Pacific Gas and Electric Company
Power Generation
Fossil Plant Construction

Gateway Generating Station
3225 Wilbur Ave.
Antioch, CA 94509
(925) 459-7200

November 5, 2007
GGS-L-00034C

GGS Compliance Log # 2007-030

Mr. Ron Yasny
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Subject: Gateway Generating Station (Docket 00-AFC-1C)
Petition for a Change to Gateway Generating Station Project Inlet Chiller System

Dear Mr. Yasny:

Enclosed is Pacific Gas & Electric Company's petition to amend the California Energy Commission's license for the Gateway Generating Station to allow use of anhydrous ammonia as the refrigerant in the project's inlet chiller system. The Final Decision currently allows use of R134A as the refrigerant, but PG&E has determined that the inlet chiller can be operated up to 300 percent more efficiently if ammonia is used as the refrigerant. The chiller system will be initially charged with 6,800 gallons of anhydrous ammonia and should not require subsequent recharges as the ammonia is not consumed and the chiller system is a closed system.

In support of this Petition, PG&E has performed a thorough environmental analysis relative to the potential risks and impacts associated with use of anhydrous ammonia in the inlet chiller. The modeling protocol was reviewed with CEC Staff prior to initiation of the modeling effort. PG&E has concluded that the potential impacts to the public are not significant. Any potential offsite impacts associated with the release of ammonia from the chiller system will be mitigated by the engineering controls planned for the ammonia chiller system. These controls include appropriate design of the chiller system, ammonia monitoring and alarms systems, integration of monitoring and control systems to reduce accidental releases of ammonia, employee training including strict lock-out/tag-out procedures, and preventative maintenance processes.

If you have any questions regarding this petition, please contact me at (916) 780-1171.

Sincerely,

Andrea E. Grenier

Andrea E. Grenier

Enclosure
AEG/aeg

cc: Tom Allen, GGS Project Manager
Scott Galati, Galati & Blek LLP
Jerry Salamy, CH2MHill
GGS Document Control

Petition for a Change to the Gateway Generating Station Project Inlet Chiller System

Prepared for the

California Energy Commission

Submitted by

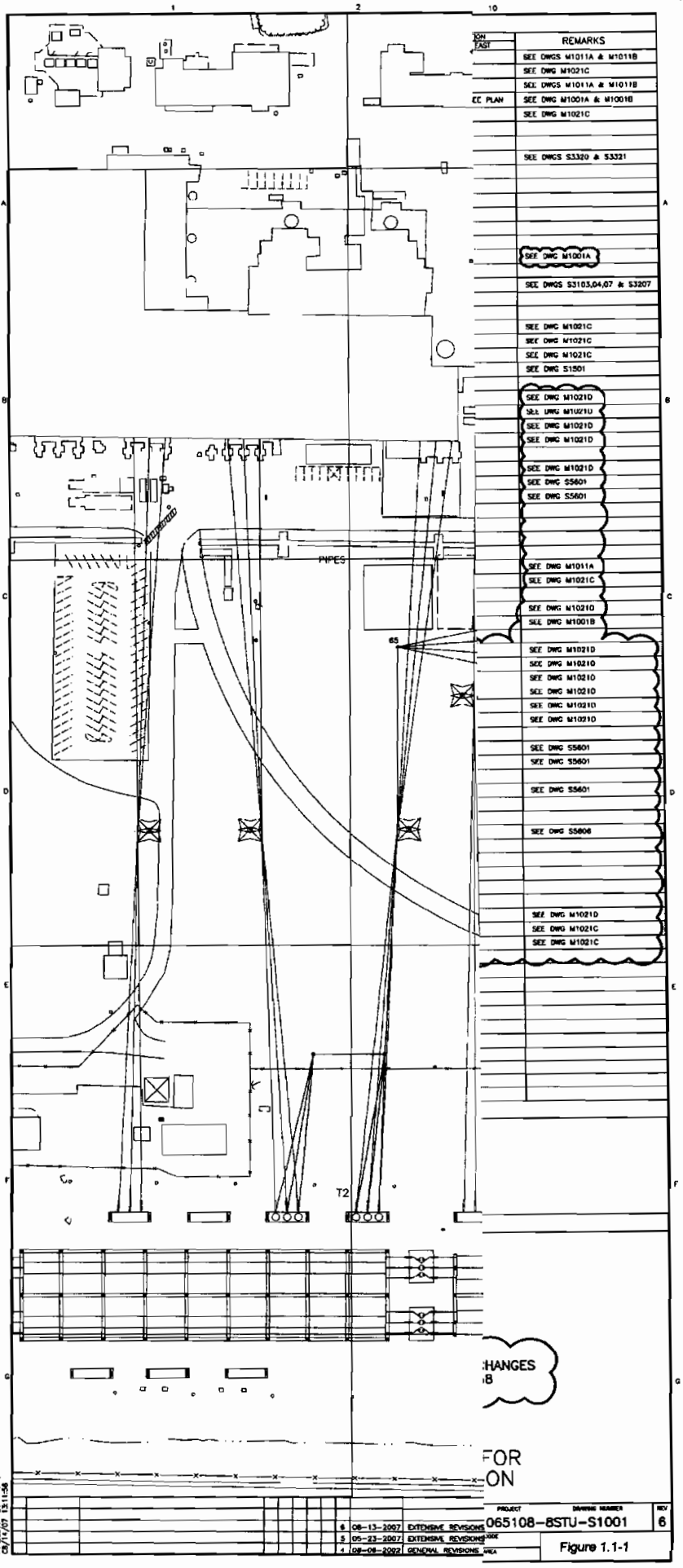
Pacific Gas and Electric Company

With Technical Assistance By

CH2MHILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833

November 5, 2007

Contents


REMARKS
SEE DWGS M1011A & M1011B
SEE DWG M1021C
SEE DWGS M1011A & M1011B
SEE DWG M1001A & M1001B
SEE DWG M1021C
SEE DWGS S3320 & S3321
SEE DWG M1001A
SEE DWGS S3103,04,07 & S3207
SEE DWG M1021C
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SEE DWG M1021C
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ON
6 08-13-2007 EXTENSIVE REVISIONS
5 05-23-2007 EXTENSIVE REVISIONS
4 08-08-2002 GENERAL REVISIONS
PROJECT
065108-8STU-S1001
REV
6

Figure 1.1-1

The chiller does this by using a mechanical system to chill water to approximately 50 °F. This water is then passed through a heat transfer system inside the combustion turbine inlet air duct. Section 2.0 presents a more complete description of the system.

1.3 Summary of Environmental Impacts

Section 1769 (a)(1)(A) of the CEC Siting Regulations requires that an analysis be conducted that addresses impacts that the proposed modification might have on the environment and proposed measures to mitigate any significant adverse impacts. In addition, the Siting Regulations requires a discussion of the impacts the modification might have on the project's ability to comply with applicable laws, ordinances, regulations and standards (LORS).

Section 3.0 of this Amendment includes an analysis of the potential environmental impacts of using anhydrous ammonia in the inlet chiller system. The analysis includes a societal risk analysis to address potential hazardous materials and public health impacts of this proposed change to the project.

Section 3.0 concludes that there will be no significant environmental impacts associated with the Amendment and that the project as amended will comply with applicable LORS.

1.4 Consistency of Amendment with License

Section 1769 (a)(1)(D) of the CEC Siting Regulations requires a discussion of the Amendment's consistency with the LORS and whether the modifications are based upon new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision. If the project is no longer consistent with the license, an explanation why the modification should be permitted must be provided. In the sections that follow, PG&E will provide an explanation of the proposed modifications, rationale for the modifications, and a LORS compliance analysis. Proposed modifications to the existing Conditions of Certification are included in Section 4.0.

2.0 Description of Project Amendment

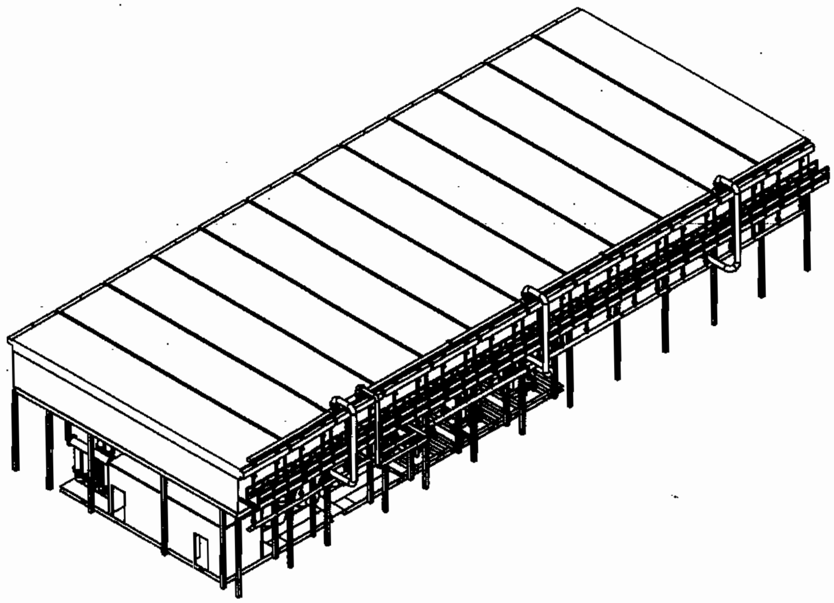
Consistent with California Energy Commission Siting Regulations, Section 1769 (a)(1)(A) and 1769(a)(1)(B), this section includes a complete description of the project modifications, as well as the necessity for the amendment.

2.1 Project Description Modifications

PG&E is proposing to change the refrigerant that will be used in the inlet chiller system from R134A to anhydrous ammonia. (The inlet chiller system was approved by the CEC on August 1, 2007, as part of PG&E's dry cooling amendment, to replace the original evaporative cooling system.) The electric chiller system is designed to reduce the inlet air temperature to the combustion turbine to 50 °F by drawing the inlet air across cooling coils containing anhydrous ammonia chilled water. A general layout arrangement for the chiller system is shown in Figure 2.1-1 and a process flow diagram is shown on Figure 2.2-2.

The proposed chiller system selected is an anhydrous ammonia-based mechanical chiller unit. The chiller system will comprise two subsystems, a chilled water system and a refrigerant system. The chilled water system is a closed-loop system where chilled water will be circulated through cooling loops in the combustion turbine's inlet air duct. After passing through the inlet air duct cooling loops, the water will be pumped to one of three shell and tube heat transfer vessels. The second system is the refrigerant loop, consisting of three screw compressors, ammonia condensers, a 7,100 gallon ammonia receiver vessel, three heat transfer vessels, and a lubricating oil system with a fin-fan cooler.

During the design of the chiller system, the manufacturer evaluated six common refrigerants and concluded that the most efficient refrigerant for the Gateway Generating Station project inlet chiller system is anhydrous ammonia. The R-134A refrigerant was not selected due its lower efficiency and the need to install multiple R-134A systems to achieve the approximate capacity of the ammonia-based system. The R-22 refrigerant was not selected due to a combination of lower efficiency of this type of system and environmental considerations. The option of using propylene as a refrigerant was also eliminated due to its lower efficiency and the inherent fire and explosion risk associated with this material. Therefore, PG&E selected an ammonia based system, while recognizing that anhydrous ammonia has inherent risks as well.



GENERAL NOTES:
1. DRAWING TYPICAL ONE UNIT ONLY.
2. ALL DIM. ARE FROM DATUM POINT (BOTTOM OF THE SKID) UNLESS NOTED OTHERWISE.
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE ± 1/4"
4. 2" GROUT AT CONDENSER SUPPORT COLUMNS ONLY.

Figure 2.1-1, page 1 of 4

REFERENCE DRAWINGS

SENT 3.27.07 JA (TO CUSTOMER)

TRANSMITTAL #00248-13

TURBINE AIR SYSTEMS

GENERAL LAYOUT ARRANGEMENT
NH3 REFIGERATION SYSTEM
PG&E GATEWAY
ANTIOCH, CALIFORNIA

REV.	DESCRIPTION	BY	CHK.	APP.	DATE
A	ISSUED FOR REVIEW	JB			

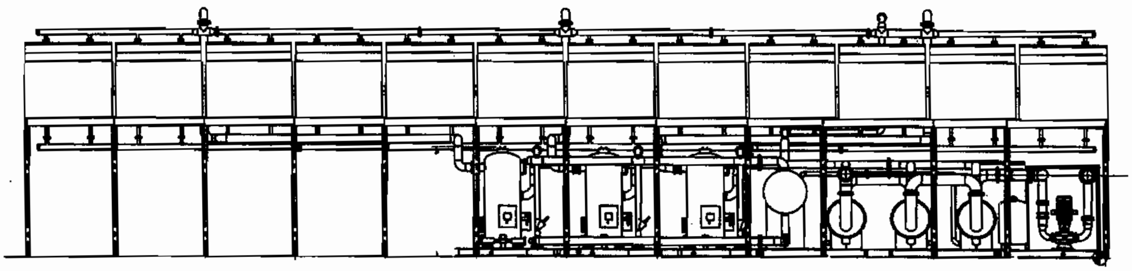
JB 07/26/07

D BROWN

1" = 12'

00248

DWG. NO. 00248-200 SHEET 1 OF 8 REV. A



NORTH ELEVATION

Figure 2.1-1, page 2 of 4

GENERAL NOTES:
1. DRAWING TYPICAL ONE UNIT ONLY.
2. ALL DIM. ARE FROM DATUM POINT (BOTTOM OF THE SKID) UNLESS NOTED OTHERWISE.
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE ± 1/4"
4. 1" GROUT AT CONDENSER SUPPORT COLUMNS ONLY.

REFERENCE DRAWINGS

SENT 3.23.08 SA (TO [illegible])
TRANSMITTAL # [illegible]

A | ISSUED FOR REVIEW

D BROWN

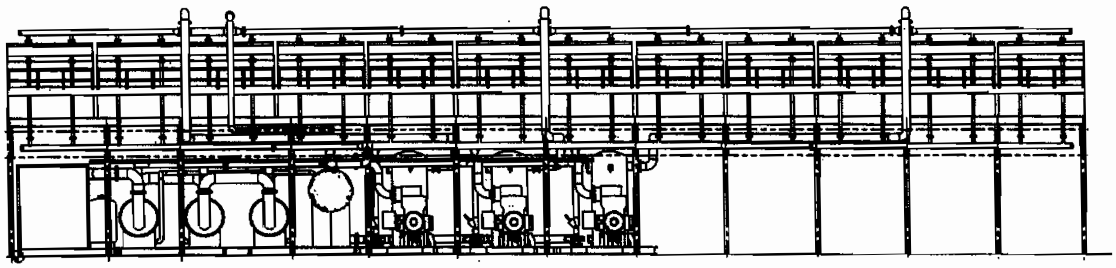
1" = 12'

00248

TURBINE AIR SYSTEMS

GENERAL LAYOUT ARRANGEMENT
NH3 REFIGERATION SYSTEM
PG&E GATEWAY
ANTIOCH, CALIFORNIA

00248-200 SHEET 7 OF 8 REV. A



SOUTH ELEVATION

Figure 2.1-1, page 3 of 4

GENERAL NOTES:

1. DRAWING TYPICAL ONE UNIT ONLY.
2. ALL DIM. ARE FROM DATUM POINT (BOTTOM OF THE SKID) UNLESS NOTED OTHERWISE.
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE ± 1/8"
4. 1" GROUT AT CONDENSER SUPPORT COLUMNS ONLY.

REFERENCE DRAWINGS

SENT 3.23.08
TRANSMITTAL #

REV.	DESCRIPTION	BY	CHK.	APP.	DATE
A	ISSUED FOR REVIEW	JB			

JB 07/26/07

D BROWN

1" = 12'

00248

TURBINE AIR SYSTEMS

GENERAL LAYOUT ARRANGEMENT
NH3 REFIGERATION SYSTEM
PG&E GATEWAY
ANTIOCH, CALIFORNIA

00248-200 SHEET 5 OF 8 REV. A

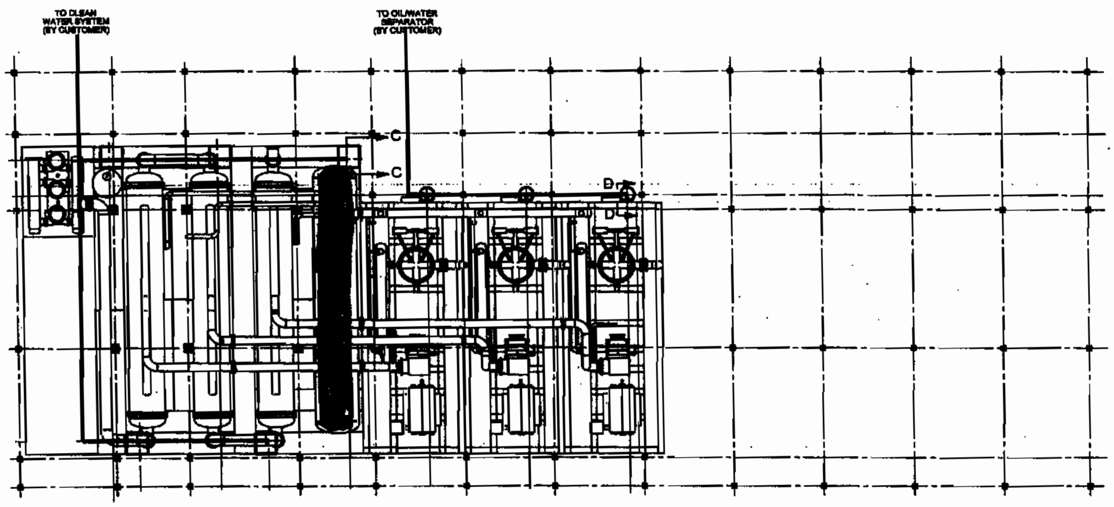


Figure 2.1-1, page 4of 4

GENERAL NOTES:

1. DRAWING TYPICAL ONE UNIT ONLY.
2. ALL DIM. ARE FROM DATUM POINT (BOTTOM OF THE SKID) UNLESS NOTED OTHERWISE.
3. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE ± 1/4"
4. 2" GROUT AT CONDENSER SUPPORT COLUMNS ONLY.

SECTION B-B

REFERENCE DRAWINGS

SENT 3.23.07 PA (TO CUSTOMER)
TRANSMITTAL # 00248-1B

A ISSUED FOR REVIEW JB 7/24/07

D BROWN

1" = 12'

00248

TURBINE AIR SYSTEMS

GENERAL LAYOUT ARRANGEMENT
NH3 REFIGERATION SYSTEM
PG&E GATEWAY
ANTIOCH, CALIFORNIA

00248-200 4 8 A

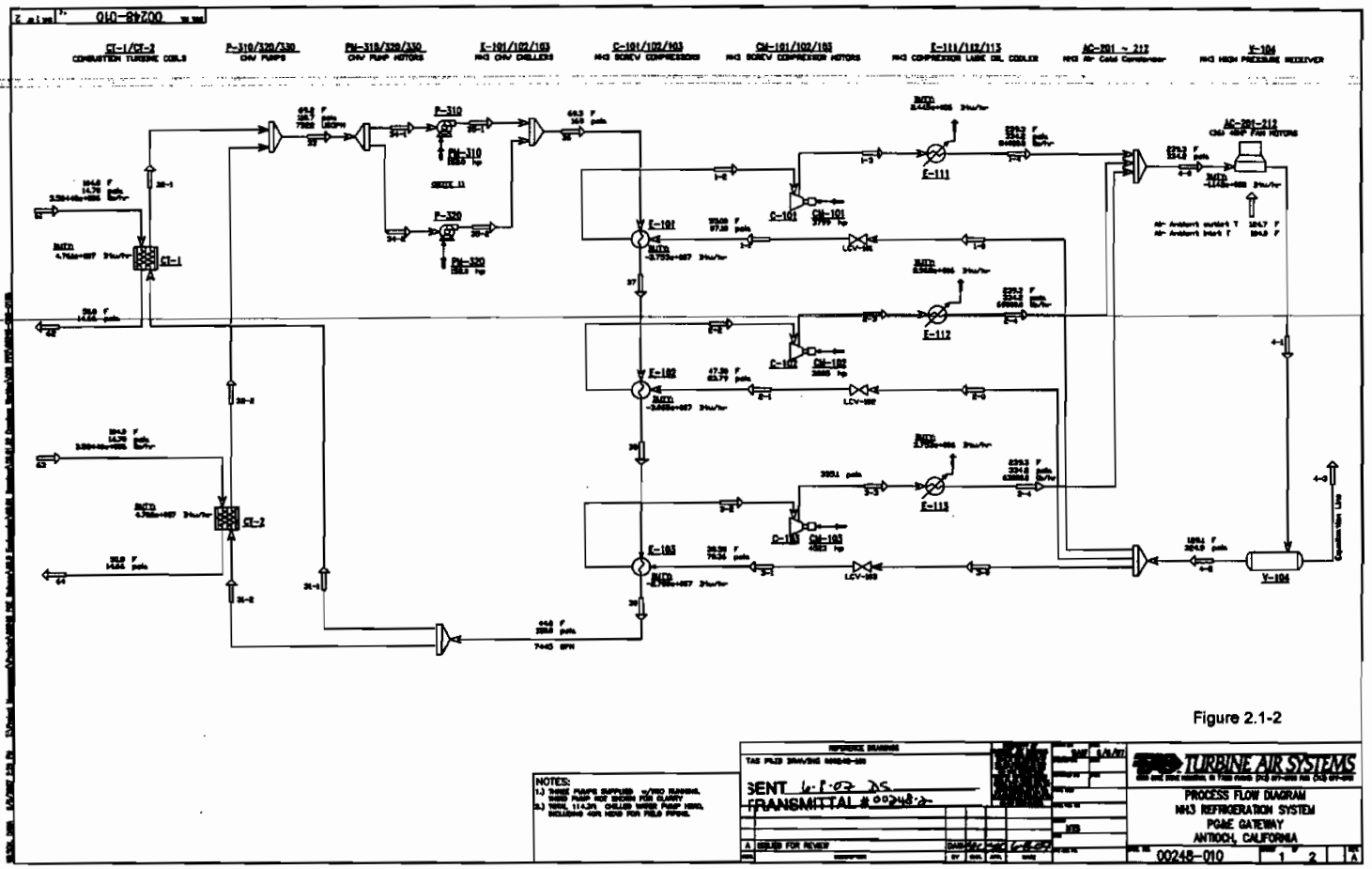


Figure 2.1-2

NOTES:
1.) THREE PUMPS SUPPLIED, 2 PER DRAWING. THIRD PUMP NOT SHOWN FOR CLARITY.
2.) TOTAL 114.3FL CHILLED WATER PUMP HEAD, INCLUDING 40FL HEAD FOR FIELD PIPING.

REFERENCE DRAWING
TAS FILE DRAWING 00248-010

SENT 4-1-02 DS
TRANSMITTAL # 00248-2

A	ISSUED FOR REVIEW			

TURBINE AIR SYSTEMS

PROCESS FLOW DIAGRAM
NH3 REFRIGERATION SYSTEM
PG&E GATEWAY
ANTIOCH, CALIFORNIA

00248-010 | 1 | 2 | A

2.2 Necessity of Proposed Change

Section 1769 (a)(1)(B) and 1769(a)(1)(C) of the CEC Siting Regulations require a discussion of the necessity for the proposed change to the project and whether this modification is based on information that was known by the petitioner during the certification proceeding. During the preparation of the dry cooling amendment, PG&E was not aware that such significant increases in efficiency could be obtained by changing the inlet chiller refrigerant from R134A to ammonia. The proposed change described in this amendment will allow PG&E to operate the GGS at higher capacity rates during warm ambient temperatures, when increase electrical demand occurs.

3.0 Environmental Analysis of the Project Changes

The proposed project change set forth in this Amendment will allow PG&E to operate the inlet chiller system to its maximum efficiency. The focus of this environmental analysis is on the potential impacts to hazardous materials handling, public health, and worker health and safety as a result changing the refrigerant in the inlet chiller system from R134A to anhydrous ammonia. The following environmental areas will **not** be affected by the change in the type of refrigerant in a closed loop system, and as such, are not addressed in this petition:

- Air Quality
- Biological Resources
- Cultural Resources
- Geologic Hazards
- Land Use
- Noise
- Paleontological Resources
- Socioeconomics
- Soils and Agriculture
- Traffic and Transportation
- Visual Resources
- Waste Management
- Water Resources

Additionally, the proposed change to the construction schedule will not alter the operational impacts that were used as the basis to license the project during the original proceeding. Therefore, operational impacts are expected to be equal to those analyzed in the CEC Final Decision and are not addressed in this amendment.

3.1 Hazardous Materials Management

This section reviews the proposed change to the project description relative to potential impacts associated with the management of hazardous materials.

The chiller system will be initially charged with 6,800 gallons (35,000 lbs plus or minus 5%) of anhydrous ammonia, which should not require subsequent recharges as the ammonia is not consumed and the chiller system is a closed system. This quantity represents the maximum amount of ammonia present in the system at any given time. Figure 2.1-2 presents a process flow diagram for the ammonia chiller system. The typical working volume of the pressure receiver is 2,720 gallons, at approximately 129 °F and 325 pounds per square inches atmospheric pressure (psia).

Anhydrous ammonia is a gas at ambient temperature and is therefore stored under pressure to maintain it in the liquid state. An event causing the rupture of the tank, a pipe, or valve

would result in a mixed-phase, liquid-gas jet of ammonia leaving the containment structure at a high rate. Because of its relatively high vapor pressure and the amount of ammonia that will be stored on-site, the accidental release of anhydrous ammonia could result in high down-wind concentrations of ammonia gas.

3.1.1 Analysis

To assess the potential impacts of an accidental ammonia release, an analysis of a worst-case accidental release of anhydrous ammonia was performed under worst-case meteorological conditions (a wind speed of 1.5 m/s and atmospheric stability class F). High atmospheric stability and relatively low, steady winds are most likely to result in increased localized public exposure if a release were to occur. This assessment included the use of atmospheric dispersion modeling to predict the distance and concentrations associated with a release of ammonia. The assessment used the SLAB computer model, consistent with accepted denser-than-air initial plume assumptions for anhydrous ammonia releases. The release rate of anhydrous ammonia was calculated using the emission calculation tool Area Locations of Hazardous Atmospheres (ALOHA) model (http://www.epa.gov/ceppo/cameo/index.htm). An iterative approach was used to estimate the size of the hole in the receiver tank, such that the entire contents were drained from the tank in 10 minutes. The modeled release scenario considered, as a worst case, the release of the entire chiller systems contents (6,800 gallons or 35,000 pounds) over a ten minute period, at an ambient temperature of 100 °F, higher than the local average high temperature for any month. A release height of 6 feet above grade was used to represent the lowest point of the tank (based on elevation drawings).

Downwind concentrations of ammonia were calculated at heights of 0 and 1.6 meters, representing the height of the highest predicted concentration and the breathing height of most individuals. A model run was prepared assuming the entire content of the chiller system volume of 6,800 gallons was released from the receiver vessel. This represents an overestimate of the potential impacts of an accidental release as the chiller system will include protective monitoring systems to isolate potential leaks within the system.

The results of the assessment indicate that the lethal concentrations (10,000 parts per million) of ammonia would occur within 16 feet of the ammonia receiver. This concentration represents a risk to PG&E workers and PG&E will incorporate training and engineering controls (monitoring, control, lock-out tag-out procedures, and alarms systems) to ensure workers are protected. The distance to the lowest concentration posing a risk of lethality, 2,000 parts per million, is 133 feet, based on 60 minutes of exposure. The 2,000 ppm isopleths extends off the GGS site to the north, approximately 52 feet onto the adjacent power plant's site. As the adjacent power plant also uses and stores ammonia, the risk to these workers is not considered as significant as compared to the impact on the general public. Figure 3.1-1 shows the extent to which the ammonia (both 10,000 and 2,000 parts per million) plumes impact offsite areas.

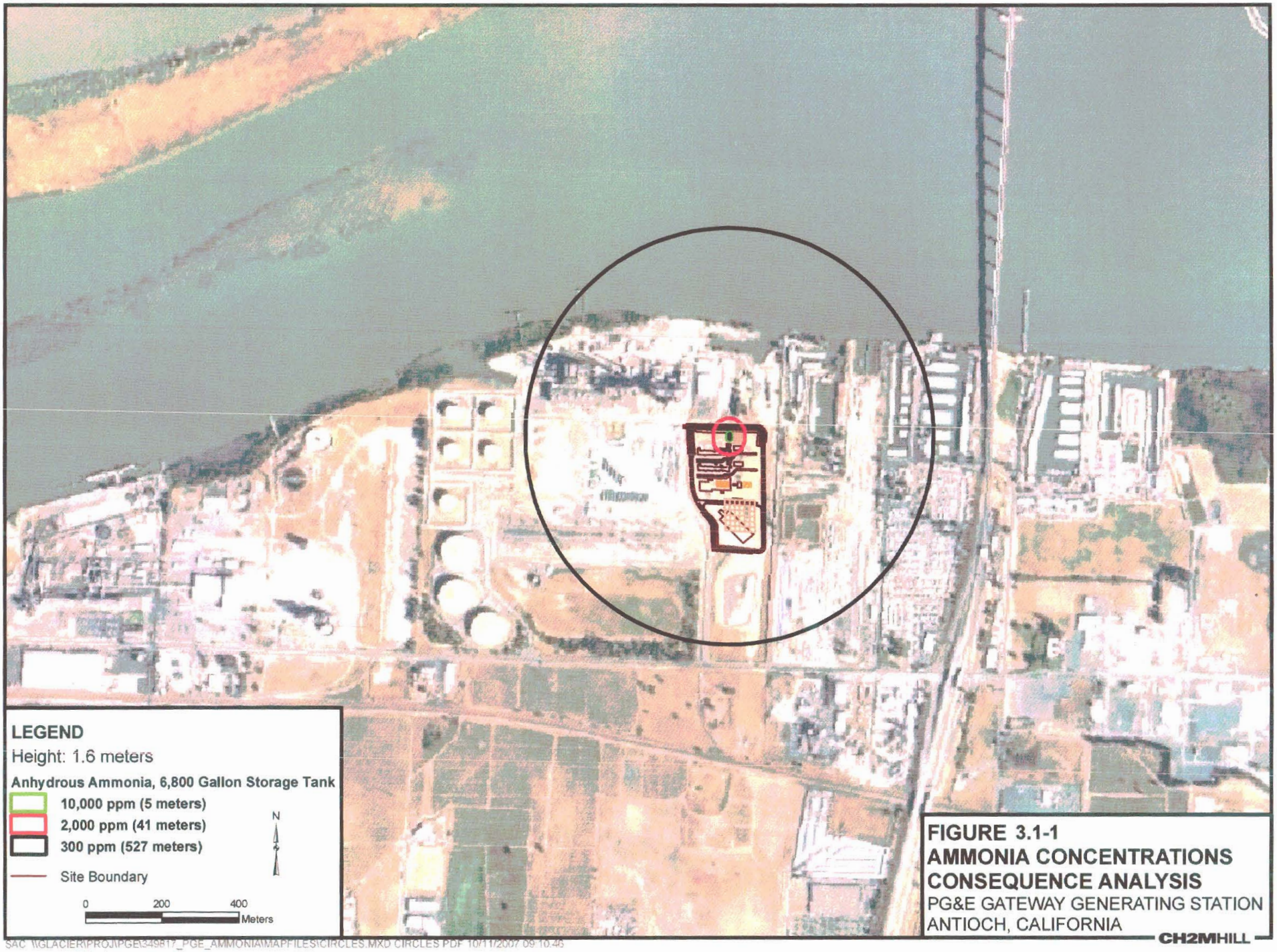


FIGURE 3.1-1
AMMONIA CONCENTRATIONS CONSEQUENCE ANALYSIS
PG&E GATEWAY GENERATING STATION
ANTIOCH, CALIFORNIA

CH2MHILL

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The potential impact to the public is based on an estimate of the number of potential fatalities that could be expected to result from the release. The de minimus level of societal risk is defined as the probability of occurrence of an incident which has the potential to cause 100 deaths per 1 million years, or a frequency of 1×10^{-4} fatalities per year. For cases where the societal risk falls below 1×10^{-4} fatalities per year, the risk is considered de minimus, and further mitigation is not required.

Based on past failure statistics, the expected failure probability for an ammonia storage tank is 1.8 x 10-6 per year (Lees 1996). From local meteorological records[1], the indicated stable atmospheric conditions, which include E and F stability classes, occur in conjunction with wind speeds less than two meters per second (approximately 16 percent of the time). The estimated circular arc that include wind vectors towards the adjacent power plant site are approximately 105 degrees. As wind directions during the stable atmospheric conditions are mostly random, probability of wind blowing toward the adjacent power plant is approximately 29 percent[2]. This results in an approximately 5 percent occurrence of stable atmospheric conditions with low-speed winds blowing in the direction of the adjacent power plant.

The resultant probability of having the ammonia receiver fail during the worst-case meteorological conditions is $1.8 \times 10^{-6} \times 5\% = 9.0 \times 10^{-8}$ per year. Assuming that this release would be fatal for all workers at the adjacent power plant would give an overall risk of 2.2×10^{-6} fatalities per year or 46 times lower than the de minimus risk level of 1×10^{-4}.

Several conservative assumptions are included in this worst-case storage-tank-failure scenario. No attempt has been made to include these factors in the modeling or the risk analysis. These unaccounted-for conservative assumptions include:

- The receiver breach produces a horizontal jet, below the vapor space, pointing in the downwind direction, and in the direction of the adjacent power plant.
- The receiver breach is large enough to empty the contents of the entire system in the 10 minutes. (The resultant adiabatic expansion of the ammonia gas would lower the temperature of the contents of the vessel, reducing the pressure and flow rate as the release continued.)
- Historical vessel failure data has been used to represent new vessel installations. Vessels designed, built and maintained by current standards would be expected to have a lower rate of failure.
- Wind direction must stay constant during the transport of the plume (change in wind direction would result in additional dispersion of the plume).

[1] Contra Costa Power Meteorological Monitoring Station for the Years 2004-2006, BAAQMD Station ID #2804.

[2] The arc radii directed toward the power plant divided by the radii of a circle.

The analysis assumes all workers at the adjacent power plant would be located within the 52 foot area impacted by the ammonia plume. This is unlikely since the point at which the plume crosses property line is a location on the adjacent power plant site with no major processes or equipment.

3.1.2 Conformance to Laws, Ordinances, Regulations, and Standards

The project is subject to the state and federal risk management programs due to the use of aqueous ammonia in the air pollution control system. The use of another form of ammonia will not subject the project to any additional regulations, although the project will now likely be required to prepare a Program 3 Risk Management Plan including a process safety management plan. Therefore, the project is expected to comply with all applicable regulations.

3.1.3 Conclusions

The use of anhydrous ammonia in the chiller system is not expected to have a significant impact. Any impacts from the use of anhydrous ammonia will be further mitigated through the implementation of the Conditions of Certification (as proposed in Section 4.0).

3.2 Public Health

The potential impacts to public health not expected to be significant. Any offsite impacts associated with the release of ammonia from the chiller system will be mitigated by the engineering controls planned for the ammonia chiller system. These controls include appropriate design of the chiller system, ammonia monitoring and alarms systems, integration of monitoring and control systems to reduce accidental releases of ammonia, employee training, and preventative maintenance processes. The project will be subject to the state and federal Risk Management Programs, which will identify the most likely release scenarios through the hazard assessment process, allowing for the development of safety processes to further mitigate potential risks.

3.3 Worker Safety and Health

PG&E will develop and implement standard operating procedures (SOP) to allow for the safe operation and maintenance of the chiller system. In addition, PG&E will develop and implement training materials to provide adjacent businesses to inform them of the possible risks and measures to protect workers.

3.4 Cumulative Impacts

This Amendment will not change the assumptions or conclusions made in the CEC Final Decision. The proposed design changes will not result in cumulative impacts not already analyzed by the CEC. The GGS project was licensed to use ammonia in the air pollution

control system and the addition of the anhydrous ammonia does not alter any underlying conditions used as the basis in the cumulative impact analyses prepared by CEC Staff during the licensing of the project.

3.5 Laws, Ordinances, Regulations, and Standards

The CEC Final Decision certifying the Project concluded that the use and storage of ammonia by the project complied with all applicable LORS. The inclusion of a different form of ammonia does not alter this determination. As shown above, the potential impacts from this Amendment will be not be significantly greater than the impacts analyzed in the Final Decision.

3.6 References

AIChE (American Institute of Chemical Engineers). 1989. Guidelines for Technical Management of Chemical Process Safety, AIChE, New York, NY 10017.

AIChE (American Institute of Chemical Engineers). 1994. Guidelines for Implementing Process Safety Management Systems, AIChE, New York, NY 10017.

EPA (Environmental Protection Agency). 1987. Technical Guidance for Hazards Analysis, Environmental Protection Agency, Washington, DC, 1987.

EPA (Environmental Protection Agency). 1999. RMP Offsite Consequence Analysis Guidance, Environmental Protection Agency, Research Triangle Park, NC, 1999.

Ermak, D.E. 1990. User's Manual for SLAB: An Atmospheric Dispersion Model for Denser-Than-Air Releases, Lawrence Livermore National Laboratory, Livermore, CA, 1990.

FEMA (Federal Emergency Management Agency). 1989. Handbook of Chemical Hazard Analysis Procedures, Federal Emergency Management Agency, Washington, DC, 1989.

Lees, F.P. 1996. Loss Prevention in the Process Industries, Vols. I, II and III. Second Edition, Butterworths, London, U.K.

USOSHA (United States Occupational Safety and Health Administration). 1993. Process Safety Management / Process Safety Management Guidelines For Compliance, U.S. Department of Labor, Washington, DC.

4.0 Proposed Changes to the Conditions of Certification

Consistent with the requirements of the CEC Siting Regulations Section 1769 (a)(1)(A), this section addresses the proposed modifications to the project's Conditions of Certification. Only modifications to the applicable Hazardous Materials Conditions of Certification are necessary as a result of the proposed amendment. These changes are presented below in an underline (insertions) and strike-through (deletions) format.

HAZ-1 No changes are proposed to the condition language, but because PG&E is proposing to add anhydrous ammonia to the list of acceptable hazardous materials allowed onsite, a revised Hazardous Materials table is provided on the following page of this petition.

HAZ-4 The aqueous ammonia storage facility and the inlet chiller system shall be designed to either the ASME Pressure Vessel Code and ANSI K61.6 or to API 620. In either case, these ~~storage tank~~ facilities shall be protected by ~~a~~ secondary containment basins capable of holding 150% of the storage volume plus the volume associated with 24 hours of rain assuming the 25-year storm.

Verification: At least sixty days prior to delivery of ~~aqueous~~ ammonia to the storage tanks or inlet chiller system, the project owner shall submit final design drawings and specifications for these ~~ammonia storage tank~~ systems and secondary containment basins to the CPM for review and approval.

HAZ-6 The project owner shall direct all vendors delivering ~~aqueous~~ ammonia to the site to use only tanker truck transport vehicles which meet or exceed the specifications of DOT Code MC-307.

Verification: At least thirty (30) days prior to receipt of ~~aqueous~~ ammonia on site, the project owner shall submit to the CPM for review and approval letters from the supply vendors indicating the specifications of the transport vehicles to be used in the delivery of ~~aqueous~~ ammonia to the site.

Proposed Changes to Condition HAZ-1 Appendix C

Hazardous Materials at GGS (Table 8.12-4 from the AFC)

Material	CAS Number	Location	Hazardous Characteristics	Maximum Quantity On-Site	Regulatory Thresholds (lbs)			
					Cal-ARP	Federal RQ	Federal TPQ	Federal TQ
Aqueous Ammonia (29%)	7664-41-7	Selective Catalytic Reduction	Corrosive	285,000 lb	500	100	500	20,000
Anhydrous Ammonia	7664-41-7	Inlet Chiller System	Corrosive	32,000 lb	500	100	500	20,000
Sulfuric Acid	7664-93-9	Water Treatment System ~~& Cooling Tower~~	Corrosive	6,000 gal	1,000	1,000	1,000	-
Sodium Hypochlorite	7681-52-9	Water Treatment System	Corrosive, Toxic	6,110 gal	-	-	-	-
Sodium Hydroxide	1310-73-2	Water Treatment System	Corrosive	6,000 gal	-	-	-	-
Sodium Bisulfite	7631-90-5	Water Treatment		110 gal	-	-	-	-
Scale Inhibitor		Water Treatment		110 gal	-	-	-	-
Corrosion Inhibitor (nitrite or molybdate)		Closed loop cooling water		55 gal (2000-2250 ppm)	-	-	-	-
Trisodium Phosphate	7601-54-9	Heat Recovery Steam Generator	Toxic	1,000 lb	-	-	-	-
~~Dispersant~~		~~Cooling Tower~~		~~4,000 gal~~	-	-	-	-
Sodium Hydroxide	1310-73-2	Water Treatment System	Corrosive	6,000 gal	-	-	-	-

5.0 Potential Effects on the Public

Consistent with the requirements of the CEC Siting Regulations Section 1769 (a)(1)(G), this section addresses the proposed Amendment's effects on the public.

The potential impacts on the public are expected to be insignificant. The inlet chiller system will be designed and operated to industry standards, which will minimize the potential for public impacts. Furthermore, PG&E will install ammonia monitoring and alarm systems to further reduce potential public impacts. Lastly, PG&E will develop and provide training materials for nearby businesses to allow them to inform and train workers on what to do in the event of an accidental release of ammonia. Implementation of these measures, in addition to complying with the existing and proposed Conditions of Certification will ensure that impacts to the public will be below the level of significance.

6.0 List of Property Owners

Consistent with the CEC Siting Regulations Section 1769(a)(1)(H), this section lists the property owners affected by the proposed modifications are presented in Appendix 1.

7.0 Potential Effects on Property Owners

Consistent with the CEC Siting Regulations Section 1769(a)(1)(I), this section addresses potential effects of the proposed Amendment on nearby property owners, the public, and parties in the application proceeding.

The use of anhydrous ammonia in the turbine inlet chiller system is not expected to impact nearby property owners. As noted above, PG&E will provide education and training materials to any interested property owners.

Appendix 1

List of Property Owners Within 1,000 Feet of the Project Site

051 031 014
Southern Energy Delta Llc
1350 Treat Blvd #500
Walnut Creek CA 94597

037 020 012
Ei Du Pont De Nemours & Co
Po Box 1039
Wilmington DE 19899

037 040 007
OXFOOT ASSOCIATES LLC
24737 Arnold Dr
Sonoma CA 95476

037 040 015
OXFOOT ASSOCIATES LLC
24737 Arnold Dr
Sonoma CA 95476

051 031 003
STATE OF CALIFORNIA
Po Box 7791
San Francisco CA 94120

051 031 004
STATE OF CALIFORNIA
Po Box 7791
San Francisco CA 94120

051 031 005
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SPORTSMEN INC
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Mechanical Co Monterey
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American Canyon CA 94503

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Virginia H Fleming
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WILBUR AVENUE LLC
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051 040 073
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051 051 021
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