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PETITION TO AMEND

DONALD VON RAESFELD POWER PLANT (02-AFC-3C)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: SILICON VALLEY POWER

A Division of the City of Santa Clara

August 2017

DAYZEN LLC

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APPENDICES

FIGURES

Section 1 INTRODUCTION

1.1 INTRODUCTION TO PETITION

Pursuant to Section 1769 of the California Energy Commission (Commission) regulations[1], Silicon Valley Power, a division of the City of Santa Clara (SVP), files this Petition For Amendment (Petition) with the California Energy Commission (Commission) to modify the Donald Von Raesfeld Power Plant (DVR). SVP is the City of Santa Clara's municipal utility and has provided Santa Clara power since 1896. The DVR is an important asset in SVP's power portfolio.

This Petition requests approval of use of an identical spare natural gas-fired combustion turbine while maintenance activities are performed on either of the existing natural gas combustion turbines for the DVR. There will not be any additional modifications to any other components of the DVR and air emissions will be unchanged by the modifications. This section describes the procedural background of the DVR and cites the authority for the Commission to process this Petition.

Section 2 of the Petition describes the modification proposed for the DVR including an explanation of why the modification is needed.

Sections 3, 4, 5 and 6 contain analysis of the proposed modifications comparing the potential environmental impacts from the modifications to the potential environmental impacts of the DVR as approved in the Commission Final Decision[2]. As discussed in these Sections, SVP does not anticipate any significant environmental impacts from the proposed modifications and therefore is not proposing any modifications to the existing Conditions of Certification. However, SVP understands that the Bay Area Air Quality Management District (BAAQMD) will issue Preliminary and Final Determinations of Compliance (PDOC and FDOC), which may modify some of the Air Quality Conditions of Certification to specifically allow for use of the spare combustion turbine.

Section 7 contains an analysis demonstrating that the modifications do not increase any potential effects on nearby property owners or the public.

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[1] Title 20 CCR Section 1769

[2] References to the Commission Final Decision include all amendments approved after issuance and prior to the date of this Petition For Amendment.

1.2 FINAL DECISION BACKGROUND

SVP filed an Application For Certification (AFC) with the Commission on October 7, 2002 to construct and operate the DVR[3], a nominal 122 megawatt (MW) combined cycle power plant. The DVR was proposed to replace power that was delivered to SVP by the Western Area Power Administration. The Commission issued its Final Decision approving the DVR on September 9, 2003 (Order No. 03-0909-03, the "Final Decision", 02-AFC-3).

1.3 PRIOR PETITIONS FOR AMENDMENT

On December 30, 2003 SVP filed a Petition For Amendment to add construction parking and laydown area to the DVR. The Commission approved the Petition on February 9, 2004.[4]

On March 9, 2004, SVP submitted a Petition For Amendment proposing additional construction laydown area. On April 14, 2004 the Commission approved the Petition For Amendment.[5]

On March 23, 2005, SVP submitted a Petition For Amendment proposing to modify its Air Quality Conditions of Certification which was approved by the CEC on August 10. 2005.

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS

As described in Sections 3, 4, 5 and 6 of this Petition, the use of a spare combustion turbine as proposed herein, with implementation of the Conditions of Certification contained in the Final Decision and subsequent amendments will not result in significant environmental impacts and will comply with all applicable LORS.

1.5 CONSISTENCY OF PROJECT MODIFICATIONS WITH LICENSE

As demonstrated in Sections 3 through 6 the proposed modifications proposed in this Petition do not undermine any of the findings and conclusions contained in the Final Decision.

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[3] At the time of filing, the Project was named the Pico Power Project.

[4] TN 30880.

[5] TN 31236.

Section 2 DESCRIPTION OF PROJECT AMENDMENT

2.1 OVERVIEW OF PROPOSED MODIFICATION

Silicon Valley Power's Donald von Raesfeld Power Plant (DVR) operates as a combined cycle facility which is comprised of two natural gas turbines with heat recovery steam generators (HRSG) which incorporate duct burners. The facility currently operates pursuant to a CEC Final Decision and under the Permit to Operate (PTO)[6] issued by the Bay Area Air Quality Management District (BAAQMD) which will expire on November 1, 2017. DVR's current BAAQMD permit to operate (PTO) includes the following sources:

- General Electric LM6000PC Natural Gas Combustion Turbine (473.7 MMBtu/hr) **(S1)**
- HRSG with 137 MMBtu/hr of duct firing **(S2)**
- General Electric LM6000PC Natural Gas Combustion Turbine (473.7 MMBtu/hr) **(S3)**
- HRSG with 137 MMBtu/hr of duct firing **(S4)**
- Wet 3-cell cooling tower at 34,980 gpm **(S5 exempt)**

Emissions from the combined turbine/HRSG (S1-S4) are controlled with selective catalytic reduction for NOx to 2.0 ppm (1-hour and a CO catalyst for control of CO at 4 ppm (1-hour) and VOCs at 2 ppm.

2.2 NEED FOR THE MODIFICATION

In order to maintain plant reliability and as part of the normal operation of the facility, an in-kind turbine exchange is necessary on a regular basis. SVP currently stores an identical GE LM6000 natural gas turbine that is rated at 473.7 MMBtu/hr. The spare turbine is currently stored at SVP's Cogen Power Plant at 524 Robert Avenue in Santa Clara, approximately 1.5 miles from the DVR site. The spare turbine is stored inside an oxygen-purged container inside a climate controlled warehouse. The spare turbine is not currently included in the DVR PTO or CEC Final Decision and thus, DVR will need to amend the Final Decision and the PTO to include the like-kind exchange turbine.

[6] BAAQMD PTO Number B4991

There will be no change in emissions with the use of the spare turbine per BAAQMD Regulation 2, Rule 2 (New Source Review).

At the time of permitting the DVR, SVP did not contemplate needing a spare turbine. After licensing of the DVR, SVP purchased a turbine that is identical to the DVR combustion turbines for use as a spare because the DVR is critical to SVP's generating portfolio.

2.3 CURRENT PROJECT DESCRIPTION

The DVR is a 122-megawatt (MW) nominal net output, natural gas-fired, combined-cycle electrical generating facility, with the ability to peak-fire to 147 MW, connected to a 115-kilovolt (kV) switchyard. The DVR is located on approximately 2.86 acres at 850 Duane Avenue in the City of Santa Clara, in Santa Clara County. A gas compressor station for the DVR is located on the City of Santa Clara's maintenance yard, a 0.26-acre parcel at the corner of Lafayette and Comstock Streets in Santa Clara.

The DVR's current power train consists of: 1) two LM6000PC Sprint combustion turbine generators (CTGs), equipped with water injection to control NOx and air inlet chilling; 2) two heat recovery steam generators (HRSGs) with duct burners; 3) selective catalytic reduction (SCR) and CO Catalyst equipment to control emissions; 4) a single condensing steam turbine generator (STG); 5) a de-aerating surface condenser; 6) a mechanical draft, plume-abated cooling tower; and 7) associated support equipment. Each CTG generates a maximum 50 MW. The CTG exhaust gases are used to generate steam in the HRSGs. The HRSGs employ a two steam-pressure design with duct firing equipment. Steam from the HRSGs is routed to a condensing STG. A maximum of 57 MW can be produced by the steam turbine. The project has had, over the last most recent 5 years, an overall annual availability of approximately 95+ percent.

2.4 DESCRIPTION OF PROPOSED MODIFICATION

SVP seeks to modify the CEC Final Decision to specifically allow for a like-kind exchange turbine at DVR that can be used as a substitute for any one of the exiting two turbines that needs maintenance. The GE LM6000 natural gas turbines at DVR are rated at 473.7 MMBtu/hr and are functionally identical units. When a turbine needs maintenance, SVP would like to use its identical spare turbine in its place until the serviced turbine is repaired and returns to the installation.

The spare turbine is currently, and will continue to be, stored at SVP's Cogen Power Plant at 524 Robert Avenue in Santa Clara, approximately 1.5 miles from the DVR site. The spare turbine is stored in an oxygen purged container inside a climate controlled warehouse. The container sits on a concrete loading pad inside the warehouse with

traffic bollards surrounding the container to avoid incidental contact. When the spare turbine is to be installed at the DVR power plant, a truck with a low-boy trailer is scheduled along with a crane to meet at the Cogen Power Plant's warehouse to load the container onto the low-boy trailer using the crane.

Both the crane and trailer follow the route to the DVR site, shown on Figure 1, and then prepare for the turbine exchange. The turbine that was removed is placed inside the same container the spare was delivered in and is hauled away on the low-boy trailer to a certified maintenance shop to work on the turbine.

The heat rate and the emissions profiles of the GE LM6000 turbines are identical. Operating with a like-kind turbine will not increase the actual or potential emissions at DVR because the spare turbine will be abated with the existing control systems to the emissions levels contained in the Final Decision. No changes to operating hours or facility heat rates will occur. Also, the same BAAQMD permit limits that apply to the existing turbines will also apply to the spare turbine.

The spare GE LM6000 turbine is not currently included in the existing PTO and therefore SVP has filed a request with the BAAQMD to amend the existing DVR PTO to include the like-kind functionally equivalent exchange turbine.

Below are the three DVR gas turbine serial numbers. These will be the only turbines used at DVR and only two turbines will be in service at any time.

1. DVR 191-498 *(existing unit currently permitted under permit #B4991)*
2. DVR 191-502 *(existing unit currently permitted under permit #B4991)*
3. DVR 191-555 *(permit application)*

It should be noted that the use of the spare turbine is considered part of the normal operation of the facility and will not extend the life of the plant nor will it result in a net increase in emission or electrical generation capacity.

Section 3 ENGINEERING ASSESSMENT

This section contains an evaluation of the modification proposed in this Petition to determine if it would result in modification of the findings, conclusions or conditions of certification for each technical discipline included within the Engineering Assessment section of the Final Decision.

3.1 FACILITY DESIGN

The storage and use of a spare turbine at the DVR will not undermine any finding or conclusion contained in the Final Decision. Installation and use of the spare turbine will occur in the same manner as installation and use of the existing turbines. The existing conditions of certification contained in the CEC Final Decision will ensure that storage and use of the spare turbine will comply with all applicable laws, ordinances, regulations and standards (LORS) and therefore no modifications to the analysis, findings, conclusions or conditions to the certification contained in the Facility Design section of the CEC Final Decision are necessary.

3.1.1 Changes in LORS Conformance and Other Permits

There are no changes in Facility Design LORS or required permits necessary to store and use the spare turbine as described in this Petition.

3.1.2 Conditions of Certification

No modifications to any of the existing Facility Design conditions of certification are necessary.

3.2 POWER PLANT EFFICIENCY AND RELIABILITY

The proposed modifications do not result in any negative affect on power plant efficiency because the spare turbine is identical to the existing combustion turbines at the DVR. The storage and use of the spare turbine will, however, have a positive impact on the reliability of the DVR.

3.3 TRANSMISSION SYSTEM ENGINEERING

Use of the spare turbine will not require changes to the switchyard or the transmission line. Therefore the proposed modification will have no effect on the findings, conclusions or conditions of certification contained in the Transmission System Engineering section of the CEC Final Decision.

3.4 TRANSMISSION LINE SAFETY AND NUISANCE

Since there are no required changes to the switchyard or the transmission line to accommodate the spare turbine the Petition will have no effect on findings, conclusions or conditions of certification contained in the Transmission Line Safety and Nuisance section of the CEC Final Decision.

Section 4 PUBLIC HEALTH AND SAFETY

This section contains an evaluation of the modification proposed in this Petition to determine if it would result in modification to the findings, conclusions or conditions of certification for each technical discipline included within the Public Health and Safety section of the Final Decision.

4.1 AIR QUALITY, GREENHOUSE GASES AND PUBLIC HEALTH

4.1.1 Pre and Post Project Emissions Comparison

The proposed project will not increase the emissions of any criteria or hazardous air pollutant either with the short term or long term (annual) limits. The ability to exchange turbines, each rated at 473.7 MMBtu/hr, will not require any changes to the existing heat recovery steam generators (HRSGs) or the associated duct burners rated at 136.9 MMBtu/hr. The existing 57 MW condensing steam turbine-generator will not be modified. The present existing 47,500 gpm cooling tower will also not be modified. The facility emissions limits, both pre and post modification are summarized in Table 1 and demonstrate that there will be no changes to the facilities potential to emit for either criteria or hazardous air pollutants.

Table 1 Existing facility emission limits

Pollutant or Parameter	ppm @15% O_2	lbs/mmbtu	lbs/hr	lbs/day	TPY
NO_x	2.0	-	4.49	358.9	43.3
CO	4.0	-	5.47	377.9	48.4
VOC (POC)	2.0	0.00255	1.56	71.9	11.2
SO_x	-	0.000676	0.41	18.2	2.93
PM10/2.5	-	-	3 / 4.3[1]	197.8	28.1
NH_3	10.0	-		-	-
Fuel Limits[1]	Each turbine rated at 473.7 mmbtu/hr Each duct burner rated at 136.9 mmbtu/hr 610.6 mmbtu/hr each turbine/DB 13,559.2 mmbtu/calendar day each turbine/DB 8,682,544 mmbtu/yr (both turbines/DBs)				
HAPs limits	Acetaldehyde 1155 lbs/yr Formaldehyde 2706 lbs/yr Benzene 112 lbs/yr Specified PAHs 0.71 lbs/yr				
Cooling Tower	Cooling tower is an exempt source category but the FDOC contains a limit of 34,980 gpm.				
Notes: [1] without DBs/with DBs					

[2] all values are HHV

4.1.2 Existing BACT Evaluation

The current facility BACT for the existing combustion turbines/duct burners is as follows:

- NO_x 2.0 ppm @ 15% O_2
- CO 4.0 ppm @ 15% O_2
- VOC 2.0 ppm @ 15% O_2
- PM10 PUC Grade Natural Gas
- SO_2 PUC Grade Natural Gas (<=4 ppm S, 0.25 grs S/100 scf)
- NH_3 10 ppm @ 15% O_2

BACT control systems currently installed at the facility are as follows:

- Water injection on the turbines for primary control of NO_x
- SCR on the turbines/duct burners for secondary (final) control of NO_x
- Oxidation catalyst on the turbines/duct burners for control of CO and VOC
- Use of PUC Grade natural gas with sulfur contents 0.25 grs S/100scf is the BACT control for PM10, PM2.5, and SO_2.

Since the like-kind exchange turbine will not change any of the emissions associated with the facility, BACT will not be triggered as per District Regulation 2, Rule 2 (2-2-301).

4.1.3 Changes in LORS Conformance and Other Permits

There are no new Air Quality, Public Heath, or Greenhouse Gases LORS for the modification proposed in this Petition. Since the spare turbine was not included in the current PTO for the facility, an application to amend the PTO was filed with the BAAQMD on April 25, 2017 and is included in Appendix A.

4.1.4 Conditions of Certification

The only modifications to any of the existing Air Quality and Public Health conditions of certification that may be necessary would be those contained in the BAAQMD amended PTO, which has not yet been issued.

4.2 HAZARDOUS MATERIALS MANAGEMENT

The modification proposed in this Petition will not affect the findings and conclusions contained in the Hazardous Materials Management section of the Final Decision as the

storage and use of the spare turbine will not involve the use of any new hazardous materials not already identified in the CEC Final Decision.

4.3 WORKER SAFETY/FIRE PROTECTION

The storage and use of a spare turbine at the DVR will not expose workers to any additional risks not evaluated in the Worker Safety/Fire Protection section of the CEC Final Decision. SVP will require its workers to comply with the various CEC-approved safety plans during installation and operation of the spare turbine. Therefore, the modification proposed in this Petition will not affect the findings and conclusions of the CEC Final Decision relating to worker safety or fire protection. No modifications to the Worker Safety conditions of certification of the CEC Final Decision are necessary.

Section 5 ENVIRONMENTAL ANALYSIS

This section contains an evaluation of the modification proposed in this Petition to determine if it would result in modification to any of the findings, conclusions or conditions of certification for each technical discipline included within the Environmental Assessment section of the Final Decision.

5.1 BIOLOGICAL RESOURCES

The use of a spare turbine at the DVR will have no biological effects beyond those analyzed in the CEC Final Decision because the spare turbine will only be operated when exchanged for one of the existing turbines. Installation of the spare turbine will not involve new construction. There are no new Biological Resource LORS or required permits for the modification proposed in this Petition. No modifications to the any of the existing Biological Resource conditions of certification are necessary and the use of a spare turbine at the DVR will not undermine any of the findings and conclusions of the CEC Final Decision.

5.2 SOIL AND WATER RESOURCES

The storage and use of the spare turbine proposed in this Petition will not change the DVR water balance or modify any existing, or create any additional, liquid waste streams. There are no new Soil and Water Resource-related LORS or required permits for the modification proposed in this Petition. No modifications to any of the existing Soil and Water Resources conditions of certification are necessary and the use of a spare turbine at the DVR will not undermine any of the findings and conclusions of the CEC Final Decision.

5.3 CULTURAL RESOURCES

The use of a spare turbine at the DVR will have no cultural resources effects because installation of the spare turbine will not involve new construction or grading. There are no new Cultural Resource LORS or required permits for the modification proposed in this Petition. No modifications to any of the existing Cultural Resource conditions of certification are necessary and the use of a spare turbine at the DVR will not undermine any of the findings and conclusions of the CEC Final Decision.

5.4 GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

The use of a spare turbine at the DVR will have no effect on Geological and Paleontological Resources because installation of the spare turbine will not involve new construction or grading. There are no new Geological or Paleontological Resources-

related LORS or required permits for the modification proposed in this Petition. No modifications to any of the existing Geological and Paleontological conditions of certification are necessary and the use of a spare turbine at the DVR will not undermine any of the findings and conclusions of the CEC Final Decision.

5.5 WASTE MANAGEMENT

The storage and use of the spare turbine proposed in this Petition will not modify any existing, or create any additional, waste streams. There are no new Waste Management-related LORS or required permits for the modification proposed in this Petition. No modifications to any of the existing Waste Management conditions of certification are necessary and the use of a spare turbine at the DVR will not undermine any of the findings and conclusions of the CEC Final Decision.

Section 6 LOCAL IMPACT ANALYSIS

This section contains an evaluation of the modification proposed in this Petition to determine if it would result in modification to any findings, conclusions or conditions of certification for each technical discipline included within the Local Impact Assessment section of the Final Decision.

6.1 LAND USE

The modification proposed in this Petition will not affect the findings and conclusions contained in the Land Use section of the Final Decision as it will not involve the use of new land areas.

6.2 NOISE AND VIBRATION

The storage and use of the spare turbine will not affect the noise output of the plant because the spare turbine has noise characteristics identical to the existing combustion turbines. Therefore, operation of the spare turbine in place of either of the combustion turbine will not modify the overall noise impacts of the DVR. Therefore, the modification proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Noise and Vibration section of the Final Decision.

6.3 SOCIECONOMICS

The modification proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Socioeconomic Resources section of the Final Decision as none of the modifications will burden existing public services.

6.4 TRAFFIC AND TRANSPORTATION

As described in Section 2.0, Project Description of this Petition, the spare turbine is currently and will continue to be stored at SVP's Cogen Power Plant at 524 Robert Avenue in Santa Clara, approximately 1.5 miles from the DVR site. The spare turbine is stored in an oxygen purged container inside a climate controlled warehouse. The container sits on a concrete loading pad inside the warehouse with traffic bollards surrounding the container to avoid incidental contact. When the spare turbine is to be installed at the DVR power plant, a truck with a low-boy trailer is scheduled along with a crane to meet at the Cogen Power Plant's warehouse to load the container onto the low-boy trailer using the crane.

Both the crane and trailer follow the route to the DVR site, shown on Figure 1, and then prepared for the turbine exchange. The turbine that was removed is placed inside the same container the spare was delivered in and is hauled away on the low-boy trailer to a certified maintenance shop to work on the turbine.

Delivery of the spare turbine to the DVR will not create traffic impacts because the preferred route shown on Figure 1 will be used. This route was chosen to immunize impacts by avoiding the left-hand turn from Lafayette Street onto Duane Avenue, where oncoming traffic is often fast and difficult to see in time to navigate the left turn.

In addition, the use of the crane will not cause any air traffic hazards because the crane will not exceed 95 feet in height, the height at which FAA requires approval of a Determination of No Hazard.

Therefore, the delivery and installation of the spare turbine proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Traffic and Transportation section of the Final Decision.

6.5 VISUAL RESOURCES

The storage and use of the spare turbine will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Visual Resources section of the Final Decision because the spare turbine is not visible.

Section 7 POTENTIAL EFFECTS ON PROPERTY OWNERS

The Commission's Power Plant Siting Regulations require a Petition For Amendment to include 1) a discussion of how the modification affects the public; 2) a list of property owners potentially affected by the modification; and 3) a discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.

As described in technical area evaluated in Sections 3, 4, 5 and 6 of this Petition, with implementation of the existing conditions of certification the impacts of the proposed modifications are less than significant and therefore would not affect the public differently than the identified in the Final Decision.

Appendix B contains an updated list of property owners within 1000 feet of the DVR fence line.

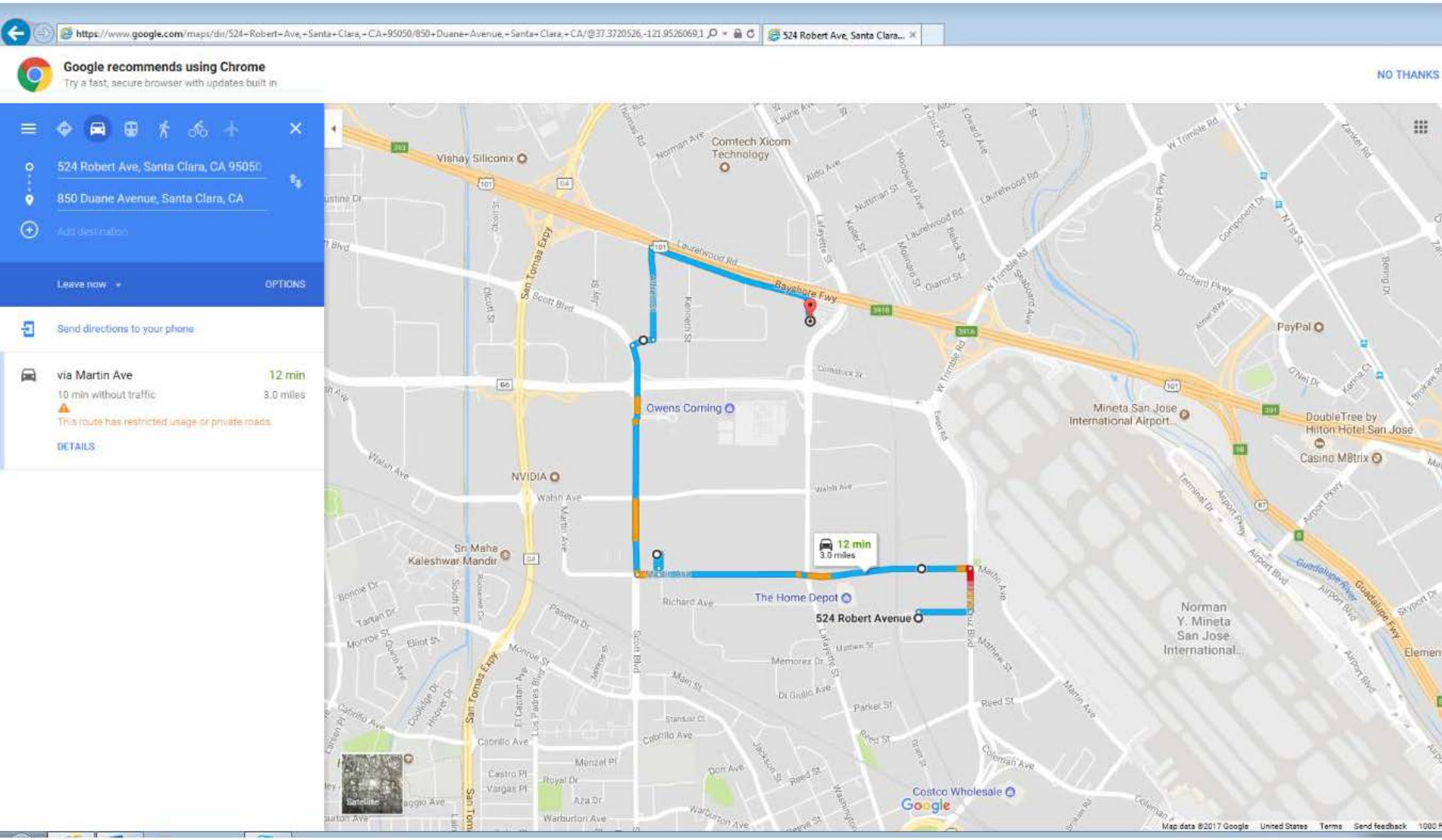


Figure 1 - Preferred route from Cogen Warehouse at 524 Robert Ave to DVR Power Plant at 850 Duane Ave.

Silicon Valley Power will use the preferred route above when shipping the spare DVR turbine to the DVR Power Plant. The purpose for choosing this route is to avoid the left-hand turn from Lafayette Street onto Duane Ave., where oncoming traffic is often fast and difficult to see in time to navigate the left turn.

Appendix A

BAAQMD Application

SILICON VALLEY POWER
CITY OF SANTA CLARA

Giving You the Power to Change the World

April 25, 2017

Brian Lusher
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Re: Application to Permit an Exchange Turbine at the Donald von Raesfeld Power Plant (# B4991)

Dear Mr. Lusher:

Silicon Valley Power's Donald von Raesfeld Power Plant (DVR) operates as a combined cycle facility which is comprised of two natural gas turbines with heat recovery steam generators (HRSG) which incorporate duct burners. The facility currently operates under the Permit to Operate (B4991) which will expire on November 1, 2017. Our current BAAQMD permit to operate (PTO) includes the following sources:

- General Electric LM6000PC Natural Gas Combustion Turbine (473.7 MMBu/hr) **(S1)**
- HRSG with 137 MMBtu/hr of duct firing **(S2)**
- General Electric LM6000PC Natural Gas Combustion Turbine (473.7 MMBtu/hr) **(S3)**
- HRSG with 137 MMBtu/hr of duct firing **(S4)**
- Wet 3-cell cooling tower at 34,980 gpm **(S5 exempt)**

Emissions from the combined turbine/HRSG (S1-S4) are controlled with selective catalytic reduction for NOx to 2.0 ppm (1-hour and a CO catalyst for control of CO at 4 ppm (1-hour) and VOCs at 2 ppm.

In order to maintain plant reliability and as part of the normal operation of the facility, an in-kind turbine exchange is necessary on a regular basis. We currently store an identical GE LM6000 natural gas turbine that is rated at 473.7 MMBtu/hr. The exchange turbine is not currently included in our PTO and thus, DVR will need to amend the existing permit to include the like-kind exchange turbine. There will be no change in emissions with the use of the exchange turbine per BAAQMD Regulation 2, Rule 2 (New Source Review). This letter accompanied by the BAAQMD forms and fees will serve as our permit application.

Current Project Description

The Silicon Valley Power-Donald Von Raesfeld Power Plant (SVP or Project) is a 122-megawatt (MW) nominal net output, natural gas-fired, combined-cycle electrical generating facility, with the ability to peak-fire to 147 MW, connected to a 115-kilovolt (kV) switchyard. The Project is located on approximately 2.86 acres at 850 Duane Avenue in the City of Santa Clara, in Santa Clara County. A gas compressor station for the Project is located on the City of Santa Clara's maintenance yard, a 0.26-acre parcel at the corner of Lafayette and Comstock Streets in Santa Clara.

The Project's current power train consists of: 1) two LM6000PC Sprint combustion turbine generators (CTGs), equipped with water injection to control NOx and air inlet chilling; 2) two heat recovery steam generators (HRSGs)

with duct burners; 3) selective catalytic reduction (SCR) and CO Catalyst equipment to control emissions; 4) a single condensing steam turbine generator (STG); 5) a de-aerating surface condenser; 6) a mechanical draft, plume-abated cooling tower; and 7) associated support equipment. Each CTG generates a maximum 50 MW. The CTG exhaust gases are used to generate steam in the HRSGs. The HRSGs employ a two steam-pressure design with duct firing equipment. Steam from the HRSGs is routed to a condensing STG. A maximum of 57 MW can be produced by the steam turbine. The project has had, over the last most recent 5 years, an overall annual availability of approximately 95+ percent.

Proposed Project Description (Modification)

The proposed permit modification is to allow for a like-kind exchange turbine at DVR that can be used as a substitute for any one of the exiting two turbines that needs maintenance. The GE LM6000 natural gas turbines at DVR are rated at 473.7 MMBtu/hr and are functionally identical units. When a turbine needs maintenance, SVP would like to exchange an identical like-kind turbine in its place until the serviced turbine is repaired and returns to the installation. SVP maintains this exchange turbine on-site which can be readily used while the one is being repaired.

The emissions profiles of the GE LM6000 turbines are identical. Operating with a like-kind turbine will not increase the actual or potential emissions at DVR because the exchange turbine will be abated with the existing control systems to the emissions levels summarized above. No changes to operating hours or facility heat rates will occur. Also, the same BAAQMD permit limits that apply to the existing turbines will also apply to the exchange turbine.

The exchange GE LM6000 turbine is not currently included in our Permit to Operate (PTO) and thus, SVP seeks to amend the existing DVR permit to include the like-kind functionally equivalent exchange turbine.

Below are the three DVR gas turbine serial numbers. These will be the only turbines used at DVR and only two turbines will be in service at any time.

1. DVR 191-498 *(existing unit currently permitted under permit #B4991)*
2. DVR 191-502 *(existing unit currently permitted under permit #B4991)*
3. DVR 191-555 *(permit application)*

It should be noted that the use of the exchange turbine is considered part of the normal operation of the facility and will not extend the life of the plant nor will it result in a net increase in emission or electrical generation capacity.

Pre and Post Project Emissions

The proposed project will not increase the emissions of any criteria or hazardous air pollutant either with the short term or long term (annual) limits. The ability to exchange turbines will not require any changes to the existing heat recovery steam generators (HRSGs) or the associated duct burners rated at 136.9 MMBtu/hr. The existing 57 MW condensing steam turbine-generator will not be modified. The present existing 47,500 gpm cooling tower will also not be modified. The facility emissions limits, both pre and post modification are summarized in Table 1.

Table 1 Existing facility emission limits

Pollutant or Parameter	ppm @15% O_2	lbs/mmbtu	lbs/hr	lbs/day	TPY
NOx	2.0	-	4.49	358.9	43.3
CO	4.0	-	5.47	377.9	48.4
VOC (POC)	2.0	0.00255	1.56	71.9	11.2
SOx	-	0.000676	0.41	18.2	2.93
PM10	-	-	3 / 4.3[1]	197.8	28.1
NH3	10.0	-		-	-
Fuel Limits[2]	Each turbine rated at 473.7 mmbtu/hr Each duct burner rated at 136.9 mmbtu/hr 610.6 mmbtu/hr each turbine/DB 13,559.2 mmbtu/calendar day each turbine/DB 8,682,544 mmbtu/yr (both turbines/DBs)				
HAPs limits	Acetaldehyde 1155 lbs/yr Formaldehyde 2706 lbs/yr Benzene 112 lbs/yr Specified PAHs 0.71 lbs/yr				
Cooling Tower	Cooling tower is exempt. Permit does not list any emissions or operational limits				

Notes:
[1] without DBs/with DBs
[2] all values are HHV

Existing BACT Evaluation

The current facility BACT for the existing combustion turbines/duct burners is as follows:

- NOx 2.0 ppm @ 15% O_2
- CO 4.0 ppm @ 15% O_2
- VOC 2.0 ppm @ 15% O_2
- PM10 PUC Grade Natural Gas
- SO2 PUC Grade Natural Gas (<=4 ppm S, 0.25 grs S/100 scf)
- NH3 10 ppm @ 15% O_2

BACT control systems currently installed at the facility are as follows:

- Water injection on the turbines for primary control of NOx
- SCR on the turbines/duct burners for secondary (final) control of NOx
- Oxidation catalyst on the turbines/duct burners for control of CO and VOC

- Use of PUC Grade natural gas with sulfur contents 0.25 grs S/100scf is the BACT control for PM10, PM2.5, and SO2.

Since the like-kind exchange turbine will not change any of the emissions associated with the facility, BACT will not be triggered as per Regulation 2, Rule 2 (2-2-301).

Conclusion

As such, this application and support documentation is submitted as a minor permit revision to the BAAQMD to include the like-kind exchange turbine in the facility operating permit. Since the like-kind turbine is identical to the existing units and will utilize the same control equipment, there will be no change in emissions. It should be noted that the use of the exchange turbine is considered part of the normal operation of the facility and will not extend the life of the plant nor will it result in a net increase in emission or electrical generation capacity.

This application includes the applicable BAAQMD permit forms and associated permit fees. Note that Forms A, P, H, and HRSA are not included, as these forms remain unchanged.

Please call me at (408) 615-6555 if you have any questions.

Sincerely,

Damon Beck
Division Manager Compliance

ATTACHMENTS:
BAAQMD Form P-101B
BAAQMD Data Form C
Facility Map that locates the equipment and its emission point
BAAQMD PTO for DVR expires November 1, 2017

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600, San Francisco, CA 94105
Engineering Division (415) 749-4990
www.baaqmd.gov fax (415) 749-5030

Form P-101B
Authority to Construct/
Permit to Operate

1. Application Information

BAAQMD Plant No. B4991 Company Name Silicon Valley Power (von Raesfeld Plant)

Equipment/Project Description Like-Kind replacement gas turbine (LM6000PC)

2. Plant Information

If you have not previously been assigned a Plant Number by the District or if you want to update any plant data that you have previously supplied to the District, please complete this section.

Equipment Location 850 Duane Ave

City Santa Clara Zip Code

Mail Address 1500 Warburton Ave.

City Santa Clara State CA Zip Code 95050

Plant Contact Damon Beck Title Div. Manager Compliance

Telephone (408) 615-6555 Fax ( ) Email

NAICS (North American Industry Classification System) see www.census.gov/eos/www/naics/

3. Proximity to a School (K-12)

The sources in this permit application (*check one*) ☐ Are ■ Are not within 1,000 ft of the outer boundary of the nearest school.

4. Application Contact Information

All correspondence from the District regarding this application will be sent to the plant contact unless you wish to designate a different contact for this application.

Application Contact Damon Beck Title Div. Manager Compliance

Mail Address 1705 Martin Avenue

City Santa Clara State CA Zip Code 95050

Telephone (408) 615-6555 Fax ( ) Email DBeck@SantaClaraCA.gov

5. Additional Information

The following additional information is required for all permit applications and should be included with your submittal. Failure to provide this information may delay the review of your application. Please indicate that each item has been addressed by checking the box. Contact the Engineering Division if you need assistance.

☐ If a new Plant, a local street map showing the location of your business

☐ A facility map, drawn roughly to scale, that locates the equipment and its emission points

■ Completed data form(s) and a pollutant flow diagram for each piece of equipment.
(See www.baaqmd.gov/forms/permits)

■ Project/equipment description, manufacturer's data

■ Discussion and/or calculations of the emissions of air pollutants from the equipment

6. Trade Secrets

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items separate as specified in Regulation 2, Rule 1, Section 2-1-402.7, please complete the following steps.

☐ Each page containing trade secret information must be labeled "trade secret" with the trade secret information clearly marked.

☐ A second copy, with trade secret information blanked out, marked "public copy" must be provided.

☐ For each item asserted to be trade secret, you must provide a statement which provides the basis for your claim.

7. Small Business Certification *You are entitled to a reduced permit fee if you qualify as a small business as defined in Regulation 3. In order to qualify, you must certify that your business meets all of the following criteria:*

☐ The business does not employ more than 10 persons and its gross annual income does not exceed $750,000.

☐ And the business is not an affiliate of a non-small business. (Note: a non-small business employs more than 10 persons and/or its gross income exceeds $750,000.)

8. Green Business Certification *You are entitled to a reduced permit fee if you qualify as a green business as defined in Regulation 3. In order to qualify, you must certify that your business meets all of the following criteria:*

☐ The business has been certified under the Bay Area Green Business Program coordinated by the Association of Bay Area Governments and implemented by participating counties.

☐ A copy of the certification is included.

9. Accelerated Permitting *The Accelerated Permitting Program entitles you to install and operate qualifying sources of air pollution and abatement equipment* ***without waiting for the District to issue a Permit to Operate****. To participate in this program you must certify that your project will meet all of the following criteria. Please acknowledge each item by checking each box.*

☐ Uncontrolled emissions of any single pollutant are each less than 10 lb/highest day, or the equipment has been precertified by the BAAQMD.

☐ Emissions of toxic compounds do not exceed the trigger levels identified in Table 2-5-1 (see Regulation 2, Rule 5).

☐ The source is not a diesel engine.

☐ The project is not subject to public notice requirements (the source is either more than 1000 ft. from the nearest school, or the source does not emit any toxic compound in Table 2-5-1).

☐ For replacement of abatement equipment, the new equipment must have an equal or greater overall abatement efficiency for all pollutants than the equipment being replaced.

☐ For alterations of existing sources, for all pollutants the alteration does not result in an increase in emissions.

☐ Payment of applicable fees (the minimum permit fee to install and operate each source). See Regulation 3 or contact the Engineering Division for help in determining your fees.

10. CEQA *Please answer the following questions pertaining to CEQA (California Environmental Quality Act).*

A. Has another public agency prepared, required preparation of, or issued a notice regarding preparation of a California Environmental Quality Act (CEQA) document (initial study, negative declaration, environmental impact report, or other CEQA document) that analyzes impacts of this project or another project of which it is a part or to which it is related? ☐YES ■NO If no, go to section 10B.

Describe the document or notice, preparer, and date of document or expected date of completion:

B. List and describe any other permits or agency approvals required for this project by city, regional, state or federal agencies:

California Energy Commission - amended Conditions of Certification

C. List and describe all other prior or current projects for which either of the following statements is true: (1) the project that is the subject of this application could not be undertaken without the project listed below, (2) the project listed below could not be undertaken without the project that is the subject of this application:

11. Certification *I hereby certify that all information contained herein is true and correct. (Please sign and date this form)*

Damon Beck	Dir. Mgr. Compliance	[signature]	5-5-17
Name of person certifying (print)	Title of person certifying	Signature of person certifying	Date

Send all application materials to the **BAAQMD Engineering Division, 375 Beale Street, Suite 600, San Francisco, CA 94105.**

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600, San Francisco, CA 94105 . (415) 749-4990 . fax (415) 749-5030
Website: www.baaqmd.gov

Data Form C
FUEL COMBUSTION SOURCE

(for District use only)

New ■ Modified □ Retro □

Form C is for all operations which burn fuel except for internal combustion engines (use Form ICE unless it is a gas turbine; for gas turbines use this form). If the operation also involves evaporation of any organic solvent, complete Form S and attach to this form. If the operation involves a process which generates any other air pollutants, complete Form G and attach to this form.

□ Check box if this source has a secondary function as an abatement device for some other source(s); complete lines 1, 2, and 7-13 on Form A (using the source number below for the Abatement Device No.) and attach to this form.

(If unknown, leave blank)

1. Company Name: Silicon Valley Power (von Raesfeld Power Plant) Plant No: B4991 Source No. S-6
2. Equipment Name & Number, or Description: Replacement/Standby Turbine, DVR-191-555
3. Make, Model : GE LM6000PC Maximum firing rate: 473.7 Btu/hr
4. Date of modification or initial operation: _____ *(if unknown, leave blank)*
5. Primary use (check one): ■ electrical generation □ space heat □ waste disposal □ testing □ abatement device □ cogeneration □ resource recovery □ other □ process heat; material heated _____
6. SIC Number 4911 (If unknown leave blank)
7. Equipment type (check one)

Internal combustion Use Form ICE (Internal Combustion Engine) unless it is a gas turbine

■ gas turbine _____hp
□ other _____ _____hp

Incinerator □ salvage operation □ pathological waste Temperature _____°F
□ liquid waste □ other _____ Residence time _____Sec

Others □ boiler □ dryer
□ afterburner □ oven
□ flare □ furnace Material dried, baked, or heated: _____
□ open burning □ kiln
□ other _____

8. Overfire air? □ yes □ no If yes, what percent _____%
9. Flue gas recirculation? □ yes □ no If yes, what percent _____%
10. Air preheat? □ yes □ no Temperature _____°F
11. Low NO_x burners? □ yes □ no Make, Model _____
12. Maximum flame temperature _____°F
13. Combustion products: Wet gas flowrate _____acfm at _____°F
Typical Oxygen Content _____ dry volume % or _____ wet volume % or _____ % excess air
14. Typical Use 24 hours/day 7 days/week 52 weeks/year
15. Typical % of annual total: Dec-Feb 25 % Mar-May 25 % Jun-Aug 25 % Sep-Nov 25 %
16. With regard to air pollutant flow, what source(s) or abatement device(s) are immediately UPSTREAM?

S _____ S _____ S _____ S _____ S _____ S _____ A _____ A _____ A _____

With regard to air pollutant flow, what source(s) or abatement device(s), and/or emission points are immediately DOWNSTREAM?

S 2 or 4 S _____ A 1 or 3 A 2 or 4 P 1 or 2 P _____

Person completing this form: G. Darvin Date: 4/25/17

(revised 4/12/16)

FUELS

INSTRUCTIONS: Complete one line in Section A for each fuel. Section B is OPTIONAL. Please use the units at the bottom of each table. N/A means "Not Applicable."

SECTION A: FUEL DATA

	Fuel Name	*Fuel Code***	*Total Annual Usage****	*Maximum Possible Fuel Use Rate*	*Typical Heat Content*	*Sulfur Content*	*Nitrogen Content (optional)*	*Ash Content (optional)*
1.	Natural Gas	189	3,367,060	473.7	1005	4 ppm	0.862%	NA
2.			mmbtu/yr	mmbtu/hr	btu/scf			
3.								
4.								
5.								

Use the appropriate units for each fuel							
	Natural Gas	therm*	Btu/hr	N/A	N/A	N/A	N/A
	Other Gas	MSCF*	MSCF/hr	Btu/MSCF	ppm	N/A	N/A
	Liquid	m gal*	m gal/hr	Btu/m gal	wt%	wt%	wt%
	Solid	ton	ton/hr	Btu/ton	wt%	wt%	wt%

SECTION B: EMISSION FACTORS (optional)

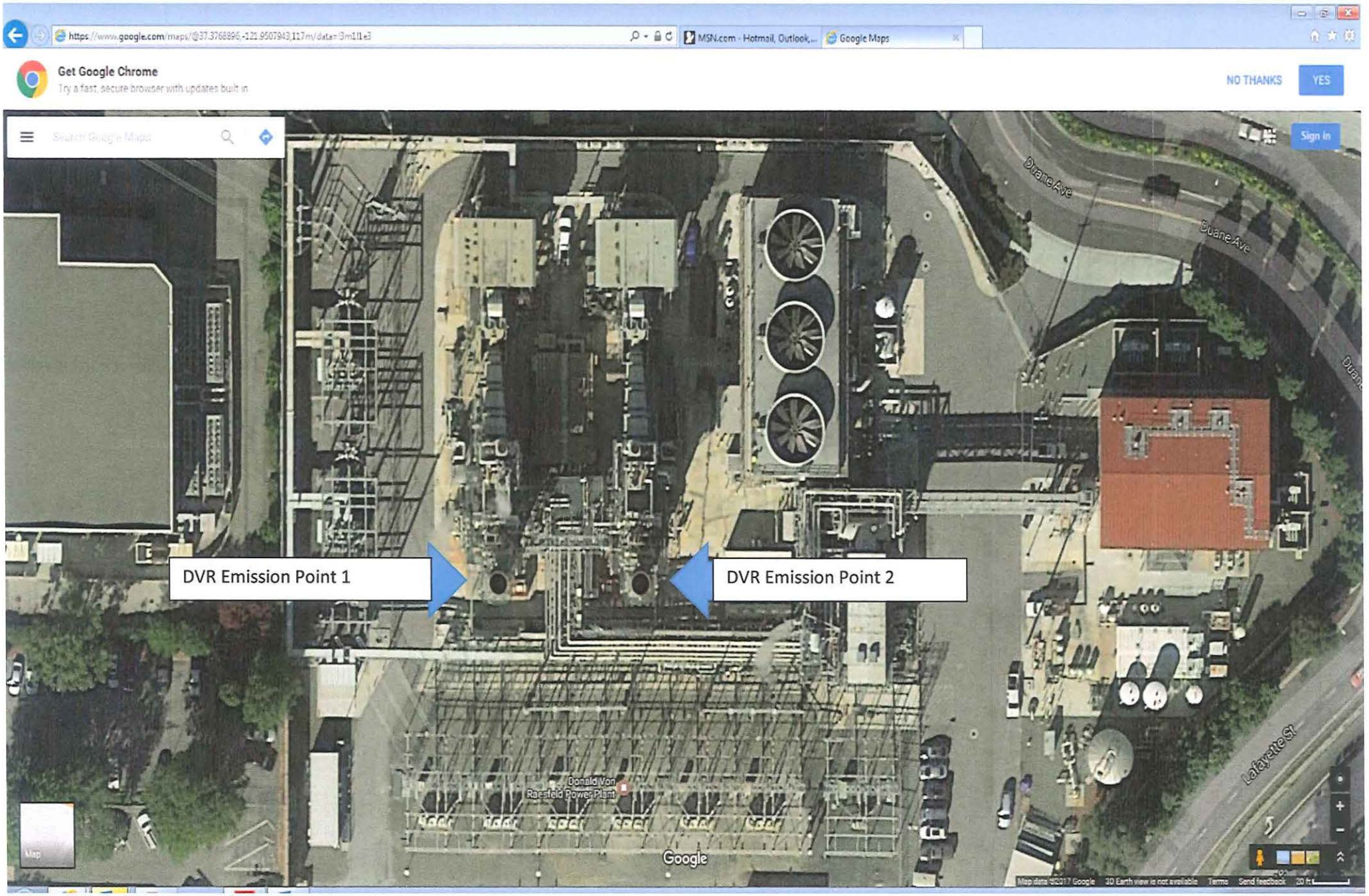
	Fuel Name	***Fuel Code****	**Particulates**		**NOx**		**CO**	
			Emission Factor	***Basis Code*	*Emission Factor*	***Basis Code*	*Emission Factor*	***Basis Code*
1.	Natural Gas	189						
2.								
3.								
4.								

Use the appropriate units for each fuel:
*Natural Gas = lb/therm**
*Other Gas = lb/MSCF**
*Liquid = lb/m gal**
Solid = lb/ton

Note:
* MSCF = thousand standard cubic feet
* m gal = thousand gallons
* therm = 100,000 BTU
** See tables below for Fuel and Basis Codes
*** Total annual usage is: – Projected usage over next 12 months if equipment is new or modified.
– Actual usage for last 12 months if equipment is existing and unchanged.

**Fuel Codes				**Basis Codes	
Code	*Fuel*	*Code*	*Fuel*	*Code*	*Method*
25	Anthracite coal	189	Natural Gas	0	Not applicable for this pollutant
33	Bagasse	234	Process gas - blast furnace	1	Source testing or other measurement by plant (attach copy)
35	Bark	235	Process gas - CO	2	Source testing or other measurement by BAAQMD (give date)
43	Bituminous coal	236	Process gas - coke oven gas	3	Specifications from vendor (attach copy)
47	Brown coal	238	Process gas - RMG	4	Material balance by plant using engineering expertise and knowledge of process
242	Bunker C fuel oil	237	Process gas - other		
80	Coke	242	Residual oil	5	Material balance by BAAQMD
89	Crude oil	495	Refuse derived fuel	6	Taken from AP-42 (compilation of Air Pollutant Emission Factors, EPA)
98	Diesel oil	511	Landfill gas		
493	Digester gas	256	Solid propellant	7	Taken from literature, other than AP-42 (attach copy)
315	Distillate oil	466	Solid waste	8	Guess
392	Fuel oil #2	304	Wood - hogged		
551	Gasoline	305	Wood - other		
158	Jet fuel	198	Other - gaseous fuels		
160	LPG	200	Other - liquid fuels		
165	Lignite	203	Other - solid fuels		
167	Liquid waste				
494	Municipal solid waste				

(revised: 4/12/16)


https://www.google.com/maps/@37.3768896,-121.9507943,117m/data=!3m1!1e3
MSN.com - Hotmail, Outlook,...
Google Maps
Get Google Chrome
Try a fast, secure browser with updates built in
NO THANKS
YES
Search Google Maps
Sign in
Duane Ave
Duane Ave
DVR Emission Point 1
DVR Emission Point 2
Donald Von Raesfeld Power Plant
Lafayette St
Google
Map data ©2017 Google
3D Earth view is not available
Terms
Send feedback
20 ft

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939 ELLIS STREET
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(415) 771-6000

PERMIT TO OPERATE

Plant# 14991 Page: 1 Expires: NOV 1, 2017

This document does not permit the holder to violate any District regulation or other law.

Donald Von Raesfeld Power Plant
1500 Warburton Avenue
Santa Clara, CA 95050

Location: 850 Duane Avenue
Santa Clara, CA 95054

S#	DESCRIPTION	[Schedule]	PAID
1	Turbine, Electrical Generation, 164K hp, Natural gas Combustion Gas Turbine #1 Abated by: A2 Catalytic Afterburner A1 Selective Catalytic Reduction (SCR) Emissions at: P1 Stack	[B]	16435
2	Boiler, Electrical Generation, 137MM BTU/hr max, Natural gas Heat Recovery Steam Generator#1Low emission duct Burner Abated by: A2 Catalytic Afterburner A1 Selective Catalytic Reduction (SCR) Emissions at: P1 Stack	[B]	4318
3	Turbine, Electrical Generation, 164K hp, Natural gas Combustion Gas Turbine #2 Abated by: A4 Catalytic Afterburner A3 Selective Catalytic Reduction (SCR) Emissions at: P2 Stack	[B]	16435
4	Boiler, Electrical Generation, 137MM BTU/hr max, Natural gas Heat Recovery Steam Generator#2Low emission duct Burner Abated by: A4 Catalytic Afterburner A3 Selective Catalytic Reduction (SCR) Emissions at: P2 Stack	[B]	4318
5	MISC> Cooling, tower, Water, 2099 thou gallons/hr max Water Cooling Tower, 3 Cell 34,980 gpm	[exempt]	0

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.

09/28/16 B4991

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Plant# 14991 Page: 2 Expires: NOV 1, 2017

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S#	DESCRIPTION	[Schedule]	PAID

4 Permitted Sources, Exempt Source

*** See attached Permit Conditions ***

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.

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Plant# 14991 Page: 3 Expires: NOV 1, 2017

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*** PERMIT CONDITIONS ***

Source# 1	subject	to	Condition	ID# 24252
Source# 2	"	"	"	ID# 24252
Source# 3	"	"	"	ID# 24252
Source# 4	"	"	"	ID# 24252

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*** PERMIT CONDITIONS ***

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COND# 24252 *applies to S#'s 1, 2, 3, 4*

Definitions:

BACT:	Best Available Control Technology
Clock Hour:	Any continuous 60-minute period beginning on the hour
Calendar Day:	Any continuous 24-hour period beginning at 12:00 AM or 0000 hours
Year:	Any consecutive twelve-month period of time
Heat Input:	All heat inputs refer to the heat input at the higher heating value (HHV) of the fuel
HHV:	Higher Heating Value in BTU/scf (natural gas)
HRSG:	Heat recovery steam generator
Rolling 3-hour period:	Any consecutive three-hour period, not including start-up or shutdown periods
Firing Hours:	Period of time during which fuel is flowing to a unit, measured in minutes
MMBTU:	Million British Thermal Units
Startup Mode:	The lesser of the first 180 minutes of continuous fuel flow to the Gas Turbine after fuel flow is initiated or the period of time from Gas Turbine fuel flow initiation until the Gas Turbine achieves two consecutive CEM data points in compliance with the emission concentration limits of Parts 20(a) and 20(c).

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Plant# 14991 Page: 5 Expires: NOV 1, 2017

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*** PERMIT CONDITIONS ***

Shutdown Mode:	The lesser of the 60 minute period immediately prior to the termination of fuel flow to the Gas Turbine or the period of time from non-compliance with any requirement listed in Parts 20(a) and 20(c) until termination of fuel flow to the Gas Turbine.
Precursor Organic Compounds (POCs):	Any compound of carbon, excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
NOX:	Nitrogen oxides
PM10:	Particulate matter
CO:	Carbon monoxide
SO2:	Sulfur dioxide
NH3:	Ammonia
Specified PAHs:	The polycyclic aromatic hydrocarbons (PAHs) listed below shall be considered to be Specified PAHs for these permit conditions. Any emission limits for Specified PAHs refer to the sum of the emissions for all six of the following compounds Benzo[a]anthracene Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[a]pyrene Dibenzo[a,h]anthracene Indeno[1,2,3-cd]pyrene

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Corrected Concentration:	The concentration of any pollutant (generally NOx, CO, POC, or NH3) corrected to a standard stack gas oxygen concentration. For emission points P-1 (combined exhaust of S-1 Gas Turbine and S-2 HRSG duct burners) and P-2 (combined exhaust of S-3 Gas Turbine and S-4 HRSG duct burners), the standard stack gas oxygen concentration is 15% O2 by volume on a dry basis.
Commissioning Activities:	Deleted - Commissioning period completed
Commissioning Period:	Deleted - Commissioning period completed
CEC CPM:	California Energy Commission Compliance Program Manager
District	Bay Area Air Quality Management District
PPP:	Deleted - Commissioning period completed

In addition to any applicable requirements, the Owner/Operator shall comply with the following conditions for the Gas Turbines (S-1 & S-3), the Heat Recovery Steam Generators (HRSGs; S-2 & S-4), A-1 & A-3 (SCR Systems) and A2 & A4 (Oxidation Catalysts):

1. Deleted - Commissioning period completed

2. Deleted - Commissioning period completed

3. Deleted - Commissioning period completed

4. Deleted - Commissioning period completed

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*** PERMIT CONDITIONS ***

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5. Deleted - Commissioning period completed

6. Deleted - Commissioning period completed

7. Deleted - Commissioning period completed

8. Deleted - Commissioning period completed

9. Deleted - Commissioning period completed

10. Deleted - Commissioning period completed

11. Deleted - Commissioning period completed

12. Deleted - Commissioning period completed

13. The Owner/Operator shall fire S-1, S-2, S-3 and S-4 exclusively with natural gas. [Basis: BACT for SO2 and PM10]

14. The Owner/Operator shall not operate the units such that the combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) exceeds 610.6 MM BTU (HHV) per hour, averaged over any rolling 3-hour period. [Basis: BACT and Cumulative Increase]

15. The Owner/Operator shall not operate the units such that the combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) exceeds 13,559.2 MM BTU (HHV) per calendar day. [Basis: BACT and Cumulative Increase]

16. The Owner/Operator shall not operate the units such that the combined cumulative heat input rate for S-1, S-2, S-3 and S-4 exceeds 8,682,544 MM BTU (HHV) per year. [Basis: Offsets and Cumulative Increase]

17. The Owner/Operator shall not fire S-2 or S-4 unless its associated S-1 or S-3, respectively, is in operation. [Basis: BACT for NOx]

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*** PERMIT CONDITIONS ***

18. The Owner/Operator shall ensure that the S-1 and S-2 are abated by the properly operated and properly maintained A-1 whenever fuel is combusted at those sources and the A-1 SCR catalyst bed has reached minimum operating temperature. [Basis: BACT for NOx]

19. The Owner/Operator shall ensure that the S-3 and S-4 are abated by the properly operated and properly maintained A-3 whenever fuel is combusted at those sources and the A-3 SCR catalyst bed has reached minimum operating temperature. [Basis: BACT for NOx]

20. The Owner/Operator shall ensure that S-1, S-2, S-3 and S-4 comply with requirements (a) through (i) under all operating scenarios, including duct burner firing mode and power augmentation mode. Requirements (a) through (i) do not apply during start-up or shutdown mode. [Basis: BACT and Regulation 2, Rule 5]

(a) NOx emission concentration at emission points P-1 and P-2 each shall not exceed 2.0 ppmv, on a dry basis, corrected to 15% O2, averaged over any 1-hour period. [Basis: BACT for NOx]

(b) NOx mass emissions (calculated as NO2) at P-1 (the combined exhaust point for S-1 and S-2 after abatement by A-1) shall not exceed 4.49 pounds per hour. Nitrogen oxide mass emissions (calculated as NO2) at P-2 (the combined exhaust point for S-3 and S-4 after abatement by A-3) shall not exceed 4.49 pounds per hour. [Basis: BACT for NOx]

(c) CO emission concentration at P-1 and P-2 each shall not exceed 4.0 ppmv, on a dry basis, corrected to 15% O2, averaged over any rolling 3-hour period. [Basis: BACT for CO]

(d) CO mass emissions at P-1 and P-2 each shall

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*** PERMIT CONDITIONS ***

not exceed 5.47 pounds per hour, averaged over any rolling 3-hour period. [Basis: BACT for CO]

(e) NH3 emission concentrations at P-1and P-2 each shall not exceed 10 ppmv, on a dry basis, corrected to 15% O2, averaged over any rolling 3-hour period. This NH3 emission concentration shall be verified by the continuous recording of the NH3 injection rate to A-1 and A-3. The correlation between the gas turbine and HRSG heat input rates, A-1 and A-3 NH3 injection rates, and corresponding NH3 emission concentration at emission points P-1 and P-2 shall be determined in accordance with Part 30. [Basis: TRMP for NH3]

(f) POC mass emissions (as CH4) at P-1 and P-2 each shall not exceed 2.0 ppmv, on a dry basis, corrected to 15% O2, averaged over any rolling 3-hour period. [Basis: BACT for POC]

(g) POC mass emissions (as CH4) at P-1 and P-2 each shall not exceed 1.56 pounds per hour or 0.00255 lb/MM BTU of natural gas fired. [Basis: BACT for POC]

(h) SO2 mass emissions at P-1 and P-2 each shall not exceed 0.41 pounds per hour or 0.000676 lb/MM BTU of natural gas fired. [Basis: BACT for SO2]

(i) PM10 mass emissions at P-1and P-2 each shall not exceed 3.0 pounds per hour when the HRSG duct burners are not in operation. PM10 mass emissions at P-1 and P-2 each shall not exceed 4.3 pounds per hour when HRSG duct burners are in operation. [Basis: BACT for PM10]

(j) Compliance with the hourly NOx emission limitations specified in Part 20(a) and 20(b), at both P1 and P2, shall not be

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*** PERMIT CONDITIONS ***

required during short-term excursions, limited to a cumulative total of 160 hours per rolling 12 month period. Short-term excursions are defined as 15-minute periods designated by the Owner/Operator that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NOx concentration exceeds 2.0 ppmv, dry @ 15% O2. Examples of transient load conditions include, but are not limited to the following:

1. Initiation/shutdown of combustion turbine inlet air cooling
2. Initiation/shutdown of combustion turbine water mist or steam injection for power augmentation
3. Rapid combustion turbine load changes
4. Initiation/shutdown of HRSG duct burners
5. Provision of Ancillary Services and Automatic Generation Control at the direction of the California Independent System Operator (Cal-ISO)

The maximum 1-hour average NOx concentration for short-term excursions at P-1 and P-2 each shall not exceed 5 ppmv, dry @ 15% O2 or 11.2 lb/hr (2.80 lb per 15 minute period). All emissions during short-term excursions shall be included in all calculations of hourly, daily and annual mass emission rates as required by this permit.

21. The Owner/Operator shall ensure that the regulated air pollutant mass emission rates from S-1 or S-3 during startup or shutdown mode does not exceed the respective limits established below.

	Startup (lb/startup)
Nitrogen Oxides (as NO2)	41

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*** PERMIT CONDITIONS ***

Carbon Monoxide (CO)	35
POC (as CH4)	2
Particulate Matter (PM10)	3

	Shutdown (lb/shutdown)
Nitrogen Oxides (as NO2)	8
Carbon Monoxide (CO)	10
POC (as CH4)	1
Particulate Matter (PM10)	3

22. The Owner/Operator shall not allow total combined emissions from S-1, S-2, S-3 and S-4 including emissions generated during startup mode, shutdown mode and transient excursions to exceed the following limits during any calendar day:

(a) 358.9 pounds of NOx (as NO2) per day
(b) 377.9 pounds of CO per day
(c) 71.9 pounds of POC (as CH4) per day
(d) 197.8 pounds of PM10 per day
(e) 18.2 pounds of SO2 per day

23. The Owner/Operator shall not allow cumulative combined emissions from S-1, S-2, S-3 and S-4 including emissions generated during startup mode, shutdown mode and transient excursions to exceed the following limits during any consecutive twelve-month period:

(a) 43.3 tons of NOx (as NO2) per year
(b) 48.4 tons of CO per year
(c) 11.2 tons of POC (as CH4) per year
(d) 28.1 tons of PM10 per year
(e) 2.93 tons of SO2 per year
[Basis: Offsets and Cumulative Increase]

24. Deleted - Redundant requirement to Part 15

25. Deleted - Redundant requirement to Part 16

26. The Owner/Operator shall not allow the maximum projected annual toxic air contaminant

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emissions (per Parts 29 and 33) from the Gas Turbines and HRSGs (S-1 & S-2 and S-3 & S-4) combined to exceed the following limits:

Acetaldehyde	1,155 pounds per year
Formaldehyde	2,706 pounds per year
Benzene	112 pounds per year
Specified PAHs	0.71 pound per year

unless the following requirement is satisfied:

The Owner/Operator shall perform a health risk assessment to determine the total facility risk using the emission rates determined by District approved source testing and the most current Bay Area Air Quality Management District approved procedures and unit risk factors in effect at the time of the analysis. This risk analysis shall be submitted to the District and the CEC CPM within 60 days of the source test date. The Owner/Operator may request that the District and the CEC CPM revise the carcinogenic compound emission limits specified above. If the Owner/Operator demonstrates to the satisfaction of the Air Pollution Control Officer (APCO) that these revised emission limits will not result in a significant cancer risk, the District and the CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. [Basis: Regulation 2, Rule 5]

27. The Owner/Operator shall demonstrate compliance with Parts 14 through 17, 20(a) through 20(d), 21, 22(a), 22(b), 23(a), and 23(b) by using properly operated and maintained continuous monitors (during all hours of operation including startup and shutdown mode) for all of the following parameters:

(a) Firing Hours and Fuel Flow Rates for each of the following sources: S-1 & S-2 combined, S-3 & S-4 combined.
(b) Oxygen (O2) concentration, nitrogen oxides (NOx) concentration, and carbon monoxide

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(CO) concentration at each of the following exhaust points:
P-1 and P-2.

(c) Ammonia injection rate at A-1 and A-3 SCR Systems

(d) Any transient load conditions recorded in Part 27(a) above and as described in 20(j) shall be fully characterized and recorded on a quarter hour (15-minute period) basis.

The Owner/Operator shall record all of the above parameters every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. For each calendar day, the Owner/Operator shall calculate and record the total firing hours, the average hourly fuel flow rates, and pollutant emission concentrations.

The Owner/Operator shall use the parameters measured above and District-approved calculation methods to calculate the following parameters:

(e) Heat Input Rate for each of the following sources: S-1 & S-2 combined and S-3 & S-4 combined.

(f) Corrected NOx concentration, NOx mass emission rate (as NO2), corrected CO concentration, and CO mass emission rate at each of the following exhaust points: P-1 and P-2.

For each source, source grouping, or exhaust point, the Owner/Operator shall record the parameters specified in Parts 27(e) and 27(f) at least once every 15 minutes (excluding normal calibration periods). As specified below, the Owner/Operator shall calculate and record the following data:

(g) Total Heat Input Rate for every clock hour and the average hourly Heat Input Rate for every rolling 3-hour period.

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(h) On an hourly basis, the cumulative total Heat Input Rate for each calendar day for the following: each Gas Turbine and associated HRSG combined and all four sources (S-1, S-2, S-3, and S-4) combined.
(i) The average NOx mass emission rate (as NO2) and corrected NOx emission concentration for every clock hour and for every quarter hour (15-minute) period.
(j) The average CO mass emission rate and corrected CO emission concentration for every clock hour and for every rolling 3-hour period.
(k) On an hourly basis, the cumulative total NOx mass emissions (as NO2) and the cumulative total CO mass emissions, for each calendar day for each Gas Turbine and associated HRSG combined, and all four sources (S-1, S-2, S-3, and S-4) combined.
(l) For each calendar day, the average hourly Heat Input Rates, Corrected NOx emission concentration, NOx mass emission rate (as NO2), corrected CO emission concentration, and CO mass emission rate for each Gas Turbine and associated HRSG combined
(m) On a daily basis, the cumulative total NOx mass emissions (as NO2) and cumulative total CO mass emissions, for the previous consecutive twelve-month period for all four sources (S-1, S-2, S-3, and S-4) combined.

[Basis: Regulation 1-520.1, 9-9-501, BACT, NSPS, Cumulative Increase]

28. To demonstrate compliance with Parts 20(f), 20(g), 20(h), 20(i), 21, 22(c) through 22(e), and 23(c) through 23(e), the Owner/Operator shall calculate and record on a daily basis, the POC mass emissions, PM10 mass emissions (including condensable particulate matter), and SO2 mass emissions from each power train. The Owner/Operator shall use the actual Heat Input Rates calculated pursuant to Part 27, actual Start-up Mode Times, actual Shutdown Mode Times, and CEC and District-approved emission

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factors to calculate these emissions. The calculated emissions shall be presented as follows:

(a) For each calendar day, POC, PM10, and SO2 emissions shall be summarized for: each power train (Gas Turbine and its respective HRSG combined) and all four sources (S-1, S-2, S-3, and S-4) combined.
(b) On a daily basis, the cumulative total POC, PM10, and SO2 mass emissions, for each year for all four sources (S-1, S-2, S-3, and S-4) combined.

[Basis: Offsets, Cumulative Increase]

29. To demonstrate compliance with Part 26, the Owner/Operator shall calculate and record on an annual basis the maximum projected annual emissions of: acetaldehyde, formaldehyde, benzene, and Specified PAHs. Maximum projected annual emissions shall be calculated using the maximum Heat Input Rate of 8,682,544 MMBTU/year and the highest emission factor (pounds of pollutant per MMBTU of heat input) determined by any District approved source test of the S-1 and S-3 Gas Turbines and/or S-2 and S-4 Heat Recovery Steam Generators. If the highest emission factor for a given pollutant occurs during minimum-load turbine operation, a reduced annual heat input rate may be utilized to calculate the maximum projected annual emissions to reflect the reduced heat input rates during gas turbine start-up and minimum-load operation. The reduced annual heat input rate shall be subject to District review and approval. [Basis: Regulation 2, Rule 5]

30. Within 60 days of start-up, the Owner/Operator shall conduct District-approved source tests on exhaust point P-1 and P-2 to determine the corrected NH3 emission concentration to determine compliance with Part 20(e). The source test shall determine the correlation between the heat input rates of each gas turbine (S-1 and S-3) and associated HRSG (S-2

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and S-4), A-1, and A-3 SCR System ammonia injection rates, and the corresponding NH3 emission concentrations at emission point P-1 and P-2. The source tests shall be conducted over the expected operating range of the turbine and HRSG (including, but not limited to, minimum and full load, and SPRINT power augmentation mode) to establish the range of ammonia injection rates necessary to achieve required NOx emission reductions while maintaining ammonia slip levels. Source testing shall be repeated on an annual basis thereafter. Ongoing compliance with Part 20(e) shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlations and continuous records of ammonia injection rate. Source test results shall be submitted to the District and the CEC CPM within 90 days of conducting the tests. [Basis: Regulation 2, Rule 5]

31. Within 90 days of start-up and on an annual basis thereafter, the Owner/Operator shall conduct a District-approved source test on exhaust points P-1 and P-2 while each Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum load (including SPRINT power augmentation mode) to determine compliance with Parts 20(a), (b), (c), (d), (f), (g), (h), and (i) while each Gas Turbine and associated Heat Recovery Steam Generator are operating at minimum load to determine compliance with Parts 20(c) and (d), and to verify the accuracy of the continuous emission monitors required in Part 27. The Owner/Operator shall test for (at a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and mass emissions, nitrogen oxide concentration and mass emissions (as NO2), carbon monoxide concentration and mass emissions, sulfur dioxide concentration and mass emissions, methane, ethane, and PM10 emissions including condensable particulate matter. Source test results shall be submitted

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to the District and the CEC CPM within 60 days of conducting the tests. [Basis: BACT]

32. The Owner/Operator shall obtain approval for all source test procedures from the District's Source Test Section and the CEC CPM prior to conducting any tests. The Owner/Operator shall comply with all applicable testing requirements for continuous emission monitors as specified in Volume V of the District's Manual of Procedures. The Owner/Operator shall notify the District's Source Test Section and the CEC CPM in writing of the source test protocols and projected test dates at least 7 days prior to the testing date(s). As indicated in Part 31 above, the Owner/Operator shall measure and include the contribution of condensable PM (back half) to the total PM10 emissions. However, the Owner/Operator may propose alternative measuring techniques to measure condensable PM such as the use of a dilution tunnel or other appropriate method used to capture semi-volatile organic compounds. Source test results shall be submitted to the District and the CEC CPM within 60 days of conducting the tests. [Basis: BACT]

33. Within 90 days of start-up, the Owner/Operator shall conduct a District-approved source tests on exhaust point P-1 and P-2 while the Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum allowable operating rates to demonstrate compliance with Part 26. [Basis: TRMP]

34. The Owner/Operator shall submit all reports (including, but not limited to monthly CEM reports, monitor breakdown reports, emission excess reports, equipment breakdown reports, etc.) as required by District Rules or Regulations and in accordance with all procedures and time limits specified in the Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual. [Basis: Regulation 2-6-502]

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35. The Owner/Operator shall maintain all records and reports on site for a minimum of 5 years. These records shall include but are not limited to: continuous monitoring records (firing hours, fuel flows, emission rates, monitor excesses, breakdowns, etc.), source test and analytical records, natural gas sulfur content analysis results, emission calculation records, records of plant upsets and related incidents. The Owner/Operator shall make all records and reports available to District and the CEC CPM staff upon request. [Basis: Regulation 2-6-501]

36. The Owner/Operator shall notify the District and the CEC CPM of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules, Regulations, and the Manual of Procedures. Notwithstanding the notification and reporting requirements given in any District Rule, Regulation, or the Manual of Procedures, the Owner/Operator shall submit written notification (facsimile is acceptable) to the Enforcement Division within 96 hours of the violation of any permit condition. [Basis: Regulation 2-1-403]

37. The Owner/Operator shall ensure that the stack height of emission points P-1 and P-2 is each at least 95 feet above grade level at the stack base. [Basis: Regulation 2, Rule 5]

38. Deleted Authority to Construct Condition

39. Deleted Authority to Construct Condition

40. Deleted Authority to Construct Condition

41. Deleted Authority to Construct Condition

42. Deleted Authority to Construct Condition

43. Deleted Authority to Construct Condition

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44. The Owner/Operator shall comply with the continuous emission monitoring requirements of 40 CFR Part 75. [Basis: Regulation 2, Rule 7]

45. The Owner/Operator shall maintain records specifying that the maximum sulfur content of the natural gas combusted at S-1, S-2, S-3 and S-4 is 20 grains or less. These records shall be in the form of a current valid purchase contract, tariff sheet, or transportation contract or equivalent as deemed by the BAAQMD. [Basis: 40 CFR 60.334(h)(3)(i)]

~~~~~~~~~~ END OF CONDITIONS ~~~~~~~~~~
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S#	Source Description	Annual Average lbs/day PART	ORG	NOx	SO2	CC
1	Combustion Gas Turbine #1	4	7.1	53	5.8	59
2	Heat Recovery Steam Generator#1Low emissio	-	-	0	-	0
3	Combustion Gas Turbine #2	11.5	8.7	61	6.5	56
4	Heat Recovery Steam Generator#2Low emissio	-	-	0	-	0
5	Water Cooling Tower, 3 Cell 34,980 gpm	12.3	-	-	-	-
	T O T A L S	27.9	15.9	114	12.4	115

** PLANT TOTALS FOR EACH EMITTED TOXIC POLLUTANT **

Pollutant Name	Emissions lbs/day
Benzene	.43
Formaldehyde	.74
Ammonia (NH3) pollutant	87.20

Appendix B

Updated List of Property Owners

APN	OWNER	MAIL1	MAIL2
101-11-001, 101-11-002, 101-11-006, 101-11-007, 101-13-002, 104-15-081, 224-36-046, 230-03-094, 230-03-095	SOUTHERN PACIFIC TRANSPORTATION CO.	65 CAHILL ST	SAN JOSE, CA 95110
224-36-035	BONNIE MILLS TRUSTEE	PO BOX 2259	AVILA BEACH, CA 93424
101-11-003	COLE AT 3205 BASSETT CA LP	1 AT&T WY	BEDMINSTER, NJ 07921
224-04-094	DIGITAL BH 800 LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
224-08-119	DIGITAL 1201 COMSTOCK LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
224-08-146	DIGITAL 1350 DUANE LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
224-08-147	1100 SPACE PK LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
224-08-151	DIGITAL 1500 SPACE PK BORROWER LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
224-36-052	DIGITAL 3011 LAFAYETTE LLC	16600 WOODRUFF AV 200	BELLFLOWER, CA 90706
101-11-004	891 LAURELWOOD LLC	PO BOX 503	BELMONT, CA 94002
224-36-004	790 COMSTOCK LLC	614 ALTA DR	BEVERLY HILLS, CA 90210
224-36-013	805 COMSTOCK LLC	614 ALTA DR	BEVERLY HILLS, CA 90210
224-36-051	795 COMSTOCK LLC	614 ALTA DR	BEVERLY HILLS, CA 90210
101-13-003	AMB PROPERTY LP	60 STATE ST 1200	BOSTON, MA 02109
101-11-009	ANTHONY MEDEIROS TRUSTEE	PO BOX 790	CHOWCHILLA, CA 93610
224-07-099	OWENS CORNING INSULATING	13155 NOEL RD LB 71	DALLAS, TX 75240
224-36-016	LOIS AVERY TRUSTEE & ET. AL.	250 VALLEY HI RD	EAGLE, ID 83616
104-51-014	GARY AND MARY ANDERSON TRUSTEE	8401 GOLDENROD CL	GILROY, CA 95020
224-36-054	PUBLIC STORAGE	701 WESTERN AV	GLENDALE, CA 91201
224-08-141, 224-36-039	STORAGE EQUITIES, INC.	PO BOX 25025	GLENDALE, CA 91221
224-36-007, 224-36-008	JOYCE WATSON TRUSTEE	2104 FALLEN LEAF LN	LINCOLN, CA 95648
224-36-001	JAKOV LAPTALO TRUSTEE	12125 HILLTOP DR	LOS ALTOS, CA 94022
224-08-006	CENTURY BAY LLC	12100 WILSHIRE BL 1400	LOS ANGELES, CA 90025
224-08-120	FRANK AND MARY ANN LASECKE	17095 SUMMIT WY	LOS GATOS, CA 95030
224-08-058	ANIL AND MARILYN SINGH TRUSTEE	204 FORRESTER RD	LOS GATOS, CA 95032
224-36-002	ROSALIE MONTALBANO TRUSTEE	3804 BAYVIEW DR	MODESTO, CA 95355
224-36-026, 224-36-050	BILL NAPOLI TRUSTEE & ET. AL.	1590 EDMUNDSON CT	MORGAN HILL, CA 95037

224-08-089	LEO FELDER TRUSTEE & ET. AL.	PO BOX 1157	NEVADA CITY, CA 95959
224-08-145	3075 RAYMOND SANTA CLARA LLC	18 CRUISERS BLUFF	NEWPORT BEACH, CA 92657
224-36-055	UNION PACIFIC RR CO.	1400 DOUGLAS ST 1690	OMAHA, NE 68179
224-04-093	CENTRAL INCOME PARTS HOLDING CO. LLC	490 CALIFORNIA AV FL4	PALO ALTO, CA 94306
224-08-109	DOLLINGER LAFAYETTE ASSOCIATES	555 TWIN DOLPHIN DR 600	REDWOOD CITY, CA 94065
224-36-024	LEAH ZIMMERMAN TRUSTEE	1010 HEWITT DR	SAN CARLOS, CA 94070
230-02-022	SAN JOSE CITY OF	801 N 01ST ST UNIT 200	SAN JOSE, CA 95110
104-51-006	R&R INVESTMENTS I	PO BOX 8029	SAN JOSE, CA 95115
224-36-015	MARK & MIRIAM ATLASREV TRUST	6223 FRANCISCAN WY	SAN JOSE, CA 95120
104-51-015	PATRICIA AND JOE ELEK	1426 ROBSHEAL DR	SAN JOSE, CA 95125
224-08-122, 224-08-123	CAPUTO FAMILY PROPERTIES LLC	1500 UNIVERSITY AV	SAN JOSE, CA 95126
104-51-009	JOHN AND CAROLEE LENAHAN TRUSTEE	460 HILLSBOROUGH BL	SAN MATEO, CA 94402
224-07-100	OWENS CORNING INSULATING	960 CENTRAL EX	SANTA CLARA, CA 95050
104-15-100	RIVER OF LIFE CHRISTIAN CHURCH	1177 LAURELWOOD RD	SANTA CLARA, CA 95054
104-51-007	MARK GIESEKE	910 GEORGE ST	SANTA CLARA, CA 95054
104-51-008	KIM TJHIN TRUSTEE	3250 BASSETT ST	SANTA CLARA, CA 95054
104-51-016	ROBERT MARSHALL	921 LAURELWOOD RD	SANTA CLARA, CA 95054
224-08-092	QUICK TURN PROPERTIES LLC	1101 COMSTOCK ST	SANTA CLARA, CA 95054
224-08-099, 224-08-143	OOIBODO LLC	3060 RAYMOND ST	SANTA CLARA, CA 95054
224-08-101, 224-08-102	AVEREX PARTNERS LLC	2975 SCOTT BL 120	SANTA CLARA, CA 95054
224-08-142	BRUCE CHACE TRUSTEE	PO BOX 300	SANTA CLARA, CA 95110
224-08-127	BIAGIO AND MARIA CAVALLINI TRUSTEE	12777 PICEA CT	SARATOGA, CA 95070
224-08-139	1101 SPACE PARK PARTNERS LLC	14573 BIG BASIN WY	SARATOGA, CA 95070
224-36-025	HANLEY MURRAY TRUSTEE	19460 ROBLE CT	SARATOGA, CA 95070
101-13-001	800 LAURELWOOD LLC	PO BOX 906	SARATOGA, CA 95071
104-51-017	DIANNA AND VERNON ADAIR TRUSTEE	399 MAUDE AV	SUNNYVALE, CA 94085
224-08-144	WILLIAMS COMMUNICATONS, INC.	PO BOX 22067 MD TC-13B	TULSA, OK 74121
224-36-048	GRANITE CONSTRUCTION CO.	PO BOX 50085	WATSONVILLE, CA 95077

APN	ADDRESS 1	ADDRESS 2	ADDRESS 3	ADDRESS 4	ADDRESS 5	ADDRESS 6	ADDRESS 7	ADDRESS 8	ADDRESS 9	ADDRESS 10
104-51-015	901 LAURELWOOD ROAD									
104-51-016	921 LAURELWOOD ROAD									
104-51-017	941 LAURELWOOD ROAD	943 LAURELWOOD ROAD								
104-51-008	3200 BASSETT STREET	3250 BASSETT STREET								
104-51-007	908 GEORGE STREET	910 GEORGE STREET								
104-51-006	920 GEORGE STREET									
104-51-009	911 GEORGE STREET									
104-51-014	3290 BASSETT STREET	903 GEORGE STREET								
101-11-007										
101-13-001	800 LAURELWOOD ROAD									
101-13-002										
101-11-004	891 LAURELWOOD ROAD									
101-13-003	750 LAURELWOOD ROAD	700 LAURELWOOD ROAD								
101-11-009	3250 KELLER STREET	3260 KELLER STREET								
101-11-003	3205 BASSETT STREET									
101-11-005										
104-15-100	1177 LAURELWOOD ROAD									
224-08-146	3090 RAYMOND STREET	3080 RAYMOND STREET	1350 DUANE AVENUE							
224-36-046										
224-08-119	1201 COMSTOCK STREET									
224-08-120	1365 COMSTOCK STREET	1231 COMSTOCK STREET								
224-08-151	1500 SPACE PARK DRIVE									
224-36-048	715 COMSTOCK STREET	717 COMSTOCK STREET								
224-36-054	3033 LAFAYETTE STREET									
224-07-100										
224-07-099	980 CENTRAL EXPRESSWAY	960 CENTRAL EXPRESSWAY	900 CENTRAL EXPRESSWAY							
224-36-025	720 COMSTOCK STREET									
224-36-008	750 COMSTOCK STREET									
224-36-007	750 COMSTOCK STREET									
224-36-024	780 COMSTOCK STREET									
224-36-004	790 COMSTOCK STREET	792 COMSTOCK STREET								
224-36-026	800 COMSTOCK STREET									

224-36-002	810 COMSTOCK STREET	820 COMSTOCK STREET									
224-36-001	850 COMSTOCK STREET	870 COMSTOCK STREET	890 COMSTOCK STREET	860 COMSTOCK STREET	840 COMSTOCK STREET						
224-08-109	2910 LAFAYETTE STREET	2906 LAFAYETTE STREET	2904 LAFAYETTE STREET	2930 LAFAYETTE STREET	2902 LAFAYETTE STREET	2920 LAFAYETTE STREET	2908 LAFAYETTE STREET	2900 LAFAYETTE STREET	950 COMSTOCK STREET	940 COMSTOCK STREET	
224-36-035	701 COMSTOCK STREET	705 COMSTOCK STREET	700 COMSTOCK STREET								
224-08-101	975 COMSTOCK STREET										
224-08-102	1025 COMSTOCK STREET										
224-08-058	1075 COMSTOCK STREET	1065 COMSTOCK STREET									
224-36-050	775 COMSTOCK STREET										
224-08-092	1101 COMSTOCK STREET	1111 COMSTOCK STREET									
224-36-013	805 COMSTOCK STREET										
224-36-056	2975 LAFAYETTE STREET	815 COMSTOCK STREET									
224-36-016	2985 LAFAYETTE STREET	2979 LAFAYETTE STREET									
224-36-015	2981 LAFAYETTE STREET	2983 LAFAYETTE STREET									
224-36-051	799 COMSTOCK STREET	795 COMSTOCK STREET									
224-08-147	1100 SPACE PARK DRIVE										
224-36-052	3011 LAFAYETTE STREET										
224-08-085	3025 RAYMOND STREET										
224-08-139	1111 SPACE PARK DRIVE	1109 SPACE PARK DRIVE	1113 SPACE PARK DRIVE	1105 SPACE PARK DRIVE	1107 SPACE PARK DRIVE	1103 SPACE PARK DRIVE	1101 SPACE PARK DRIVE	1115 SPACE PARK DRIVE			
224-08-153											
224-36-055											
224-08-144	3045 RAYMOND STREET										
224-08-099	3060 RAYMOND STREET										
224-08-143											
224-08-082	1255 SPACE PARK DRIVE										
224-08-006	870 DUANE AVENUE										
224-08-145	3075 RAYMOND STREET										
224-36-039	881 DUANE AVENUE										
224-08-142	1010 DUANE AVENUE	910 DUANE AVENUE									
224-08-141	1018 DUANE AVENUE										
224-08-123	1020 DUANE AVENUE										
224-08-122	1030 DUANE AVENUE										
224-08-127	1100 DUANE AVENUE										
224-08-089	1130 DUANE AVENUE										
224-08-150											
224-04-093	2825 LAFAYETTE STREET	2845 LAFAYETTE STREET									
224-04-094	2805 LAFAYETTE STREET										
230-02-022											
101-11-006											
101-11-001											
101-11-002											
224-36-057	2965 LAFAYETTE STREET										

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DVR Power Plant - 1000 ft radius