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**Petition for Post-Certification Amendment
Tracy Combined Cycle Power Plant
CEC Docket No. 08-AFC-07**

**Zeus 200 MW
Battery Energy Storage System Project**



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1.0 INTRODUCTION

MRP San Joaquin Energy, LLC (SJE) owns and operates the Tracy Combined Cycle Power Plant (TCCPP) at 14950 W Schulte Road in unincorporated San Joaquin County near Tracy, California. SJE hereby requests an amendment to the certification for the TCCPP (AFC No. 08-AFC-07) pursuant to Title 20, California Code of Regulations, Section 1769(a)(1). The purpose of the amendment is to implement a nominal 200 megawatt (MW), 4-hour duration Battery Energy Storage System (BESS) Project known as Zeus BESS on the former project laydown area within the TCCPP property (see Figure 1).

The TCCPP is a nominal 344 MW combined cycle power plant that consists of two 88 MW nominally rated General Electric Model PG 7121 EA combustion turbine generator sets with Heat Recovery Steam Generators with 380 million British Thermal Units (MMBTU) duct burners and a 168 MW nominally rated steam turbine shared by the two combustion turbine generators and associated equipment necessary for combined-cycle operation.

The power plant site is in an industrial and agricultural area which is properly zoned for electrical generating facilities. The requested amendment would allow for implementation of the planned Zeus BESS Project located on the former laydown area. The Zeus BESS would interconnect to the adjacent Pacific Gas & Electric Company (PG&E) Schulte Substation at 115 kilovolts (kV) via a new onsite overhead line from the BESS switchyard to the substation (see Figure 1). The connection to the PG&E Schulte Substation would allow the BESS project to transmit power to the California Independent System Operator (CAISO)-managed electrical grid. The proposed interconnection would also allow both the TCCPP and the Zeus BESS to deliver their outputs to CAISO-controlled grid simultaneously, thus delivering both reliability and energy storage benefits. The planned Zeus BESS is a separate facility from the TCCPP, but will be co-located within the same parcel. Zeus BESS would be located on a portion of APN 209-240-32 to the north and east of the TCCPP.

The Zeus BESS Project would be charged exclusively from the grid, particularly when excess renewable energy is available, storing and later discharging this energy for peak periods when intermittent renewable energy is less available, resulting in lower total greenhouse gas (GHG) emissions.

The amendment would allow for the Zeus BESS Project to be constructed and operated in the former laydown area on an approximately 10-acre BESS project site, adjacent to the TCCPP. This area is well-studied as previously permitted by the CEC, graded, and used as temporary construction laydown and parking for the TCCPP (see Figure 2). The Zeus BESS Project will be constructed in part to support California's current need for additional electrical energy storage

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available for dispatch during peak load demand time periods in the summer and would advance the State's and the California Public Utility Commission's (CPUC's) policy of 60% renewable power by 2030 and 100% by 2045 (Senate Bill 100). The Zeus BESS Project offers the CAISO a reliable dispatchable energy resource to the electrical grid in the rapidly growing Central Valley.

The environmental impact assessments presented in Section 5 and Appendix A and B hereto conclude no significant environmental impacts are associated with the implementation of the actions specified in this Petition to Amend, and that the project, as modified, will comply with all applicable laws, ordinances, regulations, and standards (LORS).

Accordingly, MRP respectfully requests that the requested modification be approved at the staff level as Staff Approved project Change (SAPC) pursuant Title 20, California Code of Regulations, Section 1769(a)(1).

1.1 Background

The Tracy Peaker Plant (TPP) was licensed by the California Energy Commission (CEC) on July 19, 2002 under Adoption Docket No. 01-AFC-16 and began commercial operations on June 1, 2003. On June 30, 2008, GWF Energy LLC submitted an Application for Certification (AFC) to the CEC to modify the peaker plant by converting the facility into a combined cycle power plant. On March 24, 2010, the CEC issued a certification for the TCCPP, a 330 MW combined cycle generating facility. On March 24, 2010, the CEC issued a license to GWF Energy LLC (GWF) for the construction and operation of the GWF Tracy Combined Cycle Power Plant (TCCPP) (08-AFC-7C). After conversion was completed, both units started commercial operation on November 1, 2012. The TCCPP units currently operate under a power purchase agreement with PG&E.

The TCCPP is located in an unincorporated portion of San Joaquin County, immediately southwest of the City of Tracy and approximately 20 miles southwest of Stockton. The TCCPP is located on an approximately 16.4-acre site within a larger, 40-acre parcel. The 16.4-acre site sitting on a 40-acre parcel is bounded by the Delta-Mendota Canal to the southwest, agricultural property to the south and east, and the Union Pacific Railroad to the north. Immediately north of the railroad are the Owens-Brockway glass container manufacturing plant and the Nutting-Rice warehouse. The power plant site is accessed via an existing 3,300-foot-long, asphalt-paved service road that runs southward from W. Schulte Road.

The Zeus site, the former laydown area, is also within the same 40-acre parcel as TCCPP. Construction of the Zeus BESS Project is planned to start construction in the 2nd quarter of 2030 and to begin commercial operation in the 2nd quarter of 2031 assuming necessary regulatory approvals are received in time. The planned project life is expected to be up to 30 years.

1.2 20 CCR Section 1769 Information Requirements

The following sections contain the information required pursuant to Title 20, California Code of Regulations (CCR), Section 1769(a)(1).

2.0 DESCRIPTION OF PROPOSED CHANGES

This section addresses the requirements of Title 20, CCR, Section 1769(a)(1)(A).

2.1 Zeus 200 MW BESS: Description of the Proposed Modification

The proposed Zeus 200 MW BESS Project's design includes the following:

- 200 MW of batteries with 800 MW hours (MWh) of energy production to be installed on an approximately 10-acre site within an overall approximately larger approximately 40-acre parcel owned and operated by MRP San Joaquin Energy, LLC (MRP). The 40-acre site is on Assessor Parcel No. 209-240-32. The overall 40-acre site includes the existing TCCPP that was previously permitted by the CEC.
- The Zeus BESS site on the former laydown area, including site access and switchyard is shown on Figures 1 and 2.
- The battery storage technology to be selected during detailed design are most likely lithium iron phosphate (LFP) and lithium nickel manganese (NMC), though the project owner in consultation with the Commission would consider other technologies that may become commercially available as the BESS project undergoes final design.
- The batteries and the associated BESS equipment will be located on a portion of the parcel that is northeast of the CEC regulated TCCPP and the compact linear corridors necessary to connect to the adjacent PG&E electrical switchyard. The conservative estimated area of total potentially surface disturbance for the proposed Zeus BESS Project is up to approximately 10 acres including the BESS equipment and the associated temporary construction laydown area. This area was previously disturbed and used for temporary laydown to support previous construction activities, including the conversion of the former peaker plant to a combined cycle power plant following CEC approval of the AFC in 2010.
- In addition, the proposed Zeus BESS area and adjacent laydown areas are part of the area that was identified as farmland mitigation associated with the original CEC licensing of the Tracy peaker plant in 2001. At the time that the peaker plant was licensed the area where the Zeus BESS project is now proposed was designated as Prime Farmland and CEC Condition of Certification TPP Land-2 required that the area be either farmed or that it be

restored following disturbance and that it be in “ag ready” condition. The area is no longer designated as Prime Farmland by the California Department of Conservation.

- Foundation design for the BESS project will be developed following the results of a site-specific geotechnical investigation related to site development on the BESS site.
- Zeus BESS will interconnect to the electrical grid at 115 kV via the existing onsite PG&E Schulte 115 kV Substation. This connection requires a short 115 kV overhead generation tie line to be installed between the BESS Generator Step-up Transformer (GSU) and the connection point at the PG&E Schulte Substation located south of the Zeus BESS switchyard.

2.2 Construction

Construction of the Zeus BESS Project is currently expected to occur over an approximately 8- to 9-month period. Construction site mobilization is anticipated to begin in the 2nd quarter of 2030. Construction hours are expected to typically start at 7 a.m. and end at 7 p.m., Monday through Saturday. Typical worker hours and equipment usage will be 8 hours/day within the 7 a.m. to 7 p.m. window.

The construction phase will be followed by commissioning, testing, and commercial operation which is planned to occur in the 2nd quarter of 2031.

The primary construction activities are planned as follows:

- Extend existing TCCPP perimeter site access road to BESS area
- Site grading of the BESS to create level development area with proper site drainage
- Site grading of a stormwater detention basin
- Install BESS equipment and switchyard foundations
- Install electrical cabling and communication lines
- Set battery modules, inverters, and switchgear
- Install facilities needed to interconnect at PG&E Schulte Substation/point of interconnection
- Complete electrical/wire connections
- Mechanical completion

The Peak construction workforce is estimated at 80. Truck trips during construction are estimated at up to 35/day for up to 24 weeks followed by approximately 5/day on average for an additional 12 weeks. Construction water usage is expected to be less than 5,000 gallons per day on average and will be trucked to the site by the construction contractor. Water usage during the operational

phase is expected to be minimal and limited primarily to fire water and landscaping irrigation needs, as applicable.

Construction equipment to be utilized would be expected to include graders and excavators, backhoes, bore/drill rigs, water trucks, sheep's foot compactors, front end loaders, concrete trucks, dump trucks, trash trucks, and flatbed trailers. Cranes, man-lifts, portable welding units, line trucks, and mechanic trucks will also be required. The Project would utilize construction equipment with Tier 4, CARB certified off-road diesel engines, as applicable.

2.3 Operation and Maintenance

Once constructed, the Zeus BESS Project would be capable of operating seven days per week and 365 days per year. The BESS facilities would be designed to be operated remotely and limited customers or visitors are expected. Periodic inspections and maintenance activities would occur. No permanent onsite BESS staff are anticipated. Security would be maintained through installation of chain-link fencing. The Zeus BESS Project facilities would also be protected by the existing security measures at the TCCPP.

Operation and maintenance of the Zeus BESS Project would generate minimal noise, primarily from fans used to cool electrical equipment and transformers. The Zeus BESS Project facilities will be designed to comply with applicable San Joaquin County noise standards. Periodic on-site maintenance is expected to be required following commissioning. Operations and maintenance activities would require several workers performing visual inspections, monitoring BESS performance, executing minor repairs, and responding to needs for BESS adjustment.

It is anticipated that battery module augmentation via installation of additional battery enclosures may be required to make up for decreased battery performance over time. The frequency and extent of such augmentations over the life for the Zeus BESS Project is currently estimated to occur every 4 to 5 years. The expected infrequent maintenance activities would generate little traffic during operations. The areas surrounding the inverters and switchgear would be graveled and would have adequate space for parking several vehicles. Operations and maintenance vehicles would include light duty trucks (e.g., pickup, flatbed) and other light equipment and hand tools for maintenance. Heavy equipment would not be utilized during normal operation. Large or heavy equipment may be brought to the facility infrequently for equipment repair or battery replacement.

Sanitary disposal needs for operations would be provided through porta potties. Other wastes from equipment replacement or other work would be removed from the site at the end of the day, or as needed. As applicable, spent batteries removed during infrequent battery module

augmentation events would be handled and transported as Universal Waste prior to offsite recycling. Normal operation of the Zeus BESS Project is not expected to require use of new hazardous materials and/or to generate additional hazardous wastes in reportable quantities.

As applicable over time, combustible vegetation on and around the Zeus BESS Project boundaries would continue to be actively managed to minimize fire risk. Additionally, the Zeus BESS project would comply with all applicable County fire standards.

2.4 Decommissioning

The proposed Zeus BESS Project is currently anticipated to be capable of operating for 40 years or more. Once BESS operations are terminated, the facility would be decommissioned in accordance with then-applicable laws, ordinances, regulations, and standards. Many of the parts of the proposed BESS systems are recyclable including a substantial percentage of the battery and other electrical components. Spent batteries would be managed and transported as Universal Waste prior to offsite recycling at an approved location. Metal, scrap equipment, and parts that do not have free-flowing oil can be sent for salvage. Equipment containing any free-flowing oil such as oil filled transformers, as applicable, would be managed as waste and would require evaluation. Oil and lubricants removed from equipment would be managed as used oil.

3.0 NECESSITY OF PROPOSED CHANGE

This section addresses the requirements of Title 20, CCR, Section 1769(a)(1)(B).

The requested amendment would allow for the Zeus BESS Project to be constructed and operated adjacent to the TCCPP. The Zeus BESS Project will be constructed in part to support California's current need for additional renewable electrical energy supply especially during peak load demand time periods in the summer and would advance the State's and the California Public Utility Commission's (CPUC) policy of 60% renewable power by 2030 and 100% by 2045 (Senate Bill 100). The Zeus BESS Project offers the CAISO a storage resource to support renewable energy resources to the electrical grid and responds to the CAISO requirement to provide additional Resource Adequacy capacity and capability to California's existing transmission system.

4.0 NEW INFORMATION OR CHANGE IN CIRCUMSTANCES THAT NECESSITATED THE CHANGE

This section addresses the requirements of Title 20, CCR, Section 1769(a)(1)(C).

The proposed modifications are not based on information that was known during the certification proceeding in 2002. California's current need and goals for additional renewable electrical energy supply were not known in 2002. In addition, the battery technology that is planned to be utilized was not available in 2002.

The modification is not based on information that was known during the certification proceedings for the TPP in 2002 or the TCCPP in 2010. California's current need and goals for additional renewable electrical energy supply were not known in 2002 or 2010.

5.0 ANALYSIS OF THE EFFECTS THAT THE PROPOSED CHANGE WILL HAVE ON THE ENVIRONMENT AND MITIGATION MEASURES PROPOSED

This section and Appendices A and B address the requirements of Title 20, CCR, Section 1769(a)(1)(D).

The CEC's Final Commission Decision issued in March 2010 for conversion of the TPP to the TCCPP addressed the following environmental topic areas: Greenhouse Gas Emissions and Air Quality; Public Health; Worker Safety/Fire Protection; Hazardous Materials Management; Biological Resources; Soil and Water Resources Cultural Resources; Geological and Paleontological Resources; Land Use; Traffic and Transportation; Socioeconomics; Noise and Vibration; and Visual Resources.

An assessment of the effects that the proposed Zeus BESS Project will have on the environment with consideration of the topics addressed in the Final Commission Decision and current regulations is attached hereto as Appendix A.

As set forth in detail in Appendix A, the Zeus BESS Project will have no significant effects on the environment and thus no new mitigation measures are required.

6.0 MODIFICATIONS IMPACT ON LORS COMPLIANCE

CEC Siting Regulations, Title 20, CCR, Section 1769(a)(1)(E) requires "An analysis of how the proposed change would affect the project's compliance with applicable laws, ordinances, regulations, and standards". As discussed in Section 5, approval of the modifications associated with implementation of the Zeus BESS Project will not impact compliance with applicable LORS.

7.0 POTENTIAL EFFECTS ON PUBLIC

This section discusses the potential effects on the public that may result from the modifications proposed in this Petition to Amend, in accordance with CEC Siting Regulations (Title 20, CCR, Section 1769(a)(1)(F)).

With implementation of the proposed Zeus BESS Project related modifications to the TCCPP and property, the Zeus BESS Project will have no adverse effect on the public. The installation and operation of the BESS facilities will comply with applicable LORS and will not result in any potentially significant impacts. Therefore, no adverse effects on the public will occur because of the changes to the TCCPP facility and property as proposed in this Petition for Post-Certification Amendment.

8.0 PROPERTY OWNERS

Section 1769(a)(1)(G) requires a “list of current assessor’s parcel numbers and owners’ names and addresses for all parcels within 500 feet of any affected project linears and 1000 feet of the project site.” Consistent with privacy considerations, a list of current assessor’s parcel numbers and owners’ names and addresses for all parcels within 1,000 feet of the project site will be provided directly to the Compliance Project Manager.

9.0 MODIFICATIONS IMPACT ON THE PUBLIC AND NEARBY PROPERTY OWNERS

This section addresses potential effects of the project changes proposed in this Petition to Amend on nearby property owners, the public, and parties in the application proceeding, in accordance with CEC Siting Regulations (Title 20, CCR, Section 1769 (a)(1)(H)). The proposed BESS will not adversely affect the public because the BESS will not result in significant unmitigated impacts to the environment and will not negatively affect the project’s ability to comply with applicable LORS. Therefore, the petition will have no impact on property owners, residents, or the public.

10.0 APPLICABLE CEQA EXEMPTIONS

Section 1769(a)(1)(I) requires a discussion of any exemptions from the California Environmental Quality Act, commencing with section 21000 of the Public Resources Code, that the project owner believes may apply to approval of the proposed change.

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Tracy Combined Cycle Power Plant
Zeus BESS 200 MW Project

The CEC's power plant siting process is a certified state regulatory program under the California Environmental Quality Act (Pub. Resources Code, § 21080.5; 14 C.C.R. §§ 15250-15253.) As such, it is exempt from the procedural elements of CEQA, though it must adhere to the substantive requirements of CEQA. The CEC's detailed certification process is commonly described as "CEQA-equivalent." CEQA defines a "Project" in pertinent part as "...an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Pub. Resources Code § 21065.)

In this case, TCCPP was subject to environmental review in accordance with the CEC's certified regulatory program. The current operations of the TCCP are not a new CEQA "project," but are part of the existing environmental baseline. Once a project is approved, CEQA does not require that it be analyzed anew every time an action is required to implement the project. Where an EIR, or in this case the CEC's CEQA-equivalent certification, has been prepared for a project, CEQA expressly prohibits agencies from requiring a subsequent or supplemental EIR, except in specified circumstances, e.g., where the project will have more severe impacts as a result of substantial changes to the project or the circumstances under which it is undertaken. (14 C.C.R. § 15162). As discussed below, the operations of Zeus BESS Project with the TCCPP does not trigger any such requirement.

Even assuming that the Zeus BESS Project was a CEQA "project," the activities are categorically exempt. First, the modifications are categorically exempt pursuant to Title 14, Section 15301 of the California Code of Regulations as a minor alteration to an existing facility. The Zeus BESS Project described herein includes activities that constitute a minor modification to the TCCPP operations and property. The changes will all be interior to the property boundary and will involve no expansion of the existing use of the TCCPP for power generation.

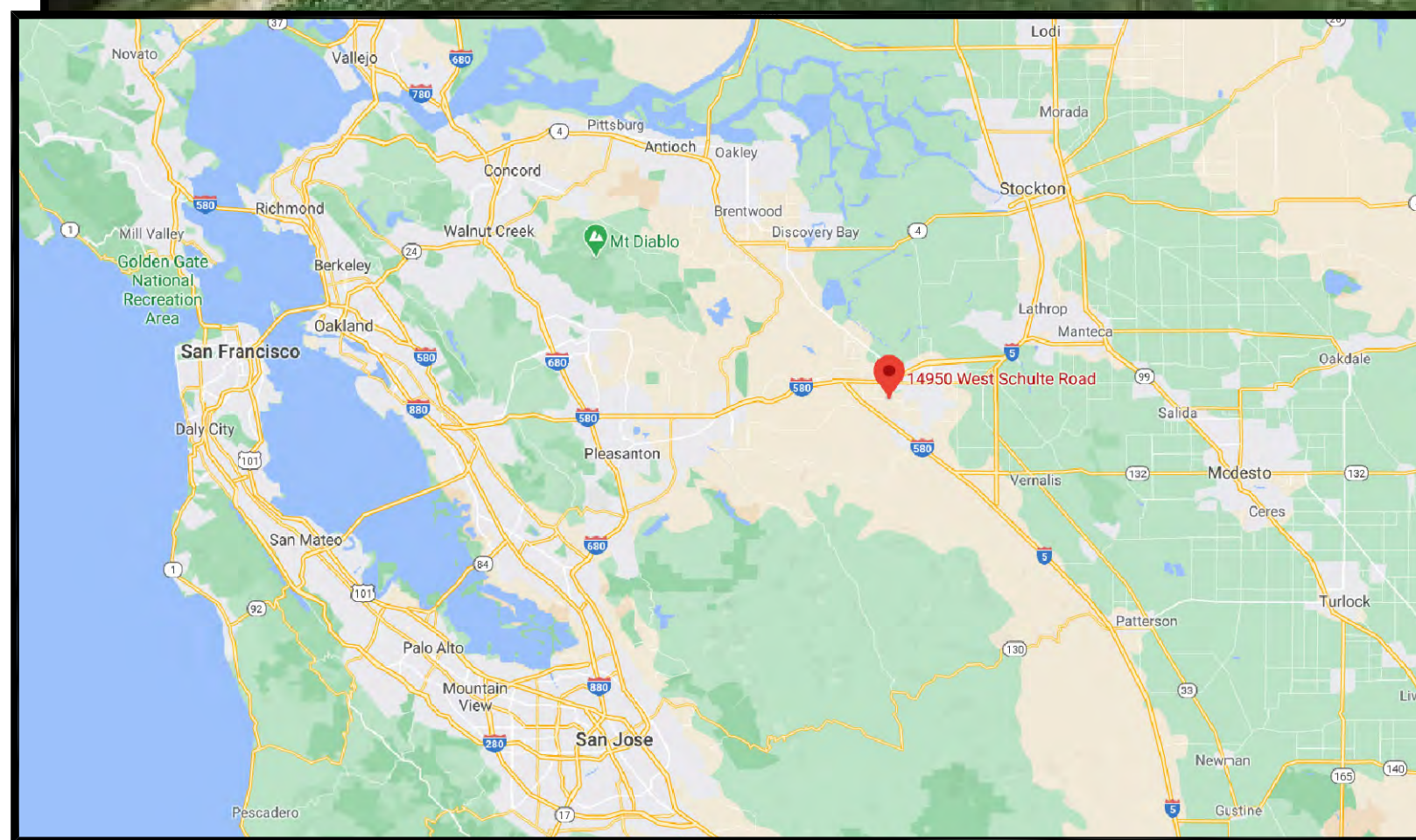
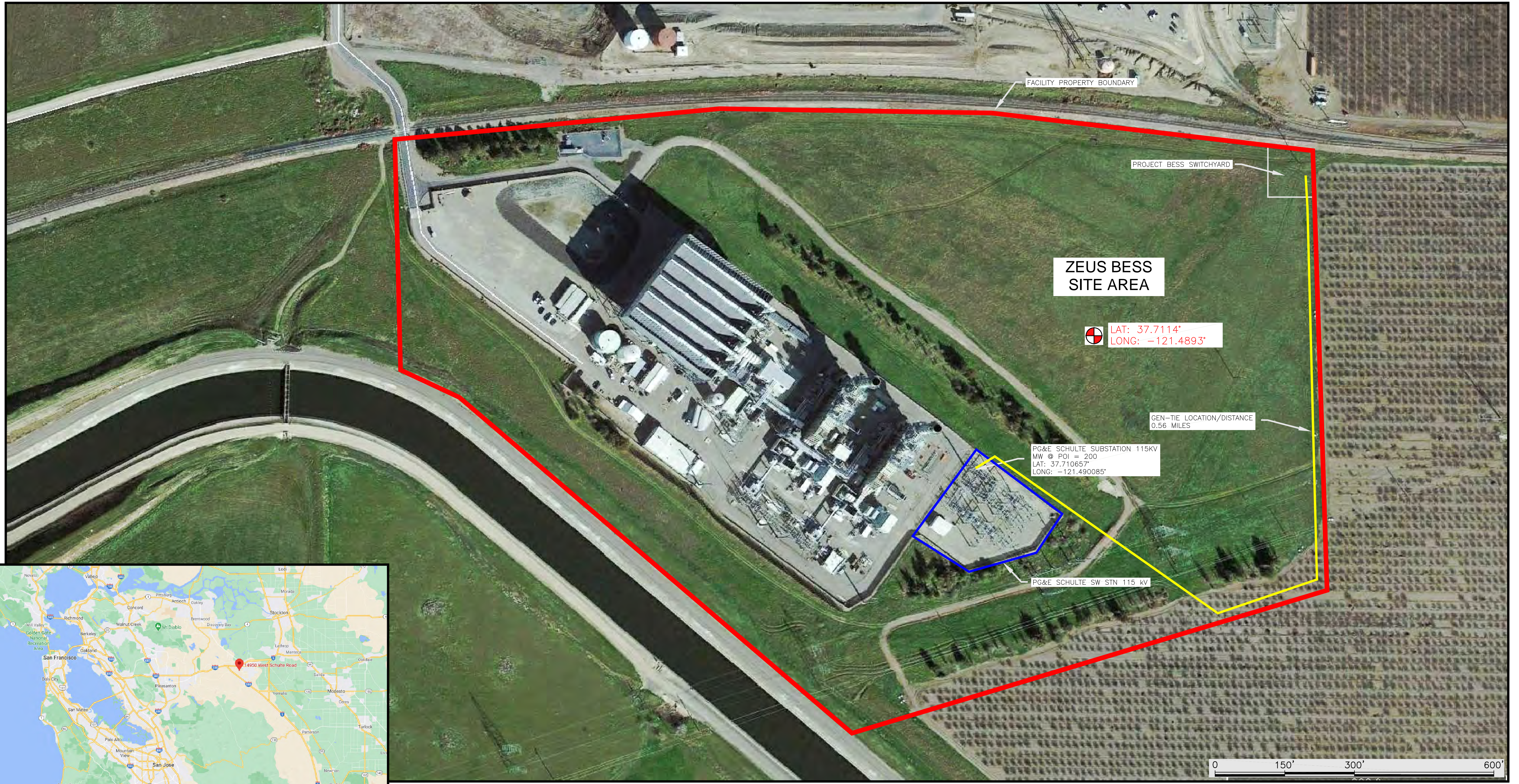
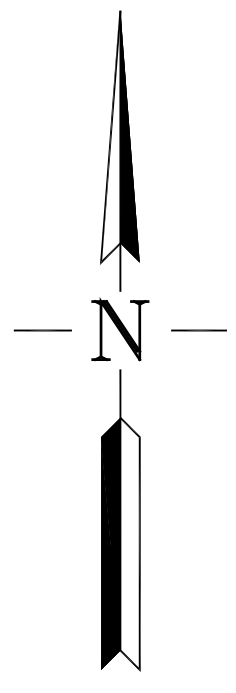
Second, CEQA Guidelines section 15303 exempts construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The Zeus BESS Project system will consist primarily of modular battery enclosures, inverters with MV transformers, a switchyard, and electrical controls and connections.

In addition, the proposed modifications associated with the Zeus BESS Project are also categorically exempt from CEQA pursuant to Section 15061(b)(3), the "Common Sense Exemption." This exemption provides that "[w]here it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." (14 C.C.R. § 15061(b)(3).) In this case, there is no possibility that

the proposed change may have a significant effect on the environment. The proposed project will not result in an increase in the TCCPP's hourly or annual emissions above the existing permitted potential to emit (PTE) limits and will not require any revisions to its hourly, daily, or annual emissions or operational limits to accommodate the project. There would be no substantial adverse changes to existing baseline conditions at the TCCPP site from the proposed Zeus BESS Project. Therefore, the proposed modifications are categorically exempt from CEQA pursuant to the "Common Sense Exemption."

11.0 CONCLUSIONS

For all the reasons set forth herein, MRP San Joaquin Energy, LLC respectfully requests that the CEC approve the requested Zeus BESS Project modification to the TCCPP pursuant to Title 20, California Code of Regulations, Section 1769(a)(1).



KEY MAP

TRACY COMBINED CYCLE POWER PLANT
 14950 WEST SCHULTE ROAD
 TRACY, CA 95377

THIS DRAWING WAS PREPARED BY PATCH SERVICES FOR A SPECIFIC PROJECT. TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT, REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH PATCH SERVICES AND PATCH'S CLIENT IS GRANTED.				△						
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REV	DATE	DESCRIPTION		DRWN BY	CHK BY	ENGR	PROJECT ENGR	APPR'D BY		

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ZEUS BESS
 200 MW AT POI BESS
 PLAN VIEW

SCALE:	AS SHOWN
JOB NO:	8621
DATE:	04-12-2021
DRAWN BY:	CM
CHECKED BY:	CJP
DRAWING NUMBER	SHEET NUMBER
D-8621-2004	
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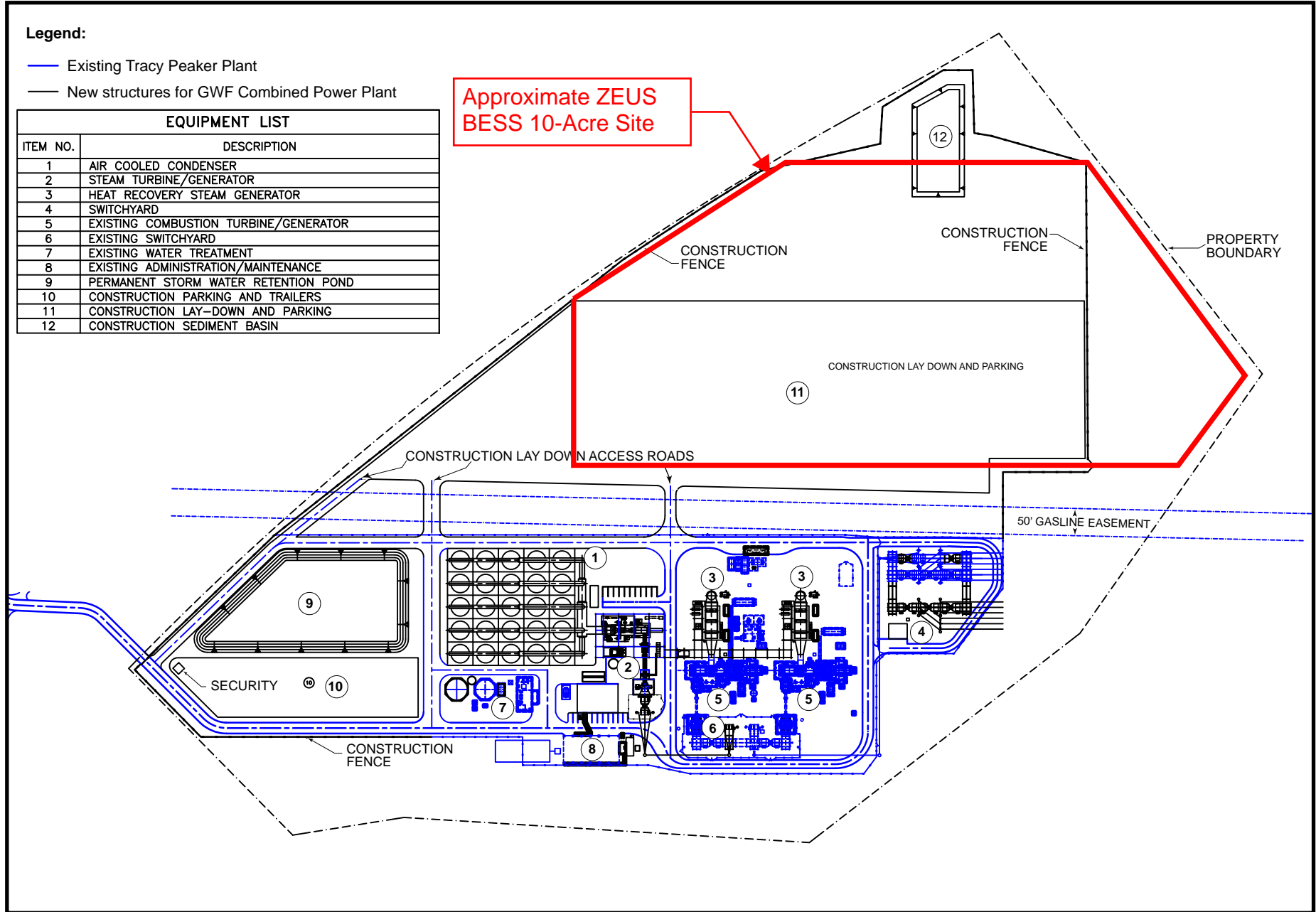
Figure 2. ZEUS BESS SITE

TRAFFIC AND TRANSPORTATION - FIGURE 2

GWF Tracy Combined Cycle Power Plant Project - General Arrangement

OCTOBER 2009

TRAFFIC AND TRANSPORTATION



Legend:

- Existing Tracy Peaker Plant
- New structures for GWF Combined Power Plant

EQUIPMENT LIST

ITEM NO.	DESCRIPTION
1	AIR COOLED CONDENSER
2	STEAM TURBINE/GENERATOR
3	HEAT RECOVERY STEAM GENERATOR
4	SWITCHYARD
5	EXISTING COMBUSTION TURBINE/GENERATOR
6	EXISTING SWITCHYARD
7	EXISTING WATER TREATMENT
8	EXISTING ADMINISTRATION/MAINTENANCE
9	PERMANENT STORM WATER RETENTION POND
10	CONSTRUCTION PARKING AND TRAILERS
11	CONSTRUCTION LAY-DOWN AND PARKING
12	CONSTRUCTION SEDIMENT BASIN

Approximate ZEUS BESS 10-Acre Site

APPENDIX A

**ANALYSIS OF THE EFFECTS THAT THE PROPOSED CHANGE
WILL HAVE ON THE ENVIRONMENT
AND MITIGATION MEASURES PROPOSED**

Section 1769(a)(1)(D) requires “An analysis of the effects that the proposed change to the project may have on the environment and proposed measures to mitigate any significant environmental effects.” This Appendix addresses each discipline considered in the original CEC certification for TCCPP.

Note: The sections and subsections of this Appendix A are numbered “5” to coincide with the numbering in the main body of the Petition for Post-Certification Amendment.

5.0 ANALYSIS OF THE EFFECTS THAT THE PROPOSED CHANGE WILL HAVE ON THE ENVIRONMENT AND MITIGATION MEASURES PROPOSED

This Appendix A and Appendix B and Section 5 of the Petition for Post-Certification Amendment address the requirements of Title 20, CCR, Section 1769(a)(1)(D).

5.1 Background

The TCCPP is a nominal 344 megawatt (MW) combined cycle power plant that consists of two 88 MW nominally rated General Electric Model PG 7121 EA combustion turbine generator sets with Heat Recovery Steam Generators with 380 MMBTU duct burners and a 168 MW nominally rated steam turbine shared by the two combustion turbine generators and associated equipment necessary for combined-cycle operation. The Tracy Peaker Plant (TPP) was licensed by the California Energy Commission (CEC) on July 19, 2002 under Adoption Docket No. 01-AFC-16 and began commercial operations on June 1, 2003. On June 30, 2008, GWF Energy LLC submitted an Application for Certification (AFC) to the CEC to modify the peaker plant by converting the facility into a combined cycle power plant. On March 24, 2010, the CEC issued a license to GWF Energy LLC (GWF) for the construction and operation of the GWF Tracy Combined Cycle Power Plant (TCCPP) (08-AFC-7C). After conversion was completed, both units started commercial operation on November 1, 2012. The units currently operate under a power purchase agreement with PG&E. On November 2012, GWF Energy was acquired by Starwest, but continued to operate as GWF Energy LLC. In November of 2015, GWF Energy LLC was acquired by AltaGas and merged into AltaGas San Joaquin Energy Inc. On November 2018, AltaGas San Joaquin Energy Inc. was acquired by Middle River Power and Merged into MRP San Joaquin Energy, LLC.

5.2 Environmental Topic Areas Addressed in Final Commission Decision in March 2010

The CEC’s Final Commission Decision issued in March 2010 for conversion of the TPP to the TCCPP addressed the following environmental topic areas: Greenhouse Gas Emissions and Air Quality; Public Health; Worker Safety/Fire Protection; Hazardous Materials Management; Biological Resources; Soil and Water Resources Cultural Resources; Geological and Paleontological

Resources; Land Use; Traffic and Transportation; Socioeconomics; Noise and Vibration; and Visual Resources.

As noted in the CEC Final Staff Assessment (FSA) (CEC 2009), issues raised by the public related to the then proposed Tracy Combined Cycle Power Plant conversion of the existing Tracy Peaker Plant at that time (2009) included the following: (1) potential increases in hazardous waste generation; (2) Tuso Family (lived nearby) concerns regarding Noise and Vibration, Air Quality, Visual Resources, and Public Health; and (3) Tracy Hills LLC real estate development company concerns about visual impacts on their adjacent property. The CEC Staff Assessment concluded that all of these concerns were addressed in the FSA.

The CEC FSA (CEC 2009) stated that as proposed with consideration of the applicant's and the staff's proposed mitigation measures and the staff's proposed conditions of certification, the GWF Tracy project would comply with all applicable laws, ordinances, regulations, and standards (LORS). It is expected that similar findings will be applicable to proposed Zeus BESS Project.

An assessment of the potential effects that the proposed Zeus BESS Project will have on the environment with consideration of the topics addressed in the CEC Final Staff Assessment (CEC 2009) and Final Commission Decision (CEC 2010) and current regulations follows.

5.3 Air Quality and Greenhouse Gas (GHG)

5.3.1 CEC Certification of TCCPP

The CEC Final Staff Assessment (FSA) air quality analysis conducted for the TCCPP (CEC 2009) evaluated the expected air quality impacts of the emissions of criteria air pollutants due to the construction and operation of the proposed TCCPP. In carrying out the analysis, the CEC staff evaluated the following major points:

- Whether the TCCPP was likely to conform with applicable Federal, State and San Joaquin Valley Air Pollution Control District (SJVAPCD) air quality laws, ordinances, regulations and standards, as required by Title 20, California Code of Regulations, section 1744 (b);
- Whether the TCCPP was likely to cause significant air quality impacts, including new violations of ambient air quality standards or contributions to existing violations of those standards, as required by Title 20, California Code of Regulations, section 1742 (b); and
- Whether the mitigation proposed for the TCCPP was adequate to lessen the potential impacts to a level of insignificance, as required by Title 20, California Code of Regulations, section 1744 (b).

The CEC Commission Decision (CEC 2010) identified construction related air emissions as potentially significant impacts and stipulated Conditions of Certification to mitigate impacts to less than significant levels for the TCCPP. Power plant construction requires the use of large earth moving equipment, which generate considerable combustion emissions along with creating fugitive dust emissions during grading, site preparation, foundations, underground utility installation, and building erection, as applicable.

The FSA (CEC 2009) stated that particulate matter emissions from construction of the TCCPP would cause a significant impact because they would contribute to existing violations of PM₁₀ and PM_{2.5} ambient air quality standards, and additionally that those emissions can and should be mitigated to a level of insignificance. Significant secondary impacts would also occur for PM₁₀, PM_{2.5}, and ozone because construction-phase emissions of particulate matter precursors (including SO_x) and ozone precursors (NO_x and VOC) would also contribute to existing violations of these standards. The direct impacts of NO₂, in conjunction with worst-case background conditions, would not create a new violation of the 1-hour or annual NO₂ ambient air quality standard. The direct impacts of CO and SO₂ would not be significant because construction of the project would neither cause nor contribute to a violation of these standards. The FSA (CEC 2009) stated that mitigation for construction emissions of PM₁₀, PM_{2.5}, SO_x, NO_x, and VOC would be appropriate for reducing impacts to PM₁₀, PM_{2.5}, and ozone.

CEC staff proposed that, prior to beginning construction, the applicant should provide an Air Quality Construction Mitigation Plan (AQCMP) that specifically identifies mitigation measures to be employed by GWF to limit air quality impacts during construction. Staff proposed Conditions of Certification AQ-SC1 through AQ-SC5 to implement these requirements. Compliance with these conditions was expected to substantially eliminate the potential for significant air quality impacts during construction of the GWF Tracy project. The Commission Decision (CEC 2010) concurred with this determination.

5.3.2 Environmental Analyses

The proposed Zeus BESS Project site is located within the jurisdiction of the SJVAPCD, which has primary responsibility for assuring that federal and state ambient air quality standards are attained and maintained in the San Joaquin Valley Air Basin. The proposed Zeus BESS Project would result in air pollutant emissions that are regulated by the air district. The Zeus BESS Project will not affect the air emissions from the TCCPP and will not include any stationary air emission sources during the operational phase.

The most significant volume of air emissions expected to be generated during project construction is associated with equipment use on the site, fugitive dust emissions from site grading and

excavations, and from vehicle trips to and from the site. The Zeus BESS Project impacts on air quality will be short term during the anticipated 8-9 months of construction activities involving ground disturbance, construction equipment operation, and construction worker and truck traffic to and from the BESS site. The proposed Zeus BESS Project will utilize Tier 4 construction equipment which will minimize equipment emissions, including greenhouse gas (GHG) emissions from offroad diesel equipment. The 8- to 9-month construction phase for the proposed Zeus BESS Project is much shorter than the 22-month demolition/construction time frame assumed for the TCCPP. In addition, the construction workforce for the Zeus BESS Project is estimated to peak at less than 80 workers whereas the TCCPP peak workforce was assumed to be 398 workers with an operational workforce of 17 full-time equivalents.

Once constructed and operational, the Zeus BESS Project will be unmanned and operated remotely. Emissions from periodic maintenance worker traffic and equipment will be minor. During the operation of the proposed Zeus BESS project, no area source emissions are expected with the exception of vehicle emissions from infrequent worker trips to and from the project site for maintenance and infrequent battery augmentation events. Emissions from Zeus BESS Project construction and operations are expected to be below air district thresholds established to attain and/or maintain conformance with state and federal air quality standards.

According to the FSA (CEC 2009), Staff did not believe that the minor GHG emission increases from construction activities for the TCCPP would be significant for several reasons. First, the period of construction would be short-term and the emissions intermittent during that period, not ongoing during the life of the project. Additionally, control measures that staff recommended to address criteria pollutant emissions, such as limiting idling times and requiring, as appropriate, using equipment that meet the latest criteria pollutant emissions standards would further minimize greenhouse gas emissions to the extent feasible. The use of newer equipment will increase fuel efficiency and be compatible with low-carbon fuel (e.g., biodiesel and ethanol) mandates that will likely be part of the ARB regulations to reduce GHG from construction vehicles and equipment. These findings are expected to be applicable to the Zeus BESS Project as well given the shorter construction time frame and intensity relative to the TCCPP and the use of Tier 4 equipment for the BESS project. In addition, once operational the BESS project is expected to have the potential to help reduce the need for fossil fuel resources.

5.3.3 Mitigation Measures

The Zeus BESS project will not result in significant impacts related to air quality and GHG emissions that will require additional mitigation measures.

5.3.4 Consistency with LORS

The Zeus BESS Project conforms to applicable LORS related to air quality and GHG emissions.

5.3.5 Conditions of Certification

The proposed modifications do not require additions to the Conditions of Certification (CoCs) for air quality (CEC 2020). The following CEC Conditions for the TCCPP are expected to be required for the Zeus BESS Project, as applicable:

- AQ-SC1: Air Quality Construction Mitigation Manager (AQMMM)
- AQ-SC2: Air Quality Construction Mitigation Plan (AQCMP)
- AQ-SC3: Construction Fugitive Dust Control
- AQ-SC4: Dust Plume Response Requirement
- AQ-SC5: Diesel-Fueled Engine Control

CEC CoCs AQ-SC6 through AQ-SC9 are specific to the TCCPP operational phase air permit related requirements and do not apply to the proposed BESS project. Similarly, CEC CoCs AQ-1 through AQ-170 are specific to the SJVAPCD District Final Determination of Compliance Conditions for the TCCPP and are not applicable to the BESS project.

Refer to Table B-1 in Appendix B herein for a summary of the air quality CoCs for the Zeus BESS Project. Refer to Appendix C herein for the complete CoCs stipulated by the CEC for the TCCPP.

5.3.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.4 Biological Resources

5.4.1 CEC Certification of TCCPP

The CEC FSA (CEC 2009) evaluated potential impacts of the TCCPP project on biological resources. The following information is presented for context for evaluating the biological resource issues

that will need to be addressed more fully based on the results of a pending Biological Habitat Assessment and permitting for the proposed Zeus BESS Project.

GWF Energy LLC (GWF or applicant) proposed to modify the existing Tracy Peaker Plant (TPP) from a nominal 169-MW simple-cycle power plant to a combined-cycle power plant, increasing the generating capacity by 145 MW to 314 MW net. The new power plant was to be named GWF Tracy Combined Cycle Power Plant (GWF Tracy) and would occupy 16.38 acres of a fenced site within an existing GWF-owned 40-acre parcel in an unincorporated portion of San Joaquin County immediately southwest of Tracy. The project would include three main elements: 1) construction of the new power plant, 2) reconductoring two segments of existing transmission line, and 3) operation of the plant. These items are not directly applicable to impacts from the Zeus BESS Project, but the previous assessments of biological resources present on the 40-acre parcel as well as the regulatory setting and previous mitigation agreements are relevant.

Energy Commission staff (Staff) analyzed the potential impacts to biological resources that would result from construction and operation of the proposed power plant. All of the construction-related impacts for GWF Tracy would occur on the same 34.6 acres that were impacted during construction of the TPP. Habitat at the plant site is ruderal upland and of low quality for native plants and wildlife. Temporary and permanent impacts to habitats (i.e., temporary and permanent habitat loss) on those 34.6 acres were mitigated for construction of the TPP project through the San Joaquin Council of Governments (SJCOG) under the San Joaquin County Multi-species Habitat Conservation and Open Space Plan (SJCOG 2000), also referred to as the SJMSCP. Mitigation was accomplished through payment of a fee to SJCOG to satisfy conditions requiring habitat compensation. Impacts to those same 34.6 acres for construction of GWF Tracy were determined to not require additional mitigation for temporary and permanent habitat loss. This finding is expected to apply to conterminous impacts from the Zeus BESS Project as well.

Other impacts to special-status species associated with GWF Tracy, beyond temporary and permanent habitat loss, included but are not limited to potential loss of dens and nesting habitat in laydown and parking areas, disturbance to breeding or nesting animals in habitats adjacent to laydown and parking areas, and disturbance impacts of construction and operation noise and night lighting. Through informal consultation, the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (now California Department of Fish and Wildlife [CDFW]) agreed to defer to SJCOG for all formal consultation for the GWF Tracy project. The SJCOG would require no further consultation for these impacts provided that the applicant implemented all the incidental take minimization and mitigation measures required for mitigation of TPP impacts (SJCOG 2000; 2002).

Biological surveys were conducted by the applicant in 2001 for the TPP, and reconnaissance surveys were conducted in 2007 and 2008 for GWF Tracy. Habitats within one mile of the GWF Tracy project area and offsite reconductoring segments were assessed for potential to support special-status plants and animals, and habitats within 10 miles were assessed for potential to support nesting Swainson’s hawks.

Many of the proposed GWF Tracy project features were located within the existing fenced TPP site, which comprises structures, paved roads, a stormwater basin, and gravel-topped open spaces. Within the fenced area, there was no bare soil or landscaping. The remainder of the 40-acre parcel (i.e., where the proposed Zeus BESS Project is located) is characterized by ruderal nonnative grasses on leveled former agricultural land that lacks surface hydrology, seasonal ponding, and native vegetation (GWF 2008). The parcel has been disturbed by current and past industrial and agricultural development and, aside from the nonnative grasslands, is currently maintained with ornamental plantings, cultivation, and weed control. Many of the ornamental or visual-screening plantings of cottonwoods (*Populus fremontii*), redbud (*Cercis occidentalis*), and elderberry (*Sambucus mexicanus*) planted following TPP construction were in declining condition during the April 2007 survey although some were replanted.

Existing habitats, including the developed TPP site, support reptile, bird, and mammal species common to the San Joaquin Valley including these observed species (GWF 2008): western fence lizard (*Sceloporus occidentalis*), red-tailed hawk (*Buteo jamaicensis*), rock dove (*Columba livia*), black phoebe (*Sayornis nigricans*), western kingbird (*Tyrannus verticalis*), European starling (*Sturnus vulgaris*), western meadowlark (*Sturnella neglecta*), black-tailed hare (*Lepus californicus*), house mouse (*Mus musculus*), and coyote (*Canis latrans*). The GWF Tracy site, while providing no vegetation, would support roosting and perching for local passerines and raptors and there is evidence that California ground squirrels (*Spermophilus beecheyi*) and cottontails (*Sylvilagus audubonii*) enter the area under the security fence.

The CEC FSA (CEC 2009) identified multiple potentially occurring special status species in or near the GWF Tracy project area as presented in the table below:

Special Status Species Potentially Occurring in or Near the GWF Tracy Project Area ¹		
Common Name	Scientific Name	Status ²
Plants		
Suisun marsh aster	<i>Aster lentus</i>	HCP/List 1B.2
Big tarplant	<i>Blepharizonia plumosa</i>	List 1B.1
Round-leaved filaree	<i>California macrophylla</i>	List 1B.1
Lemmon’s jewelflower	<i>Caulanthus coulteri var. lemmonii</i>	List 1B.2
Slough thistle	<i>Cirsium crassicaule</i>	HCP/List 1B.1

Special Status Species Potentially Occurring in or Near the GWF Tracy Project Area ¹		
Common Name	Scientific Name	Status ²
Delta button-celery	<i>Eryngium racemosum</i>	SE/1B.1
Mason's lilaeopsis	<i>Lilaeopsis masonii</i>	HCP/List 1B.1
Wright's trichocoronis	<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	List 2.1
Caper-fruited tropidocarpum	<i>Tropidocarpum capparideum</i>	List 1B.1
Invertebrates		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FE/HCP
Reptiles		
San Joaquin whipsnake	<i>Masticophis flagellum ruddocki</i>	CSC
Birds		
Tricolored blackbird	<i>Agelaius tricolor</i>	CSC/HCP
Burrowing owl	<i>Athene cunicularia</i>	CSC/HCP
Swainson's hawk	<i>Buteo swainsoni</i>	ST/HCP
Northern harrier	<i>Circus cyaneus</i>	CSC
White-tailed kite	<i>Elanus leucurus</i>	FP
Loggerhead shrike	<i>Lanius ludovicianus</i>	CSC/HCP
Mammals		
American badger	<i>Taxidea taxus</i>	CSC
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	FE/CT/HCP

¹Source: CEC 2009.

²FE = federally endangered; FT = federally threatened; FC = federal candidate for listing; SE = state endangered; ST = state threatened; SCL = state candidate for listing; CSC = California species of special concern; FP=fully protected under Fish and Game Code, i.e., no take is allowed; HCP = San Joaquin multi-species conservation plan; California Native Plant Society List 1B = rare, threatened, or endangered in California and elsewhere; List 2 = rare, threatened, or endangered in California but more common elsewhere (GWF 2001a, 2008a; CDFG 2009; CNPS 2008). Note that these status listings are as of 2008.

5.4.2 Environmental Analyses

In accordance with the CEC FSA (CEC 2009), significant impacts to biological resources would occur if special-status species or species otherwise protected by state and federal statute are likely to be impacted by construction or operation of the proposed project. A proposed project would have a significant impact to biological resources if it would:

- Interrupt migration,

- Reduce native fish, wildlife, and plant habitat,
- Cause a fish or wildlife population to drop below self-sustaining levels, or
- Disturb or degrade wetlands, marshes, riparian areas, or other wildlife habitat

In addition, harassment of a protected species that caused adverse behavioral changes would also be considered significant; harassment is considered “take” under state and federal endangered species acts.

Construction of the proposed Zeus BESS Project would involve site preparation, temporary laydown for equipment and materials, stormwater detention basin construction, foundation installation, placement of BESS facilities, electrical connections, BESS switchyard installation, and onsite 115 kV gen-tie connection to the PG&E Schulte Substation. The BESS layout is currently in development but will occupy the area north of the existing TCCPP within the overall 40-acre TCCPP site. It is currently anticipated that the construction phase may disturb up to about 15 acres and that the permanent BESS facilities may occupy up to about 10 acres. These acreages will be confirmed once the layout is finalized.

It is expected that the majority if not all of the area to be disturbed temporarily and permanently (up to 30 years) by the Zeus BESS Project will be on areas that have been previously disturbed by construction of the TPP in the early 2000’s, the TCCPP in 2010, and subsequent use of portions of the area for laydown. It is also expected that the majority if not all of the BESS area has been previously mitigated as part of the 34.6 acres that was mitigated via SJCOG through the SJMSCP.

A Zeus BESS Project-specific Habitat Assessment will be conducted as part of the CEC Petition for Post-Certification Amendment/regulatory permitting process. The results of the Habitat Assessment, including associated protocol surveys for applicable species, will guide the permitting path and requirements related to biological resources.

The CEC Conditions of Certification for biological resource impacts associated with the TCCPP project are summarized in Section 5.4.5 and are expected to be applicable to the Zeus BESS Project. With implementation of these CEC Conditions, impacts to biological resources would be expected to be less than significant.

5.4.3 Mitigation Measures

The Zeus BESS Project impacts on biological resources are expected to be less than significant with implementation of the CEC CoCs summarized in Section 5.4.5 and Appendices B and C, herein, and, therefore, will not require additional mitigation measures.

5.4.4 Consistency with LORS

The project conforms to applicable laws related to biological resources.

5.4.5 Conditions of Certification

The proposed modifications are not expected to require changes to the COCs for biological resources as summarized below:

- BIO-1: Designated Biologist Requirement
- BIO-2: Designated Biologist Duties
- BIO-3: Designated Biologist Qualifications
- BIO-4: Designated Biologist Authority
- BIO-5: Compensatory Habitat (as applicable)
- BIO-6: Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP)
- BIO-7: Impact Avoidance Measures
- BIO-8: Pre-construction Surveys
- BIO-9: Avoid Harassment or Harm to San Joaquin Kit Foxes
- BIO-10: Burrowing Owl Impact Avoidance and Minimization Measures

The applicability of Condition BIO-5, Compensatory Habitat, will be assessed following completion of the site layout and the forthcoming Habitat Assessment and an assessment of the relationship of the BESS project disturbance footprint relative to the previous mitigation for 34.6 acres within the 40-acre parcel when the TPP was permitted.

Refer to Table B-1 in Appendix B herein for a summary of the biological resources CoCs for the Zeus BESS Project. Refer to Appendix C herein for the complete CoCs stipulated by the CEC for the TCCPP.

5.4.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

GWF Energy LLC. 2008. Application for Certification for GWF Tracy Combined Cycle Power Plant Project, dated 7/10/2008. Submitted to CEC/Docket Unit on 7/18/2008.

SJCOG (San Joaquin Council of Governments). 2000. San Joaquin County multi- species habitat conservation and open space plan (SJMSCP). Stockton, CA.

_____.2002. GWF Tracy Peaker Project APN 209-240-11 SJMSCP Incidental Take Minimization Measures. San Joaquin Council of Governments, Stockton, CA.

5.5 Cultural Resources

5.5.1 CEC Certification of TCCPP

As part of the CEC FSA (CEC 2009), determined that the proposed GWF Tracy Combined-Cycle Power Plant Project (GWF Tracy) would have no impact on known archaeological resources, built- environment resources, ethnographic resources, historic districts, or cultural landscapes that are or could be eligible for the California Register of Historical Resources (CRHR). However, CEC Staff determined that ground disturbance for foundations and trenches in previously undisturbed native soils could potentially impact buried CRHR-eligible archaeological resources for which no surface evidence was observable. For the GWF Tracy project, the potential presence of such resources would be of concern only where proposed project-related ground disturbance would affect undisturbed native soils below three feet from the surface—the presumed depth of disturbance associated with previous agricultural use.

To facilitate the identification and assessment of previously unidentified archaeological resources encountered during construction in previously undisturbed areas and to mitigate any significant impacts from the project on any newly found resources assessed as CRHR-eligible, staff recommended that the Commission adopt the following cultural resources Conditions of Certification, CUL-1 through CUL-7. These conditions provide for the hiring of a Cultural Resources Specialist and archaeological monitors, for cultural resources awareness training for construction workers, for the archaeological and Native American monitoring of ground-disturbing activities, for the recovery of data from CRHR-eligible discovered archaeological deposits, for the writing of a technical archaeological report on all archaeological activities and findings, and for the curation of recovered artifacts and other data. When properly implemented and enforced, staff believed that these conditions of certification would reduce to less than significant any impacts to previously unidentified cultural resources encountered during construction or operation. Additionally, with the adoption and implementation of these conditions, the proposed GWF Tracy project would be in conformity with all applicable laws, ordinances, regulations, and standards.

CEC Staff determined that since any significant impacts from the proposed GWF Tracy project to CRHR-eligible cultural resources would be mitigated to a less-than-significant level by the project's compliance with proposed Conditions of Certification CUL-1 through CUL-7, and since similar protocols can be applied to other projects in the area, staff does not expect any

incremental effects on cultural resources of the proposed GWF Tracy project to be cumulatively considerable when viewed in conjunction with other projects.

This Petition to Amend does not require changes to the cultural resources information as described in the Commission Decision and subsequent Commission Orders.

5.5.2 Environmental Analyses

The Zeus BESS Project would not be expected to result in potential impacts greater than those analyzed in the FSA (CEC 2009) and Final Decision (CEC 2010) for conversion of the TPP to the TCCPP. The Zeus BESS Project equipment will be installed on portions of the 40-acre parcel that have been previously disturbed to an assumed depth of at least 3 feet by previous agricultural activities as well as subsequent use of portions as a laydown area. Project development activities that extend below 3 feet below ground surface will need to be monitored during construction to confirm no unknown buried cultural resources are encountered. If unanticipated buried resources are encountered during construction, existing CEC Conditions for the TCCPP would be expected to protect any such resources from significant impacts. Refer to Section 5.5.4 for more information.

In summary, no adverse impacts to cultural resources associated with construction or operation of the Zeus BESS Project are expected to occur.

5.5.3 Mitigation Measures

The Zeus BESS Project modifications are not expected to create a significant impact on cultural resources that will require additional mitigation measures.

5.5.4 Consistency with LORS

The project conforms to applicable LORS related to cultural resources.

5.5.5 Conditions of Certification

The proposed modifications are not expected to require changes to the COCs for cultural resources as summarized below:

- CUL-1: Designated Cultural Resource Specialist
- CUL-2: Project Maps Showing Ground Disturbance
- CUL-3: Cultural Resources Monitoring and Mitigation Plan
- CUL-4: Cultural Resources Report (CRR)
- CUL-5: Cultural Resources Worker Environmental Awareness Program (WEAP) Training
- CUL-6: Ground Disturbance Monitoring (>3-foot depth)

- CUL-7: Cultural Resources Specialist Authority

Refer to Table B-1 in Appendix B herein for a summary of the cultural resources CoCs for the Zeus BESS Project. Refer to Appendix C herein for the complete CoCs stipulated by the CEC for the TCCPP.

5.5.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.6 Geological and Paleontological Resources

5.6.1 CEC Certification of TCCPP

As described in the CEC FSA (CEC 2009), the proposed GWF Tracy Combined Cycle Power Plant (GWF Tracy) site is located in an active geologic area of the Great Valley physiographic province along the boundary between the Coast Ranges and the Great Valley physiographic provinces. The project site is located immediately southwest of Tracy, San Joaquin County, California, and near the western edge of the San Joaquin Valley. Because of its geologic setting, the site could be subjected to intense levels of earthquake-related ground shaking. In addition, the site is underlain by expansive clay soils and fine grain soils that could exhibit excessive consolidation when surcharged by heavily loaded structures. The impacts to the project from strong ground shaking, expansive soils, and excessive consolidation can be effectively mitigated, however, through structural designs as required by the 2007 California Building Code (CBC) (note: the current version of the CBC is dated 2022). The design-level geotechnical investigation required for the project by the CBC and proposed FACILITY DESIGN Conditions of Certification GEN-1, GEN-5, and CIVIL-1 require standard engineering design recommendations for mitigation of strong ground shaking, expansive clay soils, and excessive settlement due to compressible soils.

There are no known viable geologic or mineralogical resources at the proposed GWF Tracy project site (CEC 2009). Paleontological resources have been documented in older Quaternary sediments within three miles of the site, and paleontological resources were encountered during construction of the Tracy Peaker Project (TPP). Potential impacts to paleontological resources

due to construction activities would be mitigated through worker training and monitoring by qualified paleontologists, as required by Conditions of Certification PAL-1 through PAL-7.

Based on its independent research and review, the CEC stated in the FSA (CEC 2009) that the potential was low for significant adverse cumulative impacts to the project from geologic hazards during its design life and to potential geologic, mineralogic, and paleontological resources from the construction, operation, and closure of the proposed project. It was Staff's opinion that the GWF Tracy project could be designed and constructed in accordance with all applicable laws, ordinances, regulations, and standards (LORS) and in a manner that both protects environmental quality and assures public safety, to the extent practical. This finding is expected to be applicable to the Zeus BESS Project as well.

This Petition to Amend does not require changes to the geologic hazards or paleontological resources information as described in the Commission Decision and subsequent Commission Orders.

5.6.2 Environmental Analyses

The Zeus BESS Project would not be expected to result in potential impacts greater than those analyzed in the March 2010 AFC (CEC 2010) for conversion of the TPP to the TCCPP. Potential impacts related to geologic hazards would be mitigated through compliance with applicable building design codes and conformance with applicable COCs as previously stipulated in the Final Decision (CEC 2010) such as Facility Design Conditions GEN-1, GEN-5, and CIVIL-1.

Installation of the Zeus BESS Project facilities will occur in previously disturbed areas but are expected to require some subsurface disturbance at depths that could reach native soils (e.g., below 3 feet) and impact buried sensitive paleontological resources. CEC Conditions PALEO-1 through PALEO-7 are expected to avoid significant impacts to potentially present buried paleontological resources.

In summary, no adverse impacts related to geologic conditions or paleontological resources associated with construction or operation of the Zeus BESS Project are expected to occur.

5.6.3 Mitigation Measures

With implementation of CEC Conditions PALEO-1 through PALEO-7, Project modifications would not result in significant impacts related to geologic conditions or paleontological resources that will require additional mitigation measures.

5.6.4 Consistency with LORS

The project conforms to applicable LORS related to geological and paleontological resources.

5.6.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for geological and paleontological resources. Refer to Appendices B and C for the complete COCs.

5.6.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.7 Hazardous Materials Management

5.7.1 CEC Certification of TCCP

As stated in the CEC FSA (CEC 2009), Staff's evaluation of the proposed GWF Tracy Combined Cycle Power Plant (GWF Tracy), along with Staff's proposed mitigation measures, indicated that hazardous materials use at the site would not present a significant impact to the public. With adoption of the proposed conditions of certification, the proposed project would comply with all applicable laws, ordinances, regulations, and standards. In response to Health and Safety Code, section 255000 et seq., GWF Energy LLC (the applicant) would be required to update the Hazardous Materials Business Plan (HMBP) in place at the time for the Tracy Peaker Project (TPP). The existing Risk Management Plan (RMP) would not be expected to require revision or updating. To ensure the adequacy of this plan, Staff's proposed conditions of certification required that the HMBP be submitted for concurrent review by the San Joaquin County Environmental Health Department, the Tracy Fire department, and Energy Commission staff. In addition, Staff's proposed conditions of certification required that the project prepare and submit to staff a Safety Management Plan for review and approval prior to delivery of any liquid hazardous materials to the GWF Tracy project site. Other proposed conditions of certification address the issue of the transportation, storage, and use of aqueous ammonia. It is expected that similar requirements will be stipulated by CEC Staff for the Zeus BESS Project. However, the Zeus BESS Project will not involve use of aqueous ammonia or other hazardous liquids in bulk.

5.7.2 Environmental Analyses

The Zeus BESS Project modifications to the TCCPP will not result in the use of a new hazardous material onsite or increase the amount or delivery of hazardous materials used in excess of permitted quantities. It is expected that the pending Safety Management Plan for the Zeus BESS Project will address battery safety. Therefore, significant impacts from hazardous materials handling are not expected.

5.7.3 Mitigation Measures

The Zeus BESS Project modifications will not create a significant impact from hazardous materials handling that will require additional mitigation measures.

5.7.4 Consistency with LORS

The project conforms to applicable laws related to hazardous materials handling.

5.7.5 Conditions of Certification

The proposed modifications are not expected to require changes to the COCs for hazardous materials handling. Applicable plans will be updated to include consideration of batteries.

5.7.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.8 Land Use

5.8.1 CEC Certification of TCCPP

The CEC FSA (CEC 2009) determined that the proposed TCCPP with implementation of the recommended conditions of certification would be consistent with the applicable LORS pertaining to local land use planning and would not generate a significant land use impact under CEQA guidelines.

5.8.2 Environmental Analyses

The 2010 Commission Decision (CEC 2010) concluded that the TCCPP is a conditionally permitted use in the Agriculture (AG-40) zone in unincorporated San Joaquin County. The TCCPP site has been previously mitigated for loss of prime farmland and habitat when the TPP was originally permitted in accordance with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Under the SJMSCP the TCCPP project was not required to mitigate further for activities on the same acres. The CEC Final Decision for the TCCPP (CEC 2010) stated that there is no evidence that the TCCPP would result in any unmitigated public health or environmental impacts to rural residences within a one-mile radius of the site. The CEC determined the TCCPP to be compatible with surrounding uses and zoning districts. Addition of the Zeus BESS Project would not be expected to affect the validity of these previous determinations by the CEC. The Zeus BESS Project site area is no longer classified as Prime Farmland by the California Department of Conservation.

5.8.3 Mitigation Measures

The Zeus BESS Project modifications are not expected to result in significant impacts related to land use that will require additional mitigation measures.

5.8.4 Consistency with LORS

The project will conform to applicable LORS related to land use.

5.8.5 Conditions of Certification

The proposed modifications do not require additions to the COCs for land use.

5.8.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.9 Noise and Vibration

5.9.1 CEC Certification of TCCP

CEC staff concluded that the TCCPP could be built and operated in compliance with all applicable noise and vibration laws, ordinances, regulations, and standards and, if built in accordance with the proposed conditions of certification, would produce no significant adverse noise impacts on sensitive receptors within the affected area, either direct or cumulative. It is expected that similar findings will apply to construction and operation of the Zeus BESS Project.

This Petition to Amend does not require changes to the noise and vibration information as described in the Commission Decision and subsequent Commission Orders.

5.9.2 Environmental Analyses

The proposed Zeus BESS Project will result in short term increases in ambient noise levels at the Project site during construction. In addition, the BESS equipment will generate noise during the operational phase. A noise study will be performed to assess Project noise levels and compliance with applicable standards, including consideration of any sensitive receptors in the project vicinity. It is assumed that packaged inverters and accompanying medium voltage transformers may be supplied by Power Electronics or other manufacturers capable of providing equipment of similar design and capacity. Manufacturer's specifications indicate that these units generate a noise level of between 75 and 79 dBA at 1 meter. BESS battery enclosures would be provided as self-contained packaged units manufactured by CATL or other Tier 1 battery manufacturers. Battery manufacturer's specifications indicate that these units generate a noise level of 75 dBA at 1 meter. Exceedances of San Joaquin County noise standards are not expected.

5.9.3 Mitigation Measures

The Zeus BESS Project modifications are not expected to create significant noise and vibration impacts that will require additional mitigation measures. If the pending noise study determines mitigation is warranted, the applicant will build the mitigation into the project design.

5.9.4 Consistency with LORS

The project will conform to applicable laws related to noise and vibration.

5.9.5 Conditions of Certification

The proposed modifications do not require additions to the COCs for noise and vibration. Conditions NOISE-5 (Occupational Noise Survey During Operations) and NOISE-7 (Steam Blow Restrictions) are specific to the TCCPP and are not applicable to the proposed Zeus BESS Project. Refer to Appendices B and C herein for more information.

5.9.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.10 Socioeconomics

5.10.1 CEC Certification of TCCPP

In the TCCPP FSA (CEC 2009), CEC Staff concluded that the TCCPP project would not result in significant adverse direct or indirect socioeconomics impacts. In addition, Staff concluded that the proposed TCCPP project would not contribute to a cumulative socioeconomic impact on the area's population, employment, housing, police, schools, or hospitals because the construction and operation workforce required for GWF Tracy largely resides in the regional or local labor market area. The construction and operation of the proposed project would not result in any disproportionate adverse socioeconomic impacts to any low-income or minority population. Gross public benefits from GWF Tracy were assessed to include capital costs and sales taxes as well as the generation of secondary jobs and income. It is expected that similar findings would apply to the Zeus BESS Project which is smaller in scale compared to the TCCPP with respect to construction and operations workforces.

This Petition to Amend does not require changes to the social and economic conditions information as described in the Commission Decision and subsequent Commission Orders.

5.10.2 Environmental Analyses

Construction of the Zeus BESS Project is planned to occur over an 8- to 9-month period. The short-term construction activities for the Zeus BESS Project are expected to require up to approximately 80 workers. The BESS facility is planned to be unmanned and operated remotely. It is expected that normal maintenance would require several workers twice per week on average.

The BESS construction workforce would be much smaller relative to the TCCPP. In addition, the Zeus BESS Project would not involve the construction of any new habitable structures and would not have a need for an incremental operational workforce. These considerations support a conclusion that the less than significant socioeconomic impact findings listed above for the TCCPP are applicable for the Zeus BESS Project as well.

5.10.3 Mitigation Measures

The Zeus BESS Project modifications will not result in a significant impact related to socioeconomics and will not require additional mitigation measures.

5.10.4 Consistency with LORS

The project conforms to applicable laws related to socioeconomics.

5.10.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for socioeconomics. It is expected that CEC Condition SOCIO-1 (School Facility Development Fee) will apply to the Zeus BESS Project, if warranted.

5.10.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.11 Soil and Water Resources

5.11.1 CEC Certification of TCCPP

The CEC FSA (CEC 2009) analyzed the potential effects on soil and water resources that would occur by construction and operation of the proposed GWF TCCPP Project. Based on its assessment of the proposed GWF Tracy Project, CEC Staff concluded the following:

- Implementation of Best Management Practices (BMPs) during GWF Tracy construction and operation in accordance with effective Storm Water Pollution Prevention Plans (SWPPP) and a Drainage, Erosion and Sedimentation Control Plan (DESCP) would avoid significant adverse effects that could be caused by transport of sediments or contaminants from the GWF Tracy site and associated linear facilities by wind or water erosion.
- Stormwater runoff from all disturbed areas of the 40 acre site would not cause significant impacts with the implementation of sedimentation basins that remain active throughout construction and the subsequent period necessary for non- industrial use

areas to become sufficiently re-vegetated.

- The proposed fresh water supply for the project would not cause a significant adverse environmental impact on current or future users of the water supply.
- The proposed use of a freshwater supply would be consistent with state water policy found in State Water Resources Control Board (SWRCB) Resolution 75-58, and the Energy Commission's 2003 Integrated Energy Policy Report (IEPR) water policy because there is no economically feasible or environmentally desirable alternative. [Not applicable to Zeus BESS Project]
- GWF Tracy has proposed the use of an alternative cooling technology which is environmentally desirable and economically feasible. [Not applicable to Zeus BESS Project]
- The proposed project would be constructed to comply with 100-year flood requirements and would not exacerbate flood conditions in the vicinity of the project.
- The discharge of sanitary wastewater to a septic tank/leach field discharge system would not degrade surface or groundwater quality. [Not applicable to Zeus BESS Project]
- The proposed project would comply with all applicable federal, state, and local laws, ordinances, regulations and standards with the adoption of the recommended conditions of certification.
- GWF Tracy would not result in any unmitigated project-specific or cumulative significant adverse impacts to soil or water resources with adoption of the conditions of certifications.

Staff concluded that the GWF Tracy project would not result in any unmitigated project-specific or cumulative significant adverse impacts to soil or water resources and would comply with all applicable LORS if all of the recommended conditions of certification are adopted by the Commission and implemented by GWF.

This Petition to Amend does not require changes to the soil and water resources information as described in the Commission Decision and subsequent Commission Orders. The CEC findings presented above are expected to be applicable to the Zeus BESS Project as well with consideration of applicable CEC Conditions. The proposed Zeus BESS Project does not propose to use the TCCPP's fresh water supply intending instead to meet the BESS project's minor water needs by trucking water to the site. In addition, the Zeus BESS Project does not propose to install or utilize a septic system for sanitary waste intending instead to rely on porta-potties for sanitary needs given the facility will be unmanned.

5.11.2 Environmental Analyses

Water use during construction is expected to be up to approximately 5,000 gallons per day for 3 to 4 months during site preparation. Water will be required for dust control among other uses and will be trucked to the site by the construction contractor.

Compliance with the CEC Conditions for the TCCPP including those related to BMPs for erosion control and stormwater management will minimize BESS project impacts.

In summary, no adverse impacts to soil and water resources associated with construction or operation of the Zeus BESS Project are expected to occur.

5.11.3 Mitigation Measures

The Zeus BESS Project modifications will not create a significant impact on soil or water resources that will require additional mitigation measures.

5.11.4 Consistency with LORS

The project conforms to applicable laws related to soil and water resources.

5.11.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for soil and water resources. SOIL & WATER-5 (Septic Permit Compliance Documentation) is not applicable to the Zeus BESS Project. The proposed modifications do not require changes to the COCs for Soil and Water resources. Refer to Appendices B and C for the complete COCs.

5.11.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.12 Traffic and Transportation

5.12.1 CEC Certification of TCCPP

The CEC FSA for the TCCPP (CEC 2009) determined that construction of GWF Tracy would add traffic to local roadways during the construction period. This increase in traffic could impact existing traffic load and capacity of the street system. In addition, construction activities could result in impacts to emergency access, encroachment on railway facilities, damage to public roadways, and introduce oversize and overweight vehicles on the local street system. Once GWF Tracy was operational, traffic volumes generated from it would be minimal and insignificant on the local transportation network. CEC Staff recommended Conditions of Certification to prevent significant traffic and transportation related impacts from the TCCPP Project. In general, these measures and impact findings are expected to be applicable to the Zeus BESS Project as well. CEC Condition TRANS-2 (FAA Notifications including Thermal Plumes) is not expected to be applicable to the Zeus BESS Project. CEC staff concluded that with implementation of proposed Conditions of Certification, GWF Tracy would not generate a significant impact under CEQA guidelines with respect to CEQA Appendix G issues, "Transportation and Traffic."

This Petition to Amend does not require changes to the traffic and transportation information as described in the Commission Decision and subsequent Commission Orders.

5.12.2 Environmental Analyses

Construction of the Zeus BESS Project is planned to occur over an 8- to 9-month period. The peak construction workforce is estimated at 80. Truck trips during construction are estimated at up to 35/day for up to 24 weeks followed by approximately 5/day on average for an additional 12 weeks. This level of construction traffic will not result in significant traffic and transportation related impacts. The Zeus BESS Project will be unmanned and remotely operated. Minimal maintenance staff will be required and are estimated to average 2 workers per visit twice per week.

For reference, the traffic and transportation analysis in the CEC Final Decision for the TCCPP (CEC 2010) was based on an assumed average number of construction workers at approximately 171 with a peak workforce of approximately 398 workers for conversion of the Tracy peaker plant to a combined cycle power plant. The Commission concluded that construction and operation of the TCCPP, as mitigated, would not result in any significant, direct, indirect, or cumulative adverse impacts to the local or regional traffic and transportation system. The Zeus BESS Project temporary traffic generation would be much lower than the TCCPP levels which were found to be insignificant.

5.12.3 Mitigation Measures

The Zeus BESS Project modifications will not result in a significant impact related to traffic and transportation and will not require additional mitigation measures.

5.12.4 Consistency with LORS

The project conforms to applicable laws related to hazardous materials handling.

5.12.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for traffic and transportation. Refer to Appendices B and C for the complete COCs.

5.12.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.13 Visual Resources

5.13.1 CEC Certification of TCCP

The CEC FSA for the TCCPP Project (CEC 2009) assessed that the proposed GWF Tracy, with staff-recommended Conditions of Certification would not introduce an adverse aesthetic impact as described in the Guidelines for Implementation of the CEQA. The FSA also determined that the TCCPP Project would comply with applicable LORS pertaining to aesthetics or preservation and protection of sensitive visual resources. With implementation of the CEC TCCPP visual resource related Conditions, it is expected that similar findings would apply to the Zeus BESS Project.

This Petition to Amend does not require changes to the visual resources information as described in the Commission Decision and subsequent Commission Orders.

5.13.2 Environmental Analyses

Construction of the proposed Zeus BESS Project would result in temporary visible equipment operations. During the operational phase the BESS facilities including modular battery and

inverter containers as well as the BESS switchyard and gen-tie would add new energy facilities of varying proportions on the northern and eastern portions of the 40-acre TCCPP parcel. It is expected that BESS battery and inverter containers would typically be approximately 8-feet wide by 9.5-feet tall by 20-feet long. The containers would be the most prevalent BESS related facilities added to the site. The 115 kV gen-tie planned along the eastern parcel area between the BESS switchyard and the existing PG&E Schulte Substation would include transmission poles up to 60-80 feet tall pending final design. The BESS facilities would change the visual setting on the northern portion of the parcel, but would not be out of character with the TCCPP facilities and PG&E Substation facilities and power lines already present on the parcel and area.

With implementation of the CEC Conditions stipulated in the Final Decision for the TCCPP (CEC 2010), Zeus BESS Project impacts to visual resources would be minimized as practical.

In summary, no significant visual resource related impacts from implementation of the project are expected.

5.13.3 Mitigation Measures

The Zeus BESS Project is not expected to create significant visual resource impacts that will require additional mitigation measures.

5.13.4 Consistency with LORS

The project conforms to applicable laws related to visual resources.

5.13.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for visual resources. Refer to Appendices B and C for the complete COCs.

5.13.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.14 Waste Management

5.14.1 CEC Certification of TCCP

The CEC FSA assessed that the management of the waste generated during construction and operation of the TCCPP Project would not result in any significant adverse impacts and would comply with applicable waste management laws, ordinances, regulations, and standards if the measures proposed in the Application for Certification and staff's proposed conditions of certification were implemented.

This Petition to Amend does not require changes to the waste management information as described in the Commission Decision and subsequent Commission Orders.

5.14.2 Environmental Analyses

The Zeus BESS Project is not expected to result in an increase of operational phase waste generation at the site. Generation of construction waste will also be minimal and construction and operations phase waste will be managed in accordance with CEC Conditions. Therefore, no impacts from waste management are expected.

5.14.3 Mitigation Measures

The Zeus BESS Project modifications will not create a significant impact from waste management and will not require additional mitigation measures.

5.14.4 Consistency with LORS

The project conforms to applicable laws related to waste management.

5.14.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for waste management. Refer to Appendices B and C for the complete COCs.

5.14.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

5.15 Worker Safety/Fire Protection

5.15.1 CEC Certification of TCCPP

This Petition to Amend does not require changes to the worker safety/fire protection information as described in the Commission Decision and subsequent Commission Orders.

5.15.2 Environmental Analyses

By continuing to comply with the existing conditions of certification, the installation of the Zeus BESS Project would not have a significant effect on worker safety or fire protection and would continue to comply with all applicable LORS. Construction and operational phase activities would comply with worker safety and fire safety requirements already contained in the health and safety plans developed and utilized for the main TCCPP facility per COCs WORKER SAFETY-1 through -6 (CEC 2010). As applicable, the existing safety plans will be updated to consider battery safety and coordination with the local Tracy Fire Department.

5.15.3 Mitigation Measures

The Zeus BESS Project impacts related to worker safety and fire protection are less than significant and, therefore, will not require additional mitigation measures.

5.15.4 Consistency with LORS

The project conforms to applicable laws related to worker safety and fire protection.

5.15.5 Conditions of Certification

The proposed modifications do not require changes to the COCs for worker safety and fire protection.

5.15.6 References

CEC. 2020. Tracy Combined Cycle Power Plant (08-AFC-07C), Conditions of Certification. As amended. Updated May 26, 2020.

_____.2010. Final Commission Decision. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. March.

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MRP San Joaquin Energy, LLC
Zeus BESS Project

_____.2009. Final Staff Assessment. GWF Tracy Combined Cycle Power Plant Project, Application for Certification (08-AFC-07), San Joaquin County. October.

APPENDIX B

ZEUS BESS-ONLY CONDITIONS OF CERTIFICATION

Based on a review of existing CEC Conditions of Certification for the Tracy Combined Cycle Power Plant (TCCPP), this appendix presents a preliminary list of assumed Zeus BESS-Only Conditions. It is assumed that the CEC will specify Conditions of Certification specific to the Zeus BESS Project and that BESS compliance will be tracked by the CEC against these specific Conditions.

Table B-1 presents a summary of the assumed Zeus BESS-Only Conditions, including an itemization of TCCPP Conditions that are assessed to be “not applicable” to the Zeus BESS Project subject to CEC review and concurrence. In addition, some Conditions will need to be reworded to facilitate compliance and/or to make them specific to the BESS Project versus the TCCPP project.

Table B-1. Summary List of Assumed Zeus BESS-Only Conditions of Certification

Topic	Summary of Existing CEC Conditions for Henrietta Peaker Plant¹	Applicable to BESS Project (Y/NA)²
Air Quality	AQ-SC1: Air Quality Construction Mitigation Manager (AQCMM)	Y
	AQ-SC2: Air Quality Construction Mitigation Plan (AQCMP)	Y
	AQ-SC3: Construction Fugitive Dust Control	Y
	AQ-SC4: Dust Plume Response Requirement	Y
	AQ-SC5: Diesel-Fueled Engine Control	Y (Tier 4)
	AQ-SC6 through AQ-SC9: TCCPP-specific operational phase air permit related requirements	Not Applicable (NA); no operational phase air permits required for BESS
	AQ-1 through AQ-170: TCCPP-specific operational SJVAPCD District Final Determination of Compliance Conditions	NA; no operational phase air permits required for BESS
Biological Resources	BIO-1: Designated Biologist Requirement	Y
	BIO-2: Designated Biologist Duties	Y
	BIO-3: Designated Biologist Qualifications	Y
	BIO-4: Designated Biologist Authority	Y
	BIO-4: Worker Environmental Awareness Program	Y
	BIO-5: Compensatory Habitat	NA
	BIO-6: Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP)	Y
	BIO-7: Impact Avoidance Measures	Y
	BIO-8: Pre-construction Surveys	Y
	BIO-9: Avoid Harassment or Harm to San Joaquin Kit Foxes	Y
Cultural Resources	CUL-1: Designated Cultural Resource Specialist	Y
	CUL-2: Project Maps Showing Ground Disturbance	Y
	CUL-3: Cultural Resources Monitoring and Mitigation Plan	Y
	CUL-4: Cultural Resources Report (CRR)	Y
	CUL-5: Cultural Resources Worker Environmental Awareness Program (WEAP) Training	Y
	CUL-6: Ground Disturbance Monitoring (>3-foot depth)	Y
	CUL-7: Cultural Resources Specialist Authority	Y

Petition for Post-Certification Amendment (08-AFC-07)

Tracy Combined Cycle Power Plant

Zeus BESS 200 MW Project

Topic	Summary of Existing CEC Conditions for Henrietta Peaker Plant ¹	Applicable to BESS Project (Y/NA) ²
Facility Design	GEN-1: Design Project in Accordance with CA Building Code and Applicable LORS	Y
	GEN-2: Schedule of Facility Design Submittals	Y
	GEN-3 through GEN-8: Construction and Design Related Requirements	Y
	CIVIL-1 through CIVIL-4: Civil Design and Inspection Requirements	Y
	STRUC-1 through STRUC-4: Structural Design Plans Requirements	Y
	MECH-1 through MECH-3	NA
	ELEC-1: Electrical Design Review	Y
Paleontological Resources	PAL-1: Designated Paleontological Resources Specialist	Y
	PAL-2: Ground Disturbance Plan	Y
	PAL-3: Paleontological Resources Monitoring & Mitigation Plan (PRMMP)	Y
	PAL-4: Paleontological Worker Environmental Awareness Program (WEAP)	Y
	PAL-5: Subsurface Ground Disturbance Monitoring	Y
	PAL-6: Paleontological Resource Recovery	Y
	PAL-7: Paleontological Resource Report	Y
	PAL-8: Facility Closure Plan	Y
Hazardous Materials	HAZ-1: Hazardous Material Inventory	Y
	HAZ-2: Hazardous Material Business Plan	Y
	HAZ-3: Aqueous Ammonia Delivery Safety Management Plan	NA
	HAZ-4: Tanker Truck Standards (Aqueous Ammonia)	NA
	HAZ-5: Hazardous Material Delivery Designated Truck Routes	Y
	HAZ-6: Construction Site Security Plan	Y
	HAZ-7: Commissioning and Operation Phase Site Security Plan	Y
Land Use	LAND-1: Prime Agricultural Land Mitigation Plan	NA
Noise	NOISE-1: Pre-construction Notice and Construction Noise Complaint Hotline	Y
	NOISE-2: Noise Complaint Process	Y
	NOISE-3: Construction Noise Control Program for Workers	Y
	NOISE-4: Operating Noise Limitation	Y
	NOISE-5: Occupational Noise Survey during Operations	NA

Petition for Post-Certification Amendment (08-AFC-07)

Tracy Combined Cycle Power Plant

Zeus BESS 200 MW Project

Topic	Summary of Existing CEC Conditions for Henrietta Peaker Plant ¹	Applicable to BESS Project (Y/NA) ²
	NOISE-6: Noisy Construction Time Limitations (6 am – 9 pm)	Y
	NOISE-7: Steam Blow Restrictions	NA
Socioeconomics	SOCIO-1: School Facility Development Fee	Y
Soil & Water	SOIL & WATER-1: Construction SWPPP	Y
	SOIL & WATER-2: Drainage, Erosion, and Sedimentation Control Plan (DESCP)	Y
	SOIL & WATER-3: Operational SWPPP or NONA	NA
	SOIL & WATER-4: Water Source, Truck Transport Vehicle, and Quantity Restrictions	Y
	SOIL & WATER-5: Septic Permit Compliance Documentation	NA
	SOIL & WATER-6: Wastewater Disposal Requirements	NA
Traffic and Transportation	TRANS-1: Construction Traffic Control Plan	Y
	TRANS-2: FAA Notifications including Thermal Plumes	NA
	TRANS-3: CEC Omitted	NA
	TRANS-4: Roadway Repairs	Y
	TRANS-5: Transportation Permits and Restrictions	Y
Transmission Line Safety and Nuisance	TLSN-1: Transmission Line Design Compliance with CPUC and PG&E Construction Design Standards	Y
	TLSN-2: Radio and Television Signal Interference Requirements	Y
	TLSN-3: EMF Measurements and Reporting	Y
	TLSN-4: Transmission Line ROW Maintenance	Y
	TLSN-5: Transmission Line ROW Grounding Requirements	Y
Transmission System Engineering	TSE-1: Plans Submittal Schedule	Y
	TSE-2: Assignment of Engineers	Y
	TSE-3: Design Discrepancy Corrective Measures	Y
	TSE-4: Switchyard Plans Review	Y
	TSE-5: Transmission Line LORS Compliance	Y
	TSE-6: Reporting Requirements for TSE-5 Non-compliance Items	Y
	TSE-7: CAISO Notification Prior to Synchronization	Y
	TSE-8: As Built Transmission System Drawings and Inspection Requirements	Y
Visual Resources	VIS-1: Construction Visual Remediation	Y
	VIS-2: Surface Restoration Plan (post construction)	Y
	VIS-3: Construction Night Lighting Restrictions	Y
	VIS-4: Landscape Screening	Y

Petition for Post-Certification Amendment (08-AFC-07)

Tracy Combined Cycle Power Plant

Zeus BESS 200 MW Project

Topic	Summary of Existing CEC Conditions for Henrietta Peaker Plant ¹	Applicable to BESS Project (Y/NA) ²
	VIS-5: Lighting Restrictions	Y
	VIS-6: Color Treatment Plan for Structures and Buildings	NA
	VIS-7: Fencing Requirements	Y
Waste Management	WASTE-1: Qualified Professional Engineer/Geologist	Y
	WASTE-2: Site Characterization/Contaminated Soil Assessment and Reporting	Y
	WASTE-3: Demolition and Construction Waste Management Plan	Y
	WASTE-4: Hazardous Waste Generator ID	Y
	WASTE-5: Waste Management Enforcement Action	Y
	WASTE-6: Operation Waste Management Plan	Y
	WASTE-7: Hazardous Material Spill Response and Reporting Requirements	Y
Worker Safety and Fire Protection	WORKER SAFETY -1: Project Construction Safety and Health Program	Y
	WORKER SAFETY -2: Project Operations and Maintenance Safety and Health Program	Y
	WORKER SAFETY -3: Construction Safety Supervisor	Y
	WORKER SAFETY -4: Safety Monitor Fees	Y
	WORKER SAFETY -5: Onsite Portable Automatic External Defibrillator (AED) Requirements	Y
	WORKER SAFETY -6: Secondary Site Access Requirement for Emergency Response Personnel	Y

¹Refer to Tracy Combined Cycle Power Plant (08-AFC-07C) Conditions of Certification as Amended (updated May 26, 2020) for full text of existing Conditions of Certification, including Verification requirements. These Conditions are presented in Appendix C herein for reference.

APPENDIX C
CEC CONDITIONS OF CERTIFICATION FOR
TCCPP (08-AFC-07C)

This appendix presents the current CEC Conditions of Certification for the Tracy Combined Cycle Power Plant (TCCPP) as updated May 26, 2020.

**TRACY COMBINED-CYCLE
POWER PLANT
(08-AFC-07C)**

**CONDITIONS OF
CERTIFICATION
As Amended**

(Updated May 26, 2020)

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**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
AIR QUALITY CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	03-0723-07	29462	AQ-17, AQ-18, AQ-20 thru AQ-23, AQ-30, AQ-58, AQ-62
Commission Order	04-0121-04	30793	AQ-68, AQ-71 thru AQ-74
Commission Order	10-0324-01	56074	All Conditions

AQ-SC1 Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with Conditions **AQ-SC3**, **AQ-SC4** and **AQ-SC5** for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM delegates. The AQCMM and AQCMM delegates shall have full access to all areas of construction on the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by applicable construction mitigation Conditions. The AQCMM and AQCMM delegates may have other responsibilities in addition to those described in this Condition. The AQCMM shall not be terminated without written consent of the construction project manager (CPM).

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM delegates. The AQCMM and all delegates must be approved by the CPM before the start of ground disturbance.

AQ-SC2 Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide, for approval, an AQCMP that details the steps to be taken and the reporting requirements necessary to ensure compliance with Conditions of Certification **AQ-SC3**, **AQ-SC4** and **AQ-SC5**.

Verification: At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

AQ-SC3 Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each monthly compliance report (MCR) that demonstrates compliance with the following mitigation measures for

purposes of preventing all fugitive dust plumes from leaving the project site and linear facility routes. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A. All unpaved roads and disturbed areas in the project and linear construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives of **AQ-SC4**. The frequency of watering may be either reduced or eliminated during periods of precipitation.
- B. No vehicle shall exceed 15 miles per hour within the construction site.
- C. The construction site entrances shall be posted with visible speed limit signs.
- D. All construction equipment vehicle tires shall be inspected and washed as necessary to be free of dirt prior to entering paved roadways.
- E. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- F. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
- G. All construction vehicles shall enter the construction site through the treated entrance roadways unless an alternative route has been submitted to and approved by the CPM.
- H. Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent run-off to roadways.
- I. All paved roads within the construction site shall be swept at least twice daily (or less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- J. At least the first 500 feet of any public roadway exiting from the construction site shall be swept at least twice daily (or less during periods of precipitation) on days when construction activity occurs or on any other day when dirt or run-off from the construction site is visible on the public roadways.
- K. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or treated with appropriate dust suppressant compounds.
- L. All vehicles that are used to transport solid bulk material on public roadways and that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently

wetted and loaded onto the trucks to provide at least two feet of freeboard.

- M. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this Condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

Verification: The project owner shall include in the MCR:

1. a summary of all actions taken to maintain compliance with this Condition;
2. copies of any complaints filed with the air district in relation to project construction; and
3. any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this Condition.

Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC4 Dust Plume Response Requirement: The AQCMM or an AQCMM delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes with the potential to be transported off the project site, 200 feet beyond the centerline of the construction of linear facilities, or within 100 feet upwind of any regularly occupied structures not owned by the project owner indicate that existing mitigation measures are not providing effective mitigation. The AQCMM or delegate shall then implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed.

- Step 1: The AQCMM or delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.
- Step 2: The AQCMM or delegate shall direct implementation of additional methods of dust suppression if Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination.
- Step 3: The AQCMM or delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2 specified above fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQCMM or delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The owner/operator may appeal to the CPM any directive from the AQCMM or delegate to shut down an activity, provided that the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

Verification: The AQCMP shall include a section detailing how additional mitigation measures will be accomplished within specified time limits.

AQ-SC5

Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the MCR, a construction mitigation report that demonstrates compliance with the following mitigation measures for purposes of controlling diesel construction-related emissions. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the Conditions set forth herein.
- B. All construction diesel engines with a rating of 100 hp or higher shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless certified by the on-site AQCMM that such engine is not available for a particular item of equipment. In the event that a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a diesel particulate filter (DPF) unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" for the following, as well as other, reasons.
 1. There is no available DPF that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency for the engine in question; or
 2. The construction equipment is intended to be on site for 10 days or less.
 3. The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not possible.
- C. The use of a soot filter may be terminated immediately if one of the following conditions exists, provided that the CPM is informed within 10 working days of the termination:
 1. The use of the soot filter is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.
 2. The soot filter is causing or is reasonably expected to cause significant engine damage.
 3. The soot filter is causing or is reasonably expected to cause a significant risk to workers or the public.

4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.

- D. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- E. All diesel heavy construction equipment shall not idle for more than five minutes, to the extent practical.

Verification: The project owner shall include in the MCR: a summary of all actions taken to maintain compliance with this Condition; a list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that the equipment has been properly maintained; and any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this Condition. Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC6 The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or U.S. EPA, and any revised permit issued by the District or U.S. EPA, for the project.

Verification: The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by: 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-SC7 The project owner shall surrender to the San Joaquin Valley Air Pollution Control District emission reductions in the form of offsets or emission reduction credits (ERCs) as calculated per SJVAPCD Rule 2201 to offset CO and SOx emissions, as proposed by the Applicant.

The project owner shall surrender the ERCs from among those listed below or a modified list, as allowed by this Condition. If additional ERCs are submitted, the project owner shall submit an updated table including the additional ERCs to the CPM. The project owner shall request CPM approval for any substitutions, modifications, or additions to the listed credits.

Source / Reduction	ERC Number	CO (lb)	SOx (lb)
18800 Spreckels Blvd, Manteca	N-320-3	18,618	---
800 W. Church St., Stockton	N-575-5	---	3,206

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, and that the

requested change(s) will not cause the project to result in a significant environmental impact. The District must also confirm that each requested change is consistent with applicable federal and state laws and regulations.

Verification: The project owner shall submit to the CPM records showing that the project's offset requirements have been met prior to initiating construction. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and Commission docket. The CPM shall maintain an updated list of approved ERCs for the project.

AQ-SC8 The project owner shall submit to the CPM quarterly operation reports that include operational and emissions information as necessary to demonstrate compliance with the Conditions of Certification. The quarterly operation report shall specifically note or highlight incidences of noncompliance.

Verification: The project owner shall submit quarterly operation reports to the CPM and APCO no later than 30 days following the end of each calendar quarter.

This information shall be maintained on site for a minimum of five years and shall be provided to the CPM and District personnel upon request.

AQ-SC9 The wet surface air cooler (WSAC) shall have a mist eliminator with a manufacturer guaranteed mist reduction rate of 0.005 percent or less of the water recirculation rate. The wet surface air cooler spray water shall be tested for total dissolved solids and that data shall be used to determine and report the particulate matter emissions from the wet surface air cooler. The wet surface air cooler spray water shall be tested at least once annually during the anticipated summer operation peak period (July through September). The wet surface air cooler annual particulate matter emissions shall be limited to 110 lb/year PM10. The project owner shall estimate annual particulate emissions from the wet surface air cooler using the water quality testing data and estimated spray water use. Compliance with the wet surface air cooler PM10 emission limit shall be demonstrated as follows: $PM10 = \text{cooling water recirculation} * \text{total dissolved solids concentration in the blowdown water} * \text{design drift rate}$.

Verification: The project owner shall provide the CPM a copy of the manufacturer guarantee for the mist eliminator 30 days prior to installation of the wet surface air cooler. The project owner shall provide the water quality test results and the wet surface air cooler particulate matter emissions estimates to the CPM as part of the fourth quarter's quarterly operational report (**AQ-SC8**).

District Final Determination of Compliance Conditions (SJVAPCD - 2009d)

The SJVACPD permits each device separately, which causes duplication of Conditions. The following SJVAPCD Conditions will eliminate this duplication, with the Conditions first for each of the two units in the combined-cycle system (**AQ-1 to AQ-75**) and facility-wide Conditions (**AQ-76 to AQ-101**), followed by the Conditions for, the emergency standby generator engine (**AQ-102 to AQ-118**), the auxiliary boiler (**AQ-119 to AQ-151**), and the fire water pump engine (**AQ-152 to AQ-170**).

Equipment Description, Unit N-4597-1-5

Modification of an existing 84.4 MW nominally rated simple-cycle peak-demand power generating system #1 consisting of a General Electric Model PG 7121 EA natural gas-fired combustion turbine generator served by an inlet air filtration and cooling system, dry low-NOx combustors, a SCR system with ammonia injection, and an oxidation catalyst: to convert the existing system to a combined cycle configuration by:

1. removing the existing oxidation and selective catalytic reduction system and the existing 100 foot exhaust stacks,
2. installing a new heat recovery steam generator equipped with a 324 mmbtu/hr (HHV) natural gas-fired duct burner,
3. installing a new oxidation catalyst and new selective catalytic reduction system,
4. installing a new 150' tall 17' diameter stack,
5. installing a new STG lube oil cooler, and
6. installing a 145 MW nominally rated condensing steam turbine generator (shared with N-4597-2)

Equipment Description, Unit N-4597-2-6

Modification of an existing 84.4 MW nominally rated simple-cycle peak-demand power generating system #2 consisting of a General Electric Model PG 7121 EA natural gas-fired combustion turbine generator served by an inlet air filtration and cooling system, dry low-NOx combustors, a SCR system with ammonia injection, and an oxidation catalyst: to convert the existing system to a combined cycle configuration by:

1. removing the existing oxidation and selective catalytic reduction system and the existing 100 foot exhaust stacks,
2. installing a new heat recovery steam generator equipped with a 324 mmbtu/hr (HHV) natural gas-fired duct burner,
3. installing a new oxidation catalyst and new selective catalytic reduction system,
4. installing a new 150' tall 17' diameter stack,
5. installing a new STG lube oil cooler, and
6. installing a 145 MW nominally rated condensing steam turbine generator (shared with N-4597-1)

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: No verification necessary.

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

Verification: No verification necessary.

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

Verification: The project owner shall submit to both the District and CPM the Title V Operating Permit application prior to operation.

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

Verification: No verification necessary.

AQ-7 Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been

completed, or when the gas turbine is first fired (at the beginning of the conversion to a combined cycle plant), whichever occurs first. The commissioning period shall terminate when the plant has completed initial performance testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201]

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan at least four weeks prior to the first operation of the stationary gas turbines.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall submit to the CPM and APCO for approval the commissioning plan as required in **AQ-11**.

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

500 firing hours without abatement shall expire. Records of the commissioning hours for this unit shall be maintained. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

AQ-16 The total mass emissions of NO_x, SO_x, PM₁₀, CO, and VOC that are emitted during the commissioning period shall accrue towards the consecutive twelve-month emission limit specified in Condition **AQ-41**. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: The project owner shall submit the results of source tests to both the District and CPM in accordance with **AQ-50**.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) design plan for approval by the APCO and CPM at least 30 days prior to commencement of construction.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall submit to the District and CPM the CTG startup and shutdown event duration data demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall submit to the District and CPM the CTG startup and shutdown event duration data demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall submit to the District and CPM the CTG startup and shutdown event duration data demonstrating compliance with this condition as part of the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

AQ-39 Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd @ 15% O₂ across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the owner/operator shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the owner/operator may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the owner/operator shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rules 2201 and 4102]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

AQ-40 Daily emissions from the CTG shall not exceed the following limits: NO_x (as NO₂) – 814.9 lb/day; CO – 1071.6 lb/day; VOC – 78.6 lb/day; PM₁₀ – 132.0 lb/day; or SO_x (as SO₂) – 58.7 lb/day. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: No verification necessary.

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

Verification: No verification necessary.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The results and field data collected during source tests shall be submitted to the District and CPM within 60 days of testing and according to a pre-approved protocol (AQ-50). Testing for steady operation shall be conducted upon initial operation and at least once every twelve months.

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

Verification: The results and field data collected during source tests shall be submitted to the District and CPM within 60 days of testing and according to a pre-approved protocol (**AQ-50**). Testing for steady operation shall be conducted upon initial operation and at least once every twelve months.

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

Verification: The results and field data collected during source tests shall be submitted to the District and CPM within 60 days of testing and according to a pre-approved protocol (**AQ-50**). Testing for startup and shutdown emissions shall be conducted upon initial operation and at least once every seven years.

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

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

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

Verification: The project owner shall submit the proposed source test plan or protocol for the source tests 15 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 30 days prior to the proposed source test date and time. The project owner shall submit

source test results no later than 60 days following the source test date to both the District and CPM.

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

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

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

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

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

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

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

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) protocol for approval by the APCO and CPM at least 60 days prior to installation of the CEM.

The project owner shall make the site available for inspection by representatives of the District, ARB and the Commission upon request.

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

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) protocol for approval by the APCO and CPM at least 60 days prior to installation of the CEM.

The project owner shall make the site available for inspection by representatives of the District, ARB and the Commission upon request.

AQ-58 The NOX, CO and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2, 3, and 4, and/or 40 CFR 75 Appendix A, or shall meet

equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)]

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) protocol for approval by the APCO and CPM at least 60 days prior to installation of the CEM. The project owner shall make the site available for inspection by representatives of the District, ARB and the Commission upon request.

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

Verification: The project owner shall submit to the CPM and APCO CEMS audits demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall submit to the CPM and APCO CEMS audits demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission to verify the monitoring devices are properly installed and operational.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission to verify the monitoring devices are properly installed and operational.

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

Verification: The project owner shall submit to the District and CPM the report of emission data in the quarterly operation report (**AQ-SC8**) that follows the definitions of this Condition.

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

Verification: The project owner shall submit to the District and CPM the report of CEM operations upon notice from the APCO.

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

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) protocol for approval by the APCO and CPM at least 60 days prior to installation of the CEM. The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall provide required non-pollled CEM data to the District by a District-approved alternative method.

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

Verification: No verification necessary.

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

Verification: No verification necessary.

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

Verification: No verification necessary.

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

Verification: The project owner shall submit to the District and CPM the report of CEM operations, emission data, and monitor downtime data in the quarterly operation report (**AQ-SC8**) that follows the definitions of this Condition.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

AQ-79 The owners and operators of each source and each affected unit at the source shall:

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

AQ-89 The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or

permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72]

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: The project owner shall submit to both the District and CPM the Acid Rain Program application after completing commissioning.

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

Verification: A summary of significant construction activities and monitoring records required shall be included in the construction monthly compliance report (**AQ-SC3**).

AQ-93 An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or five acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic

yards per day of bulk materials on at least three days. [District Rules 8011 and 8021]

Verification: The Dust Control Plan shall be included within the Air Quality Construction Mitigation Plan and submitted to the District and CPM (**AQ-SC2**), and a summary of significant construction activities and monitoring records required shall be included in the construction monthly compliance report (**AQ-SC3**).

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

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

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).
Equipment Description, Unit N-4597-4-2

Modification of a 471 HP Caterpillar Model 3456 DI TA AA diesel-fired emergency IC engine powering a 300 kW electrical generator to reduce the annual hours of operation for maintenance and testing from 200 hours/year to 50 hours/year

AQ-102 This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

Verification: No verification necessary.

AQ-103 Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

Verification: The project owner shall submit to both the District and CPM the Title V Operating Permit application prior to operation.

AQ-104 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Verification: The project owner shall submit the results of certification tests to both the District and CPM in accordance with **AQ-111**.

AQ-105 No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-106 No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20 percent opacity. [District Rule 4101]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-107 The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-108 This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-109 Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201, 4102, and 4801 and 17 CCR 93115]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-110 Emissions from this IC engine shall not exceed any of the following limits: 4.69 g-NOx/bhp-hr, 0.12 g-CO/bhp-hr, or 0.04 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-111 Emissions from this IC engine shall not exceed 0.029 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-112 This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-113 During periods of operation for maintenance, testing, and required regulatory purposes, the owner/operator shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

Verification: The project owner shall submit to the District and CPM engine operation procedures and data demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

AQ-114 An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the owner/operator. [District Rule 4702]

Verification: No verification necessary.

AQ-115 This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

Verification: The project owner shall submit to the District and CPM engine operation procedures and data demonstrating compliance with this Condition as part of the quarterly operation report (**AQ-SC8**).

AQ-116 This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 4702 and 17 CCR]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-117 The owner/operator shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-118 All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

Equipment Description, Unit N-4597-5-0

85 MMBTU/HR natural gas-fired Rentech Model RTD-2-60 boiler with a Coen Model C-RMB burner and flue gas recirculation or equivalent.

AQ-119 This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

Verification: No verification necessary.

AQ-120 Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

Verification: The project owner shall submit to both the District and CPM the Title V Operating Permit application prior to operation.

AQ-121 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Verification: The project owner shall submit the results of fuel tests to both the District and CPM in accordance with **AQ-144**.

AQ-122 No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-123 No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20 percent opacity. [District Rule 4101]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-124 The owner/operator shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-125 The owner/operator's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-126 Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-127 No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-128 All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-129 The flue gas recirculation (FGR) system shall be operated properly and shall be maintained per the manufacturer's recommendations. [District Rule 2201]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-130 A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. The fuel meter shall be calibrated per the fuel meter manufacturers recommendations. [District Rules 2201 and 40 CFR 60.48 (c)(g)]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-131 The boiler shall operate a maximum of 4,000 hours per calendar year. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-132 The boiler shall only be fired on PUC-regulated natural gas with a sulfur content value not exceeding 0.66 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a daily basis and 0.25 grains of sulfur compounds (as S) per 100 dry standard cubic feet on a 12-month rolling average basis. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-133 Emission rates from this unit shall not exceed any of the following limits: NO_x (as NO₂) – 6.0 ppmvd @ 3% O₂ or 0.0073 lb/MMBtu; VOC (as methane) – 0.005 lb/MMBtu; CO - 50.0 ppmvd @ 3% O₂ or 0.037 lb/MMBtu; PM₁₀ - 0.007 lb/MMBtu; or SO_x (as SO₂) - 0.0019 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320, and 4351]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-134 Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with condition **AQ-50**.

AQ-135 Source testing to measure NO_x and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with condition **AQ-50**.

AQ-136 All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-137 Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-138 The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-139 The source plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-140 For emissions source testing, the arithmetic average of three 30-consecutive-minute (or longer periods as necessary) test runs shall apply.

If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-141 NOX emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-142 CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-143 Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320]

Verification: The project owner shall submit the proposed protocol for the source tests to both the District and CPM for approval in accordance with Condition **AQ-50**.

AQ-144 Testing to demonstrate compliance with the short-term (daily) fuel sulfur content limit shall be conducted monthly. If a monthly test indicates that a violation of the daily fuel sulfur content limit has occurred then weekly testing shall commence and continue until eight consecutive tests show compliance. Once compliance with the daily fuel sulfur content is demonstrated on eight consecutive weekly tests, testing may return to the monthly schedule. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. [District Rule 2201 an 40 CFR 60.4360, 60.4365(a) and 60.4370(c)]

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

AQ-145 Compliance with the rolling 12-month average fuel sulfur content limit shall be demonstrated monthly. The 12-month rolling average fuel sulfur content shall be calculated as follows: 12-month rolling average fuel sulfur content = Sum of the monthly average fuel sulfur contents for the previous 12 months ÷ total number of months the unit has operated in during the previous 12 months. The monthly average fuel sulfur content is the average fuel sulfur content of all tests conducted in a given month. If the unit is not operated during an entire calendar month, fuel sulfur content testing shall not be required for that specific month. Owner/operator shall

keep a monthly record of the rolling 12-month average fuel sulfur content.
[District Rules 1081 and 2201]

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

AQ-146 Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [District Rule 2201]

Verification: The result of the natural gas fuel sulfur monitoring data and other fuel sulfur content source data shall be submitted to the District and CPM in the quarterly operation report (**AQ-SC8**).

AQ-147 The exhaust stack shall either be equipped with a continuous emissions monitor (CEM) for NOX, CO, and O2 or the owner/operator shall implement one of the alternate monitoring schemes (A, B, C, D, E, F, or G) listed in District Rule 4320, Section 5.7.1 (dated 10/16/08). Owner/operator shall submit, in writing, the chosen method of monitoring (either CEMS or chosen alternate monitoring scheme) at least 30 days prior to initial operation of this boiler. [District Rules 2201, 4305, 4306 and 4320]

Verification: The project owner shall provide a Continuous Emission Monitoring System (CEM) protocol for approval by the APCO and CPM at least 60 days prior to installation of the CEM.

The project owner shall make the site available for inspection by representatives of the District, ARB and the Commission upon request.

AQ-148 The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-149 Owner/operator shall maintain daily records of the type and quantity of fuel combusted by the boiler. [District Rule 2201 and 40 CFR 60.48 (c)(g)]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-150 Owner/operator shall keep a record of the cumulative annual quantity of hours operated for this unit. The record shall be updated at least monthly. [District Rule 2201]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

AQ-151 All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (AQ-SC8).

Equipment Description, Unit N-4597-6-0

288 BHP Cummins Model CFP83-F40 TIER 3 diesel-fired emergency IC engine powering a firewater pump or equivalent.

AQ-152 This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule]

Verification: No verification necessary.

AQ-153 Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

Verification: The project owner shall submit to both the District and CPM the Title V Operating Permit application prior to operation.

AQ-154 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Verification: The project owner shall submit the results of certification tests to both the District and CPM in accordance with AQ-167.

AQ-155 No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-156 No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20 percent opacity. [District Rule 4101]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-157 The owner/operator shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-158 The owner/operator's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters. [District Rule 2010]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-159 Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-160 No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment. [District Rule 2201]

Verification: The project owner shall submit to both the District and CPM the application for equivalent equipment as needed.

AQ-161 The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-162 This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 60.4209(a)]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-163 This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90 percent control efficiency. [District Rule 2201]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-164 This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [40 CFR 60.4211(a)]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-165 Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 40 CFR 60.4207, and 17 CCR 93115]

Verification: The project owner shall make the site available for inspection by representatives of the District, ARB, and the Commission upon request.

AQ-166 Emissions from this IC engine shall not exceed any of the following limits: 2.67 g-NO_x/bhp-hr, 2.39 g-CO/bhp-hr, or 0.16 g-VOC/bhp-hr. [District Rule 2201 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60.4205(c)]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-167 Emissions from this IC engine shall not exceed 0.12 g-PM₁₀/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 13 CCR 2423 and 17 CCR 93115 and 40 CFR 60.4205(c)]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report (**AQ-SC8**).

AQ-168 This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702 and 17 CCR 93115 and 40 CFR 60.4211(e)]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report

(AQ-SC8).

AQ-169 The owner/operator shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, emergency firefighting, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report **(AQ-SC8).**

AQ-170 All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation report **(AQ-SC8).**

TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C) BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

Designated Biologist Selection

BIO-1 The project owner shall assign a Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval.

The Designated Biologist must have the following minimum qualifications:

1. A bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as the Ecological Society of America or the Wildlife Society; and
3. At least one year of field experience with biological resources found in or near the project area.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

Verification: The project owner shall submit the specified information at least 90 days prior to the start of any site mobilization. No site or site-related activities shall commence until an approved Designated Biologist is available to be on site. If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

Designated Biologist Duties

BIO-2 The project owner shall ensure that the Designated Biologist performs the following during any site mobilization, ground disturbance, grading, construction, operation, and closure activities. The Designated Biologist

may be assisted by approved biological monitors, but remains the contact for the project owner and CPM. The Designated Biologist shall:

1. Advise the project owner's construction/operation managers on the implementation of biological resource conditions of certification;
2. Consult on the preparation of the biological resource mitigation implementation and monitoring plan (BRMIMP), to be submitted by the project owner; be available to supervise, conduct, and coordinate mitigation, monitoring, and other biological resource compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources such as special-status species or their habitats;
3. Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
4. Inspect active construction areas where animals may have become trapped prior to commencement of construction each day;
5. Inspect for installation of structures that prevent entrapment or allow escape during periods of construction inactivity at the end of each day;
6. Periodically inspect areas with high vehicle activity (i.e., parking lots) for animals in harm's way;
7. Notify the project owner and CPM of any noncompliance with any biological resource condition of certification;
8. Respond directly to inquiries of the CPM regarding biological resource issues;
9. Maintain written records of the tasks specified above and those included in the biological resources mitigation implementation and monitoring plan (BRMIMP), with summaries of these records submitted in the monthly compliance report and the annual report; and
10. Train the biological monitors as appropriate, and ensure their familiarity with the BRMIMP, worker environmental awareness program (WEAP), and all permits.

Verification: The Designated Biologist shall submit in the monthly compliance report to the CPM copies of all written reports and summaries that document biological resource activities. If actions may affect biological resources during operation, a Designated Biologist shall be available for monitoring and reporting.

During project operation, the Designated Biologist shall submit record summaries in the annual compliance report unless their duties are ceased as approved by the CPM.

Biological Monitor Selection

BIO-3 The project owner's CPM-approved Designated Biologist shall submit the resume, at least three references, and contact information for the proposed biological monitors to the CPM for approval. The resume shall demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the assigned duties. Biological monitor training by the Designated Biologist shall include familiarity with the conditions of certification and the BRMIMP, WEAP, and all permits.

Verification: The project owner shall submit the specified information to the CPM for approval at least 30 days prior to the start of any site mobilization. The Designated Biologist shall submit a written statement to the CPM confirming that individual biological monitors have been trained, including the date when training was completed. If additional biological monitors are needed during construction, the specified information shall be submitted to the CPM for approval 10 days prior to their first day of monitoring activities.

Designated Biologist and Biological Monitor Authority

BIO-4 The project owner's construction/operation managers shall act on the advice of the Designated Biologist and biological monitors to ensure conformance with the biological resources conditions of certification. If required by the Designated Biologist and biological monitors, the project owner's construction/operation managers shall halt site mobilization, ground disturbance, grading, construction, and operation activities in areas specified by the Designated Biologist.

The Designated Biologist shall:

- Require a halt to all activities in any area when there would be an unauthorized adverse impact to biological resources if the activities continued;
- Inform the project owner and the construction/operation managers when to resume activities; and
- Notify the CPM if there is a halt of any activities, and advise the CPM of any corrective actions that have been taken, or shall be instituted, as a result of the work stoppage.

If the Designated Biologist is unavailable for direct consultation, the biological monitor shall act on behalf of the Designated Biologist.

Verification: The project owner shall ensure that the Designated Biologist or biological monitor notifies the CPM immediately (and no later than the following morning of the incident, or Monday morning in the case of a weekend) of any noncompliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities. The project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem. Whenever corrective action is taken by the project owner, a determination of success or failure shall be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project

owner shall be notified by the CPM that coordination with other agencies will require additional time before a determination can be made.

Worker Environmental Awareness Program

BIO-5 The project owner shall develop and implement a CPM-approved worker environmental awareness program (WEAP) in which each of its employees, as well as employees of contractors and subcontractors who work on the project site or any related facilities during site mobilization, ground disturbance, grading, construction, operation, and closure are informed about sensitive biological resources associated with the project.

The WEAP must:

1. Be developed by or in consultation with the Designated Biologist and consist of an onsite or training center presentation in which supporting written material and electronic media are made available to all participants;
2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas;
3. Present the reasons for protecting these resources;
4. Present the meaning of various temporary and permanent habitat protection measures;
5. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
6. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The specific program can be administered by a competent individual acceptable to the Designated Biologist.

Verification: At least 60 days prior to the start of any site mobilization, the project owner shall provide to the CPM two copies of the proposed WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the persons administering the program.

The project owner shall provide in the monthly compliance report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date.

At least 10 days prior to site mobilization, the project owner shall submit two copies of the CPM-approved materials.

The signed training acknowledgement forms from construction shall be kept on file by the project owner for a period of at least six months after the start of commercial operation.

During project operation, signed statements for active project operational personnel shall be kept on file for six months following the termination of an individual's employment.

Biological Resources Mitigation Implementation and Monitoring Plan

BIO-6 The project owner shall submit two copies of the proposed biological resources mitigation implementation and monitoring plan (BRMIMP) to the CPM for review and approval, and to the San Joaquin Council of Governments (SJCOG), the US Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG) for review and comment, and shall implement the measures identified in the approved BRMIMP.

The BRMIMP shall be prepared in consultation with the Designated Biologist, shall include all measures contained in the BRMIMP for the TPP project, and shall identify:

1. All applicant-proposed mitigation, monitoring, and compliance measures included as part of the project description in the AFC, which include all measures required for TPP construction and operation;
2. How noise will be monitored, including specific mitigation for noise levels that exceed 60 dBA;
3. All biological resource conditions of certification, including any measures provided in consultation with SJCOG;
4. All biological resource mitigation, monitoring, and compliance measures required by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for each species listed in Biological Resource Table 2 above for which measures are described, including exclusion zones around nests or colonies for special-status species – each species shall be named specifically with its SJMSCP-required incidental take minimization measures provided (see SJCOG 2002);
5. All biological resource mitigation, monitoring, and compliance measures required in terms and conditions of other state agencies commenting or permitting the project;
6. All biological resource mitigation, monitoring, and compliance measures required in local agency permits, such as site grading and landscaping requirements;
7. All mitigation, monitoring, and compliance measures required for protection of San Joaquin kit foxes and burrowing owls as discussed in conditions of certification **BIO-8**, **BIO-9**, and **BIO-10** below;

8. Required habitat-compensation strategy, including provisions for acquisition, enhancement, and management for any temporary and permanent loss of sensitive biological resources;
9. A detailed description of measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
10. All locations on a map, at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction;
11. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
12. Performance standards to be used to help decide if and when proposed mitigation is or is not successful;
13. All performance standards and remedial measures to be implemented if performance standards are not met;
14. A preliminary discussion of biological resource-related facility closure measures;
15. A landscaping plan that follows the TPP USFWS recommendations for maintenance of appropriate habitat character for the San Joaquin kit fox (see CEC 2002b);
16. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval;
17. A copy of all biological resource-related permits obtained; and
18. A description of impact avoidance, minimization, and mitigation measures for noise and lighting impacts.

Verification: The project owner shall provide the specified document at least 60 days prior to start of any site mobilization. The CPM, in consultation with the SJCOG (and USFWS, and CDFG if they choose to comment), shall determine the BRMIMP acceptability within 45 days of receipt. If there are any permits that have not yet been received when the BRMIMP is first submitted, these permits shall be submitted to the CPM and the SJCOG within five days of their receipt and the BRMIMP shall be revised or supplemented to reflect the permit condition within 10 days of their receipt by the project owner. Ten days prior to mobilization of the site and related facilities, the revised BRMIMP shall be resubmitted to the CPM.

The project owner shall notify the CPM no less than five working days before implementing any modifications to the approved BRMIMP to obtain CPM approval. Any changes to the approved BRMIMP must also be approved by the CPM and submitted to the SJCOG, USFWS, and CDFG to ensure that no conflicts exist.

Implementation of BRMIMP measures shall be reported in the monthly compliance reports by the Designated Biologist (i.e., survey results, construction activities that were monitored, species observed). Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written

construction closure report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's site mobilization, ground disturbance, grading, and construction phases, and which mitigation and monitoring items are still outstanding.

Impact Avoidance Mitigation measures

BIO-7 When a project is modified or a project design is finalized, it shall incorporate all feasible measures that avoid or minimize impacts to the local biological resources, including the following:

1. Design, install, and maintain transmission line poles, access roads, pulling sites, and storage and parking areas to avoid identified sensitive resources;
2. Design, install, and maintain transmission lines and all electrical components in accordance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) to reduce the likelihood of electrocutions of large birds;
3. Grade and clear construction areas between September 1 and January 31, if possible, to minimize impacts to nesting birds;
4. Eliminate from landscaping plans any List A California exotic pest plants of concern as defined by the California Exotic Pest Plant Council;
5. prescribe a road sealant that is nontoxic to wildlife and plants that will limit dust on dirt roads;
6. Implement all incidental take minimization measures developed by SJCOG for the TPP project in 2002 (SJCOG 2002) prior to any ground disturbance;
7. Implement the applicant-proposed measures discussed in GWF 2008a, the application for certification, which are summarized above under Construction Impacts to General Wildlife; and
8. Submit any plans for landscaping anywhere in the kit fox corridor between the plant itself and the Delta-Mendota Canal to the US Fish and Wildlife Service and California Department of Fish and Game for specific approval prior to implementation.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist.

Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how impact avoidance measures were completed.

Pre-construction Surveys

BIO-8 Pursuant to the San Joaquin County Multi-species Habitat Conservation and Open Space Plan (SJMSCP) and the requirements of the San Joaquin Council of Governments (SJCOG), all incidental take minimization measures for pre-construction surveys provided by SJCOG for TPP shall be implemented for the GWF Tracy project. These include but are not limited to the following (SJCOG 2002).

1. Notify SJCOG of plans to commence ground disturbance to allow for preconstruction surveys for the San Joaquin kit fox (kit fox). If surveys identify potential dens, den entrances shall be dusted for three calendar days to register tracks of any kit fox present. If no kit fox activity is identified, potential dens may be destroyed. If kit fox activity is identified, dens shall be monitored to determine if occupation is by an adult fox only or is a natal den. If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den(s) until the biologist determines that the den has been vacated. Where kit foxes are identified, the provision of the US Fish and Wildlife Service's published Standardized Recommendation for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999) shall apply.
2. Notify SJCOG of plans to commence ground disturbance to allow for preconstruction surveys for the burrowing owl. If burrowing owls are found, follow condition 3 in SJCOG 2002.
3. Prior to commencing ground disturbance, the construction team shall meet with SJCOG to discuss minimization measures designed to avoid impacts to the kit fox. The SJCOG biologist shall be present at the meeting to conduct kit fox education.

Verification: At least 14 days prior to the expected start of any project-related site mobilization, the project owner shall provide the CPM, USFWS, and CDFG with the results of preconstruction surveys and identify any mitigation measures to be employed as provided in these conditions of certification.

Avoid Harassment or Harm to San Joaquin Kit Foxes

BIO-9 The project owner shall manage the construction site and related facilities in a manner to avoid or minimize impacts to the San Joaquin kit fox by following the incidental take minimization measures developed by SJCOG for TPP (SJCOG 2002), which requires implementing the USFWS 1999 guidelines entitled Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 1999).

Measures provided by SJCOG include but are not limited to the following:

1. During construction, all pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at the construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before using or moving the equipment or materials. If a kit fox is discovered, then the materials or equipment shall not be moved until consultation with the US Fish and Wildlife Service. If necessary, under the direct supervision of the SJCOG biologist, the equipment may be moved once to remove it from the path of construction activity until the fox escapes.
2. During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.
3. After construction, SJCOG shall notify the USFWS and CDFG within 24 hours of receiving a report of incidental take occurring at the project site after project construction. SJCOG, the project proponent, and the permitting agencies shall meet within two weeks to discuss adaptive management measures that may be undertaken to reduce or eliminate future incidents of incidental take.

Verification: All incidental take minimization measures provided by the SJCOG consultant shall be included in the BRMIMP. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist.

Within 30 days after completion of project construction, the project owner shall provide to the CPM and SJCOG, for review and approval, a written construction termination report identifying how all biological resource-related conservation measures were completed.

Burrowing Owl Impact Avoidance and Minimization Measures

BIO-10 The project owner shall manage the construction site and related facilities in a manner to avoid or minimize impacts to the burrowing owl by following the SJCOG incidental take minimization measures developed for the TPP project in 2002 (SJCOG 2002), specifically conditions 3 and 6, which are provided below.

1. During the nonbreeding season (September 1 through January 31), burrowing owls found during preconstruction surveys to be occupying the project site shall be evicted by passive relocation as described in the California Department of Fish and Game Staff Report on Burrowing Owls (CDFG 1995).
2. During the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a 75-meter protective buffer until and unless the TAC, with the concurrence of the permitting agencies' representatives on the TAC, or unless a qualified biologist approved by the permitting

agencies, verifies through noninvasive means that either the birds have not begun egg laying or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once fledglings are capable of independent survival, the burrow can be destroyed.

3. During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.

Verification: The project owner shall submit a report to SJCOG and the CPM at least 30 days prior to the start of site mobilization that describes survey methods, results, and conservation or mitigation measures. If owl relocation is necessary, the project owner shall coordinate with SJCOG on the number of new burrows, their locations, and how any created burrows and compensation land shall be protected for the life of the project in a burrowing owl mitigation and monitoring plan.

Within 30 days after completion of owl relocation and monitoring and the start of ground disturbance, the project owner shall provide written verification to the SJCOG and CPM that burrowing owl mitigation measures have been completed.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
CULTURAL RESOURCES CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

CUL-1 Prior to the start of ground disturbance (includes “preconstruction site mobilization;” “construction ground disturbance;” and “construction grading, boring, and trenching,” as defined in the General Conditions for this project), the project owner shall obtain the services of a Cultural Resources Specialist (CRS), and one or more alternate CRSs, if alternates are needed. The CRS shall manage all consultation, monitoring, mitigation, curation, and reporting activities required in accordance with the Conditions of Certification (Conditions). The CRS may elect to obtain the services of Cultural Resource Monitors (CRMs) and other technical specialists, if needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS makes recommendations regarding the eligibility to the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner. No ground disturbance shall occur prior to CPM approval of the CRS, unless specifically approved by the CPM. Approval of a CRS may be denied or revoked for non-compliance on this or other projects.

CULTURAL RESOURCES SPECIALIST

The resumes for the CRS and alternate(s) shall include information demonstrating to the satisfaction of the CPM that their training and background conform to the U.S. Secretary of Interior Guidelines, as published in the Code of Federal Regulations, 36 CFR Part 61.

In addition, the CRS shall have the following qualifications:

1. The CRS’s qualifications shall be appropriate to the needs of the project and shall include a background in anthropology, archaeology, history, architectural history, or a related field; and
2. At least three years of archaeological or historical, as appropriate (per nature of predominant cultural resources on the project site), resources mitigation and field experience in California; and
3. At least one year of experience in a decision-making capacity on cultural resources projects in California and the appropriate training and experience to knowledgably make recommendations regarding the significance of cultural resources.

The resume of the CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS on referenced projects, and demonstrate that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, grading, construction, and operation.

CULTURAL RESOURCES MONITORS

CRMs shall have the following qualifications:

1. A BS or BA degree in anthropology, archaeology, historical archaeology or a related field and one year experience monitoring in California; or
2. An AS or AA degree in anthropology, archaeology, historical archaeology or a related field, and four years experience monitoring in California; or
3. Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology or a related field, and two years of monitoring experience in California.

CULTURAL RESOURCES TECHNICAL SPECIALISTS

The resume(s) of any additional technical specialists, e.g., historical archaeologist, historian, architectural historian, and/or physical anthropologist, shall be submitted to the CPM for approval.

Verification: At least 45 days prior to the start of ground disturbance, the project owner shall submit the resume for the CRS, and alternate(s), if desired, to the CPM for review and approval.

At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval. At the same time, the project owner shall also provide to the approved new CRS the AFC and all cultural documents, field notes, photographs, and other cultural materials generated by the project. If there is no alternate CRS in place to conduct the duties of the CRS, a previously approved monitor may serve in place of a CRS so that construction may continue up to a maximum of three days without a CRS. If cultural resources are discovered, then construction will remain halted until there is a CRS or alternate CRS to make a recommendation regarding significance.

At least 20 days prior to ground disturbance, the CRS shall provide a letter naming anticipated CRMs for the project and stating that the identified CRMs meet the minimum qualifications for cultural resource monitoring required by this Condition.

At least 5 days prior to additional CRMs beginning on-site duties during the project, the CRS shall provide additional letters to the CPM identifying the CRMs and attesting to their qualifications.

At least 10 days prior to beginning tasks, the resume(s) of any additional technical specialists shall be provided to the CPM for review and approval.

At least 10 days prior to the start of ground disturbance, the project owner shall confirm in writing to the CPM that the approved CRS will be available for onsite work and is prepared to implement the cultural resources Conditions.

CUL-2 Prior to the start of ground disturbance, if the CRS has not previously worked on the project, the project owner shall provide the CRS with copies of the AFC, data responses, and confidential cultural resources reports for the project. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprint of the power plant and all linear facilities. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:2000 or 1" = 200') for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. No ground disturbance shall occur prior to CPM approval of maps and drawings, unless specifically approved by the CPM.

If construction of the project would proceed in phases, maps and drawings, not previously provided, shall be submitted prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

Weekly, until ground disturbance is completed, the project construction manager shall provide to the CRS and CPM a schedule of project activities for the following week, including the identification of area(s) where ground disturbance will occur during that week.

The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases.

Verification: At least 40 days prior to the start of ground disturbance, the project owner shall provide the AFC, data responses, and confidential cultural resource documents to the CRS, if needed, and the subject maps and drawings to the CRS and CPM. The CPM will review submittals in consultation with the CRS and approve maps and drawings suitable for cultural resources planning activities.

At least 15 days prior to the start of ground disturbance, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS and CPM.

At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS and CPM.

Weekly, during ground disturbance, a current schedule of anticipated project activity shall be provided to the CRS and CPM by letter, email, or fax.

Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide written notice of the changes to the CRS and CPM.

CUL-3

Prior to the start of ground disturbance, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by or under the direction of the CRS, to the CPM for review and approval. The CPM shall provide the project owner with a draft model CRMMP to adapt for project use. The author's name shall appear on the title page of the CRMMP. The CRMMP shall identify general and specific measures to minimize potential impacts to sensitive cultural resources. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate CRS, each monitor, and the project owner's on-site construction manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless specifically approved by the CPM.

The CRMMP shall include, but not be limited to, the following elements and measures:

1. The following statement included in the Introduction: "Any discussion, summary, or paraphrasing of the Conditions in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The Conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the Conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A."
2. A proposed general research design that includes a discussion of archaeological research questions and testable hypotheses specifically applicable to the local prehistory and history of the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. The research design shall specify that the preferred treatment strategy for any buried archaeological deposits is avoidance. A mitigation plan shall be prepared for any CRHR-eligible resource (as determined by the CPM), impacts to which cannot be avoided. A prescriptive treatment plan may be included in the CRMMP for limited data types.
3. Specification of the implementation sequence and the estimated time frames needed to accomplish all project-related tasks during the ground disturbance and post-ground-disturbance analysis phases of the project.
4. Identification of the person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team.

5. A description of the manner in which Native American observers or monitors will be included, the procedures to be used to select them, and their role and responsibilities.
6. A description of all impact avoidance measures (such as flagging or fencing), to prohibit or otherwise restrict access to sensitive resource areas that may be found during construction and/or operation and may subsequently need to be avoided, and identification of the areas where these measures are to be implemented. The description shall address how these measures would be implemented and how long they would be needed to protect the resources from project-related effects.
7. A statement that all cultural resources encountered shall be recorded on a Department of Parks and Recreation (DPR) Form 523 and mapped and photographed. In addition, all archaeological materials collected as a result of the archaeological investigations (survey, testing, and data recovery) shall be curated in accordance with the State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository or museum.
8. A statement that the project owner will pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project. The project owner shall identify three possible curation facilities that could accept cultural resources materials resulting from project activities.
9. A statement that the CRS has access to equipment and supplies necessary for site mapping, photographing, and recovering any cultural resources materials that are encountered during ground disturbance and that cannot be treated prescriptively.
10. A description of the contents and format of the Cultural Resource Report (CRR), which shall be prepared according to ARMR Guidelines.

Verification: Upon approval of the CRS proposed by the project owner, the CPM will provide to the CRS an electronic copy of the draft model CRMMP.

At least 30 days prior to the start of ground disturbance, the project owner shall submit the CRMMP to the CPM for review and approval.

At least 30 days prior to the start of ground disturbance, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials collected as a result of the archaeological investigations (survey, testing, and data recovery).

CUL-4 The project owner shall submit the Cultural Resources Report (CRR) to the CPM for approval. The CRR shall be written by or under the direction of the CRS and shall be provided in the ARMR format. The CRR shall

report on all field activities related to the implementation of the CRMMP, including dates, times and locations, findings, samplings, and analyses. All survey reports, Department of Parks and Recreation (DPR) 523 forms, and any additional research reports not previously submitted to the California Historic Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as an appendix to the CRR.

If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM for review and approval on the same day as the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification: Within 90 days after completion of ground disturbance (including landscaping), the project owner shall submit the CRR to the CPM for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.

Within 90 days after completion of ground disturbance (including landscaping), if cultural materials requiring curation were collected, the project owner shall provide to the CPM a copy of an agreement with, or other written commitment from, a curation facility that meets the standards stated in the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, to accept cultural materials from this project. Any agreements concerning curation will be retained and available for audit for the life of the project.

Within 10 days after CPM approval of the CRR, the project owner shall provide documentation to the CPM that copies of the CRR have been provided to the SHPO, the CHRIS, the curating institution, if archaeological materials were collected, and to the Chairperson(s) of any Native American groups requesting copies of project-related reports.

Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.

CUL-5 Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all new workers within their first week of employment at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas. The training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance, including landscaping, is completed.

The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Samples or visuals of artifacts that might be found in the project vicinity;
3. A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed;
4. A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits;
5. Instruction that the CRS, alternate CRS, and CRMs have the authority to halt construction in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;
6. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery and shall contact their supervisor and the CRS or CRM, and that redirection of work would be determined by the construction supervisor and the CRS;
7. An informational brochure that identifies reporting procedures in the event of a discovery;
8. An acknowledgement form signed by each worker indicating that they have received the training; and
9. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

No ground disturbance shall occur prior to implementation of the WEAP program, unless such activities are specifically approved by the CPM.

Verification: At least 30 days prior to the beginning of ground disturbance, the CRS shall provide the training program draft text and graphics and the informational brochure to the CPM for review and approval.

At least 15 days prior to the beginning of ground disturbance, the CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP-trained worker to sign.

Monthly, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of persons who have completed the training in the prior month and a running total of all persons who have completed training to date.

CUL-6 The project owner shall ensure that the CRS, alternate CRS, or CRMs monitor full time all ground disturbance deeper than three feet associated with the excavation of the new stormwater retention pond and excavation of the foundation holes for the new support structures for the transmission lines connecting the project's switchyard to the Tesla-Manteca 115-kV

transmission line, to ensure there are no impacts to undiscovered archaeological resources.

If, during other ground disturbance at the project site and at laydown areas, roads, and other ancillary areas, any buried archaeological materials, as defined in the CRMMP, are discovered, the discovery shall immediately be reported to the construction supervisor, who shall halt or redirect ground disturbance in an area around the discovery sufficiently large to ensure that the resource is protected from further impacts, and who shall notify the project owner of the discovery. The project owner shall notify the CRS and the CPM. The CRS shall treat the discovery as provided in CUL-7.

Once a discovery of buried archaeological materials has been made, the CRS shall recommend to the CPM, with justifications, whether or not routine archaeological monitoring of ground disturbance should be initiated and where the routine monitoring should be conducted. If the CRS recommends monitoring, and the CPM approves it, the project owner shall ensure that the CRS, alternate CRS, or CRMs monitor full time all ground disturbance in the locations identified by the CRS, to ensure there are no impacts to undiscovered archaeological resources.

Full-time archaeological monitoring for this project shall be the archaeological monitoring of all ground-disturbing activities in the locations identified by the CRS for as long as the activities are ongoing. Where excavation equipment is actively removing dirt and hauling the excavated material farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no further than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material.

In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered. On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are

no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

A Native American monitor shall be obtained to monitor ground disturbance along with the CRS, the alternate CRS, or the CRMs in areas where Native American artifacts were discovered. Contact lists of interested Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow ground disturbance to proceed without a Native American monitor.

Verification: At least 30 days prior to the start of ground disturbance, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log.

Monthly, while monitoring is on-going, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.

At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.

Daily, as long as no cultural resources are found, the CRS shall provide a statement that “no cultural resources over 50 years of age were discovered” to the CPM as an e-mail or in some other form acceptable to the CPM.

At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS’s justification for reducing or ending daily reporting.

No later than 30 days following the discovery of any Native American cultural materials, the project owner shall submit to the CPM copies of the information transmittal letters sent to the Chairpersons of the Native American tribes or groups who requested the information. Additionally, the project owner shall submit to the CPM copies of letters of transmittal for all subsequent responses to Native American requests for notification, consultation, and reports and records.

Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner’s transmittals of information.

CUL-7 Prior to the start of ground disturbance, to provide for the possibility that a cultural resources discovery could be made while CRS-recommended and CPM-approved monitoring is on-going, the project owner shall grant authority to halt project-related ground disturbance to the CRS, alternate CRS, and the CRMs. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event cultural resources over 50 years of age or, if younger, determined exceptionally significant by the CPM, are found, or impacts to such resources can be anticipated, ground disturbance shall be halted or redirected in an area around the discovery sufficiently large to ensure that the resource is protected from further impacts. CRS-recommended monitoring and daily reporting, as provided in **CUL-6**, shall continue during the project’s ground-disturbing activities elsewhere.

The halting or redirection of ground disturbance shall remain in effect until the CRS has visited the discovery, and all of the following have occurred:

1. The CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), informed of the action taken (i.e., work stoppage or redirection), provided a recommendation of CRHR eligibility, and provided recommendations for mitigation of any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.

2. If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.
3. The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary" form shall include a recommendation on the CRHR eligibility of the discovery. The project owner shall submit completed forms to the CPM.
4. The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, and CRMs have the authority to halt project-related ground disturbance in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.

Within 48 hours of the discovery of an archaeological or ethnographic resource, the project owner shall ensure that the CRS notifies all Native American groups that expressed a desire to be notified in the event of such a discovery.

Unless the find can be treated prescriptively, as specified in the CRMMP, completed DPR 523 forms for resources newly discovered during ground disturbance shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural resource.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
FACILITY DESIGN CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

GEN-1

The project owner shall design, construct, and inspect the project in accordance with the 2007 California Building Standards Code (CBSC), also known as Title 24, California Code of Regulations, which encompasses the California Building Code (CBC), California Building Standards Administrative Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, California Code for Building Conservation, California Reference Standards Code, and all other applicable engineering LORS in effect at the time initial design plans are submitted to the Chief Building Official (CBO) for review and approval. The CBSC in effect is the edition that has been adopted by the California Building Standards Commission and published at least 180 days prior to the time initial design plans are submitted to the CBO. The project owner shall ensure that all the provisions of the above applicable codes are enforced during the construction, addition, alteration, moving, demolition, repair, or maintenance of the completed facility. (See the TRANSMISSION SYSTEM ENGINEERING section of this Decision for Conditions of Certification for all transmission facilities [lines, switchyards, switching stations, and substations].)

In the event that the initial engineering designs are submitted to the CBO after the successor to the 2007 CBSC goes into effect, the 2007 CBSC provisions shall be replaced with the applicable successor provisions. Where, in any specific case, different sections of the code specify different materials, methods of construction, or requirements other than the general requirements or those in effect at the time of project certification, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

The project owner shall ensure that all contracts with contractors, subcontractors, and suppliers clearly specify that all work performed and materials supplied comply with the codes and requirements listed above.

Verification: Within 30 days following receipt of the certificate of occupancy, the project owner shall submit a statement of verification to the Compliance Project Manager (CPM), signed by the responsible design engineer, attesting that all designs, construction, installation, and inspection requirements of the applicable LORS and the

Energy Commission's Decision have been met in the area of facility design. The project owner shall provide a copy of the certificate of occupancy to the CPM within 30 days of receipt from the CBO.

Once the certificate of occupancy has been issued, the project owner shall inform the CPM at least 30 days prior to any construction, addition, alteration, moving, demolition, repair, or maintenance being performed on any portion(s) of the completed facility that requires CBO approval for compliance with the codes identified in **GEN-1**. The CPM shall then determine if the CBO needs to approve the work.

GEN-2 Before submitting the initial engineering designs for CBO review, the project owner shall furnish the CPM and the CBO with a schedule of facility design submittals, master drawings, and master specifications lists. The schedule shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM upon request.

Verification: At least 60 days prior to the start of rough grading (or within the project owner and CBO approved alternative time frame), the project owner shall submit the schedule of facility design, master drawing list, and master specifications list of documents to the CBO and CPM prior to submitting the initial engineering designs to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in Facility Design Table 1 below. Major structures and equipment shall be added to or deleted from the table only with CPM approval.

The project owner shall provide schedule updates in the monthly compliance report.

**Facility Design Table 1
Major Structures and Equipment List**

Equipment/System	Quantity (Plant)
Steam Turbine (ST) Foundation and Connections	1
ST Generator Foundation and Connections	1
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	2
HRSG Stack Structure, Foundation and Connections	2
SCR Skid Structure, Foundation and Connections	2
Duct Burner Skid Structure, Foundation and Connections	2
Boiler Feed Pump Foundation and Connections	4
Boiler Blowdown Tank Foundation and Connections	2
CEMS Structure, Foundation and Connections	2
Generator Rotor Removal	1
ST Lube Oil Reservoir Foundation and Connections	1

Equipment/System	Quantity (Plant)
Gland Condenser Foundation and Connections	1
ST Step-up Transformer Foundation and Connections	1
ST Auxiliary Transformer Foundation and Connections	1
Water Treatment Building Structure, Foundation and Connections	1
Demineralized Water Tank Foundation and Connections	1
Steam Duct Structure, Foundation and Connections	1
Air-Cooled Condenser Structure, Foundation and Connections	1
Auxiliary Boiler & Stack Structure, Foundation and Connections	1
D.I. Trailer Structure, Foundation and Connections	2
Service/Fire Water Storage Tank Foundation and Connections	1
Fire Water Storage Tank Foundation and Connections	1
ST Closed Cycle Cooling Unit Structure, Foundation and Connections	1
Storm Water Retention Basin Relocation	1
Drainage Systems (including sanitary drain and waste)	1 Lot
High Pressure and Large Diameter Piping and Pipe Racks	1 Lot
HVAC and Refrigeration Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot
Building Energy Conservation Systems	1 Lot
Switchyard, Buses, and Towers	1 Lot
Electrical Duct Banks and Breakers	1 Lot

GEN-3 The project owner shall make payments to the CBO for design review, plan checks, and construction inspections based on a reasonable fee schedule negotiated between the project owner and the CBO. These fees shall be consistent with the fees listed in the 2007 CBC, adjusted for inflation and other appropriate adjustments; based on the value of the facilities reviewed; based on hourly rates; or as otherwise agreed upon by the project owner and the CBO.

Verification: The project owner shall make the required payments to the CBO in accordance with the agreement between the project owner and the CBO. The project owner shall send a copy of the CBO's receipt of payment to the CPM in the next monthly compliance report indicating that applicable fees have been paid.

GEN-4 Prior to the start of rough grading, the project owner shall assign a California- registered architect or structural/civil engineer as the resident engineer (RE) in charge of the project. (See the TRANSMISSION SYSTEM ENGINEERING section of this Decision for Conditions of

Certification for all transmission facilities [lines, switchyards, switching stations, and substations].)

The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project, respectively. A project may be divided into parts, provided that each part is clearly defined as a distinct unit. Separate assignments of general responsibility may be made for each designated part.

The RE shall:

1. Monitor progress of construction work requiring CBO design review and inspection to ensure compliance with LORS;
2. Ensure that construction of all facilities subject to CBO design review and inspection conforms in every material respect to applicable LORS, these Conditions of Certification, approved plans, and specifications;
3. Prepare documents to initiate changes in approved drawings and specifications when directed by the project owner or as required by the conditions of the project;
4. Be responsible for providing project inspectors and testing agencies with complete and up-to-date sets of stamped drawings, plans, specifications, and other required documents;
5. Be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, contractor, and other engineers who have been delegated responsibility for portions of the project; and
6. Be responsible for notifying the CBO of corrective action and the disposition of items noted on laboratory reports or other tests when they do not conform to approved plans and specifications.

The RE shall have the authority to halt construction and require changes or remedial work if the work does not meet requirements.

If the RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

Verification: At least 30 days prior to the start of rough grading (or within the project owner and CBO approved alternative time frame), the project owner shall submit the resume and registration number of the RE and any other delegated engineers assigned to the project to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approvals of the RE and other delegated engineer(s) within five days of the approval.

If the RE or the delegated engineer(s) is/are subsequently reassigned or replaced, the project owner shall have five days to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-5 Prior to the start of rough grading, the project owner shall assign at least one of each of the following California-registered engineers to the project: a civil engineer; a soils, geotechnical, or civil engineer experienced and knowledgeable in the practice of soils engineering; and an engineering geologist.

Prior to the start of construction, the project owner shall assign at least one of each of the following California-registered engineers to the project: a design engineer who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; a mechanical engineer; and an electrical engineer. (California Business and Professions Code section 6704 et seq., and sections 6730, 6731 and 6736 require state registration to practice as a civil engineer or structural engineer in California). (See the TRANSMISSION SYSTEM ENGINEERING section of this Decision for Conditions of Certification for all transmission facilities [lines, switchyards, switching stations, and substations].)

The project owner shall submit the names, qualifications, and registration numbers of all responsible engineers assigned to the project to the CBO for review and approval. If any designated responsible engineer is subsequently reassigned or replaced, the project owner shall submit the name, qualifications, and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers as long as each engineer is responsible for a particular segment (e.g., proposed earthwork, civil structures, power plant structures, equipment support) of the project. No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California-registered electrical engineer.

A. The civil engineer shall:

1. Review the foundation investigations, geotechnical, and/or soils reports prepared by the soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils engineering;
2. Design (or be responsible for the design of), stamp, and sign all plans, calculations, and specifications for proposed site work, civil works, and related facilities requiring design

review and inspection by the CBO. At a minimum, this includes grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads, and sanitary sewer systems; and

3. Provide consultation to the RE during the construction phase of the project and recommend changes to the construction procedures and in the design of the civil works facilities.
- B. The soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils engineering shall:
1. Review all the engineering geology reports;
 2. Prepare the foundation investigations, geotechnical, and/or soils reports containing field exploration reports, laboratory tests, and engineering analysis detailing the nature and extent of the soils that could be susceptible to liquefaction, rapid settlement, or collapse when saturated under load;
 3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with requirements set forth in the 2007 CBC. Depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both; and
 4. Recommend field changes to the civil engineer and RE.

This engineer shall be authorized to halt earthwork and require changes if site conditions are unsafe or do not conform to the predicted conditions used as the basis for design of earthwork or foundations.

- C. The engineering geologist shall:
1. Review all the engineering geology reports and prepare a final soils grading report; and
 2. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 2007 CBC. Depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both.
- D. The design engineer shall:
1. Be directly responsible for the design of the proposed structures and equipment supports;
 2. Provide consultation to the RE during design and construction of the project;

3. Monitor construction progress to ensure compliance with engineering LORS;
 4. Evaluate and recommend necessary changes in design; and
 5. Prepare and sign all major building plans, specifications, and calculations.
- E. The mechanical engineer shall be responsible for, sign, and stamp a statement with each mechanical submittal to the CBO stating that the proposed final design plans, specifications, and calculations conform to all mechanical engineering design requirements set forth in the Energy Commission's Decision and Conditions of Certification.
- F. The electrical engineer shall:
1. Be responsible for the electrical design of the project; and
 2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days prior to the start of rough grading (or within the project owner and CBO approved alternative time frame), the project owner shall submit resumes and registration numbers of the responsible civil engineer, soils (geotechnical) engineer, and engineering geologist assigned to the project to the CBO for review and approval.

At least 30 days prior to the start of construction (or within the project owner and CBO approved alternative time frame), the project owner shall submit resumes and registration numbers of the responsible design engineer, mechanical engineer, and electrical engineer assigned to the project to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approvals of the responsible engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the resume and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-6 Prior to the start of an activity requiring special inspection(s), the project owner shall assign qualified and certified special inspector(s) to the project who shall be responsible for the special inspections required. (See the TRANSMISSION SYSTEM ENGINEERING section of this Decision for Conditions of Certification for all transmission facilities [lines, switchyards, switching stations, and substations].)

A weld inspector, certified by the American Welding Society (AWS) and/or American Society of Mechanical Engineers (ASME), shall inspect welding performed on-site that requires special inspection (including structural, piping, tanks, and pressure vessels).

The special inspector shall:

1. Be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous inspection;
2. Observe the work assigned for conformance with the approved design drawings and specifications;
3. Furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction. If uncorrected, discrepancies shall be brought to the immediate attention of the CBO and the CPM for corrective action; and
4. Submit a final signed report to the RE, CBO, and CPM stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans, specifications, and other provisions of the applicable edition of the CBC or other applicable standard.

Verification: At least 15 days prior to the start of an activity requiring special inspection (or within the project owner and CBO approved alternative time frame), the project owner shall submit the name(s) and qualifications of the certified weld inspector(s) or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth in **GEN-6** to the CBO for review and approval, with a copy to the CPM. The project owner shall also submit a copy of the CBO's approval of the qualifications of all special inspectors to the CPM in the next monthly compliance report.

If a special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.

GEN-7 If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and identify the required corrective actions. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this Condition of Certification and, if appropriate, applicable sections of the CBC and/or other LORS.

Verification: The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next monthly compliance report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action necessary to obtain the CBO's approval.

GEN-8 The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project owner shall request that the CBO inspect the completed structure and review the submitted documents. The project owner shall notify the CPM

after obtaining the CBO's final approval. The project owner shall retain one set of approved engineering plans, specifications, and calculations (including all approved changes) at the project site or another accessible location during the operating life of the project. Electronic copies of the approved plans, specifications, calculations, and marked-up as-builts shall be provided to the CBO for retention by the CPM.

Verification: Within 15 days of the completion of any work, the project owner shall submit:

1. a written notice that the completed work is ready for final inspection; and
2. a signed statement that the work conforms to the final approved plans to the CBO, with a copy to the CPM, in the next monthly compliance report.

After storing the final approved engineering plans, specifications, and calculations required by **GEN-8**, the project owner shall submit a letter to the CPM stating that the above documents have been stored and identifying the storage location of those documents.

Within 90 days of the completion of construction the project owner, at its own expense, shall provide three sets of electronic copies of the above documents to the CBO. These copies shall be provided in the form of "read only" files, in Adobe.pdf 6.0 format with restricted (password-protected) printing privileges, on archive quality compact discs.

CIVIL-1 The project owner shall submit the following to the CBO for review and approval:

1. Design of the proposed drainage structures and grading plan;
2. Erosion and sedimentation control plan;
3. Related calculations and specifications, signed and stamped by the responsible civil engineer; and
4. Soils, geotechnical, and/or foundation investigations reports required by the 2007 CBC.

Verification: At least 15 days prior to the start of site grading (or within the project owner and CBO approved alternative time frame), the project owner shall submit the documents required by **CIVIL-1** to the CBO for design review and approval.

The project owner shall submit a written statement certifying that the documents have been approved by the CBO in the next monthly compliance report following the CBO's approval.

CIVIL-2 The resident engineer shall have the authority to stop all earthwork and construction in the affected area(s) in the event the responsible soils engineer, geotechnical engineer, or the civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications, and calculations to the CBO based on the newly identified soil or geologic conditions. The project owner shall obtain

CBO approval before resuming earthwork and construction in the affected area.

Verification: The project owner shall notify the CPM within 24 hours of earthwork and construction stoppage as a result of unforeseen adverse geologic/soil conditions. The project owner shall provide a copy of the CBO's approval to the CPM within 24 hours of the CBO's approval to resume earthwork and construction in the affected areas.

CIVIL-3 The project owner shall perform inspections in accordance with the 2007 CBC and other applicable LORS. All plant site-grading operations for which a grading plan is required shall be subject to inspection by the CBO.

If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report, with copies to the CBO and the CPM, detailing all discrepancies, non-compliance items, and the proposed corrective action.

Verification: Within five days of the discovery of any discrepancies, the resident engineer shall transmit a non-conformance report (NCR) and the proposed corrective action to the CBO and the CPM for review and approval. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM.

A list of NCRs for the reporting month shall also be included in the following monthly compliance report.

CIVIL-4 After completion of finished grading and the erosion and sedimentation control and drainage work, the project owner shall obtain the CBO's approval of the final grading plans (including final changes) for the erosion and sedimentation control work. The civil engineer shall ensure that the work within his/her area of responsibility was done in accordance with the final approved plans.

Verification: Within 30 days of the completion of the erosion and sediment control mitigation and drainage work (or within the project owner and CBO approved alternative time frame), the project owner shall submit the final grading plans (including final changes) to the CBO for review and approval, along with the responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans and that the facilities are adequate for their intended purposes. A copy of the transmittal letter shall be sent concurrently to the CPM.

The project owner shall submit a copy of the CBO's approval to the CPM in the next monthly compliance report.

STRUC-1 Prior to the start of any increment of construction for any major structure or component listed in **GEN-2**, Facility Design Table 1, the project owner shall submit the proposed lateral force procedures for project structures

and the applicable designs, plans, and drawings for project structures to the CBO for design review and approval. Proposed lateral force procedures, designs, plans, and drawings shall be provided for the following items (from Facility Design Table 1 above):

1. Major project structures;
2. Major foundations, equipment supports, and anchorage; and
3. Large field-fabricated tanks.

Construction of any structure or component shall not begin until the CBO has approved the lateral force procedures to be employed in designing that structure or component.

The project owner shall:

1. Obtain approval of lateral force procedures proposed for project structures from the CBO;
2. Obtain approval from the CBO for the final design plans, specifications, calculations, soils reports, and applicable quality control procedures. If there are conflicting requirements, the more stringent shall govern (e.g. highest loads or lowest allowable stresses). All plans, calculations, and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations, and specifications;
3. Submit the required number of copies of the structural plans, specifications, calculations, and other required documents of the designated major structures to the CBO prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation;
4. Ensure that the final plans, calculations, and specifications clearly reflect the inclusion of approved criteria, assumptions, and methods used to develop the design. The final designs, plans, calculations, and specifications shall be signed and stamped by the responsible design engineer; and
5. Submit the responsible design engineer's signed statement to the CBO, certifying that the final design plans conform to applicable LORS.

Verification: At least 60 days prior to the start of any increment of construction (or within the project owner and CBO approved alternative time frame) for any structure or component listed in **GEN-2**, Facility Design Table 1, the project owner shall submit the above final design plans, specifications, and calculations to the CBO, with a copy of the transmittal letter to the CPM.

The project owner shall submit a copy of the statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and comply with

the requirements set forth in applicable engineering LORS to the CPM in the next monthly compliance report.

STRUC-2 The project owner shall submit the required number of sets of the following documents to the CBO, related to work that has undergone CBO design review and approval:

1. Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);
2. Concrete pour sign-off sheets;
3. Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);
4. Field weld inspection reports including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and
5. Reports covering other structural activities requiring special inspections in accordance with the 2007 CBC or other applicable LORS.

Verification: The project owner shall, within five days, prepare and submit an NCR to the CBO describing the nature of discrepancies discovered in any of the data required in **STRUC-2** and the proposed corrective action, with a copy of the transmittal letter to the CPM. The NCR shall reference the Condition(s) of Certification and the applicable CBC chapter and section.

The project owner shall transmit a copy of the CBO's approval or disapproval of the proposed corrective action to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action to obtain the CBO's approval. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.

STRUC-3 The project owner shall submit design changes to the final plans required by the 2007 CBC to the CBO, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes and shall give to the CBO prior notice of the intended filing.

Verification: The project owner shall notify the CBO of the intended filing of design changes on a schedule acceptable to the CBO, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM.

The project owner shall notify the CPM, via the monthly compliance report, when the CBO has approved the revised plans.

STRUC-4 Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in the 2007 CBC shall, at a minimum, be designed to comply with the applicable chapter of the code.

Verification: At least 30 days prior to the start of installation of tanks or vessels containing quantities of toxic or hazardous materials exceeding amounts specified in the 2007 CBC (or within the project owner and CBO approved alternate time frame), the project owner shall submit final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification, to the CBO for design review and approval.

The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following monthly compliance report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the monthly compliance report following completion of any inspection.

MECH-1 The project owner shall submit the proposed final design, specifications, and calculations for each plant major piping and plumbing system listed in GEN-2, Facility Design Table 1 for CBO design review and approval, along with applicable quality assurance/quality control (QA/QC) procedures. Physical layout drawings and drawings not related to code compliance and life safety need not be submitted. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of that construction.

The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major piping and plumbing systems, subject to CBO design review and approval, and submit a signed statement to the CBO when the proposed piping and plumbing systems have been designed, fabricated, and installed in accordance with all of the applicable laws, ordinances, regulations, and industry standards.

These industry LORS may include, but are not limited to:

- American National Standards Institute (ANSI) B31.1 (Power Piping Code);
- ANSI B31.2 (Fuel Gas Piping Code);
- ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
- ANSI B31.8 (Gas Transmission and Distribution Piping Code);
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);

- Title 24, California Code of Regulations, Part 2 (California Building Code); and
- San Joaquin County codes.

The CBO may deputize inspectors to carry out the functions of the applicable code enforcement agency.

Verification: At least 30 days prior to the start of any increment of major piping or plumbing construction listed in **GEN-2**, Facility Design Table 1 (or within the project owner and CBO approved alternative time frame), the project owner shall submit the final plans, specifications, and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with applicable LORS, to the CBO for design review and approval and shall send the CPM a copy of the transmittal letter in the next monthly compliance report.

The project owner shall provide a copy of the transmittal letter conveying the CBO's inspection approvals to the CPM in the monthly compliance report following completion of any inspection.

MECH-2 For all pressure vessels installed in the plant, the project owner shall submit, prior to operation, the code certification papers and other documents required by applicable LORS to the CBO and California Occupational Safety and Health Administration (Cal/OSHA). Upon completion of the installation of any pressure vessel, the project owner shall request inspection of that installation by the CBO and/or Cal/OSHA.

The project owner shall:

1. Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated, and installed in accordance with the appropriate section of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and
2. Have the responsible design engineer submit a statement to the CBO certifying that the proposed final design plans, specifications, and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.

Verification: At least 30 days prior to the start of on-site fabrication or installation of any pressure vessel (or within the project owner and CBO approved alternative time frame), the project owner shall submit the documents required in **MECH-2**, including a copy of the signed and stamped engineer's certification, to the CBO for design review and approval, with a copy of the transmittal letter to the CPM.

The project owner shall also submit a copy of the transmittal letter conveying the CBO's and/or Cal/OSHA inspection approvals to the CPM in the monthly compliance report following completion of any inspection.

MECH-3

The project owner shall submit the design plans, specifications, calculations, and quality control procedures for any heating, ventilating, air conditioning (HVAC), or refrigeration system to the CBO for design review and approval. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.

The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of that construction. The final plans, specifications, and calculations shall include approved criteria, assumptions, and methods used to develop the design. In addition, the responsible mechanical engineer shall sign and stamp all plans, drawings, and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications, and calculations conform with the applicable LORS.

Verification: At least 30 days prior to the start of construction of any HVAC or refrigeration system (or within the project owner and CBO approved alternative time frame), the project owner shall submit the required HVAC and refrigeration calculations, plans, and specifications, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the CBC and other applicable codes to the CBO, with a copy of the transmittal letter to the CPM.

ELEC-1

Prior to the start of any increment of electrical construction for all electrical equipment and systems 480 Volts or higher (see a representative list, below), with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit the proposed final design, specifications, and calculations to the CBO for design review and approval. Upon approval, the above-listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of the project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. (See the TRANSMISSION SYSTEM ENGINEERING section of this Decision for Conditions of Certification for all transmission facilities [lines, switchyards, switching stations, and substations].)

A. Final plant design plans shall include:

1. One-line diagrams for the 13.8 kV, 4.16 kV, and 480 V systems; and
2. System grounding drawings.

B. Final plant calculations must establish:

1. Short-circuit ratings of plant equipment;
2. Ampacity of feeder cables;

3. Voltage drop in feeder cables;
 4. System grounding requirements;
 5. Coordination study calculations for fuses, circuit breakers, and protective relay settings for the 13.8 kV, 4.16 kV, and 480 V systems;
 6. System grounding requirements; and
 7. Lighting energy calculations.
- C. The following activities shall be reported to the CPM in the monthly compliance report:
1. Receipt or delay of major electrical equipment;
 2. Testing or energization of major electrical equipment; and
 3. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission Decision and Conditions of Certification.

Verification: At least 30 days prior to the start of each increment of electrical construction (or within the project owner and CBO approved alternative time frame), the project owner shall submit the documents required in **ELEC-1** to the CBO for design review and approval.

The project owner shall include in this submittal a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next monthly compliance report.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
GEOLOGICAL AND PALEONTOLOGICAL RESOURCES
CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

PAL-1

The project owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its Paleontological Resource Specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the Paleontological Resources Report, the project owner shall obtain CPM approval of the replacement PRS. The project owner shall keep resumes on file for qualified Paleontological Resource Monitors (PRMs). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM.

The PRS resume shall include the names and phone numbers of references. The resume shall also demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontology (SVP) guidelines of 1995.

The experience of the PRS shall include the following:

1. Institutional affiliations, appropriate credentials, and college degree;
2. Ability to recognize and collect fossils in the field;
3. Local geological and biostratigraphic expertise;
4. Proficiency in identifying vertebrate and invertebrate fossils; and
5. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.

The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems necessary on the project. Paleontologic Resource Monitors (PRMs) shall have the equivalent of the following qualifications:

- BS or BA degree in geology or paleontology and one year of experience monitoring in California; or

- AS or AA in geology, paleontology, or biology and four years' experience monitoring in California; or
- Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in California.

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.

At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project. The letter shall state that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM. The letter shall be provided to the CPM no later than one week prior to the monitor's beginning on-site duties.

Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

PAL-2 The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plant, construction laydown areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and CPM. The site grading plan and plan and profile drawings for the utility lines will be acceptable for this purpose. The plan drawings shall show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet and 1 inch = 100 feet. If the footprint of the project or its linear facilities change, the project owner shall provide maps and drawings reflecting those changes to the PRS and CPM.

If construction of the project proceeds in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Before work commences on affected phases, the project owner shall notify the PRS and CPM of any construction phase scheduling changes.

At a minimum, the project owner shall ensure that the PRS or PRM consults weekly with the project superintendent or construction field manager to confirm area(s) to be worked the following week and until ground disturbance is completed.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings to the PRS and CPM.

If there are changes to the footprint of the project, revised maps and drawings shall be provided to the PRS and CPM at least 15 days prior to the start of ground disturbance.

If there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within five days of identifying the changes.

PAL-3 The project owner shall ensure that the PRS prepares, and the project owner submits to the CPM for review and approval, a paleontological resources monitoring and mitigation plan (PRMMP) to identify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting, and sampling activities and may be modified with CPM approval. This document shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each monitor, the project owner's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the guidelines of the Society of Vertebrate Paleontology (SVP 1995) and shall include, but not be limited to, the following:

1. Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, fieldwork, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation will be performed according to PRMMP procedures;
2. Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and the Conditions of Certification;
3. A thorough discussion of the anticipated geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;
4. An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained units;
5. A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling;

6. A discussion of procedures to be followed in the event of a significant fossil discovery, halting construction, resuming construction, and how notifications will be performed;
7. A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;
8. Procedures for inventory, preparation, and delivery for curation into a retrievable storage collection in a public repository or museum which meets the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources;
9. Identification of the institution that has agreed to receive data and fossil materials collected, requirements or specifications for materials delivered for curation and how they will be met, and the name and phone number of the contact person at the institution; and
10. A copy of the paleontological Conditions of Certification.

Verification: At least 30 days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. The PRMMP shall include an affidavit of authorship by the PRS and acceptance of the PRMMP by the project owner evidenced by a signature.

PAL-4 Prior to ground disturbance and for the duration of construction activities involving ground disturbance, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for the following workers: project managers, construction supervisors, foremen, and general workers involved with or who operate ground-disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of a CPM-approved video or in-person presentation. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. No ground disturbance shall occur prior to CPM approval of the Worker Environmental Awareness Program (WEAP) unless specifically approved by the CPM.

The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect these resources.

The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontologic sensitivity;

3. Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;
4. Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. A WEAP certification of completion form signed by each worker indicating that he/she has received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification: At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow.

At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning to use a video for interim training.

If the owner requests an alternate paleontological trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct training prior to CPM authorization.

In the monthly compliance report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (in-person or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

PAL-5 The project owner shall ensure that the PRS and PRM(s) monitor consistent with the PRMMP all construction-related grading, excavation, trenching, and augering in areas where potential fossil-bearing materials have been identified, both at the site and along any constructed linear facilities associated with the project. In the event that the PRS determines full-time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the project owner shall notify and seek the concurrence of the CPM.

The project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if paleontological resources are encountered. The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:

1. Any change of monitoring from the accepted schedule in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring and

will be included in the monthly compliance report. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.

2. The project owner shall ensure that the PRM(s) keeps a daily monitoring log of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.
3. The project owner shall ensure that the PRS notifies the CPM within 24 hours of the occurrence of any incidents of non-compliance with any paleontological resources Conditions of Certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the Conditions of Certification.
4. For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM within 24 hours, or on Monday morning in the case of a weekend event, where construction has been halted because of a paleontological find.

The project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities to be placed in the monthly compliance reports. The summary shall include the name(s) of PRS or PRM(s) active during the month; general descriptions of training and monitored construction activities; and general locations of excavations, grading, and other activities. A section of the report shall include the geologic units or subunits encountered, descriptions of samplings within each unit, and a list of identified fossils. A final section of the report shall address any issues or concerns about the project relating to paleontologic monitoring, including any incidents of non-compliance or any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the report shall include an explanation in the summary as to why monitoring was not conducted.

Verification: The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the PRMMP. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.

PAL-6 The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed including collection of fossil materials, preparation of fossil materials for analysis, analysis of fossils, identification and inventory of fossils, the preparation of fossils for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during project construction.

Verification: The project owner shall maintain in his/her compliance file copies of signed contracts or agreements with the designated PRS and other qualified research

specialists. The project owner shall maintain these files for a period of three years after project completion and approval of the CPM-approved paleontological resource report (see **PAL-7**).

The project owner shall be responsible for paying any curation fees charged by the museum for fossils collected and curated as a result of paleontological mitigation. A copy of the letter of transmittal submitting the fossils to the curating institution shall be provided to the CPM.

PAL-7 The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and be submitted to the CPM for review and approval.

The report shall include, but is not limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a statement by the PRS that project impacts to paleontological resources have been mitigated below the level of significance.

Verification: Within 90 days after completion of ground-disturbing activities, including landscaping, the project owner shall submit the PRR under confidential cover to the CPM.

PAL-8 The project owner shall include in the facility closure plan a description regarding the potential for closure of the facility to impact paleontological resources. The conditions for closure will be determined when a facility closure plan is submitted to the CPM (12 months prior to closure of the facility). If no activities are proposed that would potentially impact paleontological resources, then no mitigation measures for paleontological resource management are required in the facility closure plan.

Verification: The closure requirements for paleontological resources are to be based upon the Paleontological Resources Report and the proposed grading activities for facility closure. The project owner shall include a description of closure activities described above in the facility closure plan.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
HAZARDOUS MATERIALS MANAGEMENT CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

HAZ-1 The project owner shall not use any hazardous materials not listed in Appendix B, below, or in greater quantities or strengths than those identified by chemical name in Appendix B, below, unless approved in advance by the Compliance Project Manager (CPM).

Verification: The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility.

HAZ-2 The project owner shall provide an updated Hazardous Materials Business Plan to the San Joaquin County Environmental Health Department (SJCEHD) and the Tracy Fire Department for review and to the CPM for review and approval.

Verification: At least thirty (30) days prior to receiving any hazardous material on the site for the commencement of commissioning (“first fire”), the project owner shall provide a copy of the Hazardous Materials Business Plan to the CPM for approval.

HAZ-3 The project owner shall develop and implement a Safety Management Plan for delivery of aqueous ammonia and other liquid hazardous materials by tanker truck. The plan shall include procedures, protective equipment requirements, training, and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of incompatible hazardous materials including provisions to maintain lockout control by a power plant employee not involved in the delivery or transfer operation. This plan shall be applicable during construction, commissioning, and operation of the power plant.

Verification: At least thirty (30) days prior to the delivery of any liquid hazardous material to the facility for commissioning, the project owner shall provide a Safety Management Plan as described above to the CPM for review and approval.

HAZ-4 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 for commissioning, the project owner shall submit copies of the notification letter to supply

vendors indicating the transport vehicle specifications to the CPM for review and approval.

HAZ-5 At least thirty (30) days prior to receipt of any hazardous materials on site, the project owner shall direct all vendors delivering any hazardous material to the site to use only the route approved by the CPM. Trucks will travel on I-580 to Patterson Pass Rd. to West Schulte Rd. to the plant site or on I-205 to Mountain House Rd. to West Schulte Rd. to the plant site. The project owner shall obtain approval of the CPM if an alternate route is desired.

Verification: At least thirty (30) days prior to receipt of any hazardous materials on site, the project owner shall submit to the CPM for review and approval copies of notices to hazardous materials vendors describing the required transportation route.

HAZ-6 Prior to commencing construction, a site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to the CPM for review and approval. The Construction Security Plan shall include the following:

1. Perimeter security consisting of fencing enclosing the construction lay down area;
2. Security guards;
3. Site access control consisting of a check-in procedure or tag system for construction personnel and visitors;
4. Written standard procedures for employees, contractors and vendors when encountering suspicious objects or packages on site or off site;
5. Protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
6. Evacuation procedures.

Verification: At least thirty (30) days prior to commencing construction, the project owner shall notify the CPM that a site-specific Construction Security Plan is available for review and approval.

HAZ-7 The project owner shall also prepare an updated site-specific security plan for the commissioning and operational phases that will be available to the CPM for review and approval. The project owner shall implement site security measures that address physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that which presently exists at the Tracy Peaker Project site with the following additions:

The Operation Security Plan shall include the following:

1. Written standard procedures for employees, contractors, and vendors when encountering suspicious objects or packages on site or off site;
2.
 - A. A statement (refer to sample, Attachment A), signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to determine the accuracy of employee identity and employment history and shall be conducted in accordance with state and federal laws regarding security and privacy;
 - B. A statement(s) (refer to sample, Attachment B), signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner), that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractors who visit the project site;
 - C. A statement(s) (refer to sample, Attachment C), signed by the owners or authorized representative of hazardous materials transport vendors, certifying that they have prepared and implemented security plans in compliance with 49 CFR 172.802, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B.

The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to those security plans.

The CPM may authorize modifications to these measures, or may require additional measures such as protective barriers for critical power plant components - transformers, gas lines, and compressors - depending upon circumstances unique to the facility or in response to industry-related standards, security concerns, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Council, after consultation with both appropriate law enforcement agencies and the Applicant.

Verification: At least thirty (30) days prior to the start of commissioning (“first fire”), the project owner shall notify the CPM that an updated site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan.

In the annual compliance report, the project owner shall include a statement that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

Hazardous Materials Proposed for Use at the GWF Tracy Project

Material	CAS No.	Application	Hazardous Characteristics	Maximum Quantity On Site
Acetylene	74-86-2	Welding gas	Health: hazardous if inhaled Physical: combustible, flammable	650 ft ³
Aqueous Ammonia (29.5% NH ₃ by weight)	7664-41-7	Control oxides of nitrogen (NOx) emissions through selective catalytic reduction	Health: irritation to permanent damage from inhalation, ingestion, and skin contact Physical: reactive, vapor is combustible	67,000 pounds
Carbon Monoxide (Balance Nitrogen)	630-08-0	CEMS Calibration Std.	Health: headaches, dizziness, convulsions, loss of consciousness, death Physical: flammable	1,600 ft ³
Citric Acid	77-92-9	Cleaning reverse osmosis units	Health: none Physical: non-flammable	Varies as needed (approx. 100 pounds)
Cleaning chemicals/detergents for Turbine Wash	None	Periodic cleaning of combustion turbine	Health: refer to individual chemical labels Physical: refer to individual chemical labels	Varies as needed (approx. 100 gallons)
Diesel No. 2	None	Fuel for fire pump engine/off-road vehicles	Health: may be carcinogenic Physical: flammable	200 gallons
General Dispersant – Cyanamer P-70	Proprietary	Anti-scalant Dispersant	Health: may irritate eyes and skin Physical: non-flammable	55 gallons
Hydraulic Oil	None	High-pressure combustion turbine starting system, turbine control valve actuators	Health: hazardous if ingested Physical: combustible	500 gallons
Hydrochloric Acid	7647-01-0	Lube Oil Cooler (WSAC) pH control	Health: strongly corrosive and toxic, toxic by ingestion, strong irritant to eyes and skin Physical: non-flammable	Varies as needed (approx. 100 gallons)
Laboratory Reagents	None	Water/wastewater laboratory analysis	Health: refer to individual chemical labels Physical: refer to individual chemical labels	10 gallons liquids 100 pounds solids
Lubrication Oil	None	Lubricate rotating equipment (e.g., gas turbine and steam turbine bearings)	Health: hazardous if ingested Physical: flammable	40,000 gallons

Material	CAS No.	Application	Hazardous Characteristics	Maximum Quantity On Site
Mineral Insulating Oil	8012-95-1	Transformers/switch yard	Health: hazardous if ingested Physical: may be flammable/combustible	80,000 gallons
Nitric Oxide (balance Nitrogen)	10102-43-9	CEMS Calibration Std.	Health: irritating to eyes and respiratory system, cyanosis, inhalation may result in chemical pneumonitis and pulmonary edema Physical: non-flammable	2,200 ft ³
Oxygen/Acetylene	7782-44-7	Welding Gas	Health: therapeutic overdoses can cause convulsions, liquid oxygen is an irritant to skin Physical: oxidizing agent, actively supports combustion	880 cubic feet
Permatreat PC-191	Proprietary	Scale inhibitor for reverse osmosis	Health: may cause irritation with prolonged contact Physical: non-flammable	400 gallons
Propylene Glycol	57-55-6	Antifreeze	Health: causes irritation Physical: combustible	2,000 gallons
Sodium Hydroxide (NaOH) (50% solution)	1310-73-2	Convert CO ₂ to alkalinity for removal by reverse osmosis	Health: corrosive, irritant to tissue in presence of moisture, strong irritant to tissue by ingestion Physical: non-flammable	500 gallons
Sodium Hypochlorite	7681-52-9	Water Treatment	Health: corrosive and toxic, toxic by ingestion, strong irritant to tissue Physical: fire risk when in contact with organic materials	120 gallons
Sodium Nitrate A DHS CFATS Chemical of Interest (must be <400 pounds)	7631-99-4	Cleaning of HRSG	Health: toxic, mildly toxic by ingestion Physical: non-flammable	Varies as needed (approx. 500 pounds)
Sulfur Hexafluoride	2551-62-4	Switchyard/switchgear devices	Health: hazardous if inhaled Physical: non-flammable	200 pounds
Sulfuric Acid (Lead-Acid Batteries)	7664-93-9	Battery Electrolyte	Health: strongly corrosive, strong irritant to all tissue, minor burns to permanent damage to tissue Physical: non-flammable	3,000 pounds
Trisodium Phosphate (Na ₃ PO ₄) (e.g., NALCO 7208)	7601-54-9	Boiler water alkalinity control	Health: corrosive and toxic, toxic by ingestion, irritant to tissue Physical: non-flammable	400 gallons

Source: Ex. 200.

SAMPLE CERTIFICATIONS

(Attachments A, B, and C)

SAMPLE CERTIFICATION (Attachment A)

Affidavit of Compliance for Project Owners

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of:

(Company name)

For employment at:

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 _____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment B)

Affidavit of Compliance for Contractors

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of:

(Company name)

for contract work at:

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 _____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment C)

Affidavit of Compliance for Hazardous Materials Transport Vendors

I,

(Name of person signing affidavit)(Title)

do hereby certify that the below-named company has prepared and implemented security plans in conformity with 49 CFR 172.880 and has conducted employee background investigations in conformity with 49 CFR 172, subparts A and B:

(Company name)

for hazardous materials delivery to:

(Project name and location)

as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 _____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
LAND USE CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

LAND-1 The project owner shall mitigate for the loss of 3.28 acres of Prime Farmland, as defined by the California Agricultural Land Evaluation and Site Assessment (LESA) Model, at a one-to-one (1:1) ratio. Mitigation for the conversion of 3.28 acres of Prime Farmland due to development of the GWF Tracy Project is in addition to mitigation for the 13.1 acres of Prime Farmland converted by the existing Tracy Peaker Project (TPP) as described in TPP Condition of Certification **LAND-2**. The project owner shall continue to implement the TPP’s agricultural mitigation plan for long-term maintenance of Prime Farmland on the adjacent agricultural lands within the 40-acre parcel (APN 799-000-45) owned by GWF Tracy LLC.

Verification: At least 120 days prior to the start of construction, the project owner shall pay a mitigation fee to an agricultural land trust such as the American Farmland Trust or other land trust that has been previously approved by the Compliance Project Manager (CPM). The amount of the mitigation fee shall be determined by an independent appraisal conducted on available, comparable farmland property on behalf of the agricultural land trust. The project owner shall pay all costs associated with the appraisal.

The mitigation fee shall be used by the trust to purchase agricultural land and/or easements that will be farmed in perpetuity in San Joaquin County. If no available farmland and/or easements can be purchased in San Joaquin County, then the purchase of farmland/easements in neighboring Central Valley counties is acceptable.

The project owner shall provide written proof to the CPM that the mitigation fee has been paid to the land trust on time and that the compensatory 3.28 acres of farmland and/or easements have been purchased within three years of the start of operation.

The project owner shall provide updates to the CPM in the Annual Compliance Report on the status of farmland/easement purchase(s) and the continued implementation of the TPP’s agricultural mitigation plan.

TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C) NOISE CONDITIONS OF CERTIFICATION

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within one-half mile of the site and one-quarter mile of the linear facilities, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project and include that telephone number in the above-mentioned notice. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

Verification: Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above-mentioned notification has been performed and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

NOISE COMPLAINT PROCESS

NOISE-2 Throughout the construction and operation of GWF Tracy, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints.

The project owner or authorized agent shall:

- Use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
- Attempt to contact the person(s) making the noise complaint within 24 hours;
- Conduct an investigation to determine the source of noise related to the complaint;
- Take all feasible measures to reduce the noise at its source if the noise is project related; and

- Submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts and, if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form with the CPM documenting the resolution of the complaint. If mitigation is required to resolve a complaint and the complaint is not resolved within a three-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.

NOISE-3 The project owner shall submit to the CPM for review and approval a noise control program and a statement, signed by the project owner's project manager, verifying that the noise control program will be implemented throughout construction of the project. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal/OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program and the project owner's project manager's signed statement. The project owner shall make the program available to Cal/OSHA upon request.

NOISE RESTRICTIONS

NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due solely to plant operation to exceed an average of 42 dBA Leq measured at monitoring location LT-2, the residence located approximately 2,600 feet west of the project site. No new pure-tone components shall be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.

The measurement of power plant noise for the purposes of demonstrating compliance with this Condition of Certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected residence. The character of the plant noise shall be evaluated at the affected residential locations to determine the presence of pure tones or other dominant sources of plant noise.

- A. When the project first achieves a sustained output of 85 percent or greater of rated capacity, the project owner shall conduct a community noise survey at monitoring location LT-2 or at closer locations acceptable to the CPM. This survey shall be performed

during power plant operation and shall also include measurement of one-third octave band sound pressure levels to determine whether new pure-tone noise components have been caused by the project.

- B. If the results from the noise survey indicate that the power plant average noise level (Leq) at LT-2 exceeds the above value, mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.
- C. If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: The survey shall take place within 30 days of the project's first achieving a sustained output of 85 percent or greater of rated capacity.

Within 15 days after completing the survey, the project owner shall submit a summary report of the survey to the CPM. Included in the survey report shall be a description of any additional mitigation measures necessary to achieve compliance with the above-listed noise limit and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey.

Within 15 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

NOISE-5 Following the project's first achieving a sustained output of 85 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility.

The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations sections 5095–5099 and Title 29, Code of Federal Regulations section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure.

The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal/OSHA upon request.

CONSTRUCTION TIME RESTRICTIONS

NOISE-6 Heavy equipment operation and noisy construction work relating to any project features shall be restricted to the following times of day:

Any Day 6:00 a.m. to 9:00 p.m.

Haul trucks and other engine-powered equipment shall be equipped with mufflers that meet all applicable regulations. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Verification: Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

STEAM BLOW RESTRICTIONS

NOISE-7 If a high-pressure steam blow is employed, the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 89 dBA measured at a distance of 50 feet. The project owner shall conduct steam blows only during the hours of 6:00 a.m. to 9:00 p.m.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM who shall review the proposal with the objective of ensuring that the resulting noise levels from the steam or air blows alone will not exceed 52 dBA Leq measured at the residence at LT-2.

Verification: At least 15 days prior to the first steam blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam blow silencer and the noise levels expected, as well as a description of the steam blow schedule.

At least 15 days prior to any low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
SOCIOECONOMICS CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

SOCIO-1 The project owner shall pay a total of at least \$2,300 in school impact fees to be divided appropriately between the Lammersville Elementary School District and the Tracy Joint Unified School District as required by Education Code Section 17620.

Verification: At least 30 days prior to start of project construction, the project owner shall provide the Compliance Project Manager (CPM) proof of payment of the statutory development fees.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
SOIL AND WATER RESOURCES CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions
Commission Order	15-0730-03	205634	SOIL&WATER-4

SOIL & WATER-1 The project owner shall comply with the requirements of the General National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water associated with construction activity. The project owner shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the construction of the entire GWF Tracy Combined Cycle Power Plant Project (GWF Tracy). The construction SWPPP shall include a requirement which excludes the removal of the sedimentation basin, north of the construction laydown area, prior to the return of sufficient vegetated cover (to pre-existing conditions) to the land area which drains to it.

Verification: The project owner shall submit a copy of the construction SWPPP to the San Joaquin County Stormwater Management Engineer for review. The project owner shall submit copies to the compliance project manager (CPM) of all correspondence between the project owner and the Central Valley Regional Water Quality Control Board (RWQCB) regarding the General NPDES permit for the discharge of storm water associated with construction activities within 10 days of its receipt (when the project owner receives correspondence from the RWQCB) or within 10 days of its mailing (when the project owner sends correspondence to the RWQCB). This information shall include copies of the Notice of Intent and the Notice of Termination sent to the State Water Resources Control Board for the project construction.

SOIL & WATER-2 Prior to site mobilization, the project owner shall obtain CPM approval for a site-specific Drainage, Erosion, and Sedimentation Control Plan (DESCP) that ensures protection of water quality and soil resources of the project site and all linear facilities for both the construction and operation phases of the project. This plan shall address appropriate methods and actions, both temporary and permanent, for the protection of water quality and soil resources, demonstrate no increase in offsite flooding potential, meet local requirements, and identify all monitoring and maintenance activities. Additionally, the plan shall incorporate the construction sequence of taking the existing retention basin offline, installing a modified drainage network, and constructing the new retention basin. Monitoring activities shall include routine measurement of the volume of accumulated sediment in the stormwater retention basin.

Maintenance activities must include removal of accumulated sediment from the retention basin when an average depth of 0.5 feet of sediment has accumulated in the retention basin. The plan shall be consistent with the grading and drainage plan as required by Condition of Certification **CIVIL-1**. The DESCPC shall contain the following elements. All maps shall be presented at a legible scale.

Vicinity Map – A map shall be provided indicating the location of all project elements with depictions of all significant geographic features to include watercourses, washes, irrigation and drainage canals, and sensitive areas.

Site Delineation – The site and all project elements shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.

Watercourses and Critical Areas – The DESCPC shall show the location of all nearby watercourses including washes, irrigation and drainage canals, and drainage ditches, and shall indicate the proximity of those features to the construction site.

Drainage – The DESCPC shall include hydrologic calculations for onsite areas and offsite areas that drain to the site; include maps showing the drainage area boundaries and sizes in acres, topography and typical overland flow directions, and show all existing, interim, and proposed drainage infrastructure and their intended direction of flow. Provide hydraulic calculations to support the selection and sizing of the drainage network, retention facilities and best management practices (BMPs). Spot elevations shall be required where relatively flat conditions exist. The spot elevations and contours shall be extended off site for a minimum distance of 100 feet in flat terrain or to the limits of the offsite drainage basins.

Clearing and Grading – The plan shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, cut/fill depths or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography tying in proposed contours with existing topography shall be illustrated. The DESCPC shall include a statement of the quantities of material excavated at the site, whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported or a statement explaining that there would be no clearing and/or grading conducted for each element of the project. Areas of no disturbance shall be properly identified and delineated on the plan maps.

Project Schedule – The DESCPC shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, project element excavation and construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each project element for each phase of construction.

Best Management Practices – The DESCPC shall show the location, timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during project element excavation and construction, during final grading/stabilization, and after construction. BMPs shall include measures designed to control dust and stabilize construction access roads and entrances. The maintenance schedule shall include post-construction maintenance of treatment-control BMPs applied to disturbed areas following construction.

Erosion Control Drawings – The erosion-control drawings and narrative shall be designed, stamped, and sealed by a professional engineer or erosion-control specialist.

Verification: No later than 90 days prior to start of site mobilization, the project owner shall submit a copy of the DESCPC to San Joaquin County for review and comment. A copy shall be submitted to the CPM no later than 60 days prior to the start of site mobilization for review and approval. The CPM shall consider comments received from San Joaquin County. During construction, the project owner shall provide an analysis in the monthly compliance report on the effectiveness of the drainage-, erosion- and sediment-control measures and the results of monitoring and maintenance activities.

Once operational, the project owner shall provide in the annual compliance report information on the results of stormwater BMP monitoring and maintenance activities.

SOIL & WATER-3 The project owner shall comply with the requirements of the general NPDES permit for discharges of storm water associated with industrial activity. The project owner shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the operation of the site. The project owner may also submit a Notice of Non-Applicability (NONA) to the RWQCB to apply for an exemption to the general NPDES permit.

Verification: At least 30 days prior to commercial operation, the project owner shall submit copies to the CPM of the operational SWPPP for the GWF Tracy site. Within 10 days of its mailing or receipt, the project owner shall submit to the CPM any correspondence between the project owner and the RWQCB about the general NPDES permit for discharge of storm water associated with industrial activity. This information shall include a copy of the notice of intent sent by the project owner to the State Water Resources Control Board and the notice of termination. A letter from the RWQCB indicating that there is no requirement for a general NPDES permit for discharges of storm water associated with industrial activity would satisfy this Condition.

SOIL & WATER-4 Water used for project operation for process, sanitary and landscape irrigation purposes shall exclusively be raw surface water from Byron-Bethany Irrigation District (BBID), unless recycled water infrastructure from the City of Tracy is within one mile of the project site boundary. Then, the project owner shall file a Petition to Amend, seeking to convert to recycled water use for project operation and permanently define an emergency backup supply(s). Pumping or purchasing groundwater is prohibited. In the event that BBID water supply becomes unavailable, the use of alternative water supplies shall be prioritized as follows:

- City of Tracy Recycled Water (Alternative 4). The project owner shall use tertiary treated recycled water trucked from the City of Tracy wastewater treatment plant distribution system as the primary back up supply. The owner shall also obtain approval for the use of recycled water at the power plant from the City of Tracy. In the event recycled water is not available or the timing for conversion to recycled water use at GWF Tracy temporarily prevents its use, the project owner shall utilize the water supply identified in Alternative 1 or Alternative 3 below. The project owner must use recycled water whenever a back-up supply is needed and it is available as a backup supply.
- GE Water (Alternative 1). Raw water supply from the General Electric- industrial water supply facility in San Jose, California, may be used when recycled water from the City of Tracy is unavailable.
- Bogetti Well Water (Alternative 3). Groundwater from the neighboring Bogetti family well may be used when water supply from the City of Tracy is unavailable. The project owner must offset the groundwater use through water conservation measures implemented for the benefit of the Tracy Groundwater Subbasin. The project Owner must submit an Offset Plan for CPM review and approval.
- GWF Henrietta Water (Alternative 2). In the event backup water supplies in Alternatives 4, 1, and 3 are not available, the project owner may truck the necessary GWF Henrietta facility water supply for use at GWF Tracy.
- All trucks used to transport water to the project are required to comply with ARB's on-road, heavy-duty vehicle program requirements and be scheduled to minimize traffic impacts.

Water use shall not exceed the annual water-use limit of 54.4 acre-feet per year. The project owner shall monitor and record the total water used on a monthly basis. For calculating the annual water use, the term "year"

will correspond to the date established for the annual compliance report submittal.

Prior to using raw surface water from BBID or any of the alternative supplies identified above for process needs, the project owner shall install and maintain metering devices as part of the water supply and distribution systems to monitor and record, in gallons per day, the total volume(s) of water supplied to GWF Tracy. Those metering devices shall be operational for the life of the project.

For the first year of operation, the project owner shall prepare an annual Water Use Summary, which will include the monthly range and monthly average of daily raw surface water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. For subsequent years, the annual Water Use Summary shall also include the yearly range and yearly average water use by the project. The annual Water Use Summary shall be submitted to the CPM as part of the annual compliance report.

Verification: At least sixty (60) days prior to commercial operation of GWF Tracy, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the water supply and distribution systems. When the metering devices are serviced, tested and calibrated, the project owner shall provide a report summarizing these activities in the next annual compliance report. The project owner, in the annual compliance report, shall provide a Water Use Summary that states the source and quantity of water used on a monthly basis and on an annual basis in units of acre-feet. Prior annual water use including yearly range and yearly average shall be reported in subsequent annual compliance reports.

At least 48 hours prior to use of back up water supplies from Alternative 4, 1, or 3, the project owner shall notify the CPM. If Alternative 1 or 3 is used, the notification shall include a discussion of why Alternative 4 could not be used and an estimate of when it can be used. The notification will also provide evidence that all trucks used to transport water comply with ARB's on-road, heavy-duty vehicle program requirements and will be scheduled to minimize traffic impacts.

Within 120 days of use of groundwater from the Bogetti Well in Alternative 3, the project owner shall provide a plan showing how the groundwater use will be offset. The offset plan shall include information on the measures to be used to achieve groundwater offset, when the offset will be implemented, how the offset will be verified, costs for implementation of the offset measures, and discussion of whether any other agency review and approvals are needed for implementation.

At least 48 hours prior to use of the backup water supply from Alternative 2, the project owner shall notify the CPM. The notification shall include a discussion of why Alternative 4, 1, and 3 could not be used and an estimate of when Alternative 4 can be used. The notification will also provide evidence that all trucks used to transport water comply with ARB's on-road, heavy-duty vehicle program requirements and will be scheduled to minimize traffic impacts.

The project owner shall return to use of Alternative 4 at the time described in the notification and as agreed to with the CPM. The project owner shall provide a monthly notification describing what progress is being made for use of Alternative 4, while other alternative backup water supplies are in use.

SOIL & WATER-5 The project owner shall provide Energy Commission staff with all permits related to the commercial septic system on the Tracy Peaker Plant site to verify compliance with the San Joaquin County Department of Environmental Health requirements.

Verification: The project owner shall provide the commercial septic system permit to the CPM for approval.

SOIL & WATER-6 The project owner shall not discharge wastewater, other than non-contact stormwater, and shall provide evidence that industrial wastewater and contact stormwater is being disposed of at an appropriately licensed facility.

Verification: The project owner shall provide evidence of industrial wastewater and contact stormwater disposal, via a licensed hauler, to an appropriately licensed facility in the annual compliance report.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
TRAFFIC AND TRANSPORTATION CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

TRANS-1 The project owner shall consult with the city of Tracy and prepare and submit to the Compliance Project Manager (CPM) for approval a construction traffic control plan and implementation program. The traffic control plan must be prepared in accordance with Caltrans Manual on Uniform Traffic Control Devices and the WATCH Manual and must include but not be limited to the following issues:

- timing of heavy equipment and building materials deliveries
- redirecting construction traffic with a flag person
- signing, lighting, and traffic control device placement if required
- need for construction work hours and arrival/departure times outside peak traffic periods
- ensurance of access for emergency vehicles to the project site
- temporary closure of travel lanes or disruptions to street segments and intersections during reconductoring activities or any other utility tie ins
- access to residential and/or commercial property located near reconductoring routes or any other utility tie ins
- specification of construction-related haul routes, including the minimization of construction traffic using the I-580 eastbound ramps/Corral Hollow Road, I-580 southbound ramps/Patterson Pass Road, and the I-205 eastbound ramps/ Mountain House Parkway intersections during the P.M. peak hour and avoiding residential neighborhoods to the maximum extent feasible
- identification of safety procedures for exiting and entering the site access gate
- crossing safety for all phases of project construction to address foot traffic as well as construction-related vehicle crossing and the transport of heavy/oversize loads over the adjacent rail crossing

Verification: At least 30 days prior to site mobilization, the Applicant or contractor shall provide to the CPM a copy of the referenced documents.

TRANS-2 Prior to start-up and testing activities of the plant and all related facilities, the project owner shall work with the FAA to notify all pilots using the Tracy Municipal Airport and airspace above GWF Tracy of potential air hazards. These activities would include, but not be limited to, the Applicant's working with the FAA in issuing a notice to airmen (NOTAM) of the identified air hazard and updating the Terminal Area Chart and all other FAA-approved airspace charts used by pilots that include GWF Tracy site to indicate that pilots should avoid direct overflight. The Applicant shall work with TCY to modify the Airport Facility Directory (AFD) to show the location of the GWF site on a map or figure and put in a remark about thermal plumes could cause moderate to severe turbulence, and therefore, pilots should avoid direct overflight. The Applicant shall also work with the FAA and/or TCY to add a caution to the Automatic Weather Observation System (AWOS) recommending that pilots should avoid direct overflight of the airspace above GWF Tracy site.

Verification: At least 60 days prior to start of project operation, the project owner shall submit to the CPM for review and approval a letter from the FAA and TCY showing compliance with these measures.

TRANS-3 Intentionally Omitted.

TRANS-4 Following completion of project construction, the project owner shall repair any damage to roadways affected by construction activity along with the primary roadways identified in the traffic control plan for construction traffic to the road's pre-project construction condition. Prior to the start of construction, the project owner shall photograph, videotape, or digitally record images of the roadways that will be affected by pipeline construction and heavy construction traffic. The project owner shall provide the CPM and the City of Tracy with a copy of the images for the roadway segments under its jurisdiction. Also prior to start of construction, the project owner shall notify the City about the schedule for project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction-related activities associated with other projects.

Verification: Within 30 days after completion of the redevelopment project, the project owner shall meet with the CPM and the City of Tracy to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near-original condition as possible.

Following completion of any regional road improvements, the project owner shall provide to the CPM a letter from the City of Tracy if work occurred within its jurisdictional public right-of-way stating its satisfaction with the road improvements.

TRANS-5 The project owner shall comply with Caltrans, San Joaquin County, City of Tracy and other relevant jurisdictions limitations on vehicle sizes, weights, and travel routes. In addition, the project owner shall obtain all necessary

transportation permits from Caltrans, San Joaquin County, and the city of Tracy for roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits received during that reporting period.

In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
TRANSMISSION LINE SAFETY AND NUISANCE CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

TLSN-1 The project owner shall construct the new lines and upgrade the identified line segments according to the requirements of the California Public Utility Commission’s GO-95, GO-52, GO-131-D, Title 8, and Group 2 High Voltage Electrical Safety Orders, Sections 2700 through 2974 of the California Code of Regulations, and PG&E’s EMF-reduction guidelines.

Verification: At least 30 days before starting construction of the proposed new lines and system upgrades, the project owner shall submit to the Compliance Project Manager (CPM) a letter signed by a California registered electrical engineer affirming that the lines and related structures will be constructed according to the requirements stated in the condition.

TLSN-2 The project owner shall ensure that every reasonable effort is made to identify and correct, on a case-specific basis, any complaints of interference with radio or television signals from operation of the project’s transmission line or associated switchyard.

Verification: At least 30 days before starting operation, the project owner shall submit to the CPM a letter signed by a California registered electrical engineer affirming the project owner’s intention to comply with this requirement.

TLSN-3 The project owner shall use a qualified individual to measure the strengths of the electric and magnetic fields from the constructed line and system upgrades at the points of maximum intensity for which intensity estimates were provided by the Applicant. The measurements shall be made before and after energization according to the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEEE) standard procedures. These measurements shall be completed not later than six months after the start of operations.

Verification: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements.

TLSN-4 The project owner shall ensure that the rights-of-way of the project’s line are kept free of combustible material as required under the provisions of Section 4292 of the Public Resources Code and Section 1250 of Title 14 of the California Code of Regulations.

Verification: At least 30 days before the start of operations, the project owner shall transmit to the CPM a letter affirming the project owner's intention to comply with this condition.

TLSN-5 The project owner shall ensure that all permanent metallic objects within the right-of-way of the constructed project line are grounded according to industry standards regardless of ownership.

Verification: At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter affirming its intention to comply with this condition.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
TRANSMISSION SYSTEM ENGINEERING CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

TSE-1 The project owner shall furnish to the CPM and to the CBO a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested.

Verification: At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see a list of major equipment in Table 1: Major Equipment List below). Additions and deletions shall be made to the table only with CPM and CBO approval.

The project owner shall provide schedule updates in the Monthly Compliance Report.

Table 1: Major Equipment List

Breakers
Step-up Transformer
Switchyard
Busses
Surge Arrestors
Disconnects and Wave-traps
Take off facilities
Electrical Control Building
Switchyard Control Building
Transmission Pole/Tower
Insulators and Conductors
Grounding System

TSE-2 Prior to the start of construction the project owner shall assign an electrical engineer and at least one of each of the following to the project:

- a. A civil engineer;

- b. A geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering;
- c. A design engineer, who is either a structural engineer or a civil engineer fully competent and proficient in the design of power plant structures and equipment supports; or
- d. A mechanical engineer.

(Business and Professions Code Sections 6704 et seq., require state registration to practice as a civil engineer or structural engineer in California.)

The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g., proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer. The civil, geotechnical or civil and design engineer assigned in conformance with Facility Design Condition **GEN-5**, may be responsible for design and review of the TSE facilities.

The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all engineers assigned to the project. If any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer. This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations.

The electrical engineer shall:

1. Be responsible for the electrical design of the power plant switchyard, outlet and termination facilities; and
2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project

owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

TSE-3 If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend corrective action (1998 CBC, Chapter 1, Section 108.4, Approval Required; Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector; Appendix Chapter 33, Section 3317.7, Notification of Noncompliance). The discrepancy documentation shall become a controlled document and shall be submitted to the CBO for review and approval and shall reference this Condition of Certification.

Verification: The project owner shall submit a copy of the CBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for disapproval, and the revised corrective action required to obtain the CBO's approval.

TSE-4 For the power plant switchyard, outlet line and termination, the project owner shall not begin any increment of construction until plans for that increment have been approved by the CBO. These plans, together with design changes and design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS.

The following activities shall be reported in the Monthly Compliance Report:

- a. Receipt or delay of major electrical equipment;
- b. Testing or energization of major electrical equipment; and
- c. The number of electrical drawings approved, submitted for approval, and still to be submitted.

Verification: At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, outlet line and termination, including a copy of the signed and stamped statement from the responsible electrical engineer attesting to compliance with the applicable LORS, and send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

TSE-5 The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to all applicable LORS, including the requirements listed below. The project owner shall submit

the required number of copies of the design drawings and calculations to the CBO as determined by the CBO.

1. The power plant switchyard and outlet line shall meet or exceed the electrical, mechanical, civil and structural requirements of CPUC General Order 95 or National Electric Safety Code (NESC), Title 8 of the California Code and Regulations (Title 8), Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", California ISO standards, National Electric Code (NEC) and related industry standards.
2. Breakers and busses in the power plant switchyard and other switchyards, where applicable, shall be sized to accommodate full output from the project and to comply with a short-circuit analysis.
3. Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.
4. The project conductors shall be sized to accommodate the full output from the project.
5. Termination facilities shall comply with applicable PG&E interconnection standards.

The project owner shall provide to the CPM:

1. The Special Protection System (SPS) sequencing and timing if applicable,
2. A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation are acceptable,
3. The Operational study report based on April 1, 2013 or current Commercial Operation Date (COD) system conditions from the California ISO and/or PG&E, and
4. A copy of the executed LGIA signed by the California ISO and the project owner.

Verification: At least 60 days prior to the start of construction of transmission facilities (or a lesser number of days mutually agreed to by the project owner and CBO), the project owner shall submit to the CBO for approval:

Design drawings, specifications and calculations conforming with CPUC General Order 95 or NESC, Title 8, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", NEC, applicable interconnection standards and related industry standards, for the poles/towers, foundations, anchor bolts, conductors, grounding systems and major switchyard equipment.

For each element of the transmission facilities identified above, the submittal package to the CBO shall contain the design criteria, a discussion of the calculation method(s), a sample calculation based on "worst case conditions" and a statement signed and

sealed by the registered engineer in responsible charge, or other acceptable alternative verification, that the transmission element(s) will conform with CPUC General Order 95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", NEC, applicable interconnection standards, and related industry standards.

Electrical one-line diagrams signed and sealed by the registered professional electrical engineer in responsible charge, a route map, and an engineering description of equipment and the configurations covered by requirements TSE-5 A through F above.

The Special Protection System (SPS) sequencing and timing if applicable shall be provided concurrently to the CPM.

A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation are acceptable.

The Operational study report based on April 1, 2013 or current Commercial Operation Date (COD) system conditions from the California ISO and/or PG&E, and a copy of the executed LGIA signed by the California ISO and the project owner.

TSE-6 The project owner shall inform the CPM and CBO of any impending changes that may not conform to requirements TSE-5 A through F, and have not received CPM and CBO approval, and request approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or substation configurations shall not begin without prior written approval of the changes by the CBO and the CPM.

Verification: At least 60 days prior to the construction of transmission facilities, the project owner shall inform the CBO and the CPM of any impending changes that may not conform to requirements of **TSE-5** and request approval to implement such changes.

TSE-7 The project owner shall provide the following Notice to the California Independent System Operator (California ISO) prior to synchronizing the facility with the California Transmission system:

1. At least one week prior to synchronizing the facility with the grid for testing, provide the California ISO a letter stating the proposed date of synchronization; and
2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the California ISO Outage Coordination Department.

Verification: The project owner shall provide copies of the California ISO letter to the CPM when it is sent to the California ISO one week prior to initial synchronization with the grid. The project owner shall contact the California ISO Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at (916) 351-2300 at least one business day prior to synchronizing the facility with the grid for testing.

A report of conversation with the California ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

TSE-8 The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM and CBO approved changes thereto, to ensure conformance with CPUC GO-95 or NESC, Title 8, CCR, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", applicable interconnection standards, NEC and related industry standards. In case of non-conformance, the project owner shall inform the CPM and CBO in writing, within 10 days of discovering such non-conformance and describe the corrective actions to be taken.

Verification: Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM and CBO the following:

- a. "As built" engineering description(s) and one-line drawings of the electrical portion of the facilities signed and sealed by the registered electrical engineer in responsible charge. A statement attesting to conformance with CPUC GO-95 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", and applicable interconnection standards, NEC, related industry standards, and these Conditions shall be provided concurrently.
- b. An "as built" engineering description of the mechanical, structural, and civil portion of the transmission facilities signed and sealed by the registered engineer in responsible charge or acceptable alternative verification. "As built" drawings of the electrical, mechanical, structural, and civil portion of the transmission facilities shall be maintained at the power plant and made available, if requested, for CPM audit as set forth in the "Compliance Monitoring Plan."
- c. A summary of inspections of the completed transmission facilities, and identification of any nonconforming work and corrective actions taken, signed and sealed by the registered engineer in charge.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
VISUAL RESOURCES CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

VIS-1 The project owner shall reduce the visibility of construction equipment, materials, and activities at the project site and as appropriate at any storage areas for staging, material, and equipment with temporary screening such as fabric attached to fencing or berms prior to the start of ground disturbance. Screening shall be of an appropriate height, design, opacity, and color for each specific location, as determined by the CPM.

The project owner shall submit to the CPM for review and approval a specific screening plan, the proper implementation of which shall satisfy the requirements listed in the previous paragraph. The project owner shall provide with the plan a sample (at least 3" x 5") of the proposed screening material.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the screening plan to the CPM for review and approval. The screening shall be installed during the site mobilization phase. The project owner shall notify the CPM when installation is completed.

The project owner shall provide the CPM with electronic color photographs after installing screening at the plant site, including the staging, material, and equipment storage areas, to demonstrate the effectiveness of the screening.

VIS-2 The project owner shall remove all evidence of construction activities, and shall restore the ground surface to the original condition or better condition, including the replacement of any vegetation or paving removed during construction where project development does not preclude this. The project owner shall submit to the CPM for review and approval a surface restoration plan the proper implementation of which will satisfy these requirements.

Verification: At least 60 days prior to the start of commercial operation, the project owner shall submit the surface restoration plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the surface restoration plan are needed, within 30 days of receiving that notification the project owner shall submit to the CPM a plan with the specified revisions.

The project owner shall complete surface restoration within 60 days after the start of commercial operation.

The project owner shall notify the CPM within seven days after completion of surface restoration that the restoration is ready for inspection.

- VIS-3** The project owner shall ensure that lighting for construction of the power plant is used in a manner that minimizes potential night lighting impacts, as follows:
- A. All lighting shall be of minimum necessary brightness consistent with worker safety and security.
 - B. All fixed position lighting shall be shielded/hooded, and directed downward and toward the area to be illuminated to prevent direct illumination of the night sky and direct light trespass (direct light extending outside the boundaries of the power plant site or the site of construction of ancillary facilities, including any security related boundaries).
 - C. Wherever feasible and safe and not needed for security, lighting shall be kept off when not in use.

Verification: Within seven days after the first use of construction lighting, the project owner shall notify the CPM that the lighting is ready for inspection. If the CPM requires modifications to the lighting, within 15 days of receiving that notification the project owner shall implement the necessary modifications and notify the CPM that the modifications have been completed.

Within 48 hours of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the General Conditions section including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify the CPM within 48 hours after completing implementation of the proposal.

A copy of the complaint resolution form report shall be included in the subsequent Monthly Compliance Report.

VIS-4 GWF Tracy will extend the footprint of the current Tracy Peaker Project 3.28 acres. Applicant has proposed continuing for those 3.28 acres the landscaping plan as proposed in Condition of Certification VIS-1, as modified in the Supplement to Staff Assessment on Tracy Peaker Project; California Energy Commission, February 1, 2002.

This Condition of Certification **VIS-4**, designed to ensure the continuation of this previously approved and revised landscaping plan, requires the continuation of the planting of trees and shrubs along the northern, eastern, and western edges of the 3.28 acres added to the site by the construction of GWF Tracy.

This landscaping plan will help to ensure that GWF Tracy blends in with its surroundings as well as complies with the County of San Joaquin's General Plan, Section VI, Resources, and with San Joaquin County's Landscaping, Fencing, and Screening Manual.

Verification: At least 30 (thirty) days prior to start of landscape installation, the project owner shall submit the revised perimeter landscape plan to the San Joaquin County Community Development Department for ordinance consistency review and comment and to the CPM for review and approval. This plan, designed to continue the landscaping of the same trees and shrubs approved for the TPP to be planted along the northern, eastern, and western edges of the entire site. The continuation of the previous landscaping plan to include the 3.28 acres added by the construction of GWF Tracy will help to blend GWF Tracy with its surroundings.

If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within 15 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM within 7 days after completing installation of the landscape screening that the planting and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in the Annual Compliance Report.

VIS-5 To the extent feasible and consistent with safety and security considerations, the project owner shall design and install all permanent exterior lighting such that:

1. lamps and reflectors are not visible from beyond the project site, including any off-site security buffer areas;
2. lighting does not cause excessive reflected glare;
3. direct lighting does not illuminate the nighttime sky;
4. illumination of the project and its immediate vicinity is minimized; and
5. the plan complies with local policies and ordinances.

The project owner shall submit simultaneously to the CPM and the San Joaquin County Community Development Department a lighting mitigation plan to ensure the following:

- A. Location and direction of light fixtures shall be positioned according to the lighting mitigation requirements.
- B. To aid in satisfying the lighting mitigation requirements, lighting shall be designed to consider setbacks of project features from the site boundary.
- C. Lighting shall incorporate fixture hoods/shielding with light directed downward or toward the area to be illuminated.
- D. Light fixtures visible from beyond the project boundary shall be fitted with cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project boundary, except where necessary for security.

- E. All lighting shall be of minimum necessary brightness consistent with operation safety and security.
- F. Lights in high illumination areas not occupied on a continuous basis—maintenance platforms, for instance—shall have in addition to hoods switches, timer switches, or motion detectors so that lights operate only when the area is occupied.
- G. Design the new 150-foot exhaust stacks and the 50-foot natural gas fired auxiliary boiler exhaust stack such that they shall not be lighted at night with hazard lighting— any steady task-related lighting on these structures shall remain off except when needed for human access.

Verification: At least 90 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to discuss the documentation required in the lighting mitigation plan.

At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval and simultaneously to San Joaquin County Community Development Department for review and comment a lighting mitigation plan.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a revised plan for review and approval by the CPM.

The project owner shall not order any exterior lighting until receiving CPM approval of the lighting mitigation plan.

Prior to commercial operation, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection. If after inspection the CPM notifies the project owner that modifications to the lighting are needed, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed and are ready for inspection.

Within 48 hours of receiving a lighting complaint, the project owner shall provide the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify the CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to the CPM within 30 days.

- VIS-6** The project owner shall treat the surfaces of all project structures and buildings visible to the public such that:
- a. their colors minimize visual intrusion and contrast by blending with the landscape;
 - b. their colors and finishes do not create excessive glare; and
 - c. their colors and finishes are consistent with local policies and ordinances.

The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive.

The project owner shall submit for CPM review and approval, a specific surface treatment plan that will satisfy these requirements. The treatment plan shall include:

- A. A description of the overall rationale for the proposed surface treatment, including the selection of the proposed colors and finishes.
- B. A list of each major project structure, building, tank, pipe, and wall; the transmission line towers and/or poles; and fencing, specifying the colors and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system.
- C. One set of color brochures or color chips showing each proposed color and finish.
- D. One set of 11" x 17" color photo simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture, from Key Observation Points 1, 2, and 3 (locations shown on Figure 2 of the Final Staff Assessment).
- E. A specific schedule for completion of the treatment.
- F. A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture or perform the final treatment on any buildings or structures treated in the field until the project owner receives notification of approval of the treatment plan by the CPM. Subsequent modifications to the treatment plan are prohibited without CPM approval.

Verification: At least 90 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture, the project owner shall submit the proposed treatment plan to the CPM for review and approval and simultaneously to the San Joaquin County Community Development Department for review and comment.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a plan with the specified revisions for review and approval by the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to the CPM for review and approval.

Prior to the start of commercial operation, the project owner shall notify the CPM that surface treatment of all listed structures and buildings has been completed and they are ready for inspection and shall submit one set of electronic color photographs from the same key observation points identified in (d) above.

The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify:

- a. the condition of the surfaces of all structures and buildings at the end of the reporting year;
- b. maintenance activities that occurred during the reporting year; and
- c. the schedule of maintenance activities for the next year.

VIS-7 GWF Tracy will extend the footprint of the current TPP approximately four acres. To ensure continuity with the fencing surrounding the current TPP, fencing shall be installed around the perimeter of the facility. The fencing shall be the same as installed around the perimeter of the TPP: six-foot high, two-inch mesh, non-reflective fabric chain link with sand-colored vertical PVC slats. All fences and walls for GWF Tracy shall be treated the same as fences and walls for the current TPP. That is, they shall be non-reflective and treated in appropriate colors or hues that minimize visual intrusion and contrast by blending with the surrounding landscape as well as with the existing fencing surrounding the TPP. Fences and walls for the project shall comply with any applicable requirements of the San Joaquin County Community Development Department that relate to visual resources or fencing.

Verification: Prior to ordering fences and walls, the project owner shall submit simultaneously to the CPM for review and approval and to the San Joaquin County Community Development Department for review and comment, design specifications for fences and walls and documentation of their conformance with any requirements of San Joaquin County Community Development Department.

The project owner shall not order fences and walls until the submittal is approved by the CPM.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
WASTE MANAGEMENT CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

WASTE-1 The project owner shall provide the resume of an experienced and qualified professional engineer or professional geologist, who shall be available for consultation during site characterization (if needed), demolition, excavation, and grading activities, to the CPM for review and approval. The resume shall show experience in remedial investigation and feasibility studies. The professional engineer or professional geologist shall be given full authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the resume to the CPM for review and approval.

WASTE-2 If potentially contaminated soil is identified during site characterization, demolition, excavation, or grading at either the proposed site or linear facilities, as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the professional engineer or professional geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and provide a written report to the project owner, representatives of Department of Toxic Substances Control, and the CPM stating the recommended course of action. Depending on the nature and extent of contamination, the professional engineer or professional geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the professional engineer or professional geologist, significant remediation may be required, the project owner shall contact the CPM and representatives of the Department of Toxic Substances Control for guidance and possible oversight.

Verification: The project owner shall submit any final reports filed by the professional engineer or professional geologist to the CPM within five days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-3 The project owner shall prepare a Demolition and Construction Waste Management Plan for all wastes generated during demolition and construction of the facility and shall submit the plan to the CPM for review and approval.

The plan shall meet the requirements of the San Joaquin County Solid Waste Division Waste Diversion Plan and shall contain, at a minimum, the following:

1. A description of all construction waste streams, including projections of frequency, amounts generated, and hazard classifications;
2. A survey of structures to be demolished that identifies the types of waste to be managed;
3. Completed San Joaquin County, Solid Waste Division, Waste Diversion Forms (Form A - Construction and Form B - Demolition); and
4. Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans.

Verification: The project owner shall submit the Construction Waste Management Plan to the CPM for approval no less than 30 days prior to the initiation of construction activities at the site.

WASTE-4 The project owner shall provide a hazardous waste generator identification number to the CPM prior to generating any hazardous waste during construction and operations.

Verification: The project owner shall provide the USEPA hazardous waste generator identification number to the CPM prior to the start of construction and maintain a copy of the identification number on file at the project site for the life of the project.

WASTE-5 Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

Verification: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that would be required in the way project-related wastes are managed.

WASTE-6 The project owner shall update their current Operation Waste Management Plan for all wastes generated during operation of the modified facility and shall submit the plan to the CPM for review and approval. The plan shall meet the requirements of the San Joaquin County Solid Waste Division Waste Diversion Plan.

The plan shall contain, at a minimum, the following:

1. A detailed description of all operation and maintenance waste streams, including projections of amounts to be generated, frequency of generation, and waste hazard classifications;
2. Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans;
3. Information and summary records of conversations with the local Certified Unified Program Agency and the Department of Toxic Substances Control regarding any waste management requirements necessary for project activities. Copies of all required waste management permits, notices, and/or authorizations shall be included in the plan and updated as necessary;
4. A detailed description of how facility wastes will be managed and any contingency plans to be employed, in the event of an unplanned closure or planned temporary facility closure;
5. Completed San Joaquin County, Solid Waste Division, Waste Diversion Forms (Form C – Operations Waste Diversion Plan); and
6. A detailed description of how facility wastes will be managed and disposed upon closure of the facility.

Verification: The project owner shall submit the Operation Waste Management Plan to the CPM for approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.

The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current waste generation and management practices.

WASTE-7 The project owner shall ensure that all spills or releases of hazardous substances, hazardous materials, or hazardous waste are reported, cleaned up, and remediated as necessary, in accordance with all applicable federal, state, and local requirements.

Verification: The project owner shall document all unauthorized releases and spills of hazardous substances, materials, or wastes that occur on the project property or related pipeline and transmission corridors. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release;

volume released; amount of contaminated soil/material generated; how release was managed and material cleaned up; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release.

Copies of the unauthorized spill documentation shall be provided to the CPM within 30 days of the date the release was discovered.

**TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C)
TRANSMISSION SYSTEM ENGINEERING CONDITIONS OF CERTIFICATION**

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

WORKER SAFETY-1 The project owner shall submit to the Compliance Project Manager (CPM) a copy of the Project Construction Safety and Health Program containing the following:

- A Construction Personal Protective Equipment Program;
- A Construction Exposure Monitoring Program;
- A Construction Injury and Illness Prevention Program;
- A Construction Emergency Action Plan; and
- A Construction Fire Prevention Plan.

The Personal Protective Equipment Program, the Exposure Monitoring Program, and the Injury and Illness Prevention Program shall be submitted to the CPM for review and approval concerning compliance of the program with all applicable safety orders. The Construction Emergency Action Plan and the Fire Prevention Plan shall be submitted to the Tracy Fire Department for review and comment prior to submittal to the CPM for approval.

Verification: At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and approval a copy of the Project Construction Safety and Health Program.

At least 30 days prior to the start of construction, the project owner shall provide a copy of a letter to the CPM from the Tracy Fire Department stating the fire department's comments on the Construction Fire Prevention Plan and Emergency Action Plan.

WORKER SAFETY-2 The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following:

- An Operation Injury and Illness Prevention Plan;
- An Emergency Action Plan;
- Hazardous Materials Management Program;
- Fire Prevention Plan (8 Cal Code Regs., § 3221); and

- Personal Protective Equipment Program (8 Cal Code Regs., §§ 3401 3411).

The Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted to the CPM for review and comment concerning compliance of the programs with all applicable safety orders. The Fire Prevention Plan and the Emergency Action Plan shall also be submitted to the Tracy Fire Department for review and comment.

Verification: At least 30 days prior to the start of commissioning (“first fire”), the project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program.

At least 30 days prior to the start of construction, the project owner shall provide a copy of a letter to the CPM from the Tracy Fire Department stating the fire department’s comments on the Operations Fire Prevention Plan and Emergency Action Plan.

WORKER SAFETY-3 The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant construction activities and relevant laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards.

The CSS shall:

- Have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;
- Assure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;
- Assure that all construction and commissioning workers and supervisors receive adequate safety training;
- Complete accident and safety-related incident investigations and emergency response reports for injuries and inform the CPM of safety-related incidents; and
- Assure that all the plans identified in Conditions of Certification **WORKER SAFETY-1 and -2** are implemented.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the Construction Safety Supervisor (CSS). The contact information of any replacement CSS shall be submitted to the CPM within one business day.

In the Monthly Compliance Report, the CSS shall submit a monthly safety inspection report to include:

- Record of all employees trained for that month (all records shall be kept on site for the duration of the project);

- Summary report of safety management actions and safety-related incidents that occurred during the month;
- Report of any continuing or unresolved situations and incidents that may pose danger to life or health; and
- Report of accidents and injuries that occurred during the month.

WORKER SAFETY-4 The project owner shall make payments to the Chief Building Official (CBO) for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. Those services shall be in addition to other work performed by the CBO. The Safety Monitor shall be selected by and report directly to the CBO and will be responsible for verifying that the Construction Safety Supervisor, as required in Condition of Certification **WORKER SAFETY-3**, implements all appropriate Cal/OSHA and Energy Commission safety requirements. The Safety Monitor shall conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill those responsibilities.

Verification: Prior to the start of construction, the project owner shall provide proof of its agreement to fund the Safety Monitor services to the CPM for review and approval.

WORKER SAFETY-5 The project owner shall ensure that a portable automatic external defibrillator (AED) is located on site during construction and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functioning at all times. During construction and commissioning, the following persons shall be trained in its use and shall be on site whenever the workers that they supervise are on site: the Construction Project Manager or delegate, the Construction Safety Supervisor or delegate, and all shift foremen. During operations, all power plant employees shall be trained in its use. The training program shall be submitted to the CPM for review and approval.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM for review and approval proof that a portable automatic external defibrillator (AED) exists on site and a copy of the training and maintenance program.

WORKER SAFETY-6 The project owner shall identify and provide a second access point for emergency personnel to enter the site. This access point and the method of gate operation shall be submitted to the Tracy Fire Department for review and comment and to the CPM for review and approval.

Verification: At least 60 days prior to the start of commissioning (“first fire”), the project owner shall submit to the Tracy Fire Department and the CPM preliminary plans showing the location of a second access point to the site and a description of how the gate will be opened by the fire department.

At least 30 days prior to the start of commercial operations, the project owner shall submit final plans to the CPM review and approval. The final plan submittal shall also include a letter containing comments from the Tracy Fire Department or a statement that no comments were received.

TRACY COMBINED-CYCLE POWER PLANT (08-AFC-07C) GENERAL COMPLIANCE CONDITIONS OF CERTIFICATION

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Commission Order	10-0324-01	56074	All Conditions

DEFINITIONS

The following terms and definitions are used to establish when Conditions of Certification are implemented.

PRE-CONSTRUCTION SITE MOBILIZATION

Site mobilization is limited preconstruction activities at the site to allow for the installation of fencing, construction trailers, construction trailer utilities, and construction trailer parking at the site. Limited ground disturbance, grading, and trenching associated with the above mentioned pre-construction activities is considered part of site mobilization. Walking, driving or parking a passenger vehicle, pickup truck and light vehicles is allowable during site mobilization.

CONSTRUCTION

Onsite work to install permanent equipment or structures for any facility.
Ground Disturbance

Construction-related ground disturbance refers to activities that result in the removal of top soil or vegetation at the site beyond site mobilization needs, and for access roads and linear facilities.

Grading, Boring, and Trenching

Construction-related grading, boring, and trenching refers to activities that result in subsurface soil work at the site and for access roads and linear facilities, e.g., alteration of the topographical features such as leveling, removal of hills or high spots, moving of soil from one area to another, and removal of soil.

Notwithstanding the definitions of ground disturbance, grading, boring and trenching above, construction does not include the following:

1. The installation of environmental monitoring equipment;
2. A soil or geological investigation;
3. A topographical survey;
4. Any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility; and

5. Any work to provide access to the site for any of the purposes specified in “Construction” 1, 2, 3, or 4 above.

START OF COMMERCIAL OPERATION

For compliance monitoring purposes, “commercial operation” begins after the completion of start-up and commissioning, when the power plant has reached reliable steady-state production of electricity at the rated capacity. At the start of commercial operation, plant control is usually transferred from the construction manager to the plant operations manager.

COMPLIANCE PROJECT MANAGER RESPONSIBILITIES

The Compliance Project Manager (CPM) shall oversee the compliance monitoring and is responsible for:

1. Ensuring that the design, construction, operation, and closure of the project facilities are in compliance with the terms and Conditions of the Energy Commission Decision;
2. Resolving complaints;
3. Processing post-Certification changes to the Conditions of Certification, project description (petition to amend), and ownership or operational control (petition for change of ownership) (See instructions for filing petitions);
4. Documenting and tracking compliance filings; and
5. Ensuring that compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies, Energy Commission, and staff when handling disputes, complaints, and amendments.

All project compliance submittals are submitted to the CPM for processing. Where a submittal required by a Condition of Certification requires CPM approval, the approval will involve all appropriate Energy Commission staff and management. All submittals must include searchable electronic versions (pdf or Word files).

PRE-CONSTRUCTION AND PRE-OPERATION COMPLIANCE MEETING

The CPM usually schedules pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings is to assemble both the Energy Commission’s and project owner’s technical staff to review the status of all pre-construction or pre-operation requirements, contained in the Energy Commission’s Conditions of Certification. This is to confirm that all applicable Conditions of Certification have been met, or if they have not been met, to ensure that the proper action is taken. In addition, these meetings ensure, to the extent possible, that Energy Commission Conditions will not delay the construction and operation of the plant due to oversight and to preclude any last minute, unforeseen issues from arising. Pre-construction meetings held during the Certification process must be publicly noticed unless they are confined to administrative issues and processes.

ENERGY COMMISSION RECORD

The Energy Commission shall maintain the following documents and information as a public record, in either the Compliance file or Dockets file, for the life of the project (or other period as required):

- All documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
- All monthly and annual compliance reports filed by the project owner;
- All complaints of noncompliance filed with the Energy Commission; and
- All petitions for project or Condition of Certification changes and the resulting staff or Energy Commission action.

PROJECT OWNER RESPONSIBILITIES

The project owner is responsible for ensuring that the compliance Conditions of Certification and all other Conditions of Certification that appear in the Commission Decision are satisfied. The compliance Conditions regarding post-Certification changes specify measures that the project owner must take when requesting changes in the project design, Conditions of Certification, or ownership. Failure to comply with any of the Conditions of Certification or the compliance Conditions may result in reopening of the case and revocation of Energy Commission Certification; an administrative fine; or other action as appropriate. A summary of the Compliance Conditions of Certification is included as Compliance Table 1 at the conclusion of this section.

COMPLIANCE CONDITIONS OF CERTIFICATION

Unrestricted Access (COMPLIANCE-1)

The CPM, responsible Energy Commission staff, and delegated agencies or consultants shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on-site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

Compliance Record (COMPLIANCE-2)

The project owner shall maintain project files on-site or at an alternative site approved by the CPM for the life of the project, unless a lesser period of time is specified by the Conditions of Certification. The files shall contain copies of all “as-built” drawings, documents submitted as verification for Conditions, and other project-related documents.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files maintained pursuant to this Condition.

Compliance Verification Submittals (COMPLIANCE-3)

Each Condition of Certification is followed by a means of verification. The verification describes the Energy Commission's procedure(s) to ensure post-Certification compliance with adopted Conditions. The verification procedures, unlike the Conditions, may be modified as necessary by the CPM.

Verification of compliance with the Conditions of Certification can be accomplished by the following:

1. Monthly and/or annual compliance reports, filed by the project owner or authorized agent, reporting on work done and providing pertinent documentation, as required by the specific Conditions of Certification;
2. Appropriate letters from delegate agencies verifying compliance;
3. Energy Commission staff audits of project records; and/or
4. Energy Commission staff inspections of work, or other evidence that the requirements are satisfied.

Verification lead times associated with start of construction may require the project owner to file submittals during the Certification process, particularly if construction is planned to commence shortly after Certification.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the project by AFC number, the appropriate Condition(s) of Certification by Condition number(s), and a brief description of the subject of the submittal. The project owner shall also identify those submittals not required by a Condition of Certification with a statement such as: "This submittal is for information only and is not required by a specific Condition of Certification." When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal and CEC submittal number.

The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such Condition was satisfied by work performed by the project owner or an agent of the project owner.

All hardcopy submittals shall be addressed as follows:

Compliance Project Manager
(08-AFC-7C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

Those submittals shall be accompanied by a searchable electronic copy, on a CD or by e-mail, as agreed upon by the CPM.

If the project owner desires Energy Commission staff action by a specific date, that request shall be made in the submittal cover letter and shall include a detailed explanation of the effects on the project if that date is not met.

Pre-Construction Matrix and Tasks Prior to Start of Construction (COMPLIANCE-4)

Prior to commencing construction, a compliance matrix addressing only those Conditions that must be fulfilled before the start of construction shall be submitted by the project owner to the CPM. This matrix will be included with the project owner's first compliance submittal or prior to the first pre-construction meeting, whichever comes first. It will be submitted in the same format as the compliance matrix described below. Construction shall not commence until the pre-construction matrix is submitted, all pre-construction Conditions have been complied with, and the CPM has issued a letter to the project owner authorizing construction. Various lead times for submittal of compliance verification documents to the CPM for Conditions of Certification are established to allow sufficient staff time to review and comment and, if necessary, allow the project owner to revise the submittal in a timely manner. This will ensure that project construction may proceed according to schedule.

Failure to submit compliance documents within the specified lead-time may result in delays in authorization to commence various stages of project development.

If the project owner anticipates commencing project construction as soon as the project is certified, it may be necessary for the project owner to file compliance submittals prior to project Certification. Compliance submittals should be completed in advance where the necessary lead time for a required compliance event extends beyond the date anticipated for start of construction. The project owner must understand that the submittal of compliance documents prior to project Certification is at the owner's own risk. Any approval by Energy Commission staff is subject to change, based upon the Commission Decision.

COMPLIANCE REPORTING

There are two different compliance reports that the project owner must submit to assist the CPM in tracking activities and monitoring compliance with the terms and Conditions of the Energy Commission Decision. During construction, the project owner or authorized agent will submit Monthly Compliance Reports. During operation, an Annual Compliance Report must be submitted. These reports, and the requirement for an accompanying compliance matrix, are described below. The majority of the Conditions of Certification require that compliance submittals be submitted to the CPM in the monthly or annual compliance reports.

Compliance Matrix (COMPLIANCE-5)

A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report. The compliance matrix is intended to provide the CPM with the current status of all Conditions of Certification in a spreadsheet format. The compliance matrix must identify:

1. The technical area;
2. The Condition number;
3. A brief description of the verification action or submittal required by the Condition;

4. The date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);
5. The expected or actual submittal date;
6. The date a submittal or action was approved by the Chief Building Official (CBO), CPM, or delegate agency, if applicable;
7. The compliance status of each Condition, e.g., “not started,” “in progress” or “completed” (include the date); and
8. If the Condition was amended, the date of the amendment.

Satisfied Conditions shall be placed at the end of the matrix.

Monthly Compliance Report (COMPLIANCE-6)

The first Monthly Compliance Report is due one month following the Energy Commission business meeting date upon which the project was approved, unless otherwise agreed to by the CPM. The first Monthly Compliance Report shall include the AFC number and an initial list of dates for each of the events identified on the Key Events List which can be found at the end of this section.

During pre-construction and construction of the project, the project owner or authorized agent shall submit an original and an electronic searchable version of the Monthly Compliance Report within 10 working days after the end of each reporting month. Monthly Compliance Reports shall be clearly identified for the month being reported.

The reports shall contain, at a minimum:

1. A summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule;
2. Documents required by specific Conditions to be submitted along with the Monthly Compliance Report. Each of these items must be identified in the transmittal letter, as well as the Conditions they satisfy and submitted as attachments to the Monthly Compliance Report;
3. An initial, and thereafter updated, compliance matrix showing the status of all Conditions of Certification;
4. A list of Conditions that have been satisfied during the reporting period, and a description or reference to the actions that satisfied the Condition;
5. A list of any submittal deadlines that were missed, accompanied by an explanation and an estimate of when the information will be provided;
6. A cumulative listing of any approved changes to Conditions of Certification;
7. A listing of any filings submitted to, or permits issued by, other governmental agencies during the month;
8. A projection of project compliance activities scheduled during the next two months. The project owner shall notify the CPM as soon as any changes are

made to the project construction schedule that would affect compliance with Conditions of Certification;

9. A listing of the month's additions to the on-site compliance file; and
10. A listing of complaints, notices of violation, official warnings, and citations received during the month, a description of the resolution of the resolved actions, and the status of any unresolved actions.

All sections, exhibits, or addendums shall be separated by tabbed dividers or as acceptable by the CPM.

Annual Compliance Report (COMPLIANCE-7)

After construction is complete, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports. The reports are for each year of commercial operation and are due to the CPM each year at a date agreed to by the CPM. Annual Compliance Reports shall be submitted over the life of the project unless otherwise specified by the CPM.

Each Annual Compliance Report shall include the AFC number, identify the reporting period and shall contain the following:

1. An updated compliance matrix showing the status of all Conditions of Certification (fully satisfied Conditions do not need to be included in the matrix after they have been reported as completed);
2. A summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
3. Documents required by specific Conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, with the Condition it satisfies, and submitted as attachments to the Annual Compliance Report;
4. A cumulative listing of all post-Certification changes approved by the Energy Commission or cleared by the CPM;
5. An explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
6. A listing of filings submitted to, or permits issued by, other governmental agencies during the year;
7. A projection of project compliance activities scheduled during the next year;
8. A listing of the year's additions to the on-site compliance file;
9. An evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date [see Compliance Conditions for Facility Closure addressed later in this section]; and
10. A listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved matters, and the status of any unresolved matters.

Confidential Information (COMPLIANCE-8)

Any information that the project owner deems confidential shall be submitted to the Energy Commission's Dockets Unit with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

Annual Energy Facility Compliance Fee (COMPLIANCE-9)

Pursuant to the provisions of Section 25806(b) of the Public Resources Code, the project owner is required to pay an annual compliance fee, which is adjusted annually. Current Compliance fee information is available on the Energy Commission's website http://www.energy.ca.gov/siting/filing_fees.html. You may also contact the CPM for the current fee information. The initial payment is due on the date the Energy Commission adopts the final decision. All subsequent payments are due by July 1 of each year in which the facility retains its Certification. The payment instrument shall be made payable to the California Energy Commission and mailed to: Accounting Office MS-02, California Energy Commission, 1516 9th St., Sacramento, CA 95814.

Reporting of Complaints, Notices, and Citations (COMPLIANCE-10)

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering with date and time stamp recording. All recorded complaints shall be responded to within 24 hours. The telephone number shall be posted at the project site and made easily visible to passersby during construction and operation. The telephone number shall be provided to the CPM who will post it on the Energy Commission's web page at:

http://www.energy.ca.gov/sitingcases/power_plants_contacts.html

Any changes to the telephone number shall be submitted immediately to the CPM, who will update the web page.

In addition to the monthly and annual compliance reporting requirements described above, the project owner shall report and provide copies to the CPM of all complaint forms, including noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the NOISE Conditions of Certification. All other complaints shall be recorded on the complaint form (Attachment A).

Facility Closure

At some point in the future, the project will cease operation and close down. At that time, it will be necessary to ensure that the closure occurs in such a way that public health and safety and the environment are protected from adverse impacts. Although the project setting for this project does not appear, at this time, to present any special or unusual closure problems, it is impossible to foresee what the situation will be in 30

years or more when the project ceases operation. Therefore, provisions must be made that provide the flexibility to deal with the specific situation and project setting that exist at the time of closure. Laws, Ordinances, Regulations and Standards (LORS) pertaining to facility closure are identified in the sections dealing with each technical area. Facility closure will be consistent with LORS in effect at the time of closure.

There are at least three circumstances in which a facility closure can take place: planned closure, unplanned temporary closure and unplanned permanent closure.

CLOSURE DEFINITIONS

Planned Closure

A planned closure occurs when the facility is closed in an anticipated, orderly manner, at the end of its useful economic or mechanical life, or due to gradual obsolescence.

Unplanned Temporary Closure

An unplanned temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster or an emergency.

Unplanned Permanent Closure

An unplanned permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes unplanned closure where the owner implements the on-site contingency plan. It can also include unplanned closure where the project owner fails to implement the contingency plan, and the project is essentially abandoned.

COMPLIANCE CONDITIONS FOR FACILITY CLOSURE

Planned Closure (COMPLIANCE-11)

In order to ensure that a planned facility closure does not create adverse impacts, a closure process that provides for careful consideration of available options and applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of closure, will be undertaken. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least 12 months (or other period of time agreed to by the CPM) prior to commencement of closure activities. The project owner shall file 120 copies (or other number of copies agreed upon by the CPM) of a proposed facility closure plan with the Energy Commission.

The plan shall:

1. Identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site;
2. Identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project;

3. Identify any facilities or equipment intended to remain on site after closure, the reason, and any future use; and
4. Address conformance of the plan with all applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of facility closure, and applicable Conditions of Certification.

Prior to submittal of the proposed facility closure plan, a meeting shall be held between the project owner and the Energy Commission CPM for the purpose of discussing the specific contents of the plan.

In the event that there are significant issues associated with the proposed facility closure plan's approval, or the desires of local officials or interested parties are inconsistent with the plan, the CPM shall hold one or more workshops and/or the Energy Commission may hold public hearings as part of its approval procedure.

As necessary, prior to or during the closure plan process, the project owner shall take appropriate steps to eliminate any immediate threats to public health and safety and the environment, but shall not commence any other closure activities until the Energy Commission approves the facility closure plan.

Unplanned Temporary Closure/On-Site Contingency Plan (COMPLIANCE-12)

In order to ensure that public health and safety and the environment are protected in the event of an unplanned temporary facility closure, it is essential to have an on-site contingency plan in place. The on-site contingency plan will help to ensure that all necessary steps to mitigate public health and safety impacts and environmental impacts are taken in a timely manner.

The project owner shall submit an on-site contingency plan for CPM review and approval. The plan shall be submitted no less than 60 days (or other time agreed to by the CPM) prior to commencement of commercial operation. The approved plan must be in place prior to commercial operation of the facility and shall be kept at the site at all times.

The project owner, in consultation with the CPM, will update the on-site contingency plan as necessary. The CPM may require revisions to the on-site contingency plan over the life of the project. In the annual compliance reports submitted to the Energy Commission, the project owner will review the on-site contingency plan, and recommend changes to bring the plan up to date. Any changes to the plan must be approved by the CPM.

The on-site contingency plan shall provide for taking immediate steps to secure the facility from trespassing or encroachment. In addition, for closures of more than 90 days, unless other arrangements are agreed to by the CPM, the plan shall provide for removal of hazardous materials and hazardous wastes, draining of all chemicals from storage tanks and other equipment, and the safe shutdown of all equipment. (Also see specific Conditions of Certification for the technical areas of Hazardous Materials Management and Waste Management.)

In addition, consistent with requirements under unplanned permanent closure addressed below, the nature and extent of insurance coverage, and major equipment

warranties must also be included in the on-site contingency plan. In addition, the status of the insurance coverage and major equipment warranties must be updated in the annual compliance reports.

In the event of an unplanned temporary closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the circumstances and expected duration of the closure.

If the CPM determines that an unplanned temporary closure is likely to be permanent, or for a duration of more than 12 months, a closure plan consistent with the requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPM's determination (or other period of time agreed to by the CPM).

Unplanned Permanent Closure/On-Site Contingency Plan (COMPLIANCE-13)

The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.

In addition, the on-site contingency plan shall address how the project owner will ensure that all required closure steps will be successfully undertaken in the event of abandonment.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the status of all closure activities.

A closure plan, consistent with the requirements for a planned closure, shall be developed and submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

Post Certification Changes to the Energy Commission Decision: Amendments, Ownership Changes, Staff Approved Project Modifications and Verification Changes (COMPLIANCE-14)

The project owner must petition the Energy Commission pursuant to Title 20, California Code of Regulations, section 1769, in order to modify the project (including linear facilities) design, operation or performance requirements, and to transfer ownership or operational control of the facility. It is the responsibility of the project owner to contact the CPM to determine if a proposed project change should be considered a project modification pursuant to section 1769. Implementation of a project modification without first securing Energy Commission, or Energy Commission staff approval, may result in enforcement action that could result in civil penalties in accordance with section 25534 of the Public Resources Code.

A petition is required for amendments and for Staff approved project modifications as specified below. Both shall be filed as a "Petition to Amend." Staff will determine if the change is significant or insignificant. For verification changes, a letter from the project owner is sufficient. In all cases, the petition or letter requesting a change should be

submitted to the CPM, who will file it with the Energy Commission's Dockets Unit in accordance with Title 20, California Code of Regulations, section 1209.

The criteria that determine which type of approval and the process that applies are explained below. They reflect the provisions of Section 1769 at the time this Condition was drafted. If the Commission's rules regarding amendments are amended, the rules in effect at the time an amendment is requested shall apply.

Amendment

The project owner shall petition the Energy Commission, pursuant to Title 20, California Code of Regulations, Section 1769(a), when proposing modifications to the project (including linear facilities) design, operation, or performance requirements. If a proposed modification results in deletion or change of a Condition of Certification, or makes changes that would cause the project not to comply with any applicable laws, ordinances, regulations or standards, the petition will be processed as a formal amendment to the final decision, which requires public notice and review of the Energy Commission staff analysis, and approval by the full Commission. The petition shall be in the form of a legal brief and fulfill the requirements of Section 1769(a). Upon request, the CPM will provide you with a sample petition to use as a template.

Change of Ownership

Change of ownership or operational control also requires that the project owner file a petition pursuant to section 1769 (b). This process requires public notice and approval by the full Commission. The petition shall be in the form of a legal brief and fulfill the requirements of Section 1769(b). Upon request, the CPM will provide you with a sample petition to use as a template.

Staff Approved Project Modification

Modifications that do not result in deletions or changes to Conditions of Certification, that are compliant with laws, ordinances, regulations and standards and will not have significant environmental impacts may be authorized by the CPM as a staff approved project modification pursuant to section 1769(a) (2). This process usually requires minimal time to complete, and it requires a 14-day public review of the Notice of Petition to Amend that includes staff's intention to approve the proposed project modification unless substantive objections are filed. These requests must also be submitted in the form of a "petition to amend" as described above.

Verification Change

A verification may be modified by the CPM without requesting an amendment to the decision if the change does not conflict with the Conditions of Certification and provides an effective alternate means of verification.

CBO Delegation and Agency Cooperation

In performing construction and operation monitoring of the project, Energy Commission staff acts as, and has the authority of, the Chief Building Official (CBO). Energy Commission staff may delegate CBO responsibility to either an independent third party

contractor or the local building official. Energy Commission staff retains CBO authority when selecting a delegate CBO, including enforcing and interpreting state and local codes, and use of discretion, as necessary, in implementing the various codes and standards.

Energy Commission staff may also seek the cooperation of state, regional and local agencies that have an interest in environmental protection when conducting project monitoring.

Enforcement

The Energy Commission's legal authority to enforce the terms and Conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy Commission may amend or revoke the Certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or Conditions of the Energy Commission Decision. The specific action and amount of any fines the Energy Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, oversight, unforeseeable events, and other factors the Energy Commission may consider.

NONCOMPLIANCE COMPLAINT PROCEDURES

Any person or agency may file a complaint alleging noncompliance with the Conditions of Certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1237, but in many instances the noncompliance can be resolved by using the informal dispute resolution process. Both the informal and formal complaint procedure, as described in current State law and regulations, are described below. They shall be followed unless superseded by future law or regulations.

The Energy Commission has established a toll free compliance telephone number of 1 800-858-0784 for the public to contact the Energy Commission about power plant construction or operation-related questions, complaints or concerns.

Informal Dispute Resolution Process

The following procedure is designed to informally resolve disputes concerning the interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate an informal dispute resolution process. Disputes may pertain to actions or decisions made by any party, including the Energy Commission's delegate agents.

This process may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1237, but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and Conditions of Certification as approved by the Energy Commission, although the agreed upon resolution may result in a project owner, or in some cases the Energy Commission staff, proposing an amendment.

The process encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be brought before the full Energy Commission for consideration via the complaint and investigation procedure.

Request for Informal Investigation

Any individual, group, or agency may request the Energy Commission to conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and Conditions of Certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter. Within seven working days of the CPM's request, provide a written report to the CPM of the results of the investigation, including corrective measures proposed or undertaken. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to also provide an initial verbal report, within 48 hours.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures proposed or undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within 14 days of the project owner's filing of its written report. Upon receipt of such a request, the CPM shall:

1. Immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place;
2. Secure the attendance of appropriate Energy Commission staff and staff of any other agencies with expertise in the subject area of concern, as necessary;
3. Conduct such meeting in an informal and objective manner so as to encourage the voluntary settlement of the dispute in a fair and equitable manner; and
4. After the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum that fairly and accurately identifies the positions of all parties and any understandings reached. If an agreement has not been reached, the CPM shall inform the complainant of the formal complaint process and requirements provided under Title 20, California Code of Regulations, section 1230 et seq.

Formal Dispute Resolution Procedure-Complaints and Investigations

Any person may file a complaint with the Energy Commission's Dockets Unit alleging noncompliance with a Commission decision adopted pursuant to Public Resources Code section 25500. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1237.