two combustion turbines of P-45-02(a1) shall not exceed the annual emissions allowances (up to one (1) ton per year of SO₂ may be emitted for each emission allowance allotted) that the source lawfully holds for that unit under Title IV of the CAA or the regulations promulgated pursuant to Title IV. [District Rule 3.8, §302.19(a)]
- A.11 Although there is no limit on the number of SO₂ emissions allowances held by a source, the Permit Holder shall not use these emissions allowances as a defense for non-compliance with any applicable federal requirement or District requirement, including District Regulation III (Permit System). [District Rule 3.8, §302.19(c)]
- A.12 The PM₁₀ emissions from the two combustion turbines of P-45-02(a1) shall not exceed 79.5 lb/day, 5,916 lb/1st calendar quarter, 5,916 lb/2nd calendar quarter, 5,916 lb/3rd calendar quarter, 5,916 lb/4th calendar quarter, and 11.83 tons/year. [District Rules 2.11, 2.12, 2.16, and 3.4/C-06-66]

- A.13 The emission concentration when operating under load conditions (except during periods of thermal stabilization) shall not exceed the following:
- a. NO_x (as NO_2) - 12 ppmvd, corrected to 15% O_2 (15-minute average). [District Rule 2.34, §301/C-06-66]
- A.14 The emission concentrations (except during periods of turbine start-up and thermal stabilization, and turbine shutdown) shall not exceed the following:
- a. VOC (as methane) - 2.0 parts per million by volume dry (ppmvd), corrected to 15% O_2 , (3-hour rolling average);
 - b. CO - 50.0 ppmvd, corrected to 15% O_2 , (3-hour rolling average);
 - c. NO_x (as NO_2) - 3.0 ppmvd, corrected to 15% O_2 , (3-hour rolling average);
 - d. NH_3 - 10.0 ppmvd, corrected to 15% O_2 ;
 - e. SO_x - 0.0028 lb/MMBtu; and
 - f. PM_{10} - 0.0066 lb/MMBtu. [District Rule 3.4, §409.2(a)/C-06-66]
- A.15 The mass emissions from the gas turbines (including periods of start-up, thermal stabilization, and shutdown) shall not exceed the daily, quarterly, or annual values listed in the Permitted Emission Limits table of P-45-02(a1). [District Rule 3.4, §409.2(b)/C-06-66]

B. Work Practice and Operational Requirements

Process Limits for P-44-02

- B.1 The maximum diesel fuel consumption rate of the IC engine of P-44-02 shall not exceed 91 gallons/day, 760 gallons/1st calendar quarter, 760 gallons/2nd calendar quarter, 760 gallons/3rd calendar quarter, 760 gallons/4th calendar quarter, and 760 gallons/year. [District Rule 3.4/C-02-78]

Process Limits for P-45-02(a1)

- B.2 The maximum natural gas fuel consumption rate of the turbines of P-45-02(a1) shall not exceed 11.815 million cubic feet/day, 878.738 million cubic feet/1st calendar quarter, 878.738 million cubic feet/2nd calendar quarter, 878.738 million cubic feet/3rd calendar quarter, 878.738 million cubic feet/4th calendar quarter, and 3,514.951 million cubic feet/year. [District Rule 3.4/C-06-66]

Requirements for P-44-02

- B.3 The operation shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
 - a. As dark or darker in shade than No. 2 on the Ringelmann Chart;
or
 - b. Greater than 40% opacity. [District Rule 2.3/C-02-78]
- B.4 The Permit Holder shall not operate the IC engine more than fifty (50) hours per calendar year for maintenance and testing purposes, and such operation shall be scheduled in cooperation with the District so as to limit air quality impact. [District Rule 3.4, §110.1/C-02-78]
- B.5 The Permit Holder shall not operate the IC engine more than two-hundred (200) hours per calendar year. [District Rule 3.4, §110.2/C-02-78]
- B.6 The Permit Holder's operation of the IC engine for reasons other than maintenance and testing purposes shall be limited to the emergency pumping of water for fire fighting. [District Rule 3.4, §110.4]

Requirements for P-45-02(a1)

- B.7 The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
 - a. As dark or darker in shade than No. 2 on the Ringelmann Chart;
or
 - b. Greater than 40% opacity. [District Rule 2.3/C-06-66]
- B.8 The start-up and thermal stabilization of the gas turbines shall not exceed a time period of two (2) hours per each occurrence. The start-up clock begins with the initial firing of the turbines and continues until the units meet the CO and NO_x ppmvd emission concentration limits. [District Rule 3.4/C-06-66]
- B.9 The shutdown of the gas turbines shall not exceed a time period of thirty (30) minutes per each occurrence. The shut-down clock begins with the initiation of the turbine shutdown sequence and ends with the cessation of firing of the gas turbines. [District Rule 3.4/C-06-66]

- B.10 The turbines shall be fired only on natural gas with a total sulfur content not exceeding 1 grain/100 standard cubic foot of gas. [District Rule 3.4, §409.2(a) and 40 CFR Part 60.333(b)/C-06-66]
- B.11 The Permit Holder shall install and maintain a District approved fuel flow meter in order to record the fuel heat input rate to the turbines. [District Rule 3.4/C-06-66]
- B.12 The Permit Holder shall install and maintain an ammonia (NH₃) flow meter and injection pressure indicator for the ammonia injection system. The equipment shall be accurate to plus or minus five percent (+/- 5%) and shall be calibrated once every twelve (12) months. [District Rule 3.4/C-06-66]
- B.13 The Permit Holder shall install and maintain such facilities as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with California Air Resources Board Test Method 1 or U.S. EPA Test Methods. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4/C-06-66]
- B.14 The Permit Holder shall install and maintain a CEMS for CO, NO_x, and O₂ in the exhaust gas stack. The CEMS shall comply with the requirements of 40 CFR Part 60 - Appendices B and F, and 40 CFR Part 75 - Appendices A and B, and shall be capable of monitoring concentrations and mass emissions during normal operating conditions and during start-up and shutdown periods. [District Rule 2.34, §501.1, 40 CFR Part 60.13(a) and Part 75.1(b)/C-06-66]
- B.15 The Permit Holder shall comply with the applicable requirements of 40 CFR Part 60 - Subpart GG (Standards of Performance for Stationary Gas Turbines). [40 CFR Part 60.330/C-06-66]
- B.16 The Permit Holder shall comply with the applicable requirements of 40 CFR Part 72 (Acid Rain Program) and Part 73 (Sulfur Dioxide Allowance System). [40 CFR Part 72 and Part 73/C-06-66]
- B.17 The Permit Holder shall comply with the applicable requirements of 40 CFR Part 75 (Continuous Emission Monitoring). [40 CFR Part 75/C-06-66]

- B.18 The Permit Holder shall comply with the Title IV (Acid Deposition Control) requirements contained in Appendix A of the Title V permit. [District Rule 3.23]

C. Monitoring and Testing Requirements

Requirements for P-45-02(a1)

- C.1 The Permit Holder shall analyze the fuel's higher heating value (wet basis), and the total sulfur and nitrogen content of the fuel gas on a quarterly basis. [District Rule 3.4 and 40 CFR Part 60.334(h)/C-06-66]
- C.2 The NH₃ emission concentration (slip) shall be verified by the continuous recording of the ammonia injection rate to the SCR control system. The equipment shall operate within the NH₃ injection range established during the most recent source test until re-established through another valid source test. [District Rule 3.4/C-06-66]
- C.3 The Permit Holder shall perform a source test at least once every twelve (12) months to demonstrate compliance with the following items:
- a. VOC concentration (ppmvd @ 15% O₂);
 - b. CO concentration (ppmvd @ 15% O₂);
 - c. NO_x concentration (ppmvd @ 15% O₂);
 - d. NH₃ concentration (ppmvd @ 15% O₂); and
 - e. Stack gas flow rate (SDCFM). [District Rule 3.4/C-06-66]
- C.4 The Permit Holder shall perform a Relative Accuracy Test Audit (RATA) of the CO, NO_x and O₂ CEMS at least once every four (4) successive quality assurance (QA) operating quarters (as defined by 40 CFR Part 72.2, at least 168 unit operating hours) or at least once every twenty four (24) consecutive months, whichever is more stringent. The RATA shall be performed in accordance with 40 CFR Part 75 - Appendix B (Quality Assurance and Quality Control Procedures). [District Rule 3.4, 40 CFR Part 60 - Appendix F, Section 5.1.1 and 40 CFR Part 75 - Appendix F, Section 2.3.1.1/C-06-66]
- C.5 The Permit Holder shall perform the following tests (or alternative test methods, if approved in advance by the District) to measure the required pollutant emission concentrations during any emission testing event:
- a. VOC - U.S. EPA Method 18 or 25, or CARB Method 100;
 - b. CO - U.S. EPA Method 10, or CARB Method 100;
 - c. NO_x (as NO₂) - U.S. EPA Method 20, or CARB Method 100;
 - d. Stack gas oxygen - U.S. EPA Method 20, or CARB Method 100;

- e. Flow rate - U.S. EPA Method 19, or CARB Methods 1-4; and
 - f. NH₃ - Bay Area Air Quality Management District (BAAQMD) Method ST-1B. [District Rule 2.34, §503.1 & District Rule 3.4/C-06-66]
- C.6 A written quality assurance (QA) program shall be established in accordance with 40 CFR Part 60 - Appendix F and 40 CFR Part 75 - Appendix B. [40 CFR Part 60 - Appendix F, Section 3 and 40 CFR Part 75 - Appendix B, Section 1]
- C.7 The CEMS is required to quantify and record the calibration drift (CD) at two concentration values at least once every unit operating day (as defined by 40 CFR Part 72.2, any day that the unit combusts fuel) in accordance with the method prescribed by the manufacturer. The CEMS calibration must, as minimum, be adjusted whenever the daily zero (or low-level) CD or the daily high-level CD exceeds two times (2x) the limits of the applicable Performance Standards listed in Appendix B of 40 CFR Part 60. [40 CFR 60 - Appendix F, Procedure 1, Section 4.1 and Part 72.2]
- C.8 If either the zero (or low-level) or high-level calibration drift (CD) result exceeds twice (2x) the applicable drift specification for five (5), consecutive daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times (4x) the applicable drift specification (listed in Appendix B of 40 CFR Part 60) during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary action. Following corrective action, repeat the CD checks. [40 CFR 60 - Appendix F, Procedure 1, Section 4.3]
- C.9 During the period that the CEMS is out-of-control (as defined in Procedure 1, Section 4.3.1 of Appendix F), the CEMS data may not be used in calculating emission compliance or be counted towards meeting the minimum data availability as required and described in any applicable subparts. [40 CFR 60 - Appendix F, Procedure 1, Section 4.3.2]
- C.10 Whenever excessive audit inaccuracies (as defined in Section 5.2.3 of Appendix F, Procedure 1) occur for two (2) consecutive quarters, the source owner or operator must revise the quality control (QC) procedures or modify or replace the CEMS. [40 CFR 60 - Appendix F, Procedure 1, Section 5.3]
- C.11 Each CEMS must be audited at least once every calendar quarter that a RATA is not performed, either with a cylinder gas audit (performed in accordance with 40 CFR Part 60 – Appendix F) or with a linearity test

(performed in accordance with 40 CFR Part 75 – Appendix B). Successive quarterly audits shall occur no closer than two (2) months. In any calendar quarter which qualifies as QA operating quarter, the audit shall be a linearity test. In every other calendar quarter, the audit shall be a CGA. [District Rule 3.4, 40 CFR Part 60 - Appendix F, Section 5.1.2, and 40 CFR Part 75 - Appendix B, Section 2.2.1]

- C.12 The District must be notified prior to any emissions testing event (source test or RATA), and a protocol must be submitted for approval thirty (30) days prior to testing. The results of an emissions testing event shall be submitted to the District within sixty (60) days of the test date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4/C-06-66]

D. Recordkeeping Requirements

Requirements for P-44-02

- D.1 The Permit Holder shall maintain a log of the operation hours for the IC engine identifying the type of usage (either maintenance or emergency), the duration and date of each usage. The log shall be retained for a period of five (5) years and be made available to District personnel upon request. [District Rules 2.32, §503.1 & District Rule 3.4, §501/C-02-78]

Requirements for P-45-02(a1)

- D.2 The Permit Holder shall maintain the following records:
- a. The hourly, average three-hour (rolling average), daily, quarterly, and annual quantity of fuel used and corresponding heat input rates;
 - b. The daily, quarterly, and annual hours of operation;
 - c. The date, the time, the duration, and the type of any start-up and thermal stabilization, malfunction, or shutdown, along with the resulting mass emissions during such periods;
 - d. The emission measurements from all source testing, (Relative Accuracy Test Audits (RATAs), and fuel analyses;
 - e. The hourly records of CO and NO_x emission concentrations;
 - f. The hourly ammonia injection rate;
 - g. The three-hour (rolling average) records of CO and NO_x emission concentrations;
 - h. The daily, quarterly, and annual records of the measured cumulative CO and NO_x mass emissions;

- i. The daily, quarterly, and annual records of the calculated (using the measured heat input per period and the emission concentration from the previous source test) cumulative VOC, SO_x, PM₁₀, and NH₃ mass emissions; and
 - j. For the CEMS, performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any CEM. [District Rule 2.34, §502 and District Rule 3.4/C-06-66]
- D.3 The Permit Holder shall report to the District any violation of any emission standard, as indicated by the CEMS within ninety-six (96) hours after such occurrence. [District Rule 3.4/C-06-66]
- D.4 The Permit Holder shall submit to the District a written report for each calendar quarter, within thirty (30) days of the end of the quarter, which includes the following:
- a. The time intervals, date, and magnitude of excess emissions;
 - b. The nature and cause of the excess emission, and corrective actions taken;
 - c. The time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; and
 - d. A negative declaration when no excess emissions occurred. [District Rule 3.4/C-06-66]
- D.5 All records required to be maintained by P-45-02(a1) shall be retained for a period of five (5) years and shall be made readily available for District inspection upon request. [District Rule 2.34, §502.1 and District Rule 3.8, §302.6(b)/C-06-66]
- D.6. The SO₂ allowances for the two combustion turbines of P-45-02(a1) shall be accounted for according to the procedures established in regulations promulgated pursuant to Title IV of the CAA. [District Rule 3.8, §302.19(d)]

III. FACILITY WIDE REQUIREMENTS

A. Opacity

- A.1 The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines; or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection (a) of this condition. [District Rule 2.3]

B. Nuisance

- B.1 The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property. [This permit condition is federally enforceable because it derives from District Rule 2.5 - Nuisance that is currently part of the California State Implementation Plan (SIP). The District is taking steps to remove Rule 2.5 from the SIP. Once the U.S. EPA has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become state-enforceable only]

C. Circumvention

- C.1 The Permit Holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California or District Rules or Regulations. [District Rule 2.17]

D. General Permit Requirements

- D.1 No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the Air Pollution Control Officer (APCO) as specified in Section 401 of District Rule 3.1. [District Rule 3.1, §301.1]
- D.2 No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by

District Rules and Regulations without first obtaining a written permit from the APCO. [District Rule 3.1, §302.1]

- D.3 No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, without obtaining a permit from the APCO or the Hearing Board. [District Rule 3.1, §302.2]
- D.4 The Permits to Operate shall not be transferable, by operation of law or otherwise, from one location to another or from one piece of equipment to another. It shall be the transferee's responsibility to inform the District on assumption of ownership or operating control of any item under a Permit to Operate from the District and for which a Permit to Operate will be required. For any such transfer as hereinabove described, said transferee shall submit an application for authorization in accordance with applicable District Rules. [District Rule 3.1, §304]
- D.5 All Permits to Operate shall be renewable annually on the individual permit's anniversary date, commencing one year after the date of issuance. The Permit Holder shall pay a fee for the annual permit renewal. If the annual renewal fee is not paid by the specified due date, the District shall assess a penalty of not more than 50% of the fee due. Non-payment of renewal fees is grounds for permit cancellation. [District Rule 3.1, §305 and District Rule 4.1, §303 & 401]
- D.6 Commencing work or operation under any Permits to Operates shall be deemed acceptance of all of the conditions so specified. [District Rule 3.1, §402]
- D.7 The Permit Holder shall submit an annual throughput/production report at the end of each calendar year for each Permit to Operate. These reports are due no later than March 31 for the previous year. This report must include actual operating hours and actual amounts of materials processed (for materials that have process limits listed on the Permit to Operate). Each type of material and each type of process must be listed separately. [District Rule 3.1, §405.1]
- D.8 The owner or operator of any facility, article, machine, equipment, or other contrivance for which a Permit to Operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the Permit to Operate exists. Such notice shall be given to

the District no later than four (4) hours after occurrence during regular workday hours or no later than two (2) hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1, §405.3]

- D.9 The Permit Holder shall firmly affix all Permits to Operate, an approved facsimile, or other approved identification bearing the permit number upon the facility, article, machine, equipment, or other contrivance in such a manner as to be clearly visible and accessible. In the event that the facility, article, machine, equipment, or other contrivance is so constructed or operated that the Permit to Operate cannot be so placed, the acid rain unit shall be mounted so as to be clearly visible in an accessible place within twenty (25) feet of the facility, article, machine, equipment, or other contrivance, or maintained readily available at all times on the operating premises. [District Rule 3.1, §408]
- D.10 Modifications to this permit, as defined by District Rules and Regulations, requires prior District approval. A modification is defined as any physical change, change in method of operation, addition to or any change in hours of operation, or change in production rate, which: would necessitate a change in permit conditions; or is not specifically limited by a permit condition; or results in an increase in emissions not subject to an emissions limitation. [District Rule 3.4, §223]

IV. TITLE V GENERAL REQUIREMENTS

A. Right of Entry

- A.1 The permit shall require that the source allow the entry of the District, the CARB, or the U.S. EPA officials for the purpose of inspection and sampling, including:
- a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
 - b. Inspection and duplication of records required by the Acid rain unit; and
 - c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

B. Compliance with Permit Conditions

- B.1 The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11(a)]

- B.2 The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11(b)]
- B.3 Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11(c)]
- B.4 The Permit Holder shall not use the “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11(d)]
- B.5 A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11e]
- B.6 Within a reasonable time period, the Permit Holder shall furnish any information requested by the APCO, in writing, for the purpose of determining:
 - a. Compliance with the permit; or
 - b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11(f)]

C. Emergency Provisions

- C.1 Within two (2) weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:
 - a. An emergency occurred;
 - b. The Permit Holder can identify the cause(s) of the emergency;
 - c. The facility was being properly operated at the time of the emergency;
 - d. All steps were taken to minimize the emissions resulting from the emergency; and
 - e. Within two (2) working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken; andIn any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

D. Severability

- D.1 If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid,

such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

E. Compliance Certification

- E.1 The Responsible Official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on the date that the Title V permit was originally issued, and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [District Rule 3.8, §302.14(a)]
- E.2 The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8. [District Rule 3.8, §302.14(b)]
- E.3 The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14(c)]
- E.4 The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [District Rule 3.8, §302.14(d)]

F. Permit Life

- F.1 The Title V permit shall expire five (5) years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]

G. Payment of Fees

- G.1 An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited.

Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

H. Acid Rain Units

H.1 Any increase in the SO₂ emissions for the two combustion turbines of P-45-02(a1) that is authorized by allowances acquired pursuant to Title IV of the CAA shall not require a revision of Appendix A of this operating permit provided such increases do not require permit revision under any other applicable federal requirement. [District Rule 3.8, §302.19(b)]

I. Permit Revision Exemption

I.1 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [District Rule 3.8, §302.22]

J. Application Requirements

J.1 An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than eighteen (18) months and no later than six (6) months before the expiration date of the current Acid rain unit. [District Rule 3.8, §402.2]

J.2 An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]

J.3 An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:

- a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
- b. Proposed permit terms and conditions; and
- c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

K. Permit Reopening for Cause

- K.1 Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:
- a. The need to correct a material mistake or inaccurate statement;
 - b. The need to revise or revoke a acid rain unit to assure compliance with applicable federal requirements;
 - c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is three (3) years or greater, no later than eighteen (18) months after the promulgation of such requirement (where less than three (3) years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the Acid rain unit upon renewal); or
 - d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

L. Recordkeeping

- L.1 The Permit Holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:
- a. Date, place, and time of sampling;
 - b. Operating conditions at the time of sampling;
 - c. Date, place, and method of analysis; and
 - d. Results of the analysis. [District Rule 3.8, §302.6(a)]

M. Reporting Requirements

- M.1 Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than ten (10) days after detection.[District Rule 3.8, §302.7(a)]

- M.2 A semi-annual monitoring report shall be submitted at least every six (6) consecutive calendar months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. The six (6) month period will begin on the date that the Title V permit was originally issued, and will be due within thirty (30) days after the end of the reporting period, unless otherwise approved in writing by the District. [District 3.8, §302.7(b)]
- M.3 All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7(c)]
- M.4 Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7(e)]

APPENDIX A:

PROPOSED TITLE IV - ACID DEPOSITION CONTROL PERMIT

Permit Number: ARP-05409-A

Responsible Official (Designated Authority): Site Contact Person:

Name: Jeff Paul

Name: Ramiro Gonzalez

Title: General Manager

Title: Site Supervisor

Phone: (619) 229-3770

Phone: (619) 229-3770

A. Statutory and Regulatory Authorities (Statement of Basis)

A.1 In accordance with District Rule 3.8 (Federal Operating Permits) and Title IV and V for the Federal Clean Air Act, the Yolo-Solano Air Quality Management District issues this permit pursuant to the provisions of District Rule 3.8, Section 302.19, District Rule 3.23 (Acid Deposition Control), and 40 CFR Part 72.9 (Standard Requirements).

B. Acid Rain Unit

B.1 Identification Number: P-45-02(a1), Utility Power Generation

Equipment Description: Pratt & Whitney FT-8 Twin Pac unit, consisting of two (2) natural gas fired, simple cycle, combustion turbines (500 MMBtu/hr total heat input), Serial No.'s P728615 and P728616, driving a common generator (nominal electrical output 49.5 MW at ISO conditions)

Control Equipment: Dry low-NO_x combustors, Haldor Topsoe Selective Catalytic Reduction (SCR) system, Englehart oxidation catalyst, and a Continuous Emission Monitoring System (CEMS)

C. Monitoring Requirements

C.1 The owners and operators and, to the extent applicable, designated representative of the acid rain unit identified above shall comply with the monitoring requirements as provided in 40 CFR Part 75 (Continuous Emission Monitoring). [District Rule 3.23 and 40 CFR Part 72.9(b)(1)]

- C.2 The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the acid rain unit with the acid rain emissions limitations and emissions reduction requirements for SO₂ under the Acid Rain Program. [District Rule 3.23 and 40 CFR Part 72.9(b)(2)]
- C.3 The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source. [District Rule 3.23 and 40 CFR Part 72.9(b)(3)]

D. Sulfur Dioxide (SO₂) Requirements

- D.1 The owners and operators of the acid rain unit shall:
 - a. Hold allowances, as of the allowance transfer deadline, in the acid rain unit's compliance account (after deductions under 40 CFR Part 73.34(c)), not less than the total annual emissions of SO_x for the previous calendar year from the affected units at the source; and
 - b. Comply with the applicable acid rain emissions limitations for SO₂. [District Rule 3.23 and 40 CFR Part 72.9(c)(1)]
- D.2 Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the Act. [District Rule 3.23 and 40 CFR Part 72.9(c)(2)]
- D.3 Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [District Rule 3.23 and 40 CFR Part 72.9(c)(4)]
- D.4 An allowance shall not be deducted in order to comply with the SO₂ requirements of Condition D.1 prior to the calendar year for which the allowance was allocated. [District Rule 3.23 and 40 CFR Part 72.9(c)(5)]
- D.5 An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit SO₂ in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR Part 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [District Rule 3.23 and 40 CFR Part 72.9(c)(6)]
- D.6 An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [District Rule 3.23 and 40 CFR Part 72.9(c)(7)]
- D.7 Any increase in the SO₂ emissions for the acid rain unit identified above that is authorized by allowances acquired pursuant to Title IV of the CAA shall not require a revision of this permit, provided such increases do not require permit

revision under any other applicable federal requirement. [District Rule 3.8, §302.19(b)]

E. Excess Emissions Requirements

- E.1 The owners and operators of the acid rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77 (Excess Emissions). [District Rule 3.23 and 40 CFR Part 72.9(e)(1)]
- E.2 The owners and operators of the acid rain unit that has excess emissions in any calendar year shall:
- a. Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
 - b. Comply with the terms of an approved offset plan, as required by 40 CFR Part 77. [District Rule 3.23 and 40 CFR Part 72.9(e)(2)]

F. Recordkeeping and Reporting Requirements

- F.1 Unless otherwise provided, the owners and operators of the acid rain unit shall keep on site at the source each of the following documents for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five (5) years, in writing by the Administrator or permitting authority:
- a. The certificate of representation for the designated representative of the acid rain unit, and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR Part 72.24; provided that the certificate and documents shall be retained on site at the source beyond such five (5) year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - b. All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a five (5) year period for recordkeeping, the five (5) year period shall apply.
 - c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - d. Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program. [District Rule 3.8, §302.6(b), District Rule 3.23, and 40 CFR Part 72.9(f)(1)]
- F.2 The designated representative of the acid rain unit, shall submit to the permitting authority the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 - Subpart I, and 40 CFR Part 75. [District Rule 3.23 and 40 CFR Part 72.9(f)(2)]

G. Liability

- G.1 Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR Part 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to Section 113(c) of the Act.
- G.2 Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Act and 18 U.S.C.1001. [District Rule 3.23 and 40 CFR Part 72.9(g)(2)]
- G.3 No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect. [District Rule 3.23 and 40 CFR Part 72.9(g)(3)]
- G.4 The acid rain unit shall meet the requirements of the Acid Rain Program. [District Rule 3.23 and 40 CFR Part 72.9(g)(4)]
- G.5 Any provision of the Acid Rain Program that applies to the acid rain unit (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of the acid rain unit. [District Rule 3.23 and 40 CFR Part 72.9(g)(5)]
- G.6 Any provision of the Acid Rain Program that applies to the acid rain unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. [District Rule 3.23 and 40 CFR Part 72.9(g)(6)]
- G.7 Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by the acid rain unit, or by an owner or operator or designated representative of the acid rain unit, shall be a separate violation of the Act. [District Rule 3.23 and 40 CFR Part 72.9(g)(7)]

H. Effect on Other Authorities

- H.1 No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR Part 72.7 or Part 72.8 shall be construed as:
 - a. Except as expressly provided in Title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of the acid rain unit from compliance with any other provision of the Act, including the provisions of Title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

- b. Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- c. Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- d. Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
- e. Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established. [District Rule 3.23 and 40 CFR Part 72.9(h)]