San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JAN 1 8 2012

Mark Kehoe
GWF Energy LLC
4300 Railroad Ave
Pittsburg, CA

RE: Notice of Final Action – Revised Final Determination of Compliance
Project Number: N-1113502

Dear Mr. Kehoe:

The Air Pollution Control Officer has issued a revised Final Determination of Compliance (FDOC) to GWF Energy LLC for proposed revisions to their combined cycle power plant to incorporate final engineering design parameters, at 14950 W. Schulte Road in Tracy, CA.

Enclosed is a copy of the revised FDOC and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue this revised FDOC was published on November 22, 2011. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on November 17, 2011. No comments were received following the District's preliminary decision on this project.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Rupi Gill at (209) 557-6400.

Sincerely,

David Warner
Director of Perrnit Services

DW:JH/st

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JAN 1 8 2012

Eric Veerkamp
Compliance Project Manager
California Energy Commission
1516 9th Street MS 40
Sacramento, CA 95814-5504

RE: Notice of Final Action – Revised Final Determination of Compliance
Project Number: N-1113502

Dear Mr. Rios:

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JAN 1 8 2012

Mike Tollstrup, Chief
Project Assessment Branch
Stationary Source Division
California Air Resources Board
PO Box 2815
Sacramento, CA 95812-2815

RE: Notice of Final Action – Revised Final Determination of Compliance
Project Number: N-1113502

Dear Mr. Tollstrup:

The Air Pollution Control Officer has issued a revised Final Determination of Compliance (FDOC) to GWF Energy LLC for proposed revisions to their combined cycle power plant to incorporate final engineering design parameters, at 14950 W. Schulte Road in Tracy, CA.

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David Warner
Director of Permit Services

DW:JH/st

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Gerardo C. Rios (AIR 3)
Chief, Permits Office
Air Division
U.S. E.P.A. - Region IX
75 Hawthorne Street
San Francisco, CA 94105

RE: Notice of Final Action – Revised Final Determination of Compliance
Project Number: N-1113502

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Director of Permit Services

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Modesto Bee

NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF A
REVISED FINAL DETEMINATION OF COMPLIANCE

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has a revised Final Determination of Compliance to GWF Energy LLC for proposed revisions to their combined cycle power plant to incorporate final engineering design parameters, at 14950 W. Schulte Road in Tracy, CA.

No comments were received following the District's preliminary decision on this project.

The application review for Project #N-1113502 is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the **SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA, 95356-0244.**

FINAL DETERMINATION OF COMPLIANCE EVALUATION

GWF Tracy
As-Designed Revisions to Combined-Cycle Power Plant

Facility Name:	GWF Energy, LLC
Mailing Address:	4300 Railroad Avenue Pittsburg, CA 94565-6006
Contact Name:	Mark Kehoe, Director, Environmental and Safety Projects
Telephone:	(925) 431-1440
Engineer:	James Harader, Air Quality Engineer
Lead Engineer:	Nick Peirce, Supervising Air Quality Engineer
Date:	October 25, 2011
Project #:	N-1113502
Application #'s:	N-4597-1-7 and '-2-7
Submitted:	September 26, 2011
Deemed Complete:	October 20, 2011

I. PROPOSAL:

On March 24, 2010, the California Energy Commission approved GWF Energy's Application for Certification for the conversion of their existing simple cycle power plant in Tracy, CA into a combined cycle power plant. Since that time, the design engineers have made several changes to the combined cycle power plant design. Therefore, GWF Energy is applying for an Authority to Construct permits to modify the Determination of Compliance (DOC) to incorporate the design changes. The California Energy Commission has agreed to amend the certification for the plant upon District approval of the project. The scope of this evaluation will be limited to the revisions made to the final design of the combined cycle power plant.

The following revisions occurred during the final engineering design of the plant:

1. The originally proposed duct burner package was rated at 324 MMBtu/hr. The design engineers determined that the plant could accommodate a larger duct burner system and plan to use a duct burner package with a total heat input rating of 380 MMBtu/hr. The new duct burner includes 7 rows of burners. One row of burners does not fire during normal operation; rather, this row of burners is strictly used for backup purposes. While the duct burner rating is 380 MMBtu/hr, the maximum fire rate is limited to 345 MMBtu/hr, which is the maximum rating of the gas compression system that delivers fuel to the duct burner. GWF is not proposing to increase the hourly, daily, or annual emission rates as a result of this proposal. Per the design engineers, the emission rates, previously approved in the District's Determination of Compliance, will continue to have an adequate margin of compliance despite the increase in the duct burner rating.

2. The total plant capacity has been increased from 314 MW to 337 MW. This change in total plant capacity is not due to the revised duct burner rating. Rather, the plant design engineers determined that the thermal efficiency used during permitting of the original design was overly conservative and adjusted the total plant capacity accordingly.

3. The final design includes an inlet air fogging system that consists of a high pressure (2000 psi) pumping system, injection manifold, and nozzles that injects up to 8.1 gallons per minute of high quality boiler make-up water into the combustion turbine inlet duct downstream of the filtration/evaporative cooling system and upstream of the turbine compressor section. The fogging system will assist GWF in achieving the plant output of 337 MWs by reducing the inlet air temperature, which reduces the energy needed to compress the inlet air in the combustion turbine compressor section. The reduction in compression energy translates into additional energy available for transmission to the electrical grid. Since the fogging system is only introducing high quality water to the inlet air, no emissions changes in exhaust stack emission concentrations or mass emission rates are expected.

4. The proposed location for the HRSG systems and exhaust for the combined cycle plant was moved approximately 20 meters N/E from the location supplied for the original Determination of Compliance.

GWF Energy currently has a TV permit for this facility. This modification can be classified as a Title V significant modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. GWF Energy must apply to administratively amend their Title V permit.

II. APPLICABLE RULES:

Rule 1080 Stack Monitoring (12/17/92)
Rule 1081 Source Sampling (12/16/93)
Rule 1100 Equipment Breakdown (12/17/92)
Rule 2010 Permits Required (12/17/92)
Rule 2201 New and Modified Stationary Source Review Rule (4/21/2011)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 2540 Acid Rain Program (11/13/97)
Rule 2550 Federally Mandated Preconstruction Review for Major Sources of Air Toxics (6/18/98)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/18/00)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4703 Stationary Gas Turbines (8/17/06)
Rule 4801 Sulfur Compounds (12/17/92)
Rule 8011 General Requirements (8/19/04)

Rule 8021 Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities (8/19/04)
Rule 8031 Bulk Materials (8/19/04)
Rule 8041 Carryout and Trackout (8/19/04)
Rule 8051 Open Areas (8/19/04)
Rule 8061 Paved and Unpaved Roads (8/19/04)
Rule 8071 Unpaved Vehicle/Equipment Traffic Areas (9/16/04)
Rule 8081 Agricultural Sources (9/16/04)
California Environmental Quality Act (CEQA)
California Health & Safety Code (CH&S), Sections 41700 (Health Risk Analysis), 42301.6 (School Notice), and 44300 (Air Toxic "Hot Spots")

III. PROJECT LOCATION:

The proposed equipment is located on the SW quarter of Section 36, Township 2 South, and Range 4 East on the United States Geological Survey Quadrangle map. The District has verified that the proposed location is not within 1,000' of a K-12 school.

IV. PROCESS DESCRIPTION:

Each natural gas-fired General Electric Frame 7 Model PG 7121 EA combined-cycle combustion turbine generator (CTG) will be equipped with Dry Low NO_X combustors, a selective catalytic reduction (SCR) system with ammonia injection, an oxidation catalyst, a duct burner, and a heat recovery steam generator (HRSG). Each CTG will drive an electrical generator to produce approximately 88 MW of electricity. The plant will be a "combined-cycle plant," since the gas turbine and steam turbine both drive electrical generators and produce power.

Each CTG will directly drive an electrical generator, and also produce power by directing exhaust heat through its HRSG, which supplies steam to a 168 MW steam turbine generator. Since two HRSGs will feed a single steam turbine generator, this design is referred to as a "two-on-one" configuration.

The CTGs will utilize Dry Low NO_X (DLN) combustors, SCR with ammonia injection, and an oxidation catalyst to achieve the following emission rates:

NO_X: 2.0 ppmvd @ 15% O_2
VOC: 2.0 ppmvd @ 15% O_2, with the duct burner firing
VOC: 1.5 ppmvd @ 15% O_2, without the duct burner firing
CO: 2.0 ppmvd @ 15% O_2

Continuous emissions monitoring systems (CEMs) will sample, analyze, and record NO_X, CO, and O_2 concentrations in the exhaust gas for each CTG.

V. EQUIPMENT LISTING:

Pre-Project Equipment Descriptions (Prior to Issuing the FDOC for the Combined Cycle Plant)

N-4597-1-6: 84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST

N-4597-2-6: 84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST

Project Equipment Descriptions for Original FDOC for Conversion to Combined-Cycle Plant

N-4597-1-5: 84.4 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) WITH A 324 MMBTU/HR DUCT BURNER AND A 145 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-2)

N-4597-2-5: 84.4 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW NOX COMBUSTOR, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) WITH A 324 MMBTU/HR DUCT BURNER AND A 145 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-1)

Post-Project Equipment Descriptions for As-Designed Configuration of the Combined Cycle Plant

N-4597-1-7: 88 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH AN INLET AIR FILTRATION AND COOLING SYSTEM (EVAPORATIVE AND FOGGING) DRY LOW NOX COMBUSTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) WITH A 380 MMBTU/HR DUCT BURNER (MAXIMUM FIRING RATE 345 MMBTU/HR) AND A 168 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-2)

N-4597-2-7: 88 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH AN INLET AIR FILTRATION AND COOLING SYSTEM (EVAPORATIVE AND FOGGING) DRY LOW NOX COMBUSTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) WITH A 380 MMBTU/HR DUCT BURNER (MAXIMUM FIRING RATE 345 MMBTU/HR) AND A 168 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-1)

VI. EMISSION CONTROL TECHNOLOGY EVALUATION:

The applicant has not requested any changes to the emission control equipment that was discussed in detail in the District's original Determination of Compliance (District Project N-1083212).

VII. GENERAL CALCULATIONS:

A. Assumptions

- The as-designed revisions to the power plant will not affect the emission rates approved in the FDOC for the combined cycle plant. (per applicant)
- All other assumptions will be stated as they are made.

B. Emission Factors

Simple Cycle Plant Configuration

The following table shows the emission factors for the power plant, prior to the conversion into a combined-cycle plant. These values were obtained from the application review for Project N-1083212.

Simple-Cycle Configuration Potential to Emit (per Turbine)						
Operating Mode	**NO_X**	**SO_x**	**PM_{10}**	**CO**	**VOC**	**NH_3**
Steady State	5.0 ppmvd @15% O_2	0.78 lb/hr	3.30 lb/hr	6.0 ppmvd @15% O_2	2.0 ppmvd @15% O_2	10 ppmvd @15% O_2
Startup/Shutdown	13.0 lb/event	N/A	2.6 lb/event	21.0 lb/event	1.27 lb/event	N/A

Combined-Cycle Plant Configuration (As approved in the FDOC and As-Designed)

The following table shows the emission factors for the combined-cycle power plant that were approved in the original DOC. These values were obtained from the application review for project N-1083212. The as-designed revisions to the equipment do not affect these emission rates. The short term emission factors are used to calculate the hourly and daily emissions for SOx and PM10. The long-term emission factors are used to calculate the annual emissions for SOx and PM10.

Combined-Cycle Configuration Potential to Emit (per Turbine)						
Operating Mode	**NO_X**	**SO_x**	**PM_{10}**	**CO**	**VOC**	**NH_3**
Steady State No duct burner	2.0 ppmvd @15% O_2 (8.10 lb/hr)	2.03 lb/hr (short term) 0.77 lb/hr (long term)	4.40 lb/hr (short term) 3.40 lb/hr (long term)	2.0 ppmvd @15% O_2 (3.90 lb/hr)	1.5 ppmvd @15% O_2 (1.13 lb/hr)	5 ppmvd @15%O_2 (9.40 lb/hr)
Steady State With Duct Burner	2.0 ppmvd @15% O_2 (10.3 lb/hr)	2.63 lb/hr (short term) 1.0 lb/hr (long term)	5.80 lb/hr (short term) 4.40 lb/hr (long term)	2.0 ppmvd @15% O_2 (6.00 lb/hr)	2.0 ppmvd @15% O_2 (3.22 lb/hr)	5 ppmvd @15% O_2 (9.40 lb/hr)
Startup	390.5 lb/event	4.1 lb/event	11.0 lb/event	562.5 lb/event	10.5 lb/event	N/A
Shutdown	104.0 lb/event	1.1 lb/event	3.0 lb/event	148.0 lb/event	2.6 lb/event	N/A

C. Calculations

Simple Cycle Plant Configuration

The following tables show the emission rates for the power plant, prior to the conversion into a combined-cycle plant. These values were obtained from the application review for Project N-1083212.

Simple-Cycle Configuration Potential to Emit (Maximum Hourly, Per Turbine)						
Operating Mode	**NO_X (lb/hr)**	**SO_x (lb/hr)**	**PM_{10} (lb/hr)**	**CO (lb/hr)**	**VOC (lb/hr)**	**NH_3 (lb/hr)**
Steady State	26.45	0.78	3.30	26.57	2.42	13.19
Startup	39.00	0.78	3.30	63.00	3.81	N/A
Shutdown	26.00	0.78	3.30	42.00	2.54	N/A

Simple-Cycle Configuration Potential to Emit (Maximum Daily, Per Turbine)					
NO_X (lb/day)	**SO_x (lb/day)**	**PM_{10} (lb/day)**	**CO (lb/day)**	**VOC (lb/day)**	**NH_3 (lb/day)**
493.3	18.7	80.0	235.7	42.4	316.6

Simple-Cycle Configuration Potential to Emit (Maximum Annual, Per Turbine)					
NO_X (lb/yr)	**SO_x (lb/yr)**	**PM_{10} (lb/yr)**	**CO (lb/yr)**	**VOC (lb/yr)**	**NH_3 (lb/yr)**
153,460	5,600	26,667	71,620	13,356	105,520

Combined-Cycle Plant Configuration (As approved in the original DOC and As-Designed)

The following table shows the emission rates for the combined-cycle power plant that were approved in the FDOC. These values were obtained from the application review for project N-1083212. The as-designed revisions to the equipment do not affect these emission rates.

Combined-Cycle Configuration Potential to Emit (Maximum Hourly, Per Turbine)						
Operating Mode	**NO_X (lb/hr)**	**SO_x (lb/hr)**	**PM_{10} (lb/hr)**	**CO (lb/hr)**	**VOC (lb/hr)**	**NH_3 (lb/hr)**
Steady State no duct burner	8.10	2.03	4.40	3.90	1.13	9.40
Steady State With duct burner	10.30	2.63	5.80	6.00	3.22	9.40

Combined-Cycle Configuration Potential to Emit (Maximum Daily, Per Turbine)					
NO_X (lb/day)	**SO_x (lb/day)**	**PM_{10} (lb/day)**	**CO (lb/day)**	**VOC (lb/day)**	**NH_3 (lb/day)**
814.9	58.7	132.0	1071.6	78.6	225.6

Combined-Cycle Configuration Potential to Emit (Maximum Annual, Per Turbine)					
NO_X (lb/yr)	**SO_x (lb/yr)**	**PM_{10} (lb/yr)**	**CO (lb/yr)**	**VOC (lb/yr)**	**NH_3 (lb/yr)**
88,881	7,084	32,250	74,598	15,145	59,456

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The following emission information is for the simple cycle configuration of the plant and was taken from the application review for District project N-1083212.

Pre-project Stationary Source Potential to Emit [SSPE1]						
Permit Unit	NO_X (lb/year)	CO (lb/year)	VOC (lb/year)	PM_{10} (lb/year)	SO_X (lb/year)	NH_3 (lb/year)
N-4597-1-4	306,920	71,620	26,712	53,334	5,600	105,520
N-4597-2-4		71,620			5,600	105,520
N-4597-4-1	974	25	8	6	1	0
SSPE1	**307,894**	**143,265**	**26,720**	**53,340**	**11,201**	**211,040**

4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. Note, no Emission Reduction have been banked at this source. The following information is for the combined cycle configuration of the plant and was taken from the application review for District Project N-1083212.

Post-project Stationary Source Potential to Emit [SSPE2]						
Permit Unit	NO_X (lb/year)	CO (lb/year)	VOC (lb/year)	PM_{10} (lb/year)	SO_X (lb/year)	NH_3 (lb/year)
N-4597-1-7	88,881	74,598	15,145	32,250	7,084	59,456
N-4597-2-7	88,881	74,598	15,145	32,250	7,084	59,456
N-4597-4-2	243	6	2	2	0	0
N-4597-5-0	2,482	12,580	1,700	2,380	238	0
N-4597-6-0	85	76	5	4	0	0
SSPE2	**180,572**	**161,858**	**31,997**	**66,884**	**14,406**	**118,912**

5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a major source is a stationary source with post-project emissions or a Post-project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values.

Major Source Determination					
	NO_X (lb/year)	CO (lb/year)	VOC (lb/year)	PM_{10} (lb/year)	SO_X (lb/year)
Pre-Project SSPE (SSPE1)	307,894	143,265	26,720	53,340	11,201
Post-project SSPE (SSPE2)	180,572	161,858	31,997	66,884	14,406
Major Source Threshold	50,000	200,000	50,000	140,000	140,000
Major Source?	**Yes**	No	**Yes**	No	No
New Major Source?	No	No	No	No	No

6. Baseline Emissions (BE)

Baseline emission calculations are performed to determine the quantity of offsets required. The as-designed revisions that are proposed in this project will not affect emissions from the combined cycle power plant. Therefore, the revisions do not affect the offset determination presented in the original DOC prepared in District Project N-1083212. Therefore, baseline emission calculations are not required.

7. SB288 Modification

This facility is a only a Major Source for NOx and VOC emissions; therefore, the project could only trigger an SB288 Modification for these pollutants. For both NOx and VOC emissions, the SB288 Modification threshold is 50,000 lb/year. Since SSPE2 for VOC emissions is less than 50,000 lb/year, the project cannot trigger an SB288 Modification for VOC emissions. The proposal evaluated in the original DOC triggered an SB288 Modification for NOx emissions. Therefore, it is assumed that this project with the revised equipment triggers an SB288 Modification for NOx emissions.

8. Federal Major Modification

This facility is only a Major Source for NOx and VOC emissions; therefore, the project could only trigger a Federal Major Modification for these pollutants. For both NOx and VOC emissions, the Federal Major Modification threshold is 0 lb/year. Since this project includes an increase in duct burner capacity, the net emission increase for the project will be greater than 0 for NOx and VOC emissions. Therefore, the project triggers a Federal Major Modification for NOx and VOC emissions.

9. QNEC

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Attachment E.

VIII. COMPLIANCE:

The revisions proposed in this project will not affect the requirements presented in the FDOC for the rules in the following table. The requirements of these rules will not be restated in this evaluation. For detailed information of the requirements of these Rules, please refer to the original DOC that was prepared in District Project N-1083212.

Rule 1080 - Stack Monitoring
Rule 1081 - Source Sampling
Rule 1100 - Equipment Breakdown
Rule 2010 - Permits Required
Rule 2540 - Acid Rain Program
Rule 2550 - Federally Mandated Preconstruction Review for Major Sources of Air Toxics
Rule 4001 - New Source Performance Standards
40 CFR 60 Subpart GG
40 CFR 60 Subpart KKKK[1]
Rule 4002 - National Emission Standards for Hazardous Air Pollutants
40 CFR 63 Subpart YYYY
Rule 4101 - Visible Emissions
Rule 4201 - Particulate Matter Concentration
Rule 4202 - Particulate Matter Emission Rate
Rule 4703 - Stationary Gas Turbines
Rule 4801 - Sulfur Compounds
Rule 8011 - General Requirements
Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities
District Rule 8031 - Bulk Materials
District Rule 8041 - Carryout And Trackout
District Rule 8051 - Open Areas
District Rule 8061 - Paved And Unpaved Roads
District Rule 8071 - Unpaved Vehicle/Equipment Traffic Areas
District Rule 8081 - Agricultural Sources
California Health and Safety Code 42301.6 - School Notice
California Health & Safety Code, Section 44300 - Air Toxic "Hot Spots"

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

Pursuant to the original DOC evaluation prepared in District Project N-1083212, BACT for the combustion turbine generators was triggered for NOx, SOx, PM10, and VOC emissions. The proposed as-designed revisions do not result in any changes in emissions. Additionally, the District's BACT Guideline for combined-cycle combustion turbine generators of this class and category has not changed since the original DOC was issued; therefore, the proposed revisions do not affect the BACT analyses performed in District Project N-1083212. Pursuant to the Top-Down BACT Analysis in the original DOC, BACT for these units was satisfied with the following:

[1] 40 CFR 60 Subpart KKKK has been amended since the issuance of the FDOC; however, the amendment to the requirements did not affect units that are fired on natural gas.

NO_X: 2.0 ppmv dry @ 15% O_2 (1-hr average, excluding startup and shutdown), (Selective Catalytic Reduction, or equal) and operation with NH_3 injection at the earliest feasible catalyst temperature during startup and shutdown periods.

VOC: 2.0 ppmv @ 15% O_2 when the duct burner is firing and 1.5 ppmv O_2 when the duct burner is not firing.

PM_{10}: Air inlet filter cooler, lube oil vent coalescer, and natural gas fuel, or equal.

SO_X: PUC-regulated natural gas or non-PUC regulated gas with no more than 0.75 grains S/100 dscf, or equal.

B. Offsets:

The as-designed revisions that are proposed in this project will not affect emissions from the combined cycle power plant. Therefore, the revisions do not affect the offset determination presented in the original DOC.

C. Public Notification:

This project will be treated as an SB288 modification for NOx and a Federal Major Modification for NOx and VOC emissions. Since public noticing requirements are triggered for this project for SB288 and Federal Major Modification purposes, a public notice will be performed according to the requirements of Section 5.5 of District Rule 2201.

D. Daily Emission Limits:

The as-designed revisions that are proposed in this project will not affect emissions from the combined cycle power plant. Therefore, the revisions do not affect the emission limits that were presented in the original DOC. The daily emission limits will not be restated in this evaluation.

E. Compliance Certification:

GWF Tracy has submitted a compliance certification. See Attachment F.

F. Alternative Siting Analysis

Section 4.15.1 of this rule requires sources for which an analysis of alternative sites, sizes, and production processes is required under Section 173 of the Federal Clean Air Act, the applicant shall prepare an analysis functionally equivalent to the requirements of Division 13, Section 21000 et. seq. of the Public Resources Code. The alternative analysis was performed as part of the CEQA analysis performed by the California Energy Commission. Therefore, this requirement has been satisfied.

G. Air Quality Impact Analysis:

The District performed an Air Quality Impact Analysis to ensure that the proposed change in stack locations for the turbines does not result in a violation of an Ambient Air Quality Standard. The results of the Ambient Air Quality Analysis are presented in the table below. For the full results, please refer to Attachment D.

AAQA Results Summary					
Pollutant	1 hr Average	3 hr Average	8 hr Average	24 hr Average	Annual Average
CO	Pass	N/A	Pass	N/A	N/A
NO_x	Pass	N/A	N/A	N/A	Pass
SO_x	Pass	Pass	N/A	Pass	Pass
PM_{10}	N/A	N/A	N/A	Pass	Pass

H. Compliance Assurance:

1. Source Testing

The as-designed revisions proposed in this project will not affect the source testing requirements presented in the original DOC. The source testing requirements will not be restated in this evaluation.

2. Monitoring

The as-designed revisions proposed in this project will not affect the monitoring requirements presented in the original DOC. The monitoring requirements will not be restated in this evaluation.

3. Recordkeeping

The as-designed revisions proposed in this project will not affect the recordkeeping requirements presented in the original DOC. The recordkeeping requirements will not be restated in this evaluation.

4. Reporting

The as-designed revisions proposed in this project will not affect the source testing requirements presented in the original DOC. The reporting requirements will not be restated in this evaluation.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a "permit amendment that does not qualify as a minor permit modification or administrative amendment." Any project that is a Major Modification per District Rule 2201 cannot be processed as a minor modification to the Title V permit. Since this project triggers an SB288 and Federal Major Modification, this project constitutes a Significant Modification to the Title V Permit.

The facility has applied for a Certificate of Conformity (COC), in accordance with the requirements of 40 CFR 70.6(c), and 70.8. A 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct permits. GWF Tracy will apply to modify their Title V permit with an administrative amendment prior to operating with the proposed modifications. Therefore, compliance with this rule is expected. The following conditions will be included on each permit:

- This Determination of Compliance serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

- Prior to operating with modifications authorized by this Determination of Compliance, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

California Health & Safety Code 41700 (Health Risk Analysis)

A Risk Management Review (RMR) was performed to address the change in the stack locations for the turbines. The results of the RMR are shown in the following table. For the full results, please refer to Attachment D.

RMR Summary				
Categories	**Turbine (1-7)**	**Turbine (2-7)**	**Project Totals**	**Facility Totals**
Prioritization Score	< 1.0	< 1.0	< 1.0	> 1.0
Acute Hazard Index	0.00	0.00	0.00	6.80
Chronic Hazard Index	0.00	0.00	0.12	1.02
Maximum Individual Cancer Risk (10^{-6})	0.2	0.2	0.3	0.3
T-BACT Required?	No	No		
Special Permit Conditions?	**No**	**No**		

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The California Energy Commission (CEC) has the exclusive power to certify all thermal electric power plants greater than 50 MW in the State of California (Public Resources Code § 25500). While the CEC siting process is exempt from CEQA (14 CCR § 15251(k)), it is functionally equivalent to CEQA.

The District holds no discretionary approval powers over this project; however the District prepares a Determination of Compliance (DOC), this document. The DOC confers the rights and privileges of an Authority to Construct upon certification by the CEC, where the CEC certificate contains the conditions set forth in this DOC (20 CCR § 1744.5 and Rule 2201 § 5.8.8). A Permit to Operate is required to be issued if the project receives a certificate from the CEC and the project is constructed in accordance with the conditions set forth in the DOC (Rule 2201 § 5.8.9). The District holds no discretionary approval powers over this project.

IX. RECOMMENDATION:

Compliance with all applicable prohibitory rules and regulations is expected. Issue the Revised Determination of Compliance for the facility subject to the conditions presented in Attachment A.

X. BILLING INFORMATION:

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
N-4597-1-7	3020-08A-H	168,500 kW	$13,208
N-4597-2-7	3020-08A-H	168,500 kW	$13,208

ATTACHMENT A

Permit Conditions for As-designed Combined Cycle Plant N-4597-1-7 and N-4597-2-7

N-4597-1-7: 88 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH AN INLET AIR FILTRATION AND COOLING SYSTEM (EVAPORATIVE AND FOGGING) DRY LOW NOX COMBUSTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #1 (HRSG) WITH A 380 MMBTU/HR DUCT BURNER (MAXIMUM FIRING RATE 345 MMBTU/HR) AND A 168 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-2)

1. The owner/operator shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]

2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule 2201, Section 5.8.8]

3. This Determination of Compliance serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

4. Prior to operating with modifications authorized by this Determination of Compliance, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

5. The owner/operator of GWF Tracy shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions # 6 through #16 shall apply only during the commissioning period as defined below. Unless otherwise indicated, conditions #17 through #101 shall apply after the commissioning period has ended. [District Rule 2201]

6. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the GWF Tracy construction contractor to insure safe and reliable steady state operation of the gas turbine, heat recovery steam generators, steam turbine, and associated electrical delivery systems. [District Rule 2201]

7. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired (at the beginning of the conversion to a combined cycle plant), whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201]

8. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]

9. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]

10. Coincident with the steady state operation of the SCR system and the oxidation catalyst at loads greater than 50% and after installation and tuning of emission controls, NOx, CO, and VOC emissions from this unit shall comply with the limits specified in conditions #30 and #31 of this permit. [District Rule 2201]

11. The owner/operator shall submit a plan to the District at least four weeks prior to first firing of this unit (after beginning of the conversion to a combined cycle plant), describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of each activity. The activities described shall include, but not limited to, the tuning of the combustors, the installation and operation of the SCR system and oxidation catalyst, the installation, calibration, and testing of NOx and CO continuous emission monitors, and any activities requiring firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]

12. Emission rates from the CTG, during the commissioning period, shall not exceed any of the following limits: NOx (as NO2) – 146.70 lb/hr; PM10 – 5.80 lb/hr; VOC (as methane) – 3.20 lb/hr; CO – 229.60 lb/hr; SOx (as SO2) – 2.6 lb/hr. [District Rule 2201]

13. During the initial commissioning activities, the owner/operator shall demonstrate compliance with the NOx emission limit specified in condition #12 through the use of properly operated and maintained continuous emission monitor located within the inlet section of the steam generator unit. Upon completion of the initial commission activities and with the installation of the SCR system and oxidation catalyst, the owner/operator shall demonstrate compliance with the NOx and CO emission limits specified in conditions #30, #31, #32, and #33 through the use of properly operated and maintained continuous emission monitors and recorders as specified in conditions #55 and #56. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]

14. During initial commissioning activities, the inlet NOx continuous emissions monitor specified in this permit shall be installed, calibrated, and operation prior to the first re-firing of this unit. Upon completion of the initial commissioning activities and the installation of the SCR system and oxidation catalyst, the exhaust stack NOx and CO continuous monitors specified within this permit shall be installed, calibrated, and operational prior to the first re-firing of this unit with the SCR and oxidation catalyst in place. After the first re-firing, the detection range of each continuous emissions monitor shall be adjusted as necessary to accurately measure the resulting range of NOx and/or CO emission concentrations. [District Rule 2201]

15. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 500 hours total during the commissioning period. Such operation of the unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and oxidation catalyst in place. Upon completion of these activities, the owner/operator shall proved written notice to the District and the unused balance of the 500 firing hours without abatement shall expire. Records of the commissioning hours for this unit shall be maintained. [District Rule 2201]

16. The total mass emissions of NOx, SOx, PM10, CO, and VOC that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limit specified in condition #41. [District Rule 2201]

17. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

18. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

19. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

20. Owner/operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]

21. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]

22. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]

23. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]

24. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

25. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The owner/operator shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]

26. During all types of operation, including startup and shutdown periods, ammonia injection in to the SCR system shall occur once the minimum temperature at the catalyst face has been reached to ensure NO_X emission reductions can occur with a reasonable level of ammonia slip. The minimum catalyst face temperature shall be determined during the final design phase of this project and shall be submitted to the District at least 30 days prior to commencement of construction. [District Rule 2201]

27. The SCR system shall be equipped with a continuous temperature monitoring system to measure and record the temperature at the catalyst face. [District Rule 2201]

28. Owner/operator shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]

29. The CTG shall only be fired on PUC-regulated natural gas with a sulfur content value not exceeding 0.66 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a daily basis and 0.25 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a 12-month rolling average basis. [District Rule 2201 and 40 CFR 60.4330(a)(2)]

30. Emission rates from this CTG without the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NO_X (as NO_2) – 8.10 lb/hr and 2.0 ppmvd @ 15% O_2; CO – 3.90 lb/hr and 2.0 ppmvd @ 15% O_2; VOC (as methane) – 1.13 lb/hr and 1.5 ppmvd @ 15% O_2; PM_{10} – 4.40 lb/hr; or SO_X (as SO_2) – 2.03 lb/hr. NO_X (as NO_2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]

31. Emission rates from this CTG with the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NO_X (as NO_2) – 10.30 lb/hr and 2.0 ppmvd @ 15% O_2; CO – 6.00 lb/hr and 2.0 ppmvd @ 15% O_2; VOC (as methane) – 3.22 lb/hr and 2.0 ppmvd @ 15% O_2; PM_{10} – 5.80 lb/hr; or SO_X (as SO_2) – 2.63 lb/hr. NO_X (as NO_2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]

32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO_X (as NO_2) – 390.5 lb/event; CO – 562.5 lb/event; VOC (as methane) – 10.5 lb/event; PM_{10} – 11.0 lb/event; or SO_X (as SO_2) – 4.1 lb/event. [District Rules 2201 and 4703]

33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO_X (as NO_2) –104.0 lb/event; CO – 148.0 lb/event; VOC (as methane) – 2.6 lb/event; PM_{10} – 3.0 lb/event; or SO_X (as SO_2) – 1.1 lb/event. [District Rules 2201 and 4703]

34. A start up event is defined as the period beginning with the gas turbine initial firing until the unit meets the lb/hr and ppmvd emission limits in Condition 30 or Condition 31 depending on the operating conditions of the duct burners during the start up event. A shutdown event is defined as the period beginning with the turbine shutdown sequence and ending with the cessation of firing the gas turbine engine. [District Rules 2201 and 4703]

35. The duration of each startup shall not exceed three hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]

36. The duration of each shutdown shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]

37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]

38. The ammonia (NH_3) emissions shall not exceed 5 ppmvd @ 15% O_2 or 9.40 lb/hr over a 24 hour rolling average. [District Rules 2201 and 4102]

39. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the owner/operator shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the owner/operator may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the owner/operator shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

40. Daily emissions from the CTG shall not exceed the following limits: NO_X (as NO_2) – 814.9 lb/day; CO – 1071.6 lb/day; VOC – 78.6 lb/day; PM_{10} – 132.0 lb/day; or SO_X (as SO_2) – 58.7 lb/day. [District Rule 2201]

41. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO_X (as NO_2) – 88,881 lb/year; CO – 74,598 lb/year; VOC – 15,145 lb/year; PM_{10} – 32,250 lb/year; or SO_X (as SO_2) – 7,084 lb/year. Compliance with the annual NOx and CO emission limits shall be demonstrated using CEM data and compliance with the annual VOC, PM10 and SOx emission limits shall be demonstrated using the most recent source test results. [District Rule 2201]

42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]

43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]

44. The combined natural gas fuel usage for permit units N-4597-1 and N-4597-2 shall not exceed 20,454 MMscf/year. [District Rule 2550]

45. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_X, CO, and O_2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]

46. Source testing to measure the stead state NOx, CO, VOC, and NH3 emission rates (lb/hr and ppmvd @ 15% O2) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400]

47. Source testing to measure the PM10 emission rate (lb/hr) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rule 1081, 2201 and 40 CFR 60.4400]

48. Source testing to measure startup and shutdown NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-4597-1 or N-4597-2) within 60 days after the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with 40 CFR 60, Appendix F (Relative Accuracy Audit). If CEM data is not certifiable to determine compliance with NO_X and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO relative accuracy audit demonstrates that the CEM data is certifiable, the startup and shutdown NOx and CO testing frequency shall return to the once every seven years schedule. [District Rule 1081 and 2201]

49. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703]

50. Source testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

51. The following test methods shall be used: NOx - EPA Method 7E or 20 or ARB Method 100 and EPA Method 19 (Acid Rain Program); CO - EPA Method 10 or 10B or ARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 and 202 (front half and back half) or 201a and 202; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or ARB 100. NOx testing shall also be conducted in accordance with the requirements of 40 CFR 60.4400(a)(2), (3), and (b). EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i) and 40 CFR 60.4400(a)(2), (3), and (b)]

52. Testing to demonstrate compliance with the short-term (daily) fuel sulfur content limit shall be conducted monthly. If a monthly test indicates that a violation of the daily fuel sulfur content limit has occurred then weekly testing shall commence and continue until eight consecutive tests show compliance. Once cornpliance with the daily fuel sulfur content is demonstrated on eight consecutive weekly tests, testing may return to the monthly schedule. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. [District Rule 2201 an 40 CFR 60.4360, 60.4365(a) and 60.4370(c)]

53. Compliance with the rolling 12-month average fuel sulfur content limit shall be demonstrated monthly. The 12-month rolling average fuel sulfur content shall be calculated as follows: 12-month rolling average fuel sulfur content = Sum of the monthly average fuel sulfur contents for the previous 12 months ÷ total number of months the unit has operated in during the previous 12 months. The monthly average fuel sulfur content is the average fuel sulfur content of all tests conducted in a given month. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. Owner/operator shall keep a monthly record of the rolling 12-month average fuel sulfur content. [District Rules 1081 and 2201]

54. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]

55. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO_X, CO and O_2 concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]

57. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]

58. The NO_X, CO and O_2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2, 3, and 4, and/or 40 CFR 75 Appendix A, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]

59. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

60. The owner/operator shall perform a relative accuracy test audit (RATA) for NO_X, CO and O_2 as specified by 40 CFR Part 60, Appendix F, 5.11, or 40 CFR Part 75 Appendix B, at least once every four calendar quarters. The owner/operator shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. If the RATA test is conducted as specified in 40 CFR Part 75 Appendix B, the RATA shall be conducted on a lb/MMBtu basis. [District Rule 1080 and 40 CFR 60.4345]

61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]

62. The owner/operator shall develop and keep onsite a quality assurance plan for all the continuous monitoring equipment described in 40 CFR 60.4345(a), (c), and (d). [40 CFR 60.4345(e)]

63. Results of the CEM system shall be averaged over a one hour period for NO_X emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [District Rule 4703 and 40 CFR 60.13 and 40 CFR 60.4350(a)]

64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]

65. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]

66. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]

67. Excess NOx emissions shall be defined as any 30 day operating period in which the 30 day rolling average NOx concentration exceeds an applicable emissions limit. A 30 day rolling average NOx emission rate is the arithmetic average of all hourly NOx emission data in ppm measured by the continuous monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30 day average is calculated each unit operating day as the average of all hourly NOx emission rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.4350(h) and 40 CFR 60.4380(b)(1)]

68. For the purpose of determining excess NOx emissions, for each unit operating hour in which a valid hourly average is obtained, the data acquisition system and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from Method 19 of 40 CFR 60 Appendix A. For any hour in which the hourly O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19 percent O2 may be used in the emission calculations. [40 CFR 60.4350(b)]

69. Excess SOx emissions is each unit operating hour included in the period beginning on the dat and hour of any sample for which the fuel sulfur content exceeds the applicable limits listed in this permit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitoring downtime for SOx begins when a sample is not taken by its due date. A period of monitor downtime for SOx also begins on the date and hour of a required sample, if invalid results are obtained. A period of SOx monitoring downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385(a) and (c)]

70. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]

71. The owner/operator shall submit to the District information correlating the NO_X control system operating parameters to the associated measured NO_X output. The information must be sufficient to allow the District to determine compliance with the NO_X emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703]

72. The owner/operator shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703]

73. The owner/operator shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, calculated NOx and CO mass emission rates (lb/hr and lb/twelve month rolling period), and VOC, PM10 and SOx emission rates (lb/twelve month rolling period). [District Rules 2201 and 4703]

74. The owner/operator shall maintain a system operating log, updated on a daily basis, which includes the following information: The actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703]
75. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4703]

76. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72]

77. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75]

78. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75]

79. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73]

80. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77]

81. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75]

82. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72]

83. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73]

84. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72]

85. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72]

86. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72]

87. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77]

88. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77]

89. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72]

90. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75]

91. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75]

92. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]

93. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]

94. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]

95. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051] N

96. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]

97. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]

98. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rule 8011 and 8071]

99. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, owner/operator shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]

100. Whenever any portion of the site becomes inactive, Owner/operator shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]

101. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

N-4597-2-7: 88 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH AN INLET AIR FILTRATION AND COOLING SYSTEM (EVAPORATIVE AND FOGGING) DRY LOW NOX COMBUSTION, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, AN OXIDATION CATALYST, HEAT RECOVERY STEAM GENERATOR #2 (HRSG) WITH A 380 MMBTU/HR DUCT BURNER (MAXIMUM FIRING RATE 345 MMBTU/HR) AND A 168 MW NOMINALLY RATED STEAM TURBINE (SHARED WITH N-4597-1)

1. The owner/operator shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]

2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule Rule 2201, Section 5.8.8]

3. This Determination of Compliance serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

4. Prior to operating with modifications authorized by this Determination of Compliance, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

5. The owner/operator of GWF Tracy shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions # 6 through #16 shall apply only during the commissioning period as defined below. Unless otherwise indicated, conditions #17 through #101 shall apply after the commissioning period has ended. [District Rule 2201]

6. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the GWF Tracy construction contractor to insure safe and reliable steady state operation of the gas turbine, heat recovery steam generators, steam turbine, and associated electrical delivery systems. [District Rule 2201]

7. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired (at the beginning of the conversion to a combined cycle plant), whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201]

8. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201]

9. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201]

10. Coincident with the steady state operation of the SCR system and the oxidation catalyst at loads greater than 50% and after installation and tuning of emission controls, NOx, CO, and VOC emissions from this unit shall comply with the limits specified in conditions #30 and #31 of this permit. [District Rule 2201]

11. The owner/operator shall submit a plan to the District at least four weeks prior to first firing of this unit (after beginning of the conversion to a combined cycle plant), describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of each activity. The activities described shall include, but not limited to, the tuning of the combustors, the installation and operation of the SCR system and oxidation catalyst, the installation, calibration, and testing of NOx and CO continuous emission monitors, and any activities requiring firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201]

12. Emission rates from the CTG, during the commissioning period, shall not exceed any of the following limits: NOx (as NO2) – 146.70 lb/hr; PM10 – 5.80 lb/hr; VOC (as methane) – 3.20 lb/hr; CO – 229.60 lb/hr; SOx (as SO2) – 2.6 lb/hr. [District Rule 2201]

13. During the initial commissioning activities, the owner/operator shall demonstrate compliance with the NOx emission limit specified in condition #12 through the use of properly operated and maintained continuous emission monitor located within the inlet section of the steam generator unit. Upon completion of the initial commission activities and with the installation of the SCR system and oxidation catalyst, the owner/operator shall demonstrate compliance with the NOx and CO emission limits specified in condition #30, #31, #32, and #33 through the use of properly operated and maintained continuous emission monitors and recorders as specified in conditions #55 and #56. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201]

14. During initial commissioning activities, the inlet NOx continuous emissions monitor specified in this permit shall be installed, calibrated, and operation prior to the first re-firing of this unit. Upon completion of the initial commissioning activities and the installation of the SCR system and oxidation catalyst, the exhaust stack NOx and CO continuous monitors specified within this permit shall be installed, calibrated, and operational prior to the first re-firing of this unit with the SCR and oxidation catalyst in place. After the first re-firing, the detection range of each continuous emissions monitor shall be adjusted as necessary to accurately measure the resulting range of NOx and/or CO emission concentrations. [District Rule 2201]

15. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 500 hours total during the commissioning period. Such operation of the unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and oxidation catalyst in place. Upon completion of these activities, the owner/operator shall proved written notice to the District and the unused balance of the 500 firing hours without abatement shall expire. Records of the commissioning hours for this unit shall be maintained.

16. The total mass emissions of NOx, SOx, PM10, CO, and VOC that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limit specified in condition #41. [District Rule 2201]

17. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

18. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

19. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

20. Owner/operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]

21. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]

22. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]

23. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]

24. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101]

25. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The owner/operator shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201]

26. During all types of operation, including startup and shutdown periods, ammonia injection in to the SCR system shall occur once the minimum temperature at the catalyst face has been reached to ensure NOx emission reductions can occur with a reasonable level of ammonia slip. The minimum catalyst face temperature shall be determined during the final design phase of this project and shall be submitted to the District at least 30 days prior to commencement of construction. [District Rule 2201]

27. The SCR system shall be equipped with a continuous temperature monitoring system to measure and record the temperature at the catalyst face. [District Rule 2201]

28. Owner/operator shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]

29. The CTG shall only be fired on PUC-regulated natural gas with a sulfur content value not exceeding 0.66 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a daily basis and 0.25 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a 12-month rolling average basis. [District Rule 2201 and 40 CFR 60.4330(a)(2)]

30. Emission rates from this CTG without the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NO_X (as NO_2) – 8.10 lb/hr and 2.0 ppmvd @ 15% O_2; CO – 3.90 lb/hr and 2.0 ppmvd @ 15% O_2; VOC (as methane) – 1.13 lb/hr and 1.5 ppmvd @ 15% O_2; PM_{10} – 4.40 lb/hr; or SO_X (as SO_2) – 2.03 lb/hr. NO_X (as NO_2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]

31. Emission rates from this CTG with the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NO_X (as NO_2) – 10.30 lb/hr and 2.0 ppmvd @ 15% O_2; CO – 6.00 lb/hr and 2.0 ppmvd @ 15% O_2; VOC (as methane) – 3.22 lb/hr and 2.0 ppmvd @ 15% O_2; PM_{10} – 5.80 lb/hr; or SO_X (as SO_2) – 2.63 lb/hr. NO_X (as NO_2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)]

32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NO_X (as NO_2) – 390.5 lb/event; CO – 562.5 lb/event; VOC (as methane) – 10.5 lb/event; PM_{10} – 11.0 lb/event; or SO_X (as SO_2) – 4.1 lb/event. [District Rules 2201 and 4703]

33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NO_X (as NO_2) –104.0 lb/event; CO – 148.0 lb/event; VOC (as methane) – 2.6 lb/event; PM_{10} – 3.0 lb/event; or SO_X (as SO_2) – 1.1 lb/event. [District Rules 2201 and 4703]

34. A start up event is defined as the period beginning with the gas turbine initial firing until the unit meets the lb/hr and ppmvd emission limits in Condition 30 or Condition 31 depending on the operating conditions of the duct burners during the start up event. A shutdown event is defined as the period beginning with the turbine shutdown sequence and ending with the cessation of firing the gas turbine engine. [District Rules 2201 and 4703]

35. The duration of each startup shall not exceed three hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]

36. The duration of each shutdown shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703]

37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703]

38. The ammonia (NH_3) emissions shall not exceed 5 ppmvd @ 15% O_2 or 9.40 lb/hr over a 24 hour rolling average. [District Rules 2201 and 4102]

39. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the owner/operator shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the owner/operator may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the owner/operator shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

40. Daily emissions from the CTG shall not exceed the following limits: NO_X (as NO_2) – 814.9 lb/day; CO – 1071.6 lb/day; VOC – 78.6 lb/day; PM_{10} – 132.0 lb/day; or SO_X (as SO_2) – 58.7 lb/day. [District Rule 2201]

41. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NO_X (as NO_2) – 88,881 lb/year; CO – 74,598 lb/year; VOC – 15,145 lb/year; PM_{10} – 32,250 lb/year; or SO_X (as SO_2) – 7,084 lb/year. Compliance with the annual NOx and CO emission limits shall be demonstrated using CEM data and compliance with the annual VOC, PM10 and SOx emission limits shall be demonstrated using the most recent source test results. [District Rule 2201]

42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201]

43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]

44. The combined natural gas fuel usage for permit units N-4597-1 and N-4597-2 shall not exceed 20,454 MMscf/year. [District Rule 2550]

45. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_X, CO, and O_2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081]

46. Source testing to measure the stead state NOx, CO, VOC, and NH3 emission rates (lb/hr and ppmvd @ 15% O2) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400]

47. Source testing to measure the PM10 emission rate (lb/hr) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rule 1081, 2201 and 40 CFR 60.4400]

48. Source testing to measure startup and shutdown NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-4597-1 or N-4597-2) within 60 days after the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with 40 CFR 60, Appendix F (Relative Accuracy Audit). If CEM data is not certifiable to determine compliance with NO_X and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO relative accuracy audit demonstrates that the CEM data is certifiable, the startup and shutdown NOx and CO testing frequency shall return to the once every seven years schedule. [District Rule 1081 and 2201]

49. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703]

50. Source testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

51. The following test methods shall be used: NOx - EPA Method 7E or 20 or ARB Method 100 and EPA Method 19 (Acid Rain Program); CO - EPA Method 10 or 10B or ARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 and 202 (front half and back half) or 201a and 202; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or ARB Method 100. NOx testing shall also be conducted in accordance with the requirements of 40 CFR 60.4400(a)(2), (3), and (b). EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i) and 40 CFR 60.4400(a)(2), (3), and (b)]

52. Testing to demonstrate compliance with the short-term (daily) fuel sulfur content limit shall be conducted monthly. If a monthly test indicates that a violation of the daily fuel sulfur content limit has occurred then weekly testing shall commence and continue until eight consecutive tests show compliance. Once compliance with the daily fuel sulfur content is demonstrated on eight consecutive weekly tests, testing may return to the monthly schedule. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. [District Rule 2201 an 40 CFR 60.4360, 60.4365(a) and 60.4370(c)]

53. Compliance with the rolling 12-month average fuel sulfur content limit shall be demonstrated monthly. The 12-month rolling average fuel sulfur content shall be calculated as follows: 12-month rolling average fuel sulfur content = Sum of the monthly average fuel sulfur contents for the previous 12 months ÷ total number of months the unit has operated in during the previous 12 months. The monthly average fuel sulfur content is the average fuel sulfur content of all tests conducted in a given month. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. Owner/operator shall keep a monthly record of the rolling 12-month average fuel sulfur content. [District Rules 1081 and 2201]

54. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)]

55. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703]

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO_X, CO and O_2 concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]

57. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)]

58. The NO_X, CO and O_2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2, 3, and 4, and/or 40 CFR 75 Appendix A, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]

59. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]

60. The owner/operator shall perform a relative accuracy test audit (RATA) for NO_X, CO and O_2 as specified by 40 CFR Part 60, Appendix F, 5.11, or 40 CFR Part 75 Appendix B, at least once every four calendar quarters. The owner/operator shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. If the RATA test is conducted as specified in 40 CFR Part 75 Appendix B, the RATA shall be conducted on a lb/MMBtu basis. [District Rule 1080 and 40 CFR 60.4345]

61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080]

62. The owner /operator shall develop and keep onsite a quality assurance plan for all the continuous monitoring equipment described in 40 CFR 60.4345(a), (c), and (d). [40 CFR 60.4345(e)]

63. Results of the CEM system shall be averaged over a one hour period for NO_X emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [District Rule 4703 and 40 CFR 60.13 and 40 CFR 60.4350(a)]

64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080]

65. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]

66. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]

67. Excess NOx emissions shall be defined as any 30 day operating period in which the 30 day rolling average NOx concentration exceeds an applicable emissions limit. A 30 day rolling average NOx rate is the arithmetic average of all hourly NOx emission data in ppm measured by the continuous monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30 day average is calculated each unit operating day as the average of all hourly NOx emission rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.4350(h) and 40 CFR 60.4380(b)(1)]

68. For the purpose of determining excess NOx emissions, for each unit operating hour in which a valid hourly average is obtained, the data acquisition system and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from Method 19 of 40 CFR 60 Appendix A. For any hour in which the hourly O2 concentration exceeds 19.0 percent O2, a diluent cap of 19 percent O2 may be used in the emission calculations. [40 CFR 60.4350(b)]

69. Excess SOx emissions is each unit operating hour included in the period beginning on the dat and hour of any sample for which the fuel sulfur content exceeds the applicable limits listed in this permit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitoring downtime for SOx begins when a sample is not taken by its due date. A period of monitor downtime for SOx also begins on the date and hour of a required sample, if invalid results are obtained. A period of SOx monitoring downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385(a) and (c)]

70. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395]

71. The owner/operator shall submit to the District information correlating the NO_X control system operating parameters to the associated measured NO_X output. The information must be sufficient to allow the District to determine compliance with the NO_X emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703]

72. The owner/operator shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703]

73. The owner/operator shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, calculated NOx and CO mass emission rates (lb/hr and lb/twelve month rolling period), and VOC, PM10 and SOx emission rates (lb/twelve month rolling period). [District Rules 2201 and 4703]

74. The owner/operator shall maintain a system operating log, updated on a daily basis, which includes the following information: The actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703]
75. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4703]

76. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72]

77. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75]

78. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75]

79. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73]

80. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77]

81. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75]

82. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72]

83. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73]

84. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72]

85. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72]

86. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72]

87. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77]

88. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77]

89. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72]

90. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other subrnissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75]

91. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75]

92. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021]

93. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]

94. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021]

95. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051] N

96. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061]

97. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]

98. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rule 8011 and 8071]

99. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, owner/operator shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071]

100. Whenever any portion of the site becomes inactive, Owner/operator shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071]

101. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071]

ATTACHMENT B

Previous FDOC Conditions for Combined Cycle Plant N-4597-1-5 and N-4597-2-5

ISSUANCE DATE: 08/18/2009

LEGAL OWNER OR OPERATOR: GWF ENERGY, LLC - TRACY PEAKER PROJECT
MAILING ADDRESS: 4300 RAILROAD AVE
PITTSBURG, CA 94565

LOCATION: 14950 WEST SCHULTE ROAD
TRACY, CA 95377

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
MODIFICATION OF AN EXISTING 84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST: TO CONVERT THE EXISTING SYSTEM TO A COMBINED CYCLE CONFIGURATION BY (1) REMOVING THE EXISTING OXIDATION AND SELECTIVE CATALYTIC REDUCTION SYSTEM AND THE EXISTING 100 FOOT EXHAUST STACKS, (2) INSTALLING A NEW HEAT RECOVERY STEAM GENERATOR EQUIPPED WITH A 324 MMBTU/HR (HHV) NATURAL GAS-FIRED DUCT BURNER, (3) INSTALLING A NEW OXIDATION CATALYST AND NEW SELECTIVE CATALYTIC REDUCTION SYSTEM, (4) INSTALLING A NEW 150' TALL 17' DIAMETER STACK, (5) INSTALLING A NEW STG LUBE OIL COOLER, AND (6) INSTALLING A 145 MW NOMINALLY RATED CONDENSING STEAM TURBINE GENERATOR (SHARED WITH N-4597-2)

CONDITIONS

1. The owner/operator shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule 2201 Section 5.8.8] Federally Enforceable Through Title V Permit
3. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
4. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
5. The owner/operator of GWF Tracy shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions # 6 through #16 shall apply only during the commissioning period as defined below. Unless otherwise indicated, conditions #17 through #101 shall apply after the commissioning period has ended. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the GWF Tracy construction contractor to insure safe and reliable steady state operation of the gas turbine, heat recovery steam generators, steam turbine, and associated electrical delivery systems. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired (at the beginning of the conversion to a combined cycle plant), whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
8. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

9. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Coincident with the steady state operation of the SCR system and the oxidation catalyst at loads greater than 50% and after installation and tuning of emission controls, NOx, CO, and VOC emissions from this unit shall comply with the limits specified in conditions #30 and #31 of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The owner/operator shall submit a plan to the District at least four weeks prior to first firing of this unit (after beginning of the conversion to a combined cycle plant), describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of each activity. The activities described shall include, but not limited to, the tuning of the combustors, the installation and operation of the SCR system and oxidation catalyst, the installation, calibration, and testing of NOx and CO continuous emission monitors, and any activities requiring firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Emission rates from the CTG, during the commissioning period, shall not exceed any of the following limits: NOx (as NO2) - 146.70 lb/hr; PM10 - 5.80 lb/hr; VOC (as methane) - 3.20 lb/hr; CO - 229.60 lb/hr; SOx (as SO2) - 2.6 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

13. During the initial commissioning activities, the owner/operator shall demonstrate compliance with the NOx emission limit specified in condition #12 through the use of properly operated and maintained continuous emission monitor located within the inlet section of the steam generator unit. Upon completion of the initial commission activities and with the installation of the SCR system and oxidation catalyst, the owner/operator shall demonstrate compliance with the NOx and CO emission limits specified in conditions #30, #31, #32, and #33 through the use of properly operated and maintained continuous emission monitors and recorders as specified in conditions #55 and #56. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201] Federally Enforceable Through Title V Permit

14. During initial commissioning activities, the inlet NOx continuous emissions monitor specified in this permit shall be installed, calibrated, and operation prior to the first re-firing of this unit. Upon completion of the initial commissioning activities and the installation of the SCR system and oxidation catalyst, the exhaust stack NOx and CO continuous monitors specified within this permit shall be installed, calibrated, and operational prior to the first re-firing of this unit with the SCR and oxidation catalyst in place. After the first re-firing, the detection range of each continuous emissions monitor shall be adjusted as necessary to accurately measure the resulting range of NOx and/or CO emission concentrations. [District Rule 2201] Federally Enforceable Through Title V Permit

15. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 500 hours total during the commissioning period. Such operation of the unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and oxidation catalyst in place. Upon completion of these activities, the owner/operator shall proved written notice to the District and the unused balance of the 500 firing hours without abatement shall expire. Records of the commissioning hours for this unit shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The total mass emissions of NOx, SOx, PM10, CO, and VOC that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limit specified in condition #41. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

18. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

19. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

20. Owner/operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1] Federally Enforceable Through Title V Permit
21. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0] Federally Enforceable Through Title V Permit
22. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
23. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
24. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit
25. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The owner/operator shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit
26. During all types of operation, including startup and shutdown periods, ammonia injection in to the SCR system shall occur once the minimum temperature at the catalyst face has been reached to ensure NOX emission reductions can occur with a reasonable level of ammonia slip. The minimum catalyst face temperature shall be determined during the final design phase of this project and shall be submitted to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The SCR system shall be equipped with a continuous temperature monitoring system to measure and record the temperature at the catalyst face. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Owner/operator shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The CTG shall only be fired on PUC-regulated natural gas with a sulfur content value not exceeding 0.66 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a daily basis and 0.25 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a 12-month rolling average basis. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Emission rates from this CTG without the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NOX (as NO2) - 8.10 lb/hr and 2.0 ppmvd @ 15% O2; CO - 3.90 lb/hr and 2.0 ppmvd @ 15% O2; VOC (as methane) - 1.13 lb/hr and 1.5 ppmvd @ 15% O2; PM10 - 4.40 lb/hr; or SOX (as SO2) - 2.03 lb/hr. NOX (as NO2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)] Federally Enforceable Through Title V Permit
31. Emission rates from this CTG with the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NOX (as NO2) - 10.30 lb/hr and 2.0 ppmvd @ 15% O2; CO - 6.00 lb/hr and 2.0 ppmvd @ 15% O2; VOC (as methane) - 3.22 lb/hr and 2.0 ppmvd @ 15% O2; PM10 - 5.80 lb/hr; or SOX (as SO2) - 2.63 lb/hr. NOX (as NO2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)] Federally Enforceable Through Title V Permit
32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NOX (as NO2) - 390.5 lb/event; CO - 562.5 lb/event; VOC (as methane) - 10.5 lb/event; PM10 - 11.0 lb/event; or SOX (as SO2) - 4.1 lb/event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NOX (as NO2) -104.0 lb/event; CO - 148.0 lb/event; VOC (as methane) - 2.6 lb/event; PM10 - 3.0 lb/event; or SOX (as SO2) - 1.1 lb/event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

34. A start up event is defined as the period beginning with the gas turbine initial firing until the unit meets the lb/hr and ppmvd emission limits in Condition 30 or Condition 31 depending on the operating conditions of the duct burners during the start up event. A shutdown event is defined as the period beginning with the turbine shutdown sequence and ending with the cessation of firing the gas turbine engine. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

35. The duration of each startup shall not exceed three hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

36. The duration of each shutdown shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

38. The ammonia (NH3) emissions shall not exceed 5 ppmvd @ 15% O2 or 9.40 lb/hr over a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

39. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the owner/operator shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the owner/operator may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the owner/operator shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

40. Daily emissions from the CTG shall not exceed the following limits: NOX (as NO2) - 814.9 lb/day; CO - 1071.6 lb/day; VOC - 78.6 lb/day; PM10 - 132.0 lb/day; or SOX (as SO2) - 58.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

41. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NOX (as NO2) - 88,881 lb/year; CO - 74,598 lb/year; VOC - 15,145 lb/year; PM10 - 32,250 lb/year; or SOX (as SO2) - 7,084 lb/year. Compliance with the annual NOx and CO emission limits shall be demonstrated using CEM data and compliance with the annual VOC, PM10 and SOx emission limits shall be demonstrated using the most recent source test results. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

44. The combined natural gas fuel usage for permit units N-4597-1 and N-4597-2 shall not exceed 20,454 MMscf/year. [District Rule 2550] Federally Enforceable Through Title V Permit

45. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOX, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

46. Source testing to measure the stead state NOx, CO, VOC, and NH3 emission rates (lb/hr and ppmvd @ 15% O2) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400] Federally Enforceable Through Title V Permit

47. Source testing to measure the PM10 emission rate (lb/hr) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rule 1081, 2201, and 40 CFR 60.4400] Federally Enforceable Through Title V Permit

48. Source testing to measure startup and shutdown NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-4597-1 or N-4597-2) within 60 days after the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with 40 CFR 60, Appendix F (Relative Accuracy Audit). If CEM data is not certifiable to determine compliance with NOX and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO relative accuracy audit demonstrates that the CEM data is certifiable, the startup and shutdown NOx and CO testing frequency shall return to the once every seven years schedule. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

49. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703] Federally Enforceable Through Title V Permit

50. Source testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The following test methods shall be used: NOx - EPA Method 7E or 20 or ARB Method 100 and EPA Method 19 (Acid Rain Program); CO - EPA Method 10 or 10B or ARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 and 202 (front half and back half) or 201a and 202; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or ARB 100. NOx testing shall also be conducted in accordance with the requirements of 40 CFR 60.4400(a)(2), (3), and (b). EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i) and 40 CFR 60.4400(a)(2), (3), and (b)] Federally Enforceable Through Title V Permit

52. Testing to demonstrate compliance with the short-term (daily) fuel sulfur content limit shall be conducted monthly. If a monthly test indicates that a violation of the daily fuel sulfur content limit has occurred then weekly testing shall commence and continue until eight consecutive tests show compliance. Once compliance with the daily fuel sulfur content is demonstrated on eight consecutive weekly tests, testing may return to the monthly schedule. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. [District Rule 2201 an 40 CFR 60.4360, 60.4365(a) and 60.4370(c)] Federally Enforceable Through Title V Permit

53. Compliance with the rolling 12-month average fuel sulfur content limit shall be demonstrated monthly. The 12-month rolling average fuel sulfur content shall be calculated as follows: 12-month rolling average fuel sulfur content = Sum of the monthly average fuel sulfur contents for the previous 12 months ö total number of months the unit has operated in during the previous 12 months. The monthly average fuel sulfur content is the average fuel sulfur content of all tests conducted in a given month. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. Owner/operator shall keep a monthly record of the rolling 12-month average fuel sulfur content. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

54. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit

55. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOX, CO and O2 concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)] Federally Enforceable Through Title V Permit

57. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit

58. The NOX, CO and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2, 3, and 4, and/or 40 CFR 75 Appendix A, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit

59. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

60. The owner/operator shall perform a relative accuracy test audit (RATA) for NOX, CO and O2 as specified by 40 CFR Part 60, Appendix F, 5.11, or 40 CFR Part 75 Appendix B, at least once every four calendar quarters. The owner/operator shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. If the RATA test is conducted as specified in 40 CFR Part 75 Appendix B, the RATA shall be conducted on a lb/MMBtu basis. [District Rule 1080 and 40 CFR 60.4345] Federally Enforceable Through Title V Permit

61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit

62. The owner/operator shall develop and keep onsite a quality assurance plan for all the continuous monitoring equipment described in 40 CFR 60.4345(a), (c), and (d). [40 CFR 60.4345(e)] Federally Enforceable Through Title V Permit

63. Results of the CEM system shall be averaged over a one hour period for NOX emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [District Rule 4703 and 40 CFR 60.13 and 40 CFR 60.4350(a)] Federally Enforceable Through Title V Permit

64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit

65. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

66. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

67. Excess NOx emissions shall be defined as any 30 day operating period in which the 30 day rolling average NOx concentration exceeds an applicable emissions limit. A 30 day rolling average NOx emission rate is the arithmetic average of all hourly NOx emission data in ppm measured by the continuous monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30 day average is calculated each unit operating day as the average of all hourly NOx emission rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.4350(h) and 40 CFR 60.4380(b)(1)] Federally Enforceable Through Title V Permit

68. For the purpose of determining excess NOx emissions, for each unit operating hour in which a valid hourly average is obtained, the data acquisition system and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from Method 19 of 40 CFR 60 Appendix A. For any hour in which the hourly O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19 percent O2 may be used in the emission calculations. [40 CFR 60.4350(b)] Federally Enforceable Through Title V Permit

69. Excess SOx emissions is each unit operating hour included in the period beginning on the date and hour of any sample for which the fuel sulfur content exceeds the applicable limits listed in this permit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitoring downtime for SOx begins when a sample is not taken by its due date. A period of monitor downtime for SOx also begins on the date and hour of a required sample, if invalid results are obtained. A period of SOx monitoring downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385(a) and (c)] Federally Enforceable Through Title V Permit

70. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395] Federally Enforceable Through Title V Permit

71. The owner/operator shall submit to the District information correlating the NOX control system operating parameters to the associated measured NOX output. The information must be sufficient to allow the District to determine compliance with the NOX emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703] Federally Enforceable Through Title V Permit

72. The owner/operator shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

73. The owner/operator shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, calculated NOx and CO mass emission rates (lb/hr and lb/twelve month rolling period), and VOC, PM10 and SOx emission rates (lb/twelve month rolling period). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

74. The owner/operator shall maintain a system operating log, updated on a daily basis, which includes the following information: The actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit

75. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

76. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit

77. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

78. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit

79. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit

80. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit

81. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit

82. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit

83. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit

84. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit

85. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit

86. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit

87. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

88. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

89. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit

90. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit

91. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

92. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

93. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

94. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

95. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit

96. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

97. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8076] Federally Enforceable Through Title V Permit

98. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

99. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, owner/operator shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

100. Whenever any portion of the site becomes inactive, Owner/operator shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8076] Federally Enforceable Through Title V Permit

101. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071] Federally Enforceable Through Title V Permit

ISSUANCE DATE: 08/18/2009

LEGAL OWNER OR OPERATOR: GWF ENERGY, LLC - TRACY PEAKER PROJECT
MAILING ADDRESS: 4300 RAILROAD AVE
PITTSBURG, CA 94565

LOCATION: 14950 WEST SCHULTE ROAD
TRACY, CA 95377

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
MODIFICATION OF AN EXISTING 84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST: TO CONVERT THE EXISTING SYSTEM TO A COMBINED CYCLE CONFIGURATION BY (1) REMOVING THE EXISTING OXIDATION CATALYST AND SELECTIVE CATALYTIC REDUCTION SYSTEM AND THE EXISTING 100 FOOT EXHAUST STACKS, (2) INSTALLING A NEW HEAT RECOVERY STEAM GENERATOR EQUIPPED WITH A 324 MMBTU/HR (HHV) NATURAL GAS-FIRED DUCT BURNER, (3) INSTALLING A NEW OXIDATION CATALYST AND NEW SELECTIVE CATALYTIC REDUCTION SYSTEM, (4) INSTALLING A NEW 150' TALL 17' DIAMETER STACK, (5) INSTALLING A NEW STG LUBE OIL COOLER, AND (6) INSTALLING A 145 MW NOMINALLY RATED CONDENSING STEAM TURBINE GENERATOR (SHARED WITH N-4597-1)

CONDITIONS

1. The owner/operator shall not begin actual onsite construction of the equipment authorized by this Authority to Construct until the lead agency satisfies the requirements of the California Environmental Quality Act (CEQA). [California Environmental Quality Act]
2. To the extent this Determination of Compliance serves as an Authority to Construct, said Authority to Construct shall not become effective until the California Energy Commission approves the Application for Certification. [California Environmental Quality Act and District Rule 2201 Section 5.8.8] Federally Enforceable Through Title V Permit
3. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
4. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
5. The owner/operator of GWF Tracy shall minimize the emissions from the gas turbine to the maximum extent possible during the commissioning period. Conditions # 6 through #16 shall apply only during the commissioning period as defined below. Unless otherwise indicated, conditions #17 through #101 shall apply after the commissioning period has ended. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Commissioning activities are defined as, but not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the GWF Tracy construction contractor to insure safe and reliable steady state operation of the gas turbine, heat recovery steam generators, steam turbine, and associated electrical delivery systems. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired (at the beginning of the conversion to a combined cycle plant), whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
8. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the combustors of this unit shall be tuned to minimize emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

9. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and the construction contractor, the Selective Catalytic Reduction (SCR) system and oxidation catalyst shall be installed, adjusted, and operated to minimize emissions from this unit. [District Rule 2201] Federally Enforceable Through Title V Permit

10. Coincident with the steady state operation of the SCR system and the oxidation catalyst at loads greater than 50% and after installation and tuning of emission controls, NOx, CO, and VOC emissions from this unit shall comply with the limits specified in conditions #30 and #31 of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The owner/operator shall submit a plan to the District at least four weeks prior to first firing of this unit (after beginning of the conversion to a combined cycle plant), describing the procedures to be followed during the commissioning period. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of each activity. The activities described shall include, but not limited to, the tuning of the combustors, the installation and operation of the SCR system and oxidation catalyst, the installation, calibration, and testing of NOx and CO continuous emission monitors, and any activities requiring firing of this unit without abatement by the SCR system or oxidation catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Emission rates from the CTG, during the commissioning period, shall not exceed any of the following limits: NOx (as NO2) - 146.70 lb/hr; PM10 - 5.80 lb/hr; VOC (as methane) - 3.20 lb/hr; CO - 229.60 lb/hr; SOx (as SO2) - 2.6 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

13. During the initial commissioning activities, the owner/operator shall demonstrate compliance with the NOx emission limit specified in condition #12 through the use of properly operated and maintained continuous emission monitor located within the inlet section of the steam generator unit. Upon completion of the initial commission activities and with the installation of the SCR system and oxidation catalyst, the owner/operator shall demonstrate compliance with the NOx and CO emission limits specified in conditions #30, #31, #32, and #33 through the use of properly operated and maintained continuous emission monitors and recorders as specified in conditions #55 and #56. The monitored parameters for this unit shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation). [District Rule 2201] Federally Enforceable Through Title V Permit

14. During initial commissioning activities, the inlet NOx continuous emissions monitor specified in this permit shall be installed, calibrated, and operation prior to the first re-firing of this unit. Upon completion of the initial commissioning activities and the installation of the SCR system and oxidation catalyst, the exhaust stack NOx and CO continuous monitors specified within this permit shall be installed, calibrated, and operational prior to the first re-firing of this unit with the SCR and oxidation catalyst in place. After the first re-firing, the detection range of each continuous emissions monitor shall be adjusted as necessary to accurately measure the resulting range of NOx and/or CO emission concentrations. [District Rule 2201] Federally Enforceable Through Title V Permit

15. The total number of firing hours of this unit without abatement of emissions by the SCR system and the oxidation catalyst shall not exceed 500 hours total during the commissioning period. Such operation of the unit without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and oxidation catalyst in place. Upon completion of these activities, the owner/operator shall proved written notice to the District and the unused balance of the 500 firing hours without abatement shall expire. Records of the commissioning hours for this unit shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The total mass emissions of NOx, SOx, PM10, CO, and VOC that are emitted during the commissioning period shall accrue towards the consecutive twelve month emission limit specified in condition #41. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

18. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

19. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit

20. Owner/operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1] Federally Enforceable Through Title V Permit

21. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0] Federally Enforceable Through Title V Permit

22. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit

23. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]

24. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for up to three minutes in any hour. [District Rules 2201 and 4101] Federally Enforceable Through Title V Permit

25. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve this gas turbine engine. Exhaust ducting may be equipped (if required) with a fresh air inlet blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. The owner/operator shall submit SCR and oxidation catalyst design details to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit

26. During all types of operation, including startup and shutdown periods, ammonia injection in to the SCR system shall occur once the minimum temperature at the catalyst face has been reached to ensure NOX emission reductions can occur with a reasonable level of ammonia slip. The minimum catalyst face temperature shall be determined during the final design phase of this project and shall be submitted to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit

27. The SCR system shall be equipped with a continuous temperature monitoring system to measure and record the temperature at the catalyst face. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Owner/operator shall submit continuous emission monitor design, installation, and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201] Federally Enforceable Through Title V Permit

29. The CTG shall only be fired on PUC-regulated natural gas with a sulfur content value not exceeding 0.66 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a daily basis and 0.25 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a 12-month rolling average basis. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Emission rates from this CTG without the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NOX (as NO2) - 8.10 lb/hr and 2.0 ppmvd @ 15% O2; CO - 3.90 lb/hr and 2.0 ppmvd @ 15% O2; VOC (as methane) - 1.13 lb/hr and 1.5 ppmvd @ 15% O2; PM10 - 4.40 lb/hr; or SOX (as SO2) - 2.03 lb/hr. NOX (as NO2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)] Federally Enforceable Through Title V Permit

31. Emission rates from this CTG with the duct burner firing, except during startup and shutdown periods, shall not exceed any of the following limits: NOX (as NO2) - 10.30 lb/hr and 2.0 ppmvd @ 15% O2; CO - 6.00 lb/hr and 2.0 ppmvd @ 15% O2; VOC (as methane) - 3.22 lb/hr and 2.0 ppmvd @ 15% O2; PM10 - 5.80 lb/hr; or SOX (as SO2) - 2.63 lb/hr. NOX (as NO2) emission rates are one hour rolling averages. All other emission rates are three hour rolling averages. [District Rules 2201 and 4703 and 40 CFR 60.4320(a) & (b)] Federally Enforceable Through Title V Permit

32. During start-up, CTG exhaust emission rates shall not exceed any of the following limits: NOX (as NO2) - 390.5 lb/event; CO - 562.5 lb/event; VOC (as methane) - 10.5 lb/event; PM10 - 11.0 lb/event; or SOX (as SO2) - 4.1 lb/event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

33. During shutdown, CTG exhaust emission rates shall not exceed any of the following limits: NOX (as NO2) -104.0 lb/event; CO - 148.0 lb/event; VOC (as methane) - 2.6 lb/event; PM10 - 3.0 lb/event; or SOX (as SO2) - 1.1 lb/event. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

34. A start up event is defined as the period beginning with the gas turbine initial firing until the unit meets the lb/hr and ppmvd emission limits in Condition 30 or Condition 31 depending on the operating conditions of the duct burners during the start up event. A shutdown event is defined as the period beginning with the turbine shutdown sequence and ending with the cessation of firing the gas turbine engine. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

35. The duration of each startup shall not exceed three hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

36. The duration of each shutdown shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

37. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

38. The ammonia (NH3) emissions shall not exceed 5 ppmvd @ 15% O2 or 9.40 lb/hr over a 24 hour rolling average. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

39. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the owner/operator shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the owner/operator may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the owner/operator shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

40. Daily emissions from the CTG shall not exceed the following limits: NOX (as NO2) - 814.9 lb/day; CO - 1071.6 lb/day; VOC - 78.6 lb/day; PM10 - 132.0 lb/day; or SOX (as SO2) - 58.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

41. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following limits: NOX (as NO2) - 88,881 lb/year; CO - 74,598 lb/year; VOC - 15,145 lb/year; PM10 - 32,250 lb/year; or SOX (as SO2) - 7,084 lb/year. Compliance with the annual NOx and CO emission limits shall be demonstrated using CEM data and compliance with the annual VOC, PM10 and SOx emission limits shall be demonstrated using the most recent source test results. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Each one hour period shall commence on the hour. Each one hour period in a three hour rolling average will commence on the hour. The three hour rolling average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average for ammonia slip will commence on the hour. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

44. The combined natural gas fuel usage for permit units N-4597-1 and N-4597-2 shall not exceed 20,454 MMscf/year. [District Rule 2550] Federally Enforceable Through Title V Permit

45. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOX, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

46. Source testing to measure the stead state NOx, CO, VOC, and NH3 emission rates (lb/hr and ppmvd @ 15% O2) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rules 1081, 2201 and 4703 and 40 CFR 60.4400] Federally Enforceable Through Title V Permit

47. Source testing to measure the PM10 emission rate (lb/hr) shall be conducted within 60 days after the end of the commissioning period and at least once every twelve months thereafter. [District Rule 1081, 2201 and 40 CFR 60.4400] Federally Enforceable Through Title V Permit

48. Source testing to measure startup and shutdown NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbines (N-4597-1 or N-4597-2) within 60 days after the end of the commissioning period and at least once every seven years thereafter. CEM relative accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with 40 CFR 60, Appendix F (Relative Accuracy Audit). If CEM data is not certifiable to determine compliance with NOX and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO relative accuracy audit demonstrates that the CEM data is certifiable, the startup and shutdown NOx and CO testing frequency shall return to the once every seven years schedule. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

49. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703] Federally Enforceable Through Title V Permit

50. Source testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

51. The following test methods shall be used: NOx - EPA Method 7E or 20 or ARB Method 100 and EPA Method 19 (Acid Rain Program); CO - EPA Method 10 or 10B or ARB Method 100; VOC - EPA Method 18 or 25; PM10 - EPA Method 5 and 202 (front half and back half) or 201a and 202; ammonia - BAAQMD ST-1B; and O2 - EPA Method 3, 3A, or 20 or ARB 100. NOx testing shall also be conducted in accordance with the requirements of 40 CFR 60.4400(a)(2), (3), and (b). EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i) and 40 CFR 60.4400(a)(2), (3), and (b)] Federally Enforceable Through Title V Permit

52. Testing to demonstrate compliance with the short-term (daily) fuel sulfur content limit shall be conducted monthly. If a monthly test indicates that a violation of the daily fuel sulfur content limit has occurred then weekly testing shall commence and continue until eight consecutive tests show compliance. Once compliance with the daily fuel sulfur content is demonstrated on eight consecutive weekly tests, testing may return to the monthly schedule. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. [District Rule 2201 an 40 CFR 60.4360, 60.4365(a) and 60.4370(c)] Federally Enforceable Through Title V Permit

53. Compliance with the rolling 12-month average fuel sulfur content limit shall be demonstrated monthly. The 12-month rolling average fuel sulfur content shall be calculated as follows: 12-month rolling average fuel sulfur content = Sum of the monthly average fuel sulfur contents for the previous 12 months ö total number of months the unit has operated in during the previous 12 months. The monthly average fuel sulfur content is the average fuel sulfur content of all tests conducted in a given month. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. Owner/operator shall keep a monthly record of the rolling 12-month average fuel sulfur content. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

54. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit

55. The CTG shall be equipped with a continuous monitoring system to measure and record fuel consumption. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

56. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOX, CO and O2 concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)] Federally Enforceable Through Title V Permit

57. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit

58. The NOX, CO and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2, 3, and 4, and/or 40 CFR 75 Appendix A, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit

59. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and compliance source testing are both performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

60. The owner/operator shall perform a relative accuracy test audit (RATA) for NOX, CO and O2 as specified by 40 CFR Part 60, Appendix F, 5.11, or 40 CFR Part 75 Appendix B, at least once every four calendar quarters. The owner/operator shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. If the RATA test is conducted as specified in 40 CFR Part 75 Appendix B, the RATA shall be conducted on a lb/MMBtu basis. [District Rule 1080 and 40 CFR 60.4345] Federally Enforceable Through Title V Permit

61. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit

62. The owner/operator shall develop and keep onsite a quality assurance plan for all the continuous monitoring equipment described in 40 CFR 60.4345(a), (c), and (d). [40 CFR 60.4345(e)] Federally Enforceable Through Title V Permit

63. Results of the CEM system shall be averaged over a one hour period for NOX emissions and a three hour period for CO emissions using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [District Rule 4703 and 40 CFR 60.13 and 40 CFR 60.4350(a)] Federally Enforceable Through Title V Permit

64. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit

65. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

66. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

67. Excess NOx emissions shall be defined as any 30 day operating period in which the 30 day rolling average NOx concentration exceeds an applicable emissions limit. A 30 day rolling average NOx emission rate is the arithmetic average of all hourly NOx emission data in ppm measured by the continuous monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30 day average is calculated each unit operating day as the average of all hourly NOx emission rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.4350(h) and 40 CFR 60.4380(b)(1)] Federally Enforceable Through Title V Permit

68. For the purpose of determining excess NOx emissions, for each unit operating hour in which a valid hourly average is obtained, the data acquisition system and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from Method 19 of 40 CFR 60 Appendix A. For any hour in which the hourly O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19 percent O2 may be used in the emission calculations. [40 CFR 60.4350(b)] Federally Enforceable Through Title V Permit

69. Excess SOx emissions is each unit operating hour included in the period beginning on the date and hour of any sample for which the fuel sulfur content exceeds the applicable limits listed in this permit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitoring downtime for SOx begins when a sample is not taken by its due date. A period of monitor downtime for SOx also begins on the date and hour of a required sample, if invalid results are obtained. A period of SOx monitoring downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385(a) and (c)] Federally Enforceable Through Title V Permit

70. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395] Federally Enforceable Through Title V Permit

71. The owner/operator shall submit to the District information correlating the NOX control system operating parameters to the associated measured NOX output. The information must be sufficient to allow the District to determine compliance with the NOX emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703] Federally Enforceable Through Title V Permit

72. The owner/operator shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

73. The owner/operator shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, calculated NOx and CO mass emission rates (lb/hr and lb/twelve month rolling period), and VOC, PM10 and SOx emission rates (lb/twelve month rolling period). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

74. The owner/operator shall maintain a system operating log, updated on a daily basis, which includes the following information: The actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit

75. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

76. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit

77. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit

78. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit

79. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit

80. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit

81. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit

82. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit

83. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit

84. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit

85. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit

86. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit

87. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

88. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

89. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit

90. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit

91. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

92. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

93. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

94. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011(8/19/04). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit

95. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011. [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit

96. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

97. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8076] Federally Enforceable Through Title V Permit

98. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

99. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, owner/operator shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit

100. Whenever any portion of the site becomes inactive, Owner/operator shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8076] Federally Enforceable Through Title V Permit

101. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031, and 8071] Federally Enforceable Through Title V Permit

ATTACHMENT C

Current Permit to Operate Conditions for Simple Cycle Plant Configuration N-4597-1-6 and N-4597-2-6

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-4597-1-6 **EXPIRATION DATE:** 06/30/2014

EQUIPMENT DESCRIPTION:
84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
3. This unit shall exclusively burn only natural gas with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
4. Operation of this unit shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During a startup and a shutdown of a gas turbine engine, the emissions from the gas turbine engine shall not exceed the following: NOx (as NO2) - 26 pounds in any one hour and CO - 42 pounds in any one hour. [California Environmental Quality Act]
8. Start up time shall be defined as a time during the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down shall be defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The start up and shutdown time shall not to exceed two hours. [40 CFR Subpart A 60.2; District NSR Rule and District Rule 4703, 3.26 and 3.29] Federally Enforceable Through Title V Permit
9. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Emissions from this unit, excluding periods of startup, shutdown or reduced load, shall not exceed any of the following: NOx (as NO2) - 26.45 lb/hr and 5.0 ppmvd @ 15% O2; VOC - 2.42 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.57 lb/hr and 6.0 ppmvd @ 15% O2; PM10 - 3.3 lb/hr; and SOx (as SO2) - 0.78 lb/hr. All emission concentration limits are three-hour rolling averages. [District Rules 2201 and 4703, 5.1 and 5.2 and 40 CFR 60.332(a)(1) and (a)(2)] Federally Enforceable Through Title V Permit
11. Emissions from this unit, including emissions from startup events and shutdown events, shall not exceed any of the following: NOx (as NO2) - 493.3 lb/day; VOC - 42.4 lb/day; CO - 235.7 lb/day; PM10 - 80.0 lb/day; and SOx (as SO2) - 18.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Combined quarterly emissions from N-4597-1 and N-4597-2, including emissions from startup events and shutdown events, shall be calculated for each calendar quarter and shall not exceed any of the following: NOx (as NO2) - Q1: 76,704 lb, Q2: 76,704 lb, Q3: 76,756 lb, and Q4: 76,756 lb; VOC - Q1: 6,676 lb, Q2: 6,676 lb, Q3: 6,680 lb, and Q4: 6,680 lb; and PM10 - Q1: 13,333 lb, Q2: 13,333 lb, Q3: 13,333 lb, and Q4: 13,333 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Combined annual emissions from N-4597-1 and N-4597-2, including emissions from startup events and shutdown events, calculated on a twelve consecutive month rolling basis shall not exceed any of the following: NOx (as NO2) - 306,920 lb/year; VOC - 26,712 lb/year; and PM10 - 53,334 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @ 15% O2 = ((a - (b x c/1,000,000)) x (1,000,000 / b) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOX concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
16. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Quarterly emissions shall be calculated for each calendar quarter in a year. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Source testing to demonstrate compliance with the NOx, CO, and VOC short-term emission limits (lb/hr and ppmv @ 15% O2) shall be conducted at least once every twelve months. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
19. Source testing to demonstrate compliance with PM10 short-term emission limit (lb/hr) shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing of startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbine engines (N-4597-1 or N-4597-2) at least once every seven years by District-witnessed, in-situ sampling of exhaust gases by a qualified independent source testing company. CEM relative accuracy shall be determined during startup source testing in accordance with District-approved protocol. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Source testing to demonstrate compliance with the NOx, CO, VOC, PM10, and NH3 requirements of this permit shall be conducted at least once every twelve months. [District Rules 2201 and 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Compliance with the natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit

23. Testing to demonstrate compliance with the fuel sulfur content limit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [40 CFR 60.334(h)(1)] Federally Enforceable Through Title V Permit

24. The following test methods shall be used: NOx - EPA Method 7E or 20; CO - EPA Method 10 or 10B; O2 - EPA Method 3, 3A, or 20; VOC - EPA Method 18 or 25; and NH3 - BAAQMD Method ST-1B. Alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081, 2201 and 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit

25. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Testing for fuel sulfur content shall be conducted utilizing ASTM method D 1072, D 3246 or D 4468. [District Rule 2201 and 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

27. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit

28. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit

29. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with portable NOx, CO, NH3 and O2 monitoring equipment during District inspections. [District Rule 1081] Federally Enforceable Through Title V Permit

30. The exhaust stack shall be equipped with permanent provisions for stack gas sample collection. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

31. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days of source testing. [District Rule 1081] Federally Enforceable Through Title V Permit

32. The owner or operator shall install, operate and maintain in calibration systems that continuously measure and record: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption being fired in the turbine, and the exhaust gas NOx and O2 concentrations. [District Rules 2201 and 4703 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit

33. CTG exhaust shall be equipped with continuously recording emissions monitor(s) dedicated to this unit for NOx, CO, and O2. Continuous emissions monitor(s) (CEM) shall meet the requirements of 40 CFR part 60, Appendices B and F, and 40 CFR part 75, and District-approved protocol, and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703; and 40 CFR 60.334(c) and 40 CFR Part 72] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit

35. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

36. Results of the CEM system shall be averaged over a three hour period for NOx and CO emissions using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit

37. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit

38. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

39. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

40. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit

41. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

42. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

43. The permittee shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703] Federally Enforceable Through Title V Permit

44. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period and used to determine compliance with an emissions standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j), (j)(5)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. Excess emissions shall be defined as any operating hour in which the 3-hour rolling average NOx concentration exceeds the applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

46. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit

47. Permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and annual records of NOx and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

48. Permittee shall maintain records of SOx emissions rates in lb/hr and lb/day. SOx emission rates shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

49. The operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.25 grain of sulfur (as S) per 100 dry scf of natural gas. [District Rule 2520, 9.3.2 and 40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

50. Permittee shall maintain the following records for the CTG: actual turbine start-up and stop times (local time), length and reason for reduced load periods, occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

51. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit

52. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

53. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

54. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f), 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3), and 60.335(b), (c)(2), (c)(3), and (d); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

55. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

56. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72.9(a)(2)(i & ii)] Federally Enforceable Through Title V Permit

57. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 72.9(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

58. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 72.9(b)(2)] Federally Enforceable Through Title V Permit

59. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72.9(c)(1)(i & ii)] Federally Enforceable Through Title V Permit

60. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72.9(c)(2)] Federally Enforceable Through Title V Permit

61. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72.9(c)(3)] Federally Enforceable Through Title V Permit

62. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72.9(c)(4)] Federally Enforceable Through Title V Permit

63. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 72.9(c)(5)] Federally Enforceable Through Title V Permit

64. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72.9(c)(6)] Federally Enforceable Through Title V Permit

65. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72.9(c)(7)] Federally Enforceable Through Title V Permit

66. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72.9(d)] Federally Enforceable Through Title V Permit

67. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 72.9(e)(1)] Federally Enforceable Through Title V Permit

68. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 72.9(e)(2)] Federally Enforceable Through Title V Permit

69. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72.9(f)(1)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

70. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 772.9(f)(1)(ii, iii & iv)] Federally Enforceable Through Title V Permit

71. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 72.9(f)(2)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-4597-2-6 **EXPIRATION DATE:** 06/30/2014

EQUIPMENT DESCRIPTION:
84.4 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL PG 7121 EA NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR SERVED BY AN INLET AIR FILTRATION AND COOLING SYSTEM, DRY LOW-NOX COMBUSTORS, A SCR SYSTEM WITH AMMONIA INJECTION, AND AN OXIDATION CATALYST

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
3. This unit shall exclusively burn only natural gas with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
4. Operation of this unit shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
7. During a startup and a shutdown of a gas turbine engine, the emissions from the gas turbine engine shall not exceed the following: NOx (as NO2) - 26 pounds in any one hour and CO - 42 pounds in any one hour. [California Environmental Quality Act]
8. Start up time shall be defined as a time during the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down shall be defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The start up and shutdown time shall not to exceed two hours. [40 CFR Subpart A 60.2; District NSR Rule and District Rule 4703, 3.26 and 3.29] Federally Enforceable Through Title V Permit
9. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Emissions from this unit, excluding periods of startup, shutdown or reduced load, shall not exceed any of the following: NOx (as NO2) - 26.45 lb/hr and 5.0 ppmvd @ 15% O2; VOC - 2.42 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.57 lb/hr and 6.0 ppmvd @ 15% O2; PM10 - 3.3 lb/hr; and SOx (as SO2) - 0.78 lb/hr. All emission concentration limits are three-hour rolling averages. [District Rules 2201 and 4703, 5.1 and 5.2 and 40 CFR 60.332(a)(1) and (a)(2)] Federally Enforceable Through Title V Permit

11. Emissions from this unit, including emissions from startup events and shutdown events, shall not exceed any of the following: NOx (as NO2) - 493.3 lb/day; VOC - 42.4 lb/day; CO - 235.7 lb/day; PM10 - 80.0 lb/day; and SOx (as SO2) - 18.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Combined quarterly emissions from N-4597-1 and N-4597-2, including emissions from startup events and shutdown events, shall be calculated for each calendar quarter and shall not exceed any of the following: NOx (as NO2) - Q1: 76,704 lb, Q2: 76,704 lb, Q3: 76,756 lb, and Q4: 76,756 lb; VOC - Q1: 6,676 lb, Q2: 6,676 lb, Q3: 6,680 lb, and Q4: 6,680 lb; and PM10 - Q1: 13,333 lb, Q2: 13,333 lb, Q3: 13,333 lb, and Q4: 13,333 lb. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Combined annual emissions from N-4597-1 and N-4597-2, including emissions from startup events and shutdown events, calculated on a twelve consecutive month rolling basis shall not exceed any of the following: NOx (as NO2) - 306,920 lb/year; VOC - 26,712 lb/year; and PM10 - 53,334 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

14. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @ 15% O2 = ((a - (b x c/1,000,000)) x (1,000,000 / b) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOX concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]

16. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Quarterly emissions shall be calculated for each calendar quarter in a year. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

18. Source testing to demonstrate compliance with the NOx, CO, and VOC short-term emission limits (lb/hr and ppmv @ 15% O2) shall be conducted at least once every twelve months. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit

19. Source testing to demonstrate compliance with PM10 short-term emission limit (lb/hr) shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit

20. Source testing of startup NOx, CO, and VOC mass emission rates shall be conducted for one of the gas turbine engines (N-4597-1 or N-4597-2) at least once every seven years by District-witnessed, in-situ sampling of exhaust gases by a qualified independent source testing company. CEM relative accuracy shall be determined during startup source testing in accordance with District-approved protocol. [District Rule 1081] Federally Enforceable Through Title V Permit

21. Source testing to demonstrate compliance with the NOx, CO, VOC, PM10, and NH3 requirements of this permit shall be conducted at least once every twelve months. [District Rules 2201 and 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Compliance with the natural gas sulfur content limit shall be demonstrated periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit

23. Testing to demonstrate compliance with the fuel sulfur content limit shall be conducted weekly. Once eight consecutive weekly tests show compliance, the fuel sulfur content testing frequency may be reduced to once every calendar quarter. If a quarterly test shows a violation of the sulfur content limit then weekly testing shall resume and continue until eight consecutive tests show compliance. Once compliance is shown on eight consecutive weekly tests then testing may return to quarterly. [40 CFR 60.334(h)(1)] Federally Enforceable Through Title V Permit

24. The following test methods shall be used: NOx - EPA Method 7E or 20; CO - EPA Method 10 or 10B; O2 - EPA Method 3, 3A, or 20; VOC - EPA Method 18 or 25; and NH3 - BAAQMD Method ST-1B. Alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081, 2201 and 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit

25. Source testing to measure concentrations of PM10 shall be conducted using EPA methods 201 and 202, or EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Testing for fuel sulfur content shall be conducted utilizing ASTM method D 1072, D 3246 or D 4468. [District Rule 2201 and 40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

27. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, OR ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit

28. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit

29. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with portable NOx, CO, NH3 and O2 monitoring equipment during District inspections. [District Rule 1081] Federally Enforceable Through Title V Permit

30. The exhaust stack shall be equipped with permanent provisions for stack gas sample collection. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

31. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days of source testing. [District Rule 1081] Federally Enforceable Through Title V Permit

32. The owner or operator shall install, operate and maintain in calibration systems that continuously measure and record: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption being fired in the turbine, and the exhaust gas NOx and O2 concentrations. [District Rules 2201 and 4703 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit

33. CTG exhaust shall be equipped with continuously recording emissions monitor(s) dedicated to this unit for NOx, CO, and O2. Continuous emissions monitor(s) (CEM) shall meet the requirements of 40 CFR part 60, Appendices B and F, and 40 CFR part 75, and District-approved protocol, and shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703; and 40 CFR 60.334(c) and 40 CFR Part 72] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(1)] Federally Enforceable Through Title V Permit

35. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit

36. Results of the CEM system shall be averaged over a three hour period for NOx and CO emissions using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit

37. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit

38. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

39. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

40. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit

41. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

42. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit

43. The permittee shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit during times that the CEMS is not functioning properly. [District Rule 4703] Federally Enforceable Through Title V Permit

44. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period and used to determine compliance with an emissions standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j), (j)(5)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. Excess emissions shall be defined as any operating hour in which the 3-hour rolling average NOx concentration exceeds the applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit

46. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit

47. Permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and annual records of NOx and CO emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

48. Permittee shall maintain records of SOx emissions rates in lb/hr and lb/day. SOx emission rates shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

49. The operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.25 grain of sulfur (as S) per 100 dry scf of natural gas. [District Rule 2520, 9.3.2 and 40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit

50. Permittee shall maintain the following records for the CTG: actual turbine start-up and stop times (local time), length and reason for reduced load periods, occurrence, duration, and type of any startup, shutdown, or malfunction; emission measurements; total daily and annual hours of operation; and hourly quantity of fuel used. [District Rules 2201 and 4703 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

51. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080, 2201 and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit

52. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 4703] Federally Enforceable Through Title V Permit

53. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

54. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f), 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3), and 60.335(b), (c)(2), (c)(3), and (d); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

55. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

56. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) have an Acid Rain permit. [40 CFR 72.9(a)(2)(i & ii)] Federally Enforceable Through Title V Permit

57. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 72.9(b)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

58. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 72.9(b)(2)] Federally Enforceable Through Title V Permit

59. The owners and operators of each source and each affected unit at the source shall: (i) hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units; and (ii) comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 72.9(c)(1)(i & ii)] Federally Enforceable Through Title V Permit

60. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 72.9(c)(2)] Federally Enforceable Through Title V Permit

61. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72.9(c)(3)] Federally Enforceable Through Title V Permit

62. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72.9(c)(4)] Federally Enforceable Through Title V Permit

63. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 72.9(c)(5)] Federally Enforceable Through Title V Permit

64. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72.9(c)(6)] Federally Enforceable Through Title V Permit

65. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72.9(c)(7)] Federally Enforceable Through Title V Permit

66. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72.9(d)] Federally Enforceable Through Title V Permit

67. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 72.9(e)(1)] Federally Enforceable Through Title V Permit

68. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 72.9(e)(2)] Federally Enforceable Through Title V Permit

69. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72.9(f)(1)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

70. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 772.9(f)(1)(ii, iii & iv)] Federally Enforceable Through Title V Permit

71. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 72.9(f)(2)] Federally Enforceable Through Title V Permit

ATTACHMENT D

Health Risk Assessment and Ambient Air Quality Analysis

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	James Harader, AQE – Permit Services
From:	Joe Aguayo, AQS – Technical Services
Date:	November 9, 2011
Facility Name:	GWF Energy Tracy
Location:	Township 2 South Range 4 East
Application #(s):	N-4597-1-7, 2-7
Project #:	N-1113502

A. RMR SUMMARY

RMR Summary				
Categories	**Type of Unit (Unit 1-7)**	**Type of Unit (Unit 2-7)**	**Project Totals**	**Facility Totals**
Prioritization Score	<1.0	<1.0	<1.0	>1.0
Acute Hazard Index	0.00	0.00	0.00	6.80
Chronic Hazard Index	0.00	0.00	0.12	1.02
Maximum Individual Cancer Risk (10^{-6})	0.2	0.2	0.3	0.3
T-BACT Required?	**No**	**No**		
Special Permit Conditions?	**No**	**No**		

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit # 1-7 and 2-7

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on October 28, 2011, to perform an Ambient Air Quality Analysis and a Risk Management Review for a proposed modification to two NG-fired turbines. The modification consisted of moving both of the turbines 20 meters in the northwest direction. The emission rates for from these stacks will not change.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required. Emissions calculated using emission factors for external combustion of natural gas were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and meteorological data for 2004-2008 from Tracy to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Unit 1-7 and 2-7			
Source Type	Point	**Location Type**	Urban
Stack Height (m)	45.72	**Closest Receptor (m)**	69.19
Stack Diameter. (m)	5.18	**Type of Receptor**	Business
Stack Exit Velocity (m/s)	15.06	**Max Hours per Year**	8760
Stack Exit Temp. (°K)	359.82	**Fuel Type**	NG
Burner Rating (MMBtu/hr)	324		

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM_{10}; as well as a RMR. The emission rates used for criteria pollutant modeling were 245.7 lb/hr CO, 199.5 lb/hr NOx, 2.6 lb/hr SOx, and 5.8 lb/hr PM_{10}. The engineer supplied the maximum fuel rate for the turbines used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Diesel ICE	1 Hour	3 Hours	8 Hours.	24 Hours	Annual
CO	NA[1]	X	NA[1]	X	X
NO_x	NA[1]	X	X	X	Pass
SO_x	NA[1]	NA[1]	X	NA[1]	Pass
PM_{10}	X	X	X	NA[1]	Pass[2]
$PM_{2.5}$	X	X	X	NA[1]	Pass[2]

*Results were taken from the attached PSD spreadsheet.
[1]The project is an intermittent source as defined in APR-1920. In accordance with APR-1920, compliance with short-term (i.e., 1-hour, 3-hour,8-hour and 24-hour) standards is not required.
[2]The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

IV. Attachments

A. RMR request from the project engineer
B. Additional information from the applicant/project engineer
C. Toxic emissions summary
D. Prioritization score
E. Facility Summary

ATTACHMENT E

Quarterly Net Emissions Change

QNEC Calculations

N-4597-1-5

QNEC = (PE2 – BE) ÷ 4

As shown in Section VII.C.5, BE is equal to PE1 for all pollutants. Therefore, the equation for QNEC reduces to:

QNEC = (PE2 – PE1) ÷ 4

Pollutant	PE2 (lb/year)	PE1 (lb/year	QNEC (lb/qtr)
NOx	88,881	153,460	-16,144.75
SOx	7,084	5,600	371.00
PM10	32,250	26,667	1,395.75
CO	74,598	71,620	744.50
VOC	15,145	13,356	447.25

N-4597-2-5

QNEC = (PE2 – BE) ÷ 4

As shown in Section VII.C.5, BE is equal to PE1 for all pollutants. Therefore, the equation for QNEC reduces to:

QNEC = (PE2 – PE1) ÷ 4

Pollutant	PE2 (lb/year)	PE1 (lb/year	QNEC (lb/qtr)
NOx	88,881	153,460	-16,144.75
SOx	7,084	5,600	371.00
PM10	32,250	26,667	1,395.75
CO	74,598	71,620	744.50
VOC	15,145	13,356	447.25

ATTACHMENT F

Compliance Certification for GWF Facilities

Certification of Compliance Statement

Pursuant to SJVAPCD (District) Rule 2201 Section 4.1.5.2, *Compliance by Other Owned, Operated or Controlled Sources*, GWF Power Systems, Inc. on behalf of GWF Energy LLC, I hereby certify that all GWF facilities in the State of California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. This certification shall speak as to the date of its execution.

Mark Kehoe 9/22/2011

Mark Kehoe Date