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CGS15-L-011
February 26, 2015

Eric Veerkamp
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Reference: Colusa Generating Station

Subject: Colusa Generating Station (06-AFC-9)
Condition of Certification COM-7(BIO-2; HAZ-1; Noise-8; Soil and Water 2,7, 8, 9; TLSN-3; VIS-1&3; Waste-5) – Annual Operating Report

Dear Eric:

Please find the attached pursuant to CGS Conditions of Certification COM-7. A revised Annual Compliance Report for the Colusa Generating Station representing the operational period of January 1, 2014 through December 31, 2014 is being submitted as requested. Within this report you will find the following information;

1. Attachment A: an updated compliance matrix showing the status of all Conditions of Certification (with exception to fully satisfied conditions as they do not need to be included after they have been reported as completed);

2. Attachment B: a summary of the current project operating status with explanations of any significant changes to facility operations during the reporting year;

3. Attachment C: documents required by specific conditions to be submitted along with the Annual Compliance Report. These items include;

4. Attachment D: a cumulative listing of all post-certification changes approved by the California Energy Commission or cleared by the CPM;

5. Attachment E: an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;

6. Attachment F: a listing of filings submitted to, or permits issued by, other governmental agencies during the year;

7. Attachment G: a projection of project compliance activities scheduled during the next year;

8. Attachment H: a listing of the year's additions to the on-site compliance files;

9. Attachment I: an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to update;

10. Attachment J: a listing of complaints, notices of violations, official warnings, and citations received during the year, a description of the resolution of any resolved matters, and the status of any unresolved matters.

Should you have any questions or comments please contact me at (530) 934-9007.

Regards,

Charles Price
Senior Environmental Consultant

cc: File No. 3.6.3.22
Ed Warner, PG&E
Sarah Gassner, PG&E

Attachment A
Compliance Matrix

COLUSA GENERATING STATION COMPLIANCE MATRIX BASED ON CEC FINAL DECISION

Color code key:	Construction Item	Commissioning Item	Operations Item	Submitted to CEC or Agency	Approved by CEC

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-01	COMM	All facility operating staff shall be advised of and familiar with these permit conditions.	Provide CPM and APCO with signed records of facility operating staff indicating review of permit conditions and maintain training and records documenting this training at the site.	30 days prior to first fire	PG&E	**On file in Environmental Managers Office**		**Ongoing with New Hires**	
AQ-02	CONS	Right of entry shall be provided at all times.	Project Owner shall make site available to reps of the District, ARB and CEC for inspection, etc.	As required	PG&E			Ongoing	
AQ-03	OPS	In the case of shutdown or restart of air pollution control equipment for necessary scheduled maintenance, notify CPM and APCO of such shutdown 24 hours prior.	Notify the CPM and APCO 24 hours in advance of planned shutdowns for maintenance.	As required	PG&E			Ongoing	
AQ-04	OPS	If any upset or breakdown occurs with permitted equipment that causes excess emissions of air contaminants, the APCO shall be notified with 24 hours or by 9:00am by the following work day.	In addition to phone call, also submit a written statement of full disclosure to the APCO within 72 hours, including date, time, duration, estimated emissions, cause and remedy.	As required	PG&E			Ongoing	
AQ-05	OPS	Fugitive emissions, including dust and odors, shall be controlled at all times such that a nuisance is not created at any point beyond the facility's property lines.	Project Owner shall document any complaints received from the public in the Quarterly Operation Reports (QORs) required by AQ-22 and make site available to APCO, ARB, and CEC representatives.	Quarterly after COD	PG&E			Ongoing	
AQ-07.2	COMM	A source test protocol will be submitted to the APCD for approval.	Submit source test protocol to the APCD for approval by the APCO.	45 days prior to conducting annual source tests	PG&E	Submitted to CEC, EPA, CCAPCD 09/08/10; 9/14/2011		Annual Requirement	
AQ-07.3	COMM	Notify the CPM and District 10 days prior to actual source test.	Notify the CPM and APCD prior to any compliance source test.	10 days prior to conducting any compliance source test	PG&E			Annual Requirement	
AQ-08	COMM	**CONDITION MODIFIED BY CEC ORDER 7-15-09:** Stack gas testing shall be required on an annual basis for NOx, VOC, and CO on the HRSG stacks. The HRSG stacks shall also be tested for SOx and PM10 emissions during the first year and in subsequent years if requested by APCO. The natural gas water bath heater shall be tested for NOx, SOx, VOC, CO, and PM10 during the first year and thereafter only as requested by APCO.	The results and field data colleced during source tests shall be submitted to the CPM and the District within 60 days of testing.	Within 60 days of testing	PG&E			Annual Requirement	
AQ-09	COMM	Annual testing of the HRSG stacks shall include quantification of formaldehyde and NH3 emissions for compliance with permit limits.Verify by continuous recording the ammonia injection rate to the system. The ammonia source test shall be conducted over the expected operating rate of the turbine as set forth in the Condition.	Provide results and field data collected during source tests to CPM and APCD. Submit proposed ammonia injection/emission rate correlation to the APCD and CPM for approval with the ammonia source test report.	Within 60 days of testing	PG&E			Annual Requirement	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-10	OPS	**CONDITION MODIFIED BY CEC ORDER 7-15-09:** The gas turbines, duct burners, and natural gas water heater shall be fired exclusively on pipeline quality natural gas.	Submit information on the quality and type of fuel used for the gas turbines, duct burners, and natural gas water bath heater to the CPM/APCO in the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-11	OPS	The average annual sulfur content in the natural gas shall be less than or equal to 0.3 grains per 100 SCF. Conduct monthly testing at the site using approved methods to determine sulfur content. Natural gas testing info from Burney will also be reviewed and provided to the APCD.	Compile the required data on the sulfur content of the natural gas and submit to the CPM and APCO in the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-13a	OPS	All applicable federal standards and test procedures of Subpart KKKK shall be met.	Provide copies of all correspondence with EPA regarding compliance with Subpart KKKK to the APCD and CEC.	Quarterly after COD	PG&E			Ongoing	
AQ-14	OPS	CTGs shall meet a VOC limit of 2.0 ppmvd w/ duct burner firing and 1.38 ppmvd w/o duct firing at 15% O2 averaged over 1 hour. Maximum hourly steady state VOC emission limits for each CTG are 7.2 pounds with duct firing and 3.4 pounds w/o duct firing	Submit to the CPM and APCO CTG source test emissions data demonstrating compliance with this condition as required by condition AQ-8 and provide operating data that establishes ongoing compliance as part of AQ-22.	Within 60 days of testing	PG&E			Ongoing	
AQ-15	OPS	The CTGs shall meet a NOx limit of 2.0 ppmvd @15% O2 averaged over one hour except during commissioning. Maximum hourly steady state NOx emission limits for each CTG are 20.7 pounds with duct firing and 15.3 pounds without duct firing.	Submit to the CPM and APCO CTG continuous emissions data demonstrating compliance with this condition as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-16	OPS	The CTGs shall meet a CO limit of 3.0 ppmvd @15% O2 over a three-hour rolling average except during commissioning. Maximum hourly steady state CO emission limits for each CTG are 18.9 pounds with duct firing and 14.0 pounds without duct firing.	Submit to the CPM and APCO CTG continuous emissions data demonstrating compliance with this condition as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-18	OPS	Ammonia slip shall be limited to 5.0 pmvd @15% O2 over one hour. Formaldehyde emissions will be limited to 0.917 lbs per MMscf of natural gas. Maximum hourly steady state NH3 emission limits for each CTG are 19.2 pounds with duct firing and 14.2 pounds without duct firing.	Submit to the CPM and APCO CTG source test emissions data demonstrating compliance with this condition a part of the QOR. Provide to the CPM and APCO for approval a calculation method to determine the ammonia slip emissions, using source test data, based on the NOx concentration and the ammonia injection rate; this calculation shall be revised for approval as necessary after each source test performed under AQ-9.	Within 60 days of testing	PG&E			Annual Requirement	
AQ-19a	OPS	CEMS shall be installed to sample, analyze, and record NOx, CO, and O2 concentration in the exhaust gas of both HRSG stacks.	Make the site available for inspection by the APCD, ARB, and CEC to verify CEMS is properly installed and operational.	As required	PG&E			Ongoing	
AQ-19b	OPS	CEMS will generate reports of emissions data in accordance with permit requirements and will send alarm signals to the plant DCS control room when emissions levels approach or exceed pre-selected limits.	Submit emissions data generated by the CEMS to the CPM and APCO as part of the QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-19c	OPS	RATA tests will be conducted annually to verify performance of the CEMS.	Provide RATA test results along with annual source test report as required under AQ-8.	Annually	PG&E			Ongoing	
AQ-22	OPS	Quarterly reports of CEMS and process data, including startup info, shall be submitted to the District within 30 days after the end of each quarter.	Provide information as part of QORs. (Format will be determined by the District and may include both electronic spreadsheet and hard copy files.)	Quarterly after COD	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
AQ-25	OPS	**CONDITION MODIFIED BY CEC ORDER 7-15-09:** The total emissions from the CTGs and HRSGs shall not exceed those established in the Condition for hourly and daily operations (see emission limits set forth in table in condition).	Submit CTG and HRSG emissions data to CEC CPM and APCO demonstrating compliance with the condition as part of QORs.	Quarterly after COD	PG&E			Ongoing	
AQ-26	OPS	**CONDITION MODIFIED BY CEC ORDER 7-15-09:** The total emissions from the Colusa Power Plant shall not exceed the quarterly and annual combustion emission limits established in the Condition [all numbers have been revised from original Final Decision]	Submit to the CPM and APCO the plant emissions data demonstrating compliance with this condition.	Quarterly after COD	PG&E			Ongoing	
AQ-29	OPS	Total facility emissions of Hazardous Air Pollutants shall not exceed 10 tons/year for any single pollutant except ammonia, formaldehyde, and propylene.		Annually	PG&E			Ongoing	
AQ-SC6	OPS	Submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. Project Owner shall submit to the CPM any modification to any permit proposed by the District of EPA and any revised permit issued by the District of EPA.	Submit any proposed air permit modification to the CPM.	Within 5 working days of its submittal	PG&E			Ongoing	
AQ-SC9	OPS	Submit to the CPM Quarterly Operation Reports following the end of each calendar quarter and containing the info required by Condition AQ-19.	Submit QORs to the CPM and APCO no later than 30 days following the end of each calendar quarter.	Quarterly after COD	PG&E			Ongoing	
AQ-SC11	OPS	**NEW CONDITION PER CEC ORDER 7-15-09:** 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 project owner shall provide the water quality test results and the wet surface air cooler particulate (PMI *0/PM2.5)* emissions estimates to the CPM as part of the fourth quarter's quarterly operational report (AQ-SC9).	At least once annually during summer peak period				Ongoing	
BIO-07	OPS	Incorporate biological mitigation measures into the BRMIMP and permanent or unexpected permanent closure plans.	Address all biological resource related issues associated with facility closure and provide final measures in a biological resources element of the final closure plan.	12 months prior to start of closure activities	PG&E			Ongoing	
COM-01	OPS	Unrestricted Access		Ongoing	PG&E			Ongoing access provided during construction	
COM-02	OPS	Compliance Record--The files are to contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.		Ongoing	PG&E			Ongoing	
COM-05	OPS	Compliance Matrix	Submit a compliance matrix with each MCR and also in ACR	Include in MCR and in ACR	PG&E			Ongoing	
COM-07	OPS	Annual Compliance Report	Submit to CPM on an annual basis	Annually	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
COM-09	OPS	Annual Energy Facility Compliance Fee	Submit annual compliance fee to CEC	During life of project	PG&E			Ongoing	
COM-10	OPS	Reporting of Complaints, Notices and Citations	Report to the CPM all notices, complaints, and citations within 10 days of receipt.	As required	PG&E			Ongoing	
COM-11	OPS	Planned Facility Closure	Submit a closure plan to the CPM at least 12 months prior to commencement of a planned closure	12 months prior to start of closure activities	PG&E				
COM-13	OPS	Unplanned Permanent Facility Closure	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.	Within 90 days of permanent closure	PG&E	9/29/2010	CGS10-L-0111	Approved via email 10/15/10	
COM-14	CONS	Post-Certification Changes to the Decision		As required	PG&E			Amendments are discussed in MCR	
CUL-04	CONS	Prepare the Cultural Resources Report (CRR) in ARMR format. Include all information specified in Condition.	Submit CRR within 90 days after completion of ground disturbance (including landscaping).	Within 90 days after completion of landscaping	PG&E	7/28/2011	CGS11-L-0026	Approved 4/9/13	
GEN-01c	OPS	Once the certificate of occupancy has been issued, inform the CPM of any construction, addition, alterations, moving, demolition, repair, or maintenance to be performed on any portions of the completed facility for the purpose of complying with the above stated codes.	Submit required info to the CPM.	At least 30 days prior to such work	PG&E				
GEN-08	CONS	Obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The Project Owner shall request the CBO to inspect the completed structure and review the submitted documents. The Project Owner shall retain one set of approved engineering plans, specifications, and calculations at the project site or other accessible location during the operation of the project.	Submit to the CBO a written notice that the completed work is ready for inspection and a signed statement that the work conforms to the final approved plans.	Within 15 days of completion of any work	PG&E/CBO				
HAZ-01	OPS	Do not use any hazardous material in any quantity or strength not listed in Appendix C unless approved in advance by the CEC CPM.	Report to the CPM a list of hazardous materials and storage quantities contained at the facility	Include in Annual Compliance Report	PG&E			Ongoing	
NOISE-02	OPS	Throughout the construction and operation of the project, document, investigate, evaluate, and attempt to resolve all project-related noise complaints. Noise Complaint Resolution process will be used.	File a Noise Complaint Resolution Form with the City and the CPM documenting resolution of the compliant.	Within 5 days of receiving a noise compliant	PG&E				
NOISE-08	OPS	In the event legitimate noise complaints are made by owners or occupants at the two residences locate at ML1, ML2, or RC1 during operation of the CGS, the Project Owner shall offer to pay for the following noise attenuating upgrades (see list in Condition).	Upgrades shall be installed (unless impossible due to circumstances beyond Project Owner's control) within six months of the receipt of the compliance. Provide documentation certifying the items listed in the Condition.	As required	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
PAL-06	OPS	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 .	Maintain in compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. Maintain these files for a period of three years after completion and approval of the CPM-approved Paleontological Resources Report.	As required					
SOIL & WATER-04b	OPS	Notify the CEC of any violations of the agreement requirements, limits or amounts.	Provide copies of any NOVs from the GCID. Fully explain corrective actions in next MCR.	Within 10 days of NOV	PG&E			Ongoing	
SOIL & WATER-07b	OPS	Submit any required monitoring information to the CPM in the annual compliance report.	Submit requested information.	Include in ACR	PG&E			Ongoing	
SOIL & WATER-07c	OPS	Submit copies of an NOVs to the CPM.	Submit requested info to CPM.	Within 10 days of receipt of NOV; explain correction actions in ACR	PG&E			Ongoing	
SOIL & WATER-08b	OPS	Prepare an annual water use summary which includes the monthly range and monthly average of daily raw water usage in gpd and total water used by the project on a monthly and annual basis in acre-feet. Potable water use on the site shall be recorded on a monthly basis. (See additional details for annual water use summary in Condition)	Submit requested info to CPM.	Annually	PG&E			Ongoing	
SOIL & WATER-09c	OPS	Monitor the waste water system following the general standards adopted in the SWRCB's onsite wastewater treatment system regs or the procedures outlined in the CPM-approved O&M manual. Provide testing results	Provide requested into to CPM.	Include in ACR	PG&E			Ongoing	
SOIL & WATER-11		The Project Owner shall provide two signed copies of the Water Agreement issued by GCID prior to delivery or use of water from the GCID Canal	Submit two signed copies to the CPM	10 days prior to use.	PG&E	10/27/2014		Closed	
TLSN-03	OPS	Take reasonable steps to resolve any complaints of interference with radio or TV signals from operation of the proposed lines.	Provide reports of line-related complaints along with related mitigation measures in the annual report for the first five year.	Include in ACR	PG&E			Ongoing	
VIS-01b	OPS	Notify the CPM that the surface treatment of all listed structures and buildings has been completed and is ready for inspection and submit electronic color photographs taken from the same KOPs	Set up an inspection appointment.	Within 90 days of start of commercial ops	PG&E	3/24/2011	CGS11-L-0014	4/11/2011	
VIS-02b	COMM	Notify the CPM that the lighting has been completed and is ready for inspection.	Set up an inspection appointment.	Prior to start of commercial operation	Gemma	9/19/2011	CGS11-L-0036	Approved 9/29/2011	
VIS-02c	OPS	Notify the CPM of any complaints re: lighting.	Submit a complaint resolution form to the CPM record each lighting complaint and document resolution of that complaint.	Within 48 hours after receiving a complaint	PG&E			Ongoing	

Cond. #	Sort Code	Description of Project Owner's Responsibilities	Verification/Action/Submittal Required by Project Owner	Timeframe	Lead Respons. Party	Date sent to CEC, CBO or agency	Log Number	Status	Comments
VIS-03	CONS	Provide landscaping that reduces the visibility of the power plant structures and complies with local policies and ordinances. Trees shall be strategically placed along the southern, eastern, and northern facility boundaries as appropriate and of sufficient density and height to screen the plant structures to the greatest feasible extent within the shortest feasible time.	Prepare and submit a landscaping plan (see Condition for details on info to include in plan) to the CPM for review and approval and to the County for review and comment.Notify the CPM and County within 7 days after completing installation of landscaping. Report on landscape maintenance activities in ACR.	At least 90 days prior to installation of landscaping -	PG&E			Submitted 8/25/2010 Approved 9/14/2010 Ongoing for Annual Report	
WASTE-04	CONS	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.	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 will be required in the manner in which project-related wastes are managed.	As required	PG&E			Ongoing	
WASTE-05b	OPS	Prepare an Operations Waste Management Plan for all wastes generated during construction of the facility.	Submit plan to the CPM for review and approval. See Final Decision WASTE-5 for plan requirements.	Provide training sign-in sheets in first MCR Report in Annual Report	PG&E	9/23/2010	CGS10-L-0109	Approved on 10/18/10	

Attachment B
Project Operating Status Summary

Per Com-7 Item 2 we are to provide; "A Summary of the current project operating status and an explanation of any significant changes to the facility operations during the year"

On April 22, 2014, the Colusa Generating Station (CGS) received approval from the California Energy Commission (CEC) to take water directly from the Glenn Colusa Irrigation District (GCID) canal and truck the water to the facility. On August 22, 2014, CEC staff issued a Notice of Determination allowing the Colusa Generating station to construct a pipeline from the GCID canal to the CGS.

These approvals were conditional on modification of the water agreement between GCID and PG&E per the addition of condition Soil and Water 11. The modified agreement was sent to the CEC on October 27, 2014 and water removal via the new pipeline was initiated in early November. Water was transported by truck in 2014.

There were no other significant changes to the facility and the plant is operating normally.

Attachment C
Accompanying Documents

CEC 2014 Annual Compliance Report		
Reporting Conditions; Per COM-7 item 3		
Condition of Certification	Reporting	
BIO 2	Designated Biologist Record Summaries	See Attached Documentation, Appendix 1
HAZ 1	List of Chemicals on site	See Attached Documentation, Appendix 2
Noise 8	Noise Complaints	See Attached Documentation, Appendix 3
S&W 2	SWPPP Monitoring and Maintenance Activities	See Attached Documentation, Appendix 4
S&W 7	GCID Monitoring Requirements/Violations	See Attached Documentation, Appendix 5
S&W 8	Annual Water Use	See Attached Documentation, Appendix 6
S&W 9	Septic Tank	See Attached Documentation, Appendix 7
TLSN 3	Electro Magnetic interference Complaints	See Attached Documentation, Appendix 8
VIS 1	Surface Treatment Report	See Attached Documentation, Appendix 9
VIS 3	Landscape Report	See Attached Documentation, Appendix 10
Waste 5	Waste Management Plan	See Attached Documentation, Appendix 11

Appendix 1, BIO-2

Colusa Generating Station, California Energy Commission Annual Compliance Report, Biology Section, 2014

PREPARED FOR: PG&E/Charles Price/Colusa Generating Station, Compliance Manager

COPY TO: Jerry Salamy/CH2M HILL Project Manager

PREPARED BY: Rick Crowe/CH2M Hill
Colusa Generating Station CEC Designated Biologist

DATE: February 25, 2015

Introduction

This Colusa Generating Station (CGS) Biological Annual Compliance Report, 2014 fulfills the California Energy Commission (CEC) requirement in the Verification for Condition of Certification (COC) BIO-2 Sub-section 8. "Designated Biologist Duties, BIO-2, Sub-section 8; The duties of the Designated Biologist are to maintain written records of the tasks specified above and those included in the Biological Resources Mitigation Implementation and Monitoring Plan, (BRMIMP). Summaries of these records shall be submitted in the monthly compliance report and the annual compliance report.

The CGS project was designed to avoid biological resources to the greatest extent feasible through development of mitigation and protection measures with informal consultation and discussions with the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), Central Valley Regional Water Quality Control Board (CVRWQCB), and the CEC. The CEC COCs for the CGS required that Pacific Gas and Electric Company (PG&E) appoint a designated biologist to supervise compliance of mitigation measures as outlined in the CEC-approved BRMIMP during all phases of construction and operation. All construction COCs were implemented successfully during all phases of construction and continue to be implemented during operation of the CGS facility.

Project Location

The Colusa Generating Station (CGS) site is located approximately 4 miles west of Interstate 5, 14 miles north of the farming community of Williams, and 72 miles north of Sacramento, adjacent to Pacific Gas and Electric Company's (PG&E) Delevan Natural Gas Compressor Station on Delevan Road in Colusa County, California. The power plant site is within the Holthouse Ranch and is within the eastern half of Section 35, Township 18 North, Range 4 West, Mount Diablo Base and Meridian (Figure 1).

Monitored Activities and Wildlife Interaction

Since completion of the CGS project PG&E has followed the CEC COC s and had the Designated Biologist perform pre-disturbance surveys when necessary and on numerous occasions called on the Designated Biologist to capture and relocate wildlife that were in harm's way or wildlife that could harm facility employees. The CEC Designated Biologist Richard Crowe was placed on disability due to illness from January 1, 2014 to May 12, 2014, during that time the CEC approved Biological Monitor Victor Leighton took over Designated Biologist duties.

All new employees and contract workers working at the CGS facility received Worker Environmental Awareness Training (WEAP) via video as well as lecture and daily tailgate training with the Designated Biologist (DB). The DB remained on-call throughout the 2014 year.

An Alternate Waterline Amendment was submitted to the CEC in April 2014. The Amendment was approved and work began in September of 2014. The installation of the alternate waterline was completed in November 2014. A Pre-disturbance Report and a Monitoring and Post-disturbance Report are included within Appendix B.

The on-call monitoring and compliance efforts for the year 2014 are documented below and within Appendix A, Site Photos; 1 through 34.

March 19th, the DB received a call from the CGS Compliance Manager Charles Price concerning the finding of 2 bird bands during routine cleaning of HRSG 1, Photo 1. Victor Leighton a Biological Monitor (BM) for CGS was filling in for the DB Rick Crowe while Mr. Crowe was out sick. Mr. Leighton did some research on the internet and discovered that the bird bands had belonged to a banded homing pigeon or rock dove (*Columba livia*). Rock dove are not a sensitive or protected avian species so no other action was required.

April 8th, the BM conducted field surveys in support of the Alternate Waterline Amendment. During the linear survey the BM observed a juvenile western diamond back rattlesnake (*Crotalis viridis*), Photo 2. The rattlesnake was off of the CGS site along the entrance road. The BM captured the rattlesnake and relocated it off of the CGS property.

April 18th, the BM received a call from the CGS Compliance Manager Charles Price concerning the observation of an injured western diamond back rattlesnake, Photo 3. The BM traveled to the CGS site and encountered an injured rattlesnake that had been under an equipment trailer, when the trailer was moved the injured snake was observed and reported. The injured snake was captured and released off site.

April 21st, the BM received a call from the CGS plant operator concerning the observation of a western diamond back rattlesnake, Photo 4. The BM traveled to the CGS site and safely captured and relocated the rattlesnake off of the CGS site.

May 5th, the BM received a call from the CGS plant operator concerning the observation of a western diamond back rattlesnake, Photo 5. The BM traveled to the CGS site and safely captured and relocated the rattlesnake off of the CGS site.

May 12th, the DB received a call from the CGS Compliance manager Charles Price concerning the observation of a juvenile English house sparrow (*Passer domesticus*) that had fallen out of its nest, Photo 6. The DB traveled to the site collected the sparrow and dropped it off at the Sacrament Wildlife Care facility.

May 22nd and 26th, the DB was on site to conduct a pre-disturbance survey prior to mowing the vegetation around the CGS plant for fire suppression. The DB walked meandering transects along the southern, eastern and a small portion along the west side of the CGS facility with particular care taken to observe nesting avian species. The DB observed numerous abandoned nest sites including duck nests and redwing blackbird (*Agelaius phoeniceus*) nests, Photos 7 through 10. The DB observed one active killdeer nest (*Charadrius vociferus*) located along the eastern fence line, Photo 11. The DB alerted the mower operator and flagged the area off with yellow flagging, Photo 12.

June 9th, the DB received a call from the CGS Plant Manager Ed Warner concerning the observation of some insects that were discovered during the removal of piping insulation, Photo 13. The insects appeared to be a form of squash bugs (*Anasa tristis*) that are not harmful to humans. The DB informed Mr. Warner what the insects were and that that they were not harmful or protected.

September 9th through October 29th, the DB was on site to monitor the construction of the alternate water line. The new line runs east to west beginning at the eastern end adjacent to the Glen Colusa Canal running west and terminating at the CGS facility. For more details see Appendix B for the Alternate Waterline Monitoring and Post Construction Report.

September 30th, the DB received a call from the CGS Compliance Manager Charles Price concerning the observation of an injured barn owl (*Tyto alba*). The barn owl was observed by waterline construction workers near the new alternate waterline pump skid adjacent to the Glen Colusa Canal. The DB safely captured the barn owl and took it to the University of California at Davis Raptor Center, Photo 14. Staff at the Raptor Center stated that the barn owl appeared to be suffering from some sort of poisoning.

October 1st, the DB received a call from the CGS Compliance Manager Charles price concerning the observation of dead bird under the ACC unit and a juvenile western diamond back rattlesnake observed within the CGS facility. The DB identified the dead bird as a northern flicker (*Colaptes auratus*), Photo, 15. The DB captured the juvenile rattlesnake and released it safely off site, Photo 16.

October 8th, the DB received a call from the CGS Compliance Manager Charles price concerning the observation of a juvenile western diamond back rattlesnake near some machinery. The DB traveled to the site and observed a very small rattlesnake near on the ground near a large piece of machinery. The DB attempted to capture the snake but was unsuccessful. Caution tape was placed around the machinery and CGS workers were informed that the snake was still loose, Photo 17.

October 14th, the DB received a call from the plant operator concerning the observation of a juvenile western diamond back rattlesnake on site. The DB traveled to the site and safely captured and relocated the snake off site, Photo 18. This snake was observed very close to the October 8th observation so it may have been the same snake.

Conclusion

The Colusa Generating Station was in compliance with all biological mitigation and protection measures covered in the BRMIMP that are applicable to this operating facility during the year 2014.

Appendix A
Site Photos

Photo 1, photo of bird bands that were observed during HRZG maintenance, 3/19/14.

Photo 2, juvenile western diamond back rattlesnake observed during new waterline permitting survey, 4/8/14.

Photo 3, injured western diamond back rattlesnake prior to disposal off site, 4/18/14.

Photo 4, juvenile western diamond back rattlesnake prior to safe release off site, 4/21/14.

Photo 5, juvenile western diamond back rattlesnake prior to safe release off site, 5/5/14.

Photo 6, injured English house sparrow prior to being taken to Wildlife Care facility, 5/12/14.

Photo 7, close-up of killdeer nest on CGS site observed during pre-mowing survey, 5/22/14.

Photo 8, southern portion of grassland area prior to mowing for fire suppression, 5/22/14.

Photo 9, of duck nest with hatched eggs observed during pre-mowing survey, 5/22/14.

Photo 10, of red-winged blackbird nest observed during pre-mowing survey, 5/22/14.

Photo 11, of killdeer nest observed during pre-mowing survey, 5/22/14.

Photo 12, of flagging around killdeer nest area, 5/22/14.

Photo 13, of insects observed within piping insulation, 6/9/14.

Photo 14, of Designated Biologist safely capturing an injured barn owl which was observed during waterline work, 9/30/14.

Photo 15, Northern flicker reported by PG&E Compliance Manager, observed under ACC unit, 10/1/14.

Photo 16, of western diamond back rattlesnake after capture and prior to relocation off site, 10/1/14.

Photo 17, caution tape around machinery where juvenile rattlesnake was observed, 10/8/14.

Photo 18, of western diamond back rattlesnake prior to safe capture and release off site, 10/14/14.

Appendix B
Alternate Water Line Project

Pre-construction Survey in Support of the Colusa Generating Station Back-up Water Supply Pipeline Project, September 2014

PREPARED FOR: Charles Price/PG&E Colusa Generating Station Compliance Manager

PREPARED BY: Rick Crowe/CH2M HILL
CGS Designated Biologist

COPIES: Jerry Salamy/CH2M HILL

DATE: September 3, 2014

Project Location

The Colusa Generating Station (CGS) project (CEC Docket No. 06-AFC-9) is located approximately 4 miles west of Interstate 5, 14 miles north of the farming community of Williams, and 72 miles north of Sacramento, adjacent to Delevan Road in Colusa County, California (Figure 1).

Project Description

Pacific Gas and Electric (PG&E) has constructed and commissioned a nominal 660-megawatt combined cycle power plant on 31-acres of a 100-acre site. PG&E is expected to begin constructing an approximately 0.86-mile pipeline to transport Glen Colusa Irrigation District (GCID) water from the Glen Colusa Canal (GCC) to the CGS facility on September 8, 2014. This back-up water supply line will extend from the interconnection point adjacent to the existing pump station and continue approximately 0.86 mile to the CGS facility (see Figure 1). Specifically, the pipeline route will exit the pump station area and head west on Dirks Road until it reaches the CGS facility. The pipeline will be located on the south side (eastbound lane) of Dirks Road for the entire route. As the route reaches the CGS property, it will continue west along the south side of the existing CGS fence line. The need for this pre-construction survey is to identify any biological concerns that may be encountered during construction.

Methods

Rick Crowe, CGS Designated Biologist, conducted a pre-construction survey on September 2nd, 2014 in support of the Back-up Water Supply Pipeline Project scheduled to begin on September 8th, 2014. Mr. Crowe walked the entire pipeline route inspecting areas adjacent to the Glen Colusa Canal, Dirks Road and the transition area from road to the CGS facility.

Results

The entire pipeline right-of-way and a 250-foot buffer area was surveyed for ground nesting birds, none were observed. There are no suitable nesting trees along the right-of-way so no tree nesting bird species were observed. A few common wildlife species were observed off of Dirks road such as; Black-tailed hare (*Lepus californicus*), Turkey vulture (*Anas platyrhynchos*), Mourning dove

(*Zenadiada macroura*), Brewer's blackbird (*Euphagus cyanocephalus*), Western fence lizard (*Sceloporus occidentalis*) and Cliff swallows (*Hirundo pyrrhonota*). Attached are representative photos of the right-of-way as it appeared during this survey. A follow-up pre-disturbance survey will be conducted by the Designated Biologist immediately prior to actual ground disturbance.

Photo 1, existing pump station just north of Dirks Road, 9/2/2014.

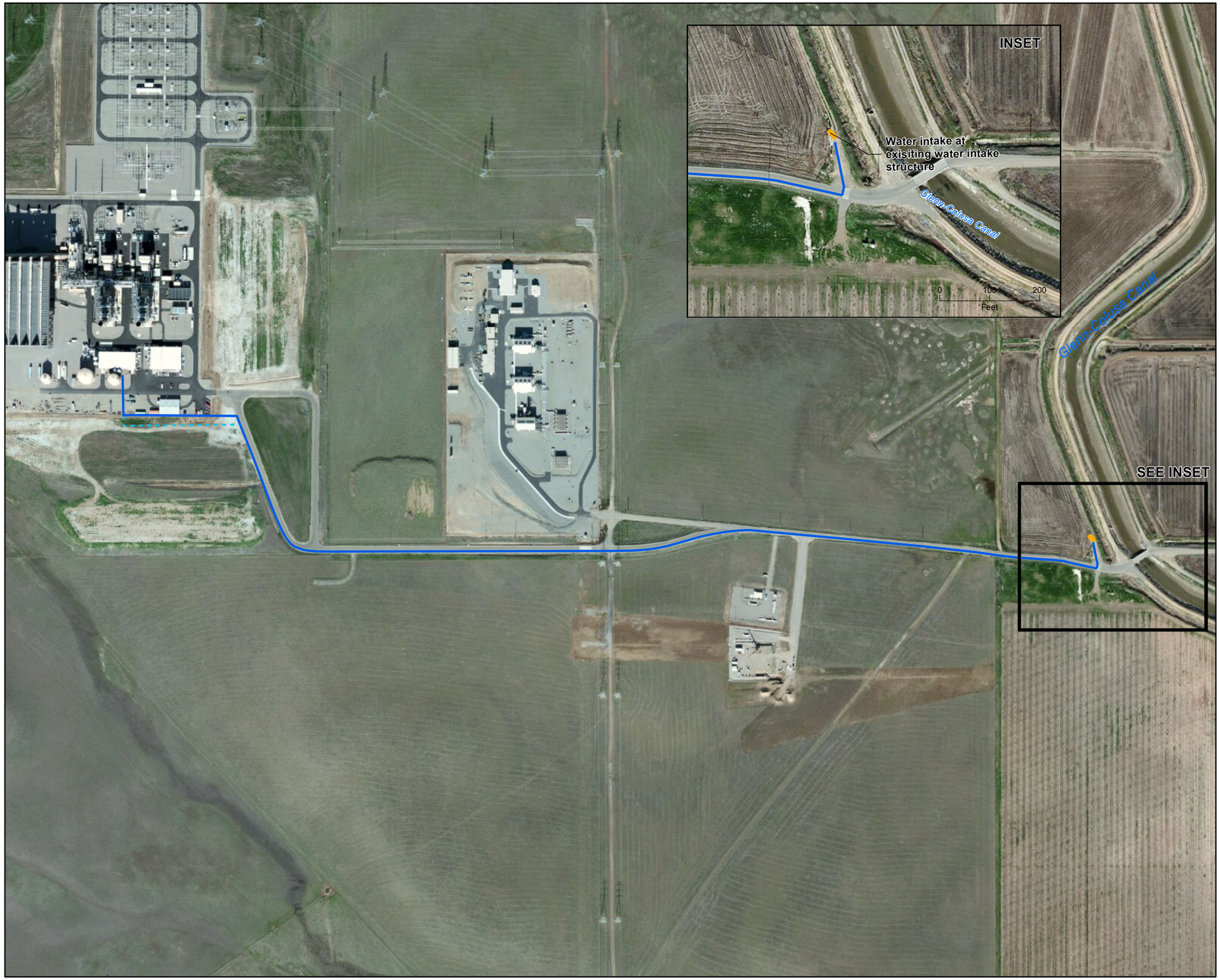
Photo 2, eastern end of Dirks Road with white paint arrows depicting pipeline route, construction equipment in photo not associated with this project, 9/2/2014.

Photo 3, continuation of Dirks Road heading west, 9/2/2014.

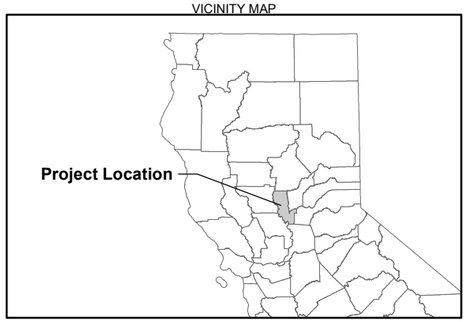
Photo 4, continuation of Dirks Road facing east, 9/2/2014.

Photo 5, western end of Dirks Road with CGS facility in background, 9/2/2014.

Photo 6, approximate transition area from Dirks Road to CGS facility, 9/2/2014.



VICINITY MAP



LEGEND

- 6-inch waterline route
- Alternate waterline route
- Water intake at exisiting water intake structure

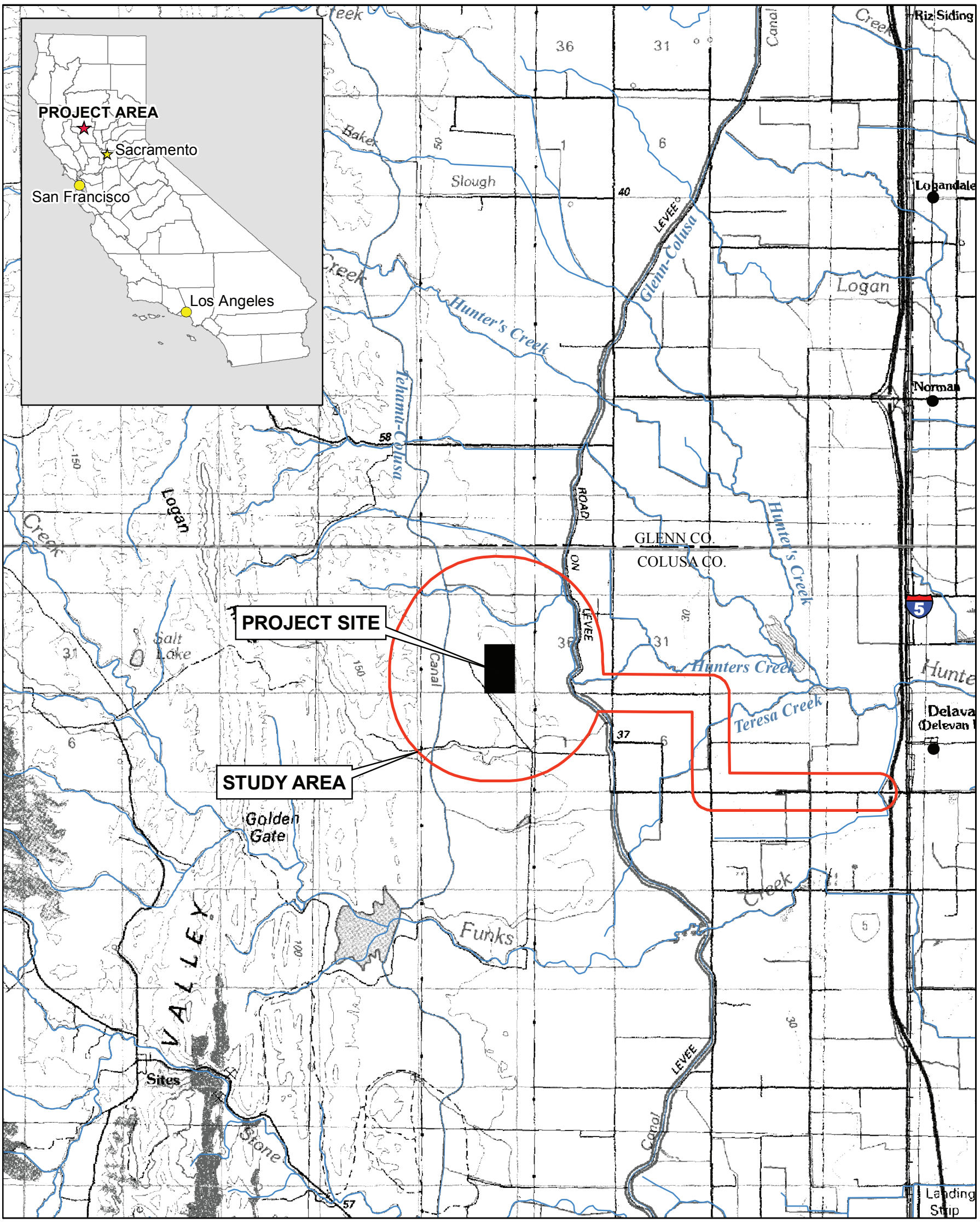
N

0 400 800
Feet

Figure 1
Colusa Generating Station
Water Line Route

Colusa Generation Station
Pacific Gas And Electric Company
Proposed Water Intake Structure and 6-inch Waterline
Colusa County, CA

CH2MHILL



Source: URS, 2008

FIGURE 1
PROJECT LOCATION MAP
COLUSA GENERATING STATION
PACIFIC GAS AND ELECTRIC
BIOLOGICAL RESOURCES MITIGATION
IMPLEMENTATION AND MONITORING PLAN

CH2MHILL

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TECHNICAL MEMORANDUM CH2MHILL

Monitoring and Post Construction Report in Support of the Colusa Generating Station Alternate Water Supply Pipeline Project, December 2014

PREPARED FOR: Charles Price/PG&E Colusa Generating Station Compliance Manager

PREPARED BY: Rick Crowe/CH2M HILL
CGS Designated Biologist

COPIES: Jerry Salamy/CH2M HILL

DATE: December 16, 2014

Project Location

The Colusa Generating Station (CGS) project (CEC Docket No. 06-AFC-9) is located approximately 4 miles west of Interstate 5, 14 miles north of the farming community of Williams, and 72 miles north of Sacramento, adjacent to Delevan Road in Colusa County, California.

Project Description

Pacific Gas and Electric (PG&E) has constructed and commissioned a nominal 660-megawatt combined cycle power plant on 31-acres of a 100-acre site. An Alternate Waterline Amendment was submitted to the CEC in April 2014, the Amendment was approved and work began in September of 2014. PG&E began constructing the approximately 0.86-mile pipeline to transport Glen Colusa Irrigation District (GCID) water from the Glen Colusa Canal (GCC) to the CGS facility on September 8, 2014. The alternate water supply line extends from the interconnection point adjacent to the existing pump station and the GCC and continued approximately 0.86 mile west to the CGS facility (Figure 1). Specifically, the pipeline route will exit the pump station area and head west on Dirks Road until it reaches the CGS facility. The pipeline was located on the south side (eastbound lane) of Dirks Road for the entire route. As the route reaches the CGS property, it continued west through annual grassland to the existing CGS fence line.

There were 22 employees associated with the installation of the new waterline that received the Worker Environmental Awareness Training (WEAP) via video as well as lecture and daily tailgate training with the Designated Biologist (DB).

Monitoring Notes

Rick Crowe, CGS Designated Biologist, covered biological monitoring during construction of the Alternate Water Supply Pipeline Project which began on September 9th, and was completed October 20th, 2014. This report provides a summary of the project activities and associated biological monitoring. The Designated Biologist (DB) completed daily logs summarizing activities, personnel interactions, and observations made during each monitoring visit. These logs are available on request. The Alternate Waterline Project did not require full time monitoring however, the DB was on site when the project was constructing near sensitive resources, and numerous spot visits were conducted. Below is a

summary of the key biological monitoring interactions with corresponding photos for the Alternate Waterline Project;

September 9th and 10th — The DB was on site to clear the project right-of-way (ROW) and to oversee beginning of construction. Prior to commencement of construction all workers on site associated with construction of the waterline attended the CGS project WEAP video and tailgate meeting with the DB. No wildlife were observed or disturbed during the initial clearing of the ROW alignment. Project activities consisted of concrete saw cutting and material and equipment off-loading. See photos 1, 2 and 3.

September 11th and 12th — The DB was on site to monitor the asphalt road grinding of the private entrance road to the CGS facility. Prior to grinding the DB cleared the road ROW, no wildlife were disturbed during the grinding of the road. Other construction activities consisted of material off loading and laydown area preparation. See photo 4.

September 17th 18th and 19th — The DB was on site to monitor excavation of the annual grassland portion of the ROW. The DB cleared the ROW and no wildlife were disturbed during excavating the annual grassland area. Construction activities consisted of excavation in the roadway and annual grassland portions of the ROW. Photo 5.

September 22nd through October 2nd — The DB was on site to perform compliance spot checks and to clear the work areas prior to work beginning each day. The DB was also on site during this period to directly monitor road construction near sensitive vernal pool habitat. Additionally, during this period there was several forecasted rain events, the DB worked closely with the waterline contractor and all pre-storm BMPs were in place and functioning prior to these minor rain events. Construction activities during this period consisted of continued excavation, pipe laying and back fill along the entire ROW. Photos 6, 7, 8, and 9.

October 7th through October 29th— The DB was on site during this period due to construction near sensitive giant garter snake and vernal pool habitat and to clear the work areas prior to work beginning each day. Construction during this period consisted of completing excavation and backfilling, installation of the new water pump skid as well as hydro-seeding the construction disturbed annual grassland and asphalt paving of the in road portion of the water line. Photos 10 through 13.

December 10 — The DB was on site to document the stabilization of the annual grassland area, Photos 14 and 15. The DB inspected the annual grassland portion of the ROW and observed 100% vegetation growths throughout the previously disturbed areas. Several rain events had occurred prior to this site visit and there was no sign of erosion or BMP failure. The DB inspected the new water line pump skid area and this area was well stabilized and showed no sign of erosion. Photo 16.

Conclusion

The Alternate Waterline Project was in compliance with all biological mitigation and protection measures covered in the BRMIMP that are applicable to this operating facility during the year 2014.

Photo 1, photo of annual grassland prior to beginning alternate waterline excavation, 9/9/14.

Photo 2, of saw cutting existing asphalt road within CGS facility for alternate waterline, 9/9/14.

Photo 3, of saw cutting private entrance road to CGS facility for alternate waterline, 9/9/14.


Photo 4, asphalt grinding of private entrance road to CGS facility for alternate waterline, 9/11/14.

Photo 5, transition excavation from road to annual grassland for alternate waterline, 9/17/14.

Photo 6, of new alternate waterline within annual grassland right-of-way, 9/22/14.

Photo 7, of typical pipe trench egress for potentially trapped wildlife, 9/23/14.

Photo 8, of typical BMPs prior to forecast rain event, 9/24/14.

Photo 9, of alternate waterline spoil pile prior to forecast rain event, 9/24/14.

Photo 10, of typical alternate waterline excavation within existing roadway, 10/7/14.

Photo 11, of alternate waterline in private road after paving, 10/29/14.

Photo 12, of alternate waterline right-of-way after hydro-seeding, 10/29/14.

Photo 13, of alternate waterline right-of-way after hydro-seeding, 10/29/14.

Photo 14, of alternate waterline right-of-way with grass growing, 12/10/14.

Photo 15, of alternate waterline right-of-way with vegetation growing, 12/10/14.

Photo 16, of alternate waterline pumping station, 12/10/14.

Appendix 2, HAZ-1

Hazardous Materials

Appendix C

Colusa Generating Station Onsite Inventory of Hazardous Materials

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
Product #001A0382	Shell Omala Oil HD 220	gear box/ACC oil	Air Cooled Condenser - Gear Box (E13)	ACC Gear Box	12 gal	gallons	42	504 gal	504	504	365	504.0
	Carbon dioxide, Liquid	Carbon dioxide, Liquid	Carbon Dioxide Bottle Storage Rack at Combustion Turbine-A (Site Feature #59)	Tank	12,000 lb	pounds	1	12,000 lb	12,000	9,000	365	9,000 lb onsite daily
	Carbon dioxide, Liquid	Carbon dioxide, Liquid	Carbon Dioxide Bottle Storage Rack at Combustion Turbine-B (Site Feature #59)	Tank	12,000 lb	pounds	1	12,000 lb	12,000	9,000		9,000 lb onsite daily
	Carbon dioxide, Liquid	Carbon dioxide, Liquid	Carbon Dioxide Bottle Storage Rack at Steam Turbine (Site Feature #59)	Tank	12,000 lb	pounds	1	12,000 lb	12,000	9,000		9,000 lb onsite daily
Nalco TRAC107 PLUS	PSO (1.0 - 5.0%)	Closed Cooling Corrosion/Scale Inhibitor	Closed Cooling Chemical Feed Tank (Site Feature #106)	55-gal Metal or Plastic Drum .56	55 gal	gallons	4	220 gal	220	165	365	1,010
MSDS #778983	Turbine Oil	lube oil	Combustion Turbine-A (E1)	CT-A Lube Oil System (E1)	6,150 gal	gallons	1	6,150 gal	6,150	4,613	365	33,671 lb onsite daily
	Hydrogen	Hydrogen / Coolant	Combustion Turbine-A HRSG (G2)	Generator	10,617 cu ft	cubic feet	1	10,617 cu ft	10,617	7,963	365	
MSDS #778984	Turbine Oil	lube oil	Combustion Turbine-B (E2)	CT-B Lube Oil System (E2)	6,150 gal	gallons	1	6,150 gal	6,150	4,613	365	33,671 lb onsite daily
	Hydrogen	Hydrogen / Coolant	Combustion Turbine-B HRSG (G2)	Generator	10,617 cu ft	cubic feet	1	10,617 cu ft	10,617	7,963	365	
	Oxygen Gas	Oxygen Gas	Continuous Emissions Monitor System Shelters (G4)	Cylinders	200 cu ft	cubic feet	6 (3 per CEMS shelter)	1,200 cu ft	1200	900	365	
	Nitrogen oxide / Nitrogen dioxide (Low Range)	Nitrogen oxide / Nitrogen dioxide (Low Range)	Continuous Emissions Monitor System Shelters (G4)	Cylinders	200 cu ft / 0.062 lb	cubic feet / pounds	6 (3 per CEMS shelter)	1200 cu ft / 0.374 lb	1200	900 cu ft / 0.281 lb	365	0.281 lb onsite daily
	Nitrogen oxide / Nitrogen dioxide (High Range)	Nitrogen oxide / Nitrogen dioxide (High Range)	Continuous Emissions Monitor System Shelters (G4)	Cylinders	200 cu ft / 0.062 lb	cubic feet / pounds	6 (3 per CEMS shelter)	1200 cu ft / 0.374 lb	1200	900 cu ft / 0.281 lb	365	0.281 lb onsite daily
	Carbon monoxide (Low Range)	Carbon monoxide (Low Range)	Continuous Emissions Monitor System Shelters (G4)	Cylinders	200 cu ft	cubic feet	6 (3 per CEMS shelter)	1200 cu ft	1,200	900	365	
	Carbon monoxide (High Range)	Carbon monoxide (High Range)	Continuous Emissions Monitor System Shelters (G4)	Cylinders	200 cu ft	cubic feet	6 (3 per CEMS shelter)	1200 cubic feet	1,200	900	365	

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
5711	Aqueous Ammonia with Monoethanolamine (5 - 12%)	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	6,320
BL-153	Ammonium Hydroxide 10-19%	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	3,338 lbs on site daily
BL-152	Aqueous Ammonia with Monoethanolamine (5 - 10%)	BFW pH Adjustment and Corrosion Control (Ammonia / Amine Blend)	Cycle Chemical Feed Shelter (Boler Feedwater/Condensate) (B1)	Tote	400 gal / 3,338 lb	gallons / pounds	1	400 gal / 3,338 lb	400 gal / 3,338 lb	300 gal / 2,504 lb	365	3,338 lbs on site daily
ELIMINOX	Carbohydrazide (5 - 10%)	Oxygen Scavenger	Cycle Chemical Feed Shelter (Boler Feedwater/Condensate) (B1)	Drum	55 gal	gallons	1	55 gal	55	41	365	490
BT-3400	Pre-blended Phosphate/Caustic (1.0 - 5.0%)	pH and Corrosion Control (HP & IP Phosphate Feed)	Cycle Chemical Feed Shelter (HRSG A&B) (B1)	Tote	110 gal	gallons	1	110 gal	110	83	365	979
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A Excitation Transformer (E9)	Transformer	521 gal	gallons	1	521 gal	521	391	365	3,165 lb onsite daily
CROSSTRANS 106 and 206	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A GSU Transformer (E4)	Transformer	14,950 gal	gallons	1	14,950 gal	14,950	11,213	365	90,821 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-A Isolation Transformer (E10)	Transformer	977 gal	gallons	1	977 gal	977	733	365	5,935 lb onsite daily
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B Excitation Transformer (E9)	Transformer	521 gal	gallons	1	521 gal	521	391	365	3,165 lb onsite daily
CROSSTRANS 106 and 207	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B GSU Transformer (E5)	Transformer	14,950 gal	gallons	1	14,950 gal	14,950	11,213	365	90,821 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Combustion Turbine-B Isolation Transformer (E10)	Transformer	977 gal	gallons	1	977 gal	977	733	365	5,935 lb onsite daily
CROSSTRANS 106 and 209	mineral oil	mineral oil	Electrical Equipment: Station Service Transformer (E7)	Transformer	6,510 gal	gallons	1	6,510 gal	6,510	4,883	365	39,548 lb onsite daily
CROSSTRANS 106 and 210	mineral oil	mineral oil	Electrical Equipment: Station Service Transformer (E7)	Transformer	6,510 gal	gallons	1	6,510 gal	6,510	4,883	365	39,548 lb onsite daily
CROSSTRANS 106 and 209	mineral oil	mineral oil	Electrical Equipment: Steam Turbine Excitation Transformer (E11)	Transformer	747 gal	gallons	1	747 gal	747	560	365	4,538 lb onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Steam Turbine GSU Transformer (E6)	Transformer	19,015 gal	gallons	1	19,015 gal	19,015	14,261	365	115,516 lb onsite daily
	Helium	Helium, Compressed	Gas Metering Station (G5)	Cylinders	250 cu ft	cubic feet	5	1250 cu ft	1,250	938	365	
	Methane	Methane Compressed	Gas Metering Station (G5)	Cylinders	59 cu ft	cubic feet	1	59 cu ft	59	44	365	
MSDS #778986	Turbine Oil	lube oil	Hazardous Materials Storage Area (M2)	Drum	55 gal	gallons	4	220 gal	220	165	365	1,205 lb onsite daily
Product #001A0383	Shell Omala Oil HD 221	gear box/ACC oil	Hazardous Materials Storage Area (M2)	Barrels	55 gal	gallons	2	110 gal	110	83	365	606 lb onsite daily

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
	Hydrogen	Hydrogen	Hydrogen Storage Area (G1)	Tube Trailer	44,000 cu ft	cubic feet	1	44,000 cu ft	44,000	33,000	365	53,000
AlphaCELL 195GXL-FT3	Lead Acid Battery	Lead Acid Battery	Packaged Electrical Electronic Control Center (PEECC) (M7)	Electrical Equipment: Battery	100 lb	pounds	116	11,600 lb	11,600	11,600	365	11,600
	Acetylene Gas	Acetylene Gas	Plant Maintenance Area (G3)	Cylinders	143 cu ft	cubic feet	4	572 cu ft	572	429	365	
	Argon Gas	Argon Gas	Plant Maintenance Area (G3)	Cylinders	381 cu ft	cubic feet	2	762 cu ft	762	572	365	
	Oxygen Gas	Oxygen Gas	Plant Maintenance Area (G3)	Cylinders	250 cu ft	cubic feet	6	1500 cu ft	1,500	1,125	365	
	Propane Gas	Propane Gas	Plant Maintenance Area (G3)	Cylinders	20 lb	pounds	16	319 lb	320	240	365	
	Nitrogen Gas	Nitrogen Gas	Plant Maintenance Area (G3), Compressed Cylinder Storage Area (C3)	Cylinders	250 cu ft	cubic feet	48	12,000 cu ft	12,000	12,000	365	
CDID: Stationary SPg - IB	Lead-Antimony Battery	Lead-Antimony Battery	Power Distribution Center in center of site (M6)	Electrical Equipment: Battery	110 lb	pounds	60	6,600 lb	6,600	6,600	365	6,600
CDID: Stationary SPg - IB	Lead-Antimony Battery	Lead-Antimony Battery	Power Distribution Center in Water Treatment Building (M6)	Electrical Equipment: Battery	110 lb	pounds	20	2,200 lb	2,200	2,200	365	2,200
MSDS #778985	Turbine Oil	lube oil	Steam Turbine (E3)	Steam Turbine Lube Oil System (E3)	5,250 gal	gallons	1	5,250 gal	5,250	3,938	365	28,744 lb onsite daily
	Hydrogen	Hydrogen / Coolant	Steam Turbine Generator (G2)	Generator	15,439 cu ft	cubic feet	1	15,439 cu ft	15,439	11,579	365	
	Sulfur Hexafluoride	SF6	Sulfur Hexafluoride Breakers (G4)	Electrical Equipment: Breaker	205 lb	pounds	7	1,432 lb	1,432	1,074	365	1,074 lb onsite daily
C & D Technologies 3DJ-200	Flooded Lead-Calcium Battery	Flooded Lead-Calcium Battery	Switchyard Control House (M7)	Electrical Equipment: Battery	100 lb	pounds	60	6,000 lb	6,000	6,000	365	6,000
7469	Anti-foam	Foam Control (ZLD)	Water Treatment Building (High Efficiency RO and ZLD) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	4,200
FO-321	Anti-foam	Foam Control (ZLD)	Water Treatment Building (High Efficiency RO and ZLD) (Site Feature #15)	Tank	360	gallons	1	360	360	270	365	3013 lbs on site daily
Nalco 8131	Coagulant (5 - 20%)	Coagulant (UF and Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	2,500 gal / 31,295 lb	gallons / pounds	1	2,500 gal / 31,295 lb	2,500 gal / 31,295 lb	1,875 gal / 23,471 lb	365	23,471 lb onsite daily
P-828L	Ferric Sulfate 30-60%	Coagulant (UF and Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	2,500 gal / 31,295 lb	gallons / pounds	1	2,500 gal / 31,295 lb	2,500 gal / 31,295 lb	1,875 gal / 23,471 lb	365	23,471 lb onsite daily
Cat-Floc 8018 Plus	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480
7744	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480
P-817E	Flocculant (5 - 20%)	Flocculant (Lamella Clarifier)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	480

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
PC-7408	Sodium Bisulfite (30 - 60%)	Water Treatment Feedwater Dechlorinization (Sodium Bisulfite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	2,399
RL-124	Sodium Bisulfite (30 - 60%)	Water Treatment Feedwater Dechlorinization (Sodium Bisulfite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	3,600
	Sulfuric Acid 98% (66 degree Baume 93%)	pH Adjustment (Sulfuric Acid for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	300 gal	gallons	2	600 gal	600	450	365	9,205
8735	Sodium Hydroxide	pH Adjustment (Caustic for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	2,399
BL-1304	Sodium Hydroxide 15-40%; Potassium Hydroxide 10-30%	pH Adjustment (Caustic for pH Adjustment)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	4543 lbs on site daily
PC-191T	Antiscalant	RO Scale Inhibition (Raw Water RO Antiscalant)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tote	400 gal	gallons	1	400 gal	400	300	365	1,200
RL-9008	Antiscalant 2-Phosphono-1,2,4 - butane tricarboxylic acid 5-10%	RO Scale Inhibition (Raw Water RO Antiscalant)	Water Treatment Building (Raw Water Pre-Treatment and RO) (Site Feature #15)	Tank	360 gal	gallons	1	360 gal	360	270	365	3431 lb on site daily
	Sodium Hypochlorite (10 - 12%)	Bacteria Control for UF (Sodium Hypo-chlorite Feed)	Water Treatment Building (Raw Water Pre-Treatment and RO) (B4)	Aboveground Tank	1000 gal	gallons	1	1,000 gal	1,000	750	365	6,259 lb onsite daily
PERMA-CARE® PC-98	Sodium Hydroxide (5 - 15%)	High pH Cleaning (RO Cleaning Chemical)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	55-gal Metal or Plastic Drum .56	55 gal	gallons	4	220 gal	220	165	365	940
PERMA-CARE® PC-40	Sodium Percarbonate (5 - 15%)	Surfactant for Cleaning (RO Cleaning Chemical)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	5-gal Pail	5 gal	gallons	2	9 gal / 100 lbs	10	8	365	42
8344	Citric Acid (5 - 15%)	Low pH Cleaning (UF Iron Cleaner)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	55-gal Plastic Drum .56	55 gal	gallons	4	220 gal	220	165	365	575
RL-2016	Citric Acid (10-30%)	Low pH Cleaning (UF Iron Cleaner)	Water Treatment Building (Reverse Osmosis and UF Cleaners) (Site Feature #15)	Drum	55 gal	gallons	4	220 gal	220	165	365	2006 lbs on site Daily
	Soda Ash	Ph control	Water Treatment Building (Site Feature #15)	Drum	500 lbs	lbs	2	1000 lbs	1,000	750	365	750
	Sodium Hypochlorite (10 - 12%)		Water Treatment Building (Site Feature #15)	Tote	300 gal	gallons	1	300 gal	300	225	365	600
RL-1500	Ethylene diamine tetraacetic acid, tetrasodium salt (10-30%)	High pH Cleaning (RO Cleaning Chemical)	Water Treatment Building (Site Feature #15)	Dum	55 gal	gallons	2	110 gal	110	83	365	

Trade Name	Chemical Name	Common Name / Chemical Purpose	Location	Storage Container Type	Capacity of Largest Container	Unit	Number of Items	Total Amount Stored	Maximum Daily Amount	Average Daily Amount	Days on Site	Estimated Pounds Per Year of Chemical
CL-2156	5-chloro-2methyl-4-isothiazolin-3-one 1.11%; 2-methyl-4-isothiazolin-3-one .39%; Magnesium Nitrate 1.61%; Magnesium Chloride .96%	Evaporative Cooling Water Biocide	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tank	150 gal	gallon	1	150 gal	150	113	365	1286 lbs onsite daily
3DTBR06	Bioreporter (1 - 10%)	Tracing Agent (Bioreporter)	Wet Surface Air Cooled Chemical Feed Shelter (B2)	5-gal Pail	5 gal	gallons	2	10 gal	10	8	365	330
Nalco 3DT161	Inhibitor (5 - 10%)	Evaporative Cooling Scale/Corrosion Inhibitor	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tote	110 gal	gallons	1	110 gal	110	83	365	3,359
CL-1432	Potassium phosphate, tribasic 5-10%; 1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium salt .5-1.0%; Tetrapotassium pyrophosphate 1-5%; Potassium hydroxide 5-10%, Tolytriazole, sodium salt 1-5%	Evaporative Cooling Scale/Corrosion Inhibitor	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Tank	150 gal	gallons	1	150 gallons	150	113	365	1674 lbs onsite daily
CT-709	Tetrapotassium pyrophosphate 40-70%	Wet SAC Passivation	Wet Surface Air Cooled Chemical Feed Shelter (B2)	Drum	55 gal	gallons	1	55 gal	55	41	365	792 lbs onsite daily
CROSSTRANS 106 and 208	mineral oil	mineral oil	Electrical Equipment: Alternate Power Transformer (E12)	Transformer	550 gal	gallons	1	550 gal	550	550	365	550 lb onsite daily
MSDS #778984	Turbine Oil	lube oil	Combustion Turbine-A HRSG (G2)	boiler feedwater pump	141 gal	gallons	2	282 gal	282	212	365	2,045 lb onsite daily
MSDS #778984	Turbine Oil	lube oil	Combustion Turbine-B HRSG (G2)	boiler feedwater pump	141 gal	gallons	2	282 gal	282	212	365	2,045 lb onsite daily
	Sulfuric Acid 98% (66 degree Baume 93%)		Zero Liquid Discharge AreaSite Feature #21)	Tote	325 gal	gallons	1	325 gal	325	244	365	4,986
	Aqueous Ammonia (19%)		Aqueous Ammonia Storage Tank (M5)	Tank	20,000 gal	gallons	1	20,000 gal	20,000	15,000	365	154,971
Shell Turbo Fluid DR 46	Trixyly Phosphate (60-100%)	Steam Turbine Hydraulic Oil	Steam Turbine (E14)	Tank	500 gal	gallons	1	500 gal	500	400	365	
DOWFROST* 30 Heat Transfer Fluid	Propylene Gycol (30%)	propylene gycol in the water bath heater	Water Bath Heater (Site Feature #85)	In water bath heater	16,662 gal	gallons	1	16,662 gal	16,662	12,497	365	
Carbon Dioxide	Carbon Dioxide, Gas (99%)		Near STG	compressed gas cylinder	436 cu ft	cu ft	72	31392 cu ft	31,392	23,544	365	
Gasoline	Gasoline	Gasoline	Hazardous Materials Storage Area (M2)	Drum	55 Gal	gallons	2	110 gallons	110	55	365	3000 gallons
Diesel	Diesel	Diesel	Hazardous Materials Storage Area (M2)	Drum	55 Gal	gallons	2	110 gallons	110	55	365	2200 gallons

Appendix 3, Noise-8

Per Noise-8, the following is required: "In the first annual compliance report after the receipt of a complaint, the project owner shall include documentation certifying that: 1) the noise-attenuating upgrades were installed on the specified residence at the project owner's expense; 2) the noise attenuating upgrades were already a feature of the residence; 3) installation was offered but refused by the owner; or 4) residential use by the complainant was ceased.

There were no Noise Complaints made by the owners or occupants of any of the existing residences located at ML1, ML2, or RC1 during operation of the CGS in 2014. There have been no noise complaints to date from anyone.

Appendix 4, Soil & Water -2

Pacific Gas and Electric Company®

Ed Warner
Plant Manager

Mailing Address
Pacific Gas and Electric Company
Colusa Generating Station
P.O. Box 398
Maxwell, CA 95955

530.934.9061
Fax: 530.934.9024

CGS14-L-0011
June 30, 2014

Robert Ditto
Central Valley - Regional Water Quality Control Board
11020 Sun Center Drive, Suite #200
Rancho Cordova, CA 95670-6114

Attention: Annual Report for Industrial Activities

Reference: WDID Number 5S06I022929
Pacific Gas and Electric Company – Colusa Generating Station

Subject: 2013-2014 Annual Report for Storm Water Discharges Associated with Industrial Activities

Dear Mr. Ditto:

In compliance with the terms of the General Permit for Storm Water Discharges Associated with Industrial Activity for Pacific Gas and Electric Company, Colusa Generating Station (WDID# 5S06I0022929), attached is a copy of the 2013-2014 Annual Report.

If you have any questions please contact Charles Price at (530) 934-9007.

Regards,

6/30

Ed Warner
Plant Manager

Cc: File Number: 3.11.17.1
C. Price, PG&E
J. Vann, PG&E

State of California
STATE WATER RESOURCES CONTROL BOARD

2013-2014

ANNUAL REPORT

FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2013 through June 30, 2014

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.swrcb.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 5S06I022929

Facility Business Name: Colusa Generating Station
Physical Address: 4780 Dirks Road
City: Maxwell
Standard Industrial Classification (SIC) Code(s): 4911

Contact Person: Ed Warner
e-mail: E1W2@pge.com
CA Zip: 95955 Phone: 530-934-9061

B. Facility Operator Information:

Operator Name: Pacific Gas & Electric Co.
Mailing Address: P.O. Box 398
City: Maxwell

Contact Person: Ed Warner
e-mail: E1W2@pge.com
State: CA Zip: 95955 Phone: 530-934-9061

C. Facility Billing Information:

Operator Name: Pacific Gas & Electric Co.
Mailing Address: P.O. Box 398
City: Maxwell

Contact Person: Ed Warner
e-mail: E1W2@pge.com
State: CA Zip: 95955 Phone: 530-934-9061

2013-2014

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

_____

ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

Re-evaluation Date: _____

Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

Re-evaluation Date: _____

Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

iv. ☐ Received Regional Board Certification Certification Date: _____

v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 2 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

☒ **YES** ☐ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's storm water discharge locations? ☐ YES, go to Item E.6 ☒ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☒ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were <u>all</u> samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was <u>all</u> storm water sampling preceded by three (3) working days without a storm water discharge? ☒ YES ☐ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☒ YES ☐ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☒ YES ☐ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☒ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

[X] **YES** [ ] **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September [ ] **YES** [ ] **NO** [X] **N/A** October-December [ ] **YES** [ ] **NO** [X] **N/A**

January-March [ ] **YES** [ ] **NO** [X] **N/A** April-June [ ] **YES** [ ] **NO** [X] **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September [X] **YES** [ ] **NO** October-December [X] **YES** [ ] **NO**

January-March [X] **YES** [ ] **NO** April-June [X] **YES** [ ] **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

[ ] **YES** [X] **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

[ ] **YES** [ ] **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☐	☒	February	☒	☐
November	☐	☒	March	☒	☐
December	☐	☒	April	☐	☒
January	☐	☒	May	☐	☒

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? [X] YES [ ] NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? [X] YES [ ] NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? [X] YES [ ] NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? [X] YES [ ] NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? [X] YES [ ] NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☒ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Ed Warner

Signature: _____ Date: 6/30/2014

Title: Senior Plant Manager

2013-2014
ANNUAL REPORT

Attachment 1

FORM 1 – SAMPLING & ANALYSIS RESULTS

2013-2014

ANNUAL REPORT

SIDE A

FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Charles Price TITLE: Sr Environmental Consultant SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Iron				
Sediment Pond	2/10/14 ☒ AM ☐ PM 7:39	NA ☐ AM ☐ PM	7.52	11	380	ND		.62				
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/l				
TEST METHOD DETECTION LIMIT:			.01	2.0	1.0	2.0		.1				
TEST METHOD USED:			Handheld	2540D	120.1	1664A		200.7				
ANALYZED BY (SELF/LAB):			Self	Lab	Lab	Lab		Lab				

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

CALIBRATION OF HYDROGEN ION ACTIVITY (pH)

INSTRUMENT

MAKE/MODEL# Hach HQ40d pHC101

SERIAL # 123202561011

STANDARDS: *Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were opened.*

Standard A Hach pH 4.01 ± .02 Lot A2313 Exp 11/14

Standard B Hach pH 7.00 ± .02 Lot A2314 Exp 11/14

Standard C Hach pH 10.01 ± .02 Lot A2306 Exp 10/13

DATE dd/mm/yy	TIME hr:min	STD A,B,C	STD VALUE	INSTRUMENT RESPONSE	CALIBRATED? YES, NO	TEMP °F	SAMPLER INITIALS	COMMENTS
2/10/14	7:28	B	7.00	7.05	Yes	69.5	CSP	
2/10/14	7:29	A	4.01	3.97	Yes	69.7	CSP	
2/10/14	7:30	C	10.08 CSP	10.05	Yes	69.6	CSP	expired

FIELD MEASUREMENT OF HYDROGEN ION ACTIVITY (pH)

INSTRUMENT

MAKE/MODEL# HACH 40400 PHC101

SERIAL # 123200256101 1

CALIBRATION: *Ensure the instrument has been calibrated before sample analysis proceeds.*

SAMPLE ID	SAMPLE DATE mmddyy	SAMPLE TIME hr:min	ANALYSIS DATE mmddyy	ANALYSIS TIME hr:min	ANALYSIS WITHIN 15 MIN OF SAMP? Y/N	INSTRUMENT RESPONSE	TEMP °C	SAMPLER INITIALS	COMMENT
Pond	2/10/14	7:39	2/10/14	7:44	Y	7.52	56.9	CRP	

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

February 26, 2014

CLS Work Order #: CXB0327
COC #:

Charles Price
PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project Name: Colusa Generating Station

Enclosed are the results of analyses for samples received by the laboratory on 02/10/14 09:35. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

02/26/14 16:25

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXB0327
COC #:

Pacific Gas and Electric Company

Chain of Custody Record

CXB0327

From: Pacific Gas & Electric Company ☒ PG&E Facility ☐ Sample Site
Address or Location: 4780 Dirks Road
City: Maxwell, CA (Zip) 95955
Contact Name/Phone No.: Charles Price 530-934-9007

Ship To: Lab Name:
Address:
City: , CA (Zip)
Phone No.
Contact Name:

Turnaround Time
☒ NORMAL (10 days or less) ☐ RUSH ☐ OTHER, Specify
☐ TELEPHONE ☐ FAX Give Results to:

Project Name: Colusa Generating Station
Project Supervisor (Name/Phone No.): Charles Price 530-934-9007
Sampled by: (Signature) (Print Name)

Analysis Requested: TSS, Specific Conductivity, EC (EC 200), 0.1 & Grease

Sample No./Equipment Serial No.	Sampled Date	Sampled Time	Sample Type/Description	Containers No.	Containers Size	TSS / Specific Conductivity	EC	0.1 & Grease						Remarks
1. STORM 2	2/10/14	7:12	Storm Water	1	1L Poly	X								
2. "	"	"	"	1	1L Poly		X							
3. "	"	"	"	1	1L Amb			X						
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														

Relinquished by (Name&Dept)	Date&Time	Received by (Name&Dept)	Date&Time	
Charles Price	2/10/14 9:35	CLS LAB	2/10/14 @ 0935	Ship Via:
Relinquished by (Name&Dept)	Date&Time	Received by (Name&Dept)	Date&Time	Bill of Lading/Airbill No.:
Relinquished by (Name&Dept)	Date&Time	Received by (Name&Dept)	Date&Time	

SAP Accounting Data: | Billing Contact: | Billing Address:

7.9 °

Notes:
1. Samples are discarded by the laboratory 90 days after results are reported unless other arrangements are made.
2. File a copy of this Chain of Custody Record, complete with appropriate laboratory signatures, with the test analysis results.
3. The first "Relinquished by/Date" is the shipping date unless otherwise noted.
4. The final PCB results will be the cumulative results added together for each PCB.
5. When this form is computer-generated, send the completed original to the laboratory, and make copies for the originator and sampler.

Distribution (See note #5)
White: Laboratory
Canary: Originator
Pink: Sampler

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXB0327
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Storm 2 (CXB0327-01) Storm Water	**Sampled: 02/10/14 07:12**	**Received: 02/10/14 09:35**							
Specific Conductance (EC)	**380**	1.0	µmhos/cm	1	CX00907	02/10/14	02/10/14	EPA 120.1	
Total Suspended Solids	**11**	2.0	mg/L	"	CX00941	02/11/14	02/12/14	SM2540D	

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXB0327
COC #:

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Storm 2 (CXB0327-01) Storm Water Sampled: 02/10/14 07:12 Received: 02/10/14 09:35									
Iron	**620**	100	µg/L	1	CX00932	02/11/14	02/11/14	EPA 200.7	

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXB0327
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CX00907 - General Preparation										
Blank (CX00907-BLK1)				Prepared & Analyzed: 02/10/14						
Specific Conductance (EC)	ND	1.0	µmhos/cm							
Batch CX00941 - General Preparation										
Blank (CX00941-BLK1)				Prepared: 02/11/14 Analyzed: 02/12/14						
Total Suspended Solids	ND	2.0	mg/L							
Duplicate (CX00941-DUP1)		**Source: CXB0313-01**		Prepared: 02/11/14 Analyzed: 02/12/14						
Total Suspended Solids	ND	2.0	mg/L		ND				20	

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXB0327
COC #:

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CX00932 - EPA 3010A										
Blank (CX00932-BLK1)				Prepared & Analyzed: 02/11/14						
Iron	ND	100	µg/L							
LCS (CX00932-BS1)				Prepared & Analyzed: 02/11/14						
Iron	5250	100	µg/L	5000		105	85-115			
Matrix Spike (CX00932-MS1)		**Source: CXB0327-01**		Prepared & Analyzed: 02/11/14						
Iron	5750	100	µg/L	5000	619	103	70-130			
Matrix Spike (CX00932-MS2)		**Source: CXB0317-01**		Prepared & Analyzed: 02/11/14						
Iron	17500	100	µg/L	5000	11400	123	70-130			
Matrix Spike Dup (CX00932-MSD1)		**Source: CXB0327-01**		Prepared & Analyzed: 02/11/14						
Iron	5480	100	µg/L	5000	619	97	70-130	5	25	

PG&E - Maxwell	Project: Colusa Generating Station	
P.O. Box 398	Project Number: [none]	**CLS Work Order #: CXB0327**
Maxwell, CA 95955	Project Manager: Charles Price	COC #:

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

2013-2014

ANNUAL REPORT

SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Charles Price TITLE: SR Environmental Consultant SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	iron				
Sediment Pond Inlet	03/10/14 ☒ AM 08:05 ☐ PM	NA ☐ AM ☐ PM	8.48	4.0	170	ND		.23				
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/l				
TEST METHOD DETECTION LIMIT:			0.01	2.0	1.0	2.0		0.1				
TEST METHOD USED:			Handheld	2540D	120.1	1664A		200.7				
ANALYZED BY (SELF/LAB):			Self	Lab	Lab	Lab		Lab				

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

CALIBRATION OF HYDROGEN ION ACTIVITY (pH)

INSTRUMENT

MAKE/MODEL# HQ40D

SERIAL # PHC101

STANDARDS: *Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were opened.*

Standard A HACH 4,01 ± 0,02 Exp Nov 2016

Standard B HACH 7,00 ± 0,02 Exp Nov 2014

Standard C HACH 10,01 ± 0,02 Exp Jan 2015

DATE dd/mm/yy	TIME hr:min	STD A,B,C	STD VALUE	INSTRUMENT RESPONSE	CALIBRATED? YES, NO	TEMP °C	SAMPLER INITIALS	COMMENTS
03/10/14	0802	A,B TW	4,01	4,00	Yes	73.9	TW	
03/10/14	0802	B	7,00	7,03	Yes	75.9	TW	
03/10/14	0802	C	10,01	10,01	Yes	75.9	TW	

FIELD MEASUREMENT OF HYDROGEN ION ACTIVITY (pH)

INSTRUMENT

MAKE/MODEL# HQ40D

SERIAL # PH401

CALIBRATION: *Ensure the instrument has been calibrated before sample analysis proceeds.*

SAMPLE ID	SAMPLE DATE mmddyy	SAMPLE TIME hr:min	ANALYSIS DATE mmddyy	ANALYSIS TIME hr:min	ANALYSIS WITHIN 15 MIN OF SAMP? Y/N	INSTRUMENT RESPONSE	TEMP °F	SAMPLER INITIALS	COMMENT
Pond	3/10/14	08:05	3/10/14	8:13	Y	8.48 CP	61.4	CP	

Clinical Laboratory of San Bernardino, Inc.

CLS Labs	Project: Oil & Grease / TPH	Work Order: 14C0840
3249 Fitzgerald Rd.	Sub Project: CXC0371	Received: 03/11/14 12:30
Rancho Cordova CA, 95742	Project Manager: Mark Smith	Reported: 03/18/14

Pond Storm **14C0840-01 (Water)** **Sample Date:** 03/10/14 8:05 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MDL	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses										
Oil & Grease/HEM	EPA 1664A	ND	mg/L	2.0	1.3		03/14/14	03/17/14	1411418	

ND Analyte NOT DETECTED at or above the MDL; Method Detection Limit

Bob Glaubig
Laboratory Director

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

CLS Labs	Project: Oil & Grease / TPH	Work Order: 14C0840
3249 Fitzgerald Rd.	Sub Project: CXC0371	Received: 03/11/14 12:30
Rancho Cordova CA, 95742	Project Manager: Mark Smith	Reported: 03/18/14

General Chemical Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	%Rec Limits	RPD	RPD Limit	Qualifier
Batch 1411418 **Analyst: DQ**										
Blank (1411418-BLK1)				Prepared: 03/14/14 Analyzed: 03/17/14						
Oil & Grease/HEM	ND	2.0	mg/L							
LCS (1411418-BS1)				Prepared: 03/14/14 Analyzed: 03/17/14						
Oil & Grease/HEM	7.30	2.0	mg/L	8.0		91	78-114			
LCS Dup (1411418-BSD1)				Prepared: 03/14/14 Analyzed: 03/17/14						
Oil & Grease/HEM	7.60	2.0	mg/L	8.0		95	78-114	4	18	

ND Analyte NOT DETECTED at or above the reporting limit

Bob Glaubig

Bob Glaubig

Laboratory Director

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

SUBCONTRACT ORDER

CXC0371

14C0840

SENDING LABORATORY:

CLS Labs
3249 Fitzgerald Rd.
Rancho Cordova, CA 95742
Phone: 916-638-7301
Fax: 916-638-4510
Project Manager: Mark Smith

[redacted]

RECEIVING LABORATORY:

Clinical Lab of San Bernardino
21881 Barton Road
Grand Terrace, CA 92324
Phone :(909) 825-7693
Fax: (909) 825-7696

Analysis	TAT	Due	Expires	Laboratory ID	Sample Date	Received	Matrix
O&G-1664 (SUB)	5	03/17/14 12:00	04/07/14 08:05	CXC0371-01	03/10/14 08:05	03/10/14 10:15	Water

[redacted]

Client sample ID: Pond Storm
Laboratory sample ID: CXC0371-01
Please use client sample ID on all reports

Containers Supplied:
1L Amber- Unpres. (A)

Relinquished By: 3/10/14	Date	Received By	Date
Relinquished By	Date	Received By: 3-11-14	Date: 12:30
Shipped By: GN TRAC	Airbill Number: B143020148607		

Subcontract Sample Receipt Checklist

CLS Work Order Number: CXC0571

Chain of Custody (COC) Information

Carrier Name ON TRAC

Chain of custody present?	Yes	☑	☐	No
Chain of custody signed when relinquished and received?	Yes	☑	☐	No
Chain of custody agrees with sample labels?	Yes	☑	☐	Non-Compliant

Sample Receipt Information

Shipping container/cooler in good condition?	Yes	☑	☐	No	Not Present	☐
Samples in proper container/bottle?	Yes	☑	☐	Non-Compliant		
Sample containers intact?	Yes	☑	☐	No		
Sufficient sample volume for indicated test?	Yes	☑	☐	No		

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	☐	No
Temperature upon receipt: 13 C				
Wet Ice present in Cooler?	Yes	☑	☐	No
Blue Ice present in Cooler?	Yes	☐	☑	No

Analytical Requirement Information

Are non-Standard of Modified methods requested?	Yes	☐	☐	No
Subcontract Lab CERTIFIED for the various methods requested?	Yes	☑	☐	No
Will Subcontract Lab be able to meet the turn-around time (TAT) requirements?	Yes	☑	☐	No

Subcontract Lab Information

Work Order Number assigned by Subcontract Lab 1409840

Date received at Subcontract Lab 3-11-19

If any items are check marked NO or are non-compliant, a phone call back to California Laboratory Services is required immediately. If all items are acceptable, a faxed copy of the signed sub chain of custody (COC) and the completed sample receipt check list is required within 24 hours of sample receipt.

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

June 19, 2014

CLS Work Order #: CXC0371
COC #:

Charles Price
PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project Name: Colusa Generating Station

Enclosed are the results of analyses for samples received by the laboratory on 03/10/14 10:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

 06/19/14 16:40

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXC0371
COC #:

Pacific Gas and Electric Company

Chain of Custody Record

CXC0371

From: Pacific Gas & Electric Company ☒ PG&E Facility ☐ Sample Site
Address or Location: 4780 Dicks Road
City: Maxwell CA (Zip) 95955
Contact Name/Phone No.: Charley Price 530-934-9...
crpf@pge.com

Ship To: Lab Name:
Address:
City: , CA (Zip)
Phone No.
Contact Name:

Turnaround Time
☒ NORMAL (10 days or less) ☐ RUSH ☐ OTHER, Specify
☐ TELEPHONE ☐ FAX Give Results to:

Project Name:
Project Supervisor (Name/Phone No.):
Sampled by: (Signature) (Print Name)

Analysis Requested: TSS, Sc, pH; Oil/Grease; Iron

Sample No./Equipment Serial No.	Date	Time	Sample Type/Description	Containers No.	Size	TSS, Sc, pH	Oil/Grease	Iron						Remarks
1. pond storm	3/10/14	8:45	Water	1	1L	X								
2. "	"	"	"	1	1L amber		X							
3. "	"	"	"	1	1/2L			X						preserved with nitric
4.														
5.														
6.														
7.														
8.														
9.														
10.														
11.														
12.														

Relinquished by (Name&Dept.)	Date&Time	Received by (Name&Dept.)	Date&Time	Ship Via
[signature]	3/11/14 N/A	[signature]	3/11/14 1315	
				Bill of Lading/Airbill No.:

SAP Accounting Data: | Billing Contact: | Billing Address:

Notes:
1. Samples are discarded by the laboratory 90 days after results are reported unless other arrangements are made.
2. File a copy of this Chain of Custody Record, complete with appropriate laboratory signatures, with the test analysis results.
3. The first "Relinquished by/Date" is the shipping date unless otherwise noted.
4. The final PCB results will be the cumulative results added together for each PCB.
5. When this form is computer-generated, send the completed original to the laboratory, and make copies for the originator and sampler.

Distribution (See note #5)
White: Laboratory
Canary: Originator
Pink: Sampler

©PG&E November, 1998

PG&E - Maxwell	Project: Colusa Generating Station	
P.O. Box 398	Project Number: [none]	**CLS Work Order #: CXC0371**
Maxwell, CA 95955	Project Manager: Charles Price	COC #:

CLS LABS
SAMPLE RECEIVING EXCEPTION REPORTS

CLS Labs Job # CXC 0371

Problem discovered by: Debra M. **Date:** 3/10/14

Nature of problem

Sulfite **Chlorine, Total** **Chlorine, Residual** **Ph** **Dissolved O2**

(Circle analysis above) Received out of HOLD time.

Client contacted? Yes_____ No_____ Spoke With: _____

By whom: _____ **Date:** __/__/__ **Time:** _____ **HRS**

Client instructions:

Resolution of problem:

Logged in regardless and will be ran for analysis requested.

H:\WillOrd\Jana\SampleException.Doc

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXC0371
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond Storm (CXC0371-01) Storm Water	**Sampled: 03/10/14 08:05**		**Received: 03/10/14 10:15**						
Specific Conductance (EC)	**170**	1.0	µmhos/cm	1	CX01629	03/11/14	03/11/14	EPA 120.1	
pH	**8.16**	0.01	pH Units	"	CX01604	03/10/14	03/10/14	SM4500-H B	HT-F
Total Suspended Solids	**4.0**	2.0	mg/L	"	CX01626	03/11/14	03/11/14	SM2540D	

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXC0371
COC #:

Metals by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Pond Storm (CXC0371-01) Storm Water	**Sampled: 03/10/14 08:05**	**Received: 03/10/14 10:15**							
Iron	**230**	100	µg/L	1	CX01631	03/11/14	03/11/14	EPA 200.7	

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXC0371
COC #:

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CX01626 - General Preparation										
Blank (CX01626-BLK1)				Prepared & Analyzed: 03/11/14						
Total Suspended Solids	ND	2.0	mg/L							
Duplicate (CX01626-DUP1)	**Source: CXC0358-02**			Prepared & Analyzed: 03/11/14						
Total Suspended Solids	ND	2.0	mg/L		ND				20	
Batch CX01629 - General Preparation										
Blank (CX01629-BLK1)				Prepared & Analyzed: 03/11/14						
Specific Conductance (EC)	ND	1.0	µmhos/cm							

PG&E - Maxwell
P.O. Box 398
Maxwell, CA 95955

Project: Colusa Generating Station
Project Number: [none]
Project Manager: Charles Price

CLS Work Order #: CXC0371
COC #:

Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CX01631 - EPA 3010A										
Blank (CX01631-BLK1)				Prepared & Analyzed: 03/11/14						
Iron	ND	100	µg/L							
LCS (CX01631-BS1)				Prepared & Analyzed: 03/11/14						
Iron	5030	100	µg/L	5000		101	85-115			
Matrix Spike (CX01631-MS1)		Source: CXC0405-01		Prepared & Analyzed: 03/11/14						
Iron	8710	100	µg/L	5000	3660	101	70-130			

PG&E - Maxwell	Project: Colusa Generating Station	
P.O. Box 398	Project Number: [none]	**CLS Work Order #: CXC0371**
Maxwell, CA 95955	Project Manager: Charles Price	COC #:

Notes and Definitions

HT-F	This is a field test method and it is performed in the lab outside holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

2013-2014
ANNUAL REPORT

Attachment 2

FORM 2 – QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWD'S)

2013-2014

ANNUAL REPORT

SIDE A

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Quarterly dry weather visual observations are required of each authorized NSWD.
- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Authorized NSWDs must meet the conditions provided in Section D (pages 5-6), of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** DATE: 9-24-13	Observers Name: Charles Price Title: Sr Env Consultant Signature:	☐ YES ☒ NO **WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** If YES, complete reverse side of this form.
QUARTER: **OCT.-DEC.** DATE: 12/31/13	Observers Name: Charles Price Title: SR Env Consultant Signature:	☐ YES ☒ NO **WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** If YES, complete reverse side of this form.
QUARTER: **JAN.-MARCH** DATE: 3/27/14	Observers Name: Charles Price Title: Sr Env Consultant Signature:	☐ YES ☒ NO **WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** If YES, complete reverse side of this form.
QUARTER: **APRIL-JUNE** DATE: 6/18/14	Observers Name: Charles Price Title: Sr Env Consultant Signature:	☐ YES ☒ NO **WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** If YES, complete reverse side of this form.

2013-2014
ANNUAL REPORT

Attachment 3

FORM 3 – QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWD'S)

2013-2014
ANNUAL REPORT

SIDE A

FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: JULY-SEPT. DATE/TIME OF OBSERVATIONS 9-24-13 09 ☒ AM ☐ PM	Observers Name: Charles Price Title: S.r. Environmental consultant Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? ☐ YES ☒ NO WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? ☐ YES ☒ NO	If YES to either question, complete reverse side.
QUARTER: OCT.-DEC. DATE/TIME OF OBSERVATIONS 12/31/13 08 ☒ AM ☐ PM	Observers Name: Charles Price Title: Sr Environmental Consultant Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? ☐ YES ☒ NO WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? ☐ YES ☒ NO	If YES to either question, complete reverse side.
QUARTER: JAN.-MARCH DATE/TIME OF OBSERVATIONS 3/10/14 09 ☒ AM ☐ PM	Observers Name: Charles Price Title: Sbe Env Consultants Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? ☐ YES ☒ NO WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? ☐ YES ☒ NO	If YES to either question, complete reverse side.
QUARTER: APRIL-JUNE DATE/TIME OF OBSERVATIONS 6/12/14 09 ☒ AM ☐ PM	Observers Name: Title: Senior Env Consultant Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? ☐ YES ☒ NO WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? ☐ YES ☒ NO	If YES to either question, complete reverse side.

2013-2014
ANNUAL REPORT

Attachment 4

FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

2013-

ANNUAL REPORT

FORM 4-MONTHLY VISUAL OBSERVATIONS OF

SIDE A

STORM WATER DISCHARGES

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Observation Date: October ____ 2013 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1 No	#2 Discharge	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: November____ 2013 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1 No	#2 Discharge	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: December____ 2013 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1 No	#2 Discharge	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: January____ 2014 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2 No Discharge	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐

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ANNUAL REPORT

FORM 4 (Continued)-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

		#1	#2	#3	#4
Observation Date: February 10 2014 Observers Name: Charles Price Title: SR Env Consultant Signature:	Drainage Location Description	Pond			
	Observation Time	7:12 ☐P.M. ☒A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: March 10 2014 Observers Name: Charles Price Title: SR Env Consultant Signature:	Drainage Location Description	#1 Pond Inlet	#2	#3	#4
	Observation Time	8:05 ☐P.M. ☒A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	NA ☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: April ____ 2014 Observers Name: ____ Title: ____ Signature: ____	Drainage Location Description	#1 No	#2 Discharge in April	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: May ____ 2014 Observers Name: ____ Title: ____ Signature: ____	Drainage Location Description	#1	#2 No Discharge in May	#3	#4
	Observation Time	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Time Discharge Began	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.	☐P.M. ☐A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐

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Attachment 5

FORM 5 – ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

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ANNUAL REPORT

SIDE A

FORM 5-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 06/18/14 **INSPECTOR NAME:** Charles Price **TITLE:** Sr. Environmental Consultant **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)				Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Balance of Plant General Housekeeping	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☒ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)				Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Storm Drain System (Inlets, ditches, and sediment pond)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☒ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)				Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Trash Roll off Bins/Scrap Metal Bins	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☒ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)				Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Zero Liquid Discharge System/Water Treatment Building	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☒ NO			

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SIDE B

FORM 5 (Continued)-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 6/18/14 INSPECTOR NAME: Charles Price TITLE: SR Environmental Consultant SIGNATURE: [signature]

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Virgin Oil/Haz Material/Haz Waste Storage Buildings/Oil Water Separator	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☒NO			
Oil Filled Equipment (Transformers/Lube Oil Systems/Boiler Feed Pumps/Air Cooled Condensor Fan Gear Boxes)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☒NO			
Chemical Feed Shelters (Wet Surface Air Cooler/Cycle)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☒NO			
Ammonia System (Ammonia Tank/Ammonia Dosing Skid)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☒NO			

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ANNUAL REPORT

Attachment 6

EXPLANATIONS

2013-2014 Annual SWPPP Report Explanation Documentation

E. Sampling and Analysis Results

E.4. For each storm event sampled, did you collect and analyze a sample from each of the facility's storm water discharge locations?

Only one sample was taken at the retention pond discharge point during 2013-2014. The dry weather pattern this year led to only two discharges of the stormwater pond. The first occurred late-night on February 9th, which was sampled when there was adequate light on February 10th, and another which occurred late-night on February 28th (a Friday night). Adequate trained staff was not present over the February 28th – March 2nd weekend to take a sample. The weather forecast was favorable for the retention pond to stop discharging on March 2nd and showed an additional large storm, which would trigger another discharge, coming in on March 9th. . The storm that came in on the March 9th proved to be too weak to raise the retention pond back up to discharge levels. A visual observation of the plant runoff into the retention pond was taken at the inlet to the pond and a sample was pulled from the pond on March 9th, in an attempt to be proactive in case another large storm did not come in prior to June. As all water from the site comes together and co-mingles in the retention pond prior to discharge, this sample adequately represents the quality of the facility's storm water discharge, even though that storm did not have a discharge out from the facility.

E.6. Were all samples collected during the first hour of discharge?

The first qualifying storm event during the 2013-2014 season occurred over a weekend with discharging estimated to have begun sometime Sunday night/Monday morning (February 9-10). All storm water at the Colusa Generating Station drains to a retention pond prior to discharge; and as this event occurred over a weekend, the exact time of discharge from the retention pond cannot be established. Samples were taken by the sampler upon arrival at the generating station at 07:39 Monday morning, when the discharge point was adequately lit [see note below]. PG&E believes that although the exact time of discharge is unknown, the collected samples are representative of the quality of storm water discharged, as the retention pond was crafted to equalize storm water inflows and holds approximately 2.5 acre feet of water before discharging.

Note: The sampling point is located off the main plant footprint and is in a poorly lit, difficult to reach area in poor conditions with a thriving rattlesnake

population inhabiting the area. Samples are pulled during daylight hours when it is safe to do so.

E.9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events?

Two storm events were sampled but only one discharged from the retention pond with a potential to leave site. All water from the site comes together and co-mingles in the retention pond prior to discharge, this sample adequately represents the quality and quantity of the facility's storm water discharges, even though that storm did not have a discharge out from the facility.

G. Monthly Wet Season Visual Observations

G.1. Monthly visual observations of storm water discharges

In October, November, December of 2013 and January, March and April of 2014, insufficient precipitation occurred for the retention pond to discharge. March's visual observation was the plant water entering the retention pond. There was pond discharging that began in February which continued through the first days of March but was not a separate storm event.

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 1/31/14 0830

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good could use some sweeping but minor.	none at this time	
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 1/31/14 0830

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	lids up	start lids	1/31/14
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	still working on plan for fixing eroded area at SW of pointer		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 2/27/14 @ 1500

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection:_____

Name and Signature of Inspector(s):_____

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	Good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	Good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	Excellent !!!		
Storm Drain System (inlets, ditches, and outfalls)	• Evidence of material entering the drainage system (stains, odors, accumulation of sediment, industrial materials, or debris). • Sediment buildup in detention basin • Evidence of sediment discharge from detention basin	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 3/28/14 0700

Name and Signature of Inspector(s): Charley Brace

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Zero liquid discharge (ZLD) system	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	~~good~~ Flash Tank A needs good cleaning	Clean under Flash Tank A (ALS)	3/28/14
Aqueous ammonia storage tank	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	Containment Needs draining	Pump broke need to use Portable to pump containment	3/28/14
Air cooled condenser	• Evidence of oil spills/leaks from gear boxes	good		
Oil/water separator	• General housekeeping • Evidence of spills/leaks	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection:_____

Name and Signature of Inspector(s):_____

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	Good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 4/30/14 0830

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	A lot of work going on. everything looks ok at this time	none at this time	
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	see above	Contractors are maintaining well	
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	Good		
Storm Drain System (inlets, ditches, and outfalls)	• Evidence of material entering the drainage system (stains, odors, accumulation of sediment, industrial materials, or debris). • Sediment buildup in detention basin • Evidence of sediment discharge from detention basin	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 4/30/14 0800

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	Good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	Good		
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 5/29/14 11:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	good		
Storm Drain System (inlets, ditches, and outfalls)	• Evidence of material entering the drainage system (stains, odors, accumulation of sediment, industrial materials, or debris). • Sediment buildup in detention basin • Evidence of sediment discharge from detention basin	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 5/29/14 11:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 6/18/14 09:00

Name and Signature of Inspector(s): Charles Freeman

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	Good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	Good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 6/8/14 09:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 07/29/14 09:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	good		
Storm Drain System (inlets, ditches, and outfalls)	• Evidence of material entering the drainage system (stains, odors, accumulation of sediment, industrial materials, or debris). • Sediment buildup in detention basin • Evidence of sediment discharge from detention basin	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 07/29/14 09:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 8/28/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 8/28/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Zero liquid discharge (ZLD) system	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	good		
Aqueous ammonia storage tank	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	good		
Air cooled condenser	• Evidence of oil spills/leaks from gear boxes	good		
Oil/water separator	• General housekeeping • Evidence of spills/leaks	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 9/25/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 9/25/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	good		

PG&E Colusa Generating Station
Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 10/27/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Cycle chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Wet surface air cooler chemical feed shelter	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Ammonia dosing skid	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Water treatment building outdoor chemical storage areas	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 10/27/14 0900

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 11/25/14 0800

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Zero liquid discharge (ZLD) system	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	Good		
Aqueous ammonia storage tank	• General housekeeping • Evidence of spills/leaks • Spill kits maintained • Containment area drain valve closed • Containment fee of accumulated material	Good		
Air cooled condenser	• Evidence of oil spills/leaks from gear boxes	Good		
Oil/water separator	• General housekeeping • Evidence of spills/leaks	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 11/25/14 08:50

Name and Signature of Inspector(s): Charles Frick

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	Good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	Good		
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	Good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	Good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 12/31/14 09:00

Name and Signature of Inspector(s): charles free

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Trash roll-off bins, scrap metal bins, dumpsters or rolloff containers	• Good housekeeping • Lids or covers in place • Evidence of liquid leaking from bin • Appropriate materials placed in dumpster • Adequate capacity	good		
General housekeeping	• Accumulations of trash, debris, or sediment with the potential to enter storm drains? • No cars or trucks leaking automotive fluids. • No automotive fluid accumulations in parking areas. • Appropriate stormwater controls exercised at construction areas involving earth disturbances or stockpiling of bulk materials.	good		
Erosion Control	• Erosion or grade deterioration observed? • Sediment accumulation in catch basins, storm drains, or gutters.	good		

PG&E Colusa Generating Station

Monthly Storm Water Inspection Sheet

Date and Time of Inspection: 12/30/14 07:00

Name and Signature of Inspector(s): Charles Price

When complete, form should be submitted to the Senior Environmental Consultant for assignment and follow-up on corrective actions. When complete, forms should be filed in Appendix K of the SWPPP

Area Inspected	Items to Inspect	Observations/ Notes	Corrective Actions Required/Responsible Party	Date Corrective Action Completed (Complete within 14 days of assignment)
Virgin oil and used oil/hazardous waste modular storage buildings	• General housekeeping • Evidence of spills/ leaks • Storm drain mat, if required • Containment free of accumulated material	Good		
Transformers	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	water in several transformer containment	drain containments	12/30/14
Turbine lube oil systems	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Spill kits maintained • Containment area drain valve closed	good		
Boiler feedwater pumps	• General housekeeping • Evidence of spills/leaks • Containment fee of accumulated material • Containment area drain valve closed	Good		

Appendix 5, Soil & Water -7

Per Soil &Water 7 the following is required: "the project owner shall submit any related monitoring required by the agreement to the CPM in the annual compliance report. The project owner shall submit any notice of violations from the Glenn Colusa Irrigation District to the CPM within 10 days of receipt and fully explain the corrective actions taken in the next annual compliance report."

There are no reporting or monitoring requirements in the water agreement with the Glenn Colusa Irrigation District.

No notice of violations issued by GCID in the 2014 reporting year.

Appendix 6, Soil & Water -8

CEC-1304 Schedule 3 Part A (page 1)
Annual Water Supply and Use, and Wastewater Discharge Report

Year	2013
CEC Plant ID	06-AFC-9
EIA Plant ID	

Section 1. Power Plant Water Supply

1a	Primary Water Supply Source	Agricultural Canal	1e	Backup Water Supply Source	N/A
1b	Name of Primary Water Purveyor, Wastewater Supplier, or Well ID(s)	Tehama Colusa Canal Authority/Glen Colusa Irrigation District	1f	Name of Backup Water Purveyor, Wastewater Supplier, or Well ID(s)	N/A
1c	Primary Water Supply Average Total Dissolved Solids (mg/l)	90	1g	Backup Water Supply Average Total Dissolved Solids (mg/l)	N/A
1d	Regional Water Quality Control Board	Central Valley Regional Water Quality Control Board			

Section 2. Power Plant Water Use

2a ☐ *Check this box if water use at the power plant is not metered and cannot reasonably estimated.*

2b

Volume of Water Required (in gallons)	☐ Sanitation	☐ Landscaping	☑ Solar Mirror Washing	☑ Dust Suppression	☐ Other Water Use	☑ Daily Maximum	
	Check the boxes below if the categorized water use is not metered and cannot reasonably be estimated or is not applicable.						
January	5,421				570,880		
Febraury	5,367				437,205		
March	12,441				116,311		
April	3,927	9234			315,271		
May	14,135	10,000			617,689		
June	30,063	9766			1,556,139		
July	30,721	3094			4,624,345		
August	47,517	17012			1,926,279		
September	42,059	7114			3,522,475		
October	34,948	8362			3,729,042		
November	10,890	9262			642,540		
December	20,394				487,056		

2c	Metering Frequency	Recorded Monthly	Metering Technology	Inline analog meters

Section 3. Power Plant Wastewater Disposal

3a ☐ *Check box if wastewater is not metered and cannot reasonably estimated.*

3b	Wastewater Disposal Method	Zero Liquid Discharge/Septic System
3c	Average Total Dissolved Solids (mg/l)	N/A
3d	Equipment Manufacturer	Aquatech
3e	Year of Installation	2010
3f	Waste Reduction Equipment or Measures Taken	Zero Liquid Discharge
3g	Name of the Facility or Water Body Receiving the Wastewater	N/A
3h	Notes: Process waste water is ran through a crystallizer that removes the solids and vaporiz	

3i

Volume of Discharged Waste (in gallons)	Daily Maximum	Monthly Total
January	N/A	
Febraury	N/A	
March	N/A	
April	N/A	
May	N/A	
June	N/A	
July	N/A	
August	N/A	
September	N/A	
October	N/A	
November	N/A	
December	N/A	N/A

Declaration

Person submitting the Report:

Charles Price
Senior Environment Consultant
Pacific Gas and Electric Company
4780 Dirks Road
Street Address 2
Maxwell, CA 95955
530-934-9007
530-934-9024
crpf@pge.com

Company responsible for submitting the Report:

Pacific Gas and Electric Company
4780 Dirks Road
Street Address 2
Maxwell, CA 95955
530-934-9007
530-934-9024
crpf@pge.com

Reporting Period: 2014

I certify under the penalty of perjury of the laws of the State of California that I am authorized by Pacific Gas and Electric Company to submit the enclosed report. This report fulfills the requirement for CCR, Title 20, Division 2, Section 1304. The matters contained in this report are, to the best of my knowledge and belief and based on diligent investigation, true, accurate, complete and in compliance with these regulations.

Charles Price, Senior Environment Consultant

February 13, 2014
Date

Signed declaration to be submitted to: California Energy Commission

1. via email to QFERGEN@energy.state.ca.us as a PDF attachment or;
2. via fascimile to (916) 654-4559 or;
3. via US postal mail to 1516 Ninth Street, MS-20, Sacramento CA 95814

Appendix 7, Soil & Water - 9

Per Soil &Water 9, in regards to the Septic System, the following is required: "Any testing results or correspondence exchanged between the project owner and the California Department of Health Services or the Colusa County Environmental Health Division."

There is no testing required for the Septic System at the Colusa Generating Station and there was no formal correspondence with the Colusa County Department of Environmental Health. In 2012 we signed a maintenance contract with Hydrotec Solutions Inc., to provide quarterly maintenance of our septic system in accordance with our O&M manual. This company was recommended to us by the Colusa County Department of Environmental Health. They began their quarterly maintenance in the third quarter of 2012 and have continued thought the present.

Attached is their 2014 report.

PGE Colusa Generating Station

ANNUAL 2014 REPORT

COMPLETED: **11/24/14**

PGE Colusa Generating Station

Hydrotec Solutions, Inc.
P.O. Box 7908
Chico, CA 95927
(530) 891-4420

2014 PG&E Colusa Generating Station

Date	# days	STEP Tank EC	Net Cycles	ADC	STEP Tank Pump 2: ETM	Net Run Time	ADRT
12/11/13	111	1479	277.00	2.50	7715.50	1486.47	13.39
3/26/14	105	1673	194.00	1.85	9115.45	1399.95	13.33
7/23/14	119	1952	279.00	2.34	10630.09	1514.64	12.73
11/18/14	118	2221	269.00	2.28	12110.25	1480.16	12.54

KEY:	
ADC	Ave. Daily Cycle
ADRT	Ave. Daily Run Time
EC	Event Counter
ETM	Elapsed Time Meter
NET	Month Total

PGE Colusa Generating Station

Hydrotec Solutions, Inc.
P.O. Box 7908
Chico, CA 95927
(530) 891-4420

PIEZOMETER MEASUREMENTS

3/26/14	TOTAL DEPTH	DEPTH TO H2O
Piez #1	2.50'	DRY
Piez #2	2.75'	1.60'
Piez #3	2.73'	2.20'

Missed	TOTAL DEPTH	DEPTH TO H2O
Piez #1		
Piez #2		
Piez #3		

7/23/14	TOTAL DEPTH	DEPTH TO H2O
Piez #1	2.50'	1.60'
Piez #2	2.75'	DRY
Piez #3	2.73'	DRY

11/18/14	TOTAL DEPTH	DEPTH TO H2O
Piez #1	2.50'	DRY
Piez #2	2.75'	DRY
Piez #3	2.73'	1.40'

PGE Colusa Generating Station

Hydrotec Solutions, Inc.
P.O. Box 7908
Chico, CA 95927
(530) 891-4420

SCUM & SLUDGE MEASUREMENTS

3/26/14

	SEPTIC		DOSING	
	INLET	OUTLET	INLET	OUTLET
SCUM	3"	0"	0"	0"
SLUDGE	6"	7"	3"	2"

Missed

	SEPTIC		DOSING	
	INLET	OUTLET	INLET	OUTLET
SCUM				
SLUDGE				

7/23/14

	SEPTIC		DOSING	
	INLET	OUTLET	INLET	OUTLET
SCUM	3"	1"	0"	0"
SLUDGE	10"	8"	3"	1"

11/18/14

	SEPTIC		DOSING	
	INLET	OUTLET	INLET	OUTLET
SCUM	3"	0"	0"	0"
SLUDGE	11"	10"	2"	2"

Appendix 8, TLSN-3

Per TLSN-3, the following is required: "Any reports of line-related complaints shall be summarized along with related mitigation measures for the first five years and provided in an annual report to the CPM."

There have been no line related complaints.

Appendix 9, VIS-1

Per VIS-1, the following is required: "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) major maintenance activities that occurred during the reporting year; and c) the schedule of major maintenance activities for the next year.

Surface coating applications for the most part remain in excellent condition after their completion in March 2011, as a result no maintenance activities occurred in 2014.

There is a possibility that some touch up painting may occur on the steam turbine duct where some heat issues effected the coatings. This is in an area that is not visible to the public.

Appendix 10, VIS-3

Per VIS-3, the following is required: "The project owner shall report landscape maintenance activities, including of dead or dying vegetation, for the previous year of operation in each annual compliance report."

The landscape contractor took over the irrigation from the valves to the sprinklers and everything is looking good.

I have attached the quarterly reports as well as the annual arborist report.

February 4, 2015

Marsha Gale
Environmental Vision
2550 Ninth Street, Suite 205
Berkeley, CA 94710

Subject: Landscape Inspection
Colusa Generating Station

Dear Ms. Gale:

Environmental Vision designed the perimeter landscape for the PG&E power generating station in Colusa County. The landscape was installed in 2011. HortScience, Inc. was asked to perform a follow-up inspection to evaluate tree conditions, assess conformance to recommendations made in our February 2014 inspection report, and to provide recommendations as appropriate. This letter responds to that request.

Landscape assessment
I visited the Colusa Generating Station on December 18, 2014 and evaluated the condition of thirty-three (33) trees. All trees were assigned numbers for assessment purposes but were not numerically tagged. Since the last inspection, blue oak #12 was replaced. Each tree is described and maintenance recommendations are specified in the attached ***Landscape Assessment Form***. Overall the landscape had fair to good appearance, with an apparent improvement in the health of tree foliage since last season.

- Twelve Aleppo pine trees all exhibited new green foliage and fuller crowns since the last inspection. Eight trees were in good condition and four trees in fair condition, which remained unchanged. There was standing water in the surrounding area, and several of the trees were loose in the soil. Most of the trees had upright trunks, however trees #2 and #33 both had trunk leans (photo 1).

Photo 1. Two Aleppo pines had trunk leans; #2 to the north (far left) and #33 to the W (left). The rootballs of both trees were loose in the saturated soil.

- Twelve manna gums were in fair to good condition. Conditions of all trees remained unchanged with the exception of #7, which improved from poor to fair condition. Dead branches were removed and new growth was exhibited in the canopy. Trees #21 and 24 had sinuous upper trunk leans to the W (photo 2). Many still had had several inches of soil covering the root flare.

Photo 2. Manna gums #20 (left) and 24 (right) exhibit bowed and sinuous trunk structure shaped by wind forces.

- The conditions of five silver dollar gums remained unchanged. They were in good and fair condition with dense crowns and good foliage color. Tree #16 was in fair condition with a trunk lean. Tree (#8) had developed a sinuous, codominant trunk, and like tree #14, it was planted too deep, with several inches of soil covering the root flare.

- Blue oak #11 with codominant trunks declined from fair to poor condition with low vigor and branch dieback. Blue oak #12 was a replacement tree in fair condition. Conditions of canyon live oaks #10 and 13 remained unchanged. Canyon live oak #10 was in poor condition with branch dieback and a dead central leader. Canyon live oak #13 was in fair condition with low vigor and poor structure.

The soil was saturated at the time of inspection. As a result of the cool temperatures and plentiful rain, the trees exhibited fuller crowns with healthy, new foliage. Previous year's foliage was chlorotic and sparse in comparison.

Based on previous recommendations, stakes had been removed from trees #3, 4, 6, 8, 16, 18, 19, 21, 23, 24 and 29. Stakes remained on trees #5, 7, 10-13, and 31. Watering basins were flattened from the rains, and mulch had moved off-site. Root flares remained buried on some trees, and structural pruning was needed on several others.

Recommendations
Based on my landscape evaluation, I recommend the following corrective actions:

1. Remove the soil covering root crowns and the lower trunks of trees #4, 5, 7, 8, 13, 14, 18, 23, 30, 31, and 32 to expose the root flare of all trees

2. Re-construct watering basins around all trees to enclose bubbler irrigation heads per the Planting Installation Notes and grade the soil within the basin to flow away from the trunks of the trees.

3. Remove all weeds and grasses in the area, and apply coarse organic mulch 3-6" deep around all trees per the Planting Installation Notes.

4. Prune to correct structural defects, including lopsided canopies from wind forces. Pruning should be minimal by first removing any dead branches and retaining as many live branches as possible to promote trunk diameter growth. Shorten branches on the leeward side of the trees to balance canopies.
    a. Codominant trunks – Prune trees #1, 2, 9-11, 14-16, 18-20, 22 and 24 to develop one dominant trunk. Choose the stronger, more upright stem that will make the best leader and prune back or remove the other stem at its point of origin.
    b. Crossing branches – Remove crossing branches from trees #17 and 21.
    c. Girdling roots – Cut girdling roots of trees #29 and 33 with a knife or pruning tool to prevent them from girdling the tree later.

5. Install a guy system at trees #2 and 33. Guying is the installation of a cable between the tree and an anchor in the ground to provide supplemental support and reduce tree movement while the root system is established (figure 1). It is important to remove girding roots before installing the system.

6. Consider replacing canyon live oaks #10 and 13 and blue oaks #11 and 12 with species native to a similar environment.

7. Apply fertilizer in spring and fall this year.
    a. Spring application: 1 lb/1000 ft.² slow-release nitrogen (sulfur-coated urea, 36-0-0).
    b. Fall application: 1 lb/1000 ft.² slow-release nitrogen (36-0-0) and 2.5 lbs/1000 ft² of superphosphate (0-20-0).

8. Verify the location of tree #28 and, if necessary, relocate outside the Landscape Clearance Zone per the landscape plan.

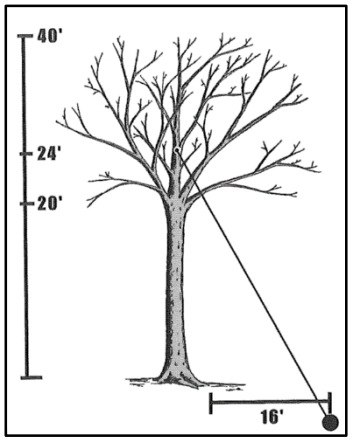


Figure 1. The preferred location of the ground anchor is the same distance out from the trunk as the height of the tree at the point of connection (in this case, 24'). The minimum distance is 2/3 the height, or 16'.

Smiley, Lilly. Tree Support Systems, ISA, 2001.

Please call if you have any questions.

Sincerely,

Carol Randisi

Carol Randisi
Certified Arborist #WE-6481A

Landscape Assessment

Colusa Generating Station
Colusa Co. CA
December 2014

Tree number	Common name *planted March '12	Condition 1=poor 5=excellent	Tree comments	Remove stake	Expose root flare	Structural prune	Remove weeds and restructure watering basin	Reapply organic mulch	Maintenance comments
1	Aleppo pine	4	Codominant trunks; trunk lean to W; slightly thin crown; healthy new foliage.	-	-	x	x	x	Suppress codominant stem.
2	Aleppo pine	4	Slight upper trunk lean to N; green new foliage; slightly chlorotic older foliage.	-	-	x	x	x	Suppress codominant stem; structural prune into wind.
3	Aleppo pine	4	Slightly thin crown; healthy new foliage.	-	-	-	x	x	
4	Aleppo pine	4	Slightly thin crown; healthy new foliage.	-	x	-	x	x	
5	Aleppo pine	3	Thin upper crown; planted too deep.	-	x	-	x	x	
6	Manna gum	4	Good form and structure.	-	-	-	x	x	Stake removed.
7	Manna gum	3	Small tree; planted too deep; stakes inside rootball.	-	x	-	x	x	Dead leader and lateral branches removed.
8	Silver dollar gum	4	Sinuous trunk; round-headed crown; planted too deep.	-	x	-	x	x	
9	Silver dollar gum	3	Full canopy; upper crown lean to W.	-	-	x	x	x	Reduce extended branch on W side.
10	Canyon live oak*	2	Thin crown; dead branches; dead top.	-	-	x	x	x	Prune dead branches and top; or consider replacing tree with different species.
11	Blue oak	3	Codominant trunks; upper trunk lean to W; branch dieback and leader mostly dead.	-	-	x	x	x	Suppress codominant stem; prune dead branches.
12	Blue oak	3	Replacement tree; spreading top; planted too deep.	-	-	x	x	x	Select leader and reduce competing branches at top.
13	Canyon live oak*	3	Thin crown; some dieback; planted too deep; trunk bows west.	-	x	-	x	x	Consider replacing tree with a different species.
14	Silver dollar gum	4	Good foliage density and color; planted too deep; codominant stems at 8'.	-	x	x	x	x	Suppress west codominant stem.
15	Silver dollar gum	4	Codominant trunks at 6'; dense foliage.	-	-	x	x	x	Suppress west codominant stem; stake removed.
16	Silver dollar gum	3	Top of trunk bends leeward; codominant stems at 7'; heavy lateral limb.	-	-	x	x	x	Remove W codominant stem; suppress heavy lateral limb; stake removed.

Landscape Assessment

Colusa Generating Station
Colusa Co. CA
December 2014

Tree number	Common name *planted March '12	Condition 1=poor 5=excellent	Tree comments	Remove stake	Expose root flare	Structural prune	Remove weeds and restructure watering basin	Reapply organic mulch	Maintenance comments
17	Manna gum	3	Crossing stems; trunk zig-zags at 10'; dense crown.	-	-	x	x	x	Remove crossing stem.
18	Manna gum*	4	Codominant trunks at 8'; nice foliage; planted 2-3" too deep.	-	x	x	x	x	Suppress codominant stem; stake removed.
19	Manna gum*	3	Codominant trunks at 9'; slightly thin crown; nice form.	-	-	x	x	x	Suppress codominant stem; stake removed.
20	Manna gum*	3	Curve in trunk; codominant trunks at 6'; nice foliage.	-	-	x	x	x	Suppress codominant stem.
21	Manna gum*	4	Nice tree; crossing stems at 6'.	-	-	x	x	x	Remove crossing stem.
22	Manna gum*	3	Codominant trunks at 4'; slightly thin crown.	-	-	x	x	x	Suppress codominant stem.
23	Manna gum	3	High, slightly thin crown; stippled leaves; planted too deep.	-	x	-	x	x	
24	Manna gum*	4	Codominant trunks at 6'; tie damage; stakes inside root ball.	-	-	x	x	x	Suppress codominant stem and balance canopy.
25	Aleppo pine	4	Nice form; new growth.	-	-	-	x	x	
26	Aleppo pine	4	Nice form; dense crown.	-	-	-	x	x	
27	Aleppo pine	4	Nice form; dense crown.	-	-	-	x	x	
28	Aleppo pine	3	Nice form; dense crown; topped at 6'; located within "landscape clearance zone".	-	-	x	x	x	Prune to create a central leader and suppress laterals extending to E and W.
29	Manna gum*	4	Nice form; dense crown; girdling root.	-	-	x	x	x	Remove girdling root; stake removed.
30	Manna gum	4	Nice form; trunk damage; planted 2-3" too deep.	-	x	-	x	x	
31	Aleppo pine	3	Slightly thin crown; chlorotic; planted 4-5" too deep.	-	x	-	x	x	
32	Aleppo pine	4	Nice form; planted 3-4" too deep.	-	x	-	x	x	
33	Aleppo pine	3	Slightly thin crown; lost central leader; girdling root.	-	-	x	x	x	Remove girdling root

#1 Aleppo pine

#2 Aleppo pine

#3 Aleppo pine

#4 Aleppo pine

#5 Aleppo pine

#6 Manna gum

#7 Manna gum

#8 Silver dollar gum

#9 Silver dollar gum

#10 Canyon live oak

#11 Blue oak

#12 Blue oak

#13 Canyon live oak

#14 Silver dollar gum

#15 Silver dollar gum

#16 Silver dollar gum

#17 Manna gum

#18 Manna gum

#19 Manna gum

#20 Manna gum

#21 Manna gum

#22 Manna gum

#23 Manna gum

#24 Manna gum

#25 Aleppo pine

#26 Aleppo pine

#27 Aleppo pine

#28 Aleppo pine

#29 Manna gum

#30 Manna gum

#31 Aleppo pine

#32 Aleppo pine

#33 Aleppo pine

#1-7 South side looking northwest

#8-11 East side, south of entrance looking west

#12-18 East side, north of entrance looking northwest

#20-25 East side, north of entrance looking west

#25-29 East side, north of entrance looking northwest

#31-33 East side, north of entrance looking northwest

Charles,
Re: 4th Quarter Tree Maintenance Report

We removed most of trees stakes and tree ties on December 14. 2014 during our 4th quarter trees maintenance . All trees are doing well, however trees still need water at least once week.
Kim Creedon,

Sent from Kim's Professional Landscaping

2511 Connie Drive
Sacramento, CA
95815

Phone: 916-929-3132
Fax: 916-929-3133

Design
Construction
Maintenance
Consulting
Tree Service
Irrigation

To: Charles Price
PG&E/ Colusa Generating Station

September 12, 2014

We have increased watering schedule from twice a week to three times a week, with water up to 5-7 galon water per tree., due to unusual high temperature.
Also, remove and replace some broken stakes, tree ties.
Fertilizer we applied in June should last until Dec/14.

Kim Creedon,

2511 Connie Drive
Sacramento, CA
95815

Phone: 916-929-3132
Fax: 916-929-3133

Design
Construction
Maintenance
Consulting
Tree Service
Irrigation

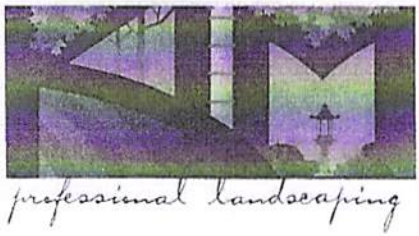
To Charles Price
PG&E/Colusa Generating Station

June 16, 2014

Second Quarter Trees Maintenance Report

Due to high wind we have used cable to stake some large trees, increased water scheduling frequency to twice a week with 3-5-g per trees.
Also, fertilize trees with Agriform tablets.

Kim Creedon,



2511 Connie Drive
Sacramento, CA
95815

Phone: 916-929-3132
Fax: 916-929-3133

Design
Construction
Maintenance
Consulting
Tree Service
Irrigation

To: Charles Price
PG&E/Colusa Generating Station

March 10, 2014

First Quarter Trees Maintenance Report

a- Remove stakes from 2 pine and 2 oaks trees.
b- Trim up all low branches and remove weed around trees
c- Clean out some sprinklers heads
d- Fertilize all trees with Agriform tablets.

The trees are doing well since the weather is cool, but should continue to water at least once week.

Kim Creedon,

Appendix 11, Waste-5

TABLE 2-1
Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Method Used Y/N
General Wastes				
Non-recyclable non-hazardous office and lunchroom waste	Waste paper, metal, plastic, cardboard, wood	Non-hazardous solid waste, based on waste management practices and staff training.	Commercial waste bins	Y
Recyclable office materials	Waste paper, metal, plastic, cardboard	Not a waste, based on waste management practices and staff training.	Commercial recycling bins	Y
Janitorial products and waste from their use	Janitorial products (e.g., window cleaner, floor stripper, wax, drain cleaners, etc.) may contain chemicals that are hazardous. These chemicals are consumed during normal use.	Use according to instructions on product labels does not constitute disposal. Discarded full-strength products may exhibit characteristics of ignitability, corrosivity, reactivity, or toxicity.	Empty containers of 5 gallons or less (meeting the definition of an empty container) can be disposed of in commercial waste bins. Discarded unused products will be characterized based on review of product labels and MSDSs and disposed of appropriately.	Y
Used consumer electronic products and components	Cell phones, personal computers, computer perhipherals (e.g., printers), pagers, personal digital assistants, process control system components	Universal hazardous waste	Universal waste destination facility to be identified	Y
Light tubes	Includes fluorescent light tubes, high-pressure sodium lamps, and other lamps that exhibit a characteristic of a hazardous waste.	Universal hazardous waste	Universal waste destination facility to be identified	Y
Batteries	Rechargeable nickel-cadmium batteries, lithium batteries, alkaline batteries, silver button batteries, mercury batteries, small sealed lead-acid batteries, carbon-zinc batteries, and any other batteries that exhibit a	Universal hazardous waste	Universal waste destination facility to be identified	Y

TABLE 2-1
Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Method Used Y/N
	characteristic of a hazardous waste			
Lead acid batteries – automotive or large industrial	Contain lead and sulfuric acid	Recyclable hazardous waste	Destination facility to be identified	Y
Off-specification chemicals	Unusable new products, materials that cannot be returned to the vendor, and expired materials (shelf-life exceeded)	Chemical products may be non-hazardous, listed hazardous wastes, or characteristic waste.	Non-hazardous waste will be discarded in commercial waste bins. Hazardous waste will be disposed appropriately following characterization based on product labels and MSDSs.	Y
Spent sorbent	Varies with wastes absorbed. May contain oil, solvents, coolant, or diesel fuel. Listed solvents are not expected to be used at the facility.	Non-hazardous waste if used to absorb a non-hazardous liquid; non-RCRA hazardous waste if used to absorb oil; RCRA hazardous waste if used to absorb a listed solvent or material that causes the sorbent to become a characteristic or listed hazardous waste	Non-hazardous waste will be discarded in commercial waste bins. Oil-contaminated sorbent will be disposed as a non-RCRA hazardous waste based on generator knowledge. Other hazardous waste sorbent will be disposed based on either generator knowledge if the material absorbed in known or analysis if it is not known.	Y
Aerosol cans	Aerosol cleaners and lubricants may contain listed chemicals. In addition, aerosol propellants and materials may be ignitable. Materials may also be corrosive or reactive.	Universal hazardous waste	Empty, expired unused, or partially used aerosol cans	Y Managed as Universal Hazardous Waste and sent to appropriate facility.
Used oil	Used oil includes lubricating oil, gearbox oil, compressor oil, bearing oil, transformer oil, metal	Non-RCRA hazardous waste	Evergreen Oil or similar used oil recycler	Y

TABLE 2-1
Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Method Used Y/N
	working oil, and hydraulic oil that is not mixed with solvents.			
Painting wastes	Large-scale work is contracted out. Paint wastes include cans of unused or partially used paint, empty paint cans, and paint contaminated materials (brushes, rollers, tarps, and wipes).	It is assumed that waist paints are hazardous wastes. Paint-contaminated material is typically non-hazardous unless disposed when the paint is still wet.	Discarded unused or partially used paint will be characterized based on review of product labels and MSDSs and will be disposed of appropriately.	Y
Biohazard wastes	Biohazard waste may result from first air operations.	Biohazard	Transport to a local hospital for disposal by incineration	Y (Has not been necessary)
Sanitary wastewater	Wastewater from toilets, sinks, showers, and janitorial closets.	Non-hazardous. Waste management provisions include posting signs at sinks and training employees regarding materials prohibited from draining at sinks.	Delta Diablo Sanitation District treatment plant	N (Sanitary Wastewater goes to Septic/Leach field as designed)
Used oil filters	Used oil filters are hazardous based on oil content and may exhibit hazardous characteristics for lead and other heavy metals.	Used oil filters are classified as recyclable hazardous wastes provided that they are managed per requirements including draining of free-flowing oil	Drained oil filters may be transported to an approved destination such as Evergreen Oil under a bill of lading, provided that requirements for used oil filter management have been met.	Y
Reusable soiled textiles (shop towels)	Varies with material absorbed. May contain oil, solvents, or other chemicals.	May be managed as a recyclable material excluded from classification as a waste if managed in accordance with requirements for reusable soiled textiles.	Recycle at facility that is compliant with requirements for reusable soiled textiles.	Y
Empty product containers	Empty containers may contain residues that have hazardous characteristics. Care should be taken in handling empty containers previously	Empty containers meeting the regulatory definition of empty (e.g. all contents have been poured out) may be disposed of as non-	Empty containers of 5 gallons or less may be disposed with commercial waste. Empty containers of greater than 5 gallons need to be labeled	Y

TABLE 2-1
Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Method Used Y/N
	holding ignitable materials as they may contain ignitable vapors.	hazardous waste provided they also meet empty container management requirements.	with the word "empty" and the date they were emptied and either sent for reconditioning or for scrap within one year of becoming empty.	
Scrap metal	Used metal parts	Recyclable materials (22 CCR 66261.6(a)(3)	Place in scrap metal bins for transportation to a scrap metal recycler.	Y
Compressed gas cylinders	Cylinders containing pressurized oxygen, acetylene, argon, nitrogen, and calibration gas blends; may contain residual pressure.	Non-hazardous solid waste when empty	Return refillable cylinders to vendors. Dispose of non-refillable cylinders as non-hazardous waste.	Y
Spent solvent, sludge, and filters from parts washers.	Water-based and hydrocarbon based spent solvent, sludge, and filters.	Hydrocarbon-based solvent is typically hazardous and is collected and recycled.	Contract a parts washer service to recycle parts washer spent solvent in accordance with regulation.	N/A
Used blasting grit	Used blasting grit may contain metal from the parts processed as well as coating residue.	The material will be collected for characterization prior to disposal.	Manage as a hazardous waste. The material will be disposed at an approved disposal facility in accordance with federal, state, and local regulations.	Blasting grit disposed of as Haz Waste.
Oil/water separator sludge	Material collecting on the bottom of the oil/water separator may include oil-contaminated metals and other solids.	The material will be managed has a hazardous waste based on waste analysis.	Manage as a hazardous waste. The material will be disposed at an approved disposal facility in accordance with federal, state, and local regulations.	Y Oil from OWS is removed by Recycler
Used engine coolant	Used engine coolants are mixtures of water and organic compounds such as ethylene glycol.	Spent coolants are typically non-RCRA hazardous wastes.	Recycle at Evergreen Oil or similar facility.	Y
Wet Surface Air Cooler (WSAC) Sludge	WSAC sludge is a mixture of ambient particulate matter and water.	Dependent on samples—likely non-hazardous. Class II/III landfill if nonhazardous; Class I	Store in bins. Bins are to be covered if rain is predicted. Storage is allowed until container is full. Waste will be transported off-site	N/A

TABLE 2-1
Characterization of Waste Streams at the Colusa Generating Station
Waste Management Plan, PG&E Colusa Generating Station

Waste Stream	Characteristics	Classification	Disposal	Method Used Y/N
		if hazardous.	weekly.	
Salt Cake	Residual concentrated brine solution	Dependent on samples—likely non-hazardous. Class II/III landfill if nonhazardous; Class I if hazardous.	Store in bins. Bins are to be covered if rain is predicted. Storage is allowed until container is full. Waste will be transported off-site weekly.	Y – Cake is produced in low amounts so unnecessary to remove weekly.

MSDS = Material Safety Data Sheet.

Attachment D
Post-Certification Changes

Per Com-7 Item 4 we are to provide; "A Summary of the current project operating status and an explanation of any significant changes to the facility operations during the year."

Significant changes include the ability for the Colusa Generating Station to use water directly from the GCID canal when the Tehama Colusa Canal Authority (TCCA) canal is unavailable. This is discussed in greater detail in attachment B. The changes were the result of commission approval to use GCID water and commission staff approval to install a waterline from the GCID canal to the Colusa Generating Station.

DOCKETED

Docket Number:	06-AFC-09C
Project Title:	Colusa Generating Station - Compliance
TN #:	201985
Document Title:	Colusa Amendment Cover Letter/Executive Summary
Description:	Summary and Staff Analyses for Colusa Amendment requesting to truck water to the site
Filer:	Eric Veerkamp
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	4/8/2014 4:39:22 PM
Docketed Date:	4/8/2014

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

DATE: April 8, 2014

TO: Interested Parties

FROM: Eric Veerkamp, Compliance Project Manager

SUBJECT: **Colusa Generating Station (06-AFC-9C)**
Staff Analysis of Proposal to Temporarily Truck Water to the Project Site

On March 14, 2014, Pacific Gas and Electric (PG&E) filed a petition with the California Energy Commission (Energy Commission) requesting to amend the Final Decision for the Colusa Generating Station (CGS). The petition proposes to alter the way in which the CGS obtains water for the project. Instead of drawing water from the project supplier, Glenn Colusa Irrigation District (GCID), via the Tehama Colusa Canal (TCC), water would be drawn directly from the Glenn Colusa Irrigation District's Glenn Colusa Canal (GCC) and delivered to the site via water trucks. The change is necessitated by the fact that due to drought related water supply reductions, the CGS is unable to continue to receive water via the TCC. The CGS is proposing to temporarily truck project water to the site until a new alternate water supply pipeline can be constructed to tap directly into the GCC.

The CGS is a combined-cycle, natural gas-fired, air-cooled, 660 megawatt electricity-generating facility certified by the Energy Commission in its April 23, 2008 Decision. CGS began commercial operation on December 22, 2010. The facility is located in an unincorporated area of Colusa County, California, approximately 6 miles north of the community of Maxwell, 4 miles west of Interstate 5.

California Energy Commission staff reviewed the petition and assessed the impacts of this proposal on environmental quality and on public health and safety. In the Staff Analysis, staff proposes a modified condition of certification **Soil & Water S&W-8** and new conditions of certification, **Soil and Water S&W-11** and **Air Quality AQSC-12**, and**.** It is staff's opinion that, with the implementation of these modified and new conditions, the project would remain in compliance with applicable laws, ordinances, regulations, and standards (LORS), and the proposed changes to conditions of certification would not result in any significant adverse direct, indirect, or cumulative impacts to the environment (20 Cal. Code of Regs., § 1769).

The amendment petition and Staff Analysis have been posted on the Energy Commission's CGS webpage at http://www.energy.ca.gov/sitingcases/colusa/. Energy Commission staff intends to recommend approval of the petition at the April 22, 2014, Business Meeting of the Energy Commission. After the Final Decision, the Energy

Commission's Order regarding this petition will also be posted on the Commission's CGS webpage.

This Notice is being provided to interested parties and property owners adjacent to the CGS site. This Notice has been mailed to the CGS mail list and sent electronically to the CGS list serve.

Any person may comment on the Staff Analysis. Those who wish to comment on the analysis are asked to submit their comments within 10 days of the date of this Notice by using the Energy Commission's e-commenting feature as follows: Go to the Energy Commission's CGS webpage and click on the "Submit e-Comment" link. In the form, provide the required information—your full name, e-mail address, the comment Title, and either a comment or an attached document. The comment Title should be "[Your Name]'s Comments re CGS Staff Analysis." Type your comments into the "Comment Text" field, or upload and attach a document with your comments. The maximum upload file size is 10MB, and only .doc, .docx, or .pdf attachments will be accepted. Enter the CAPTCHA that is used to prevent spamming. Then click on the "Agree and Submit your Comments" button to submit your comments to the Energy Commission Dockets Unit for review. When your comments are approved and docketed, you will receive an e-mail with a link to them on the facility webpage.

Written comments may also be mailed or hand-delivered to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 06-AFC-9C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with and approved by the Dockets Unit will be added to the CGS Docket Log and become publically accessible on the Energy Commission's webpage for the facility.

If you have questions about this Notice, please contact Eric Veerkamp, Compliance Project Manager, at (916) 654-4611, or by fax to (916) 654-3882, or via e-mail at eric.veerkamp@energy.ca.gov.

For information on participating in the Energy Commission's review of the proposed modification to the CGS the Energy Commission Public Adviser's Office at (800) 822-6228 (toll-free in California). The Public Adviser's Office can also be contacted via e-mail at publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at mediaoffice@energy.ca.gov.

Mail List 7182
Colusa Generating Station List Serve

COLUSA GENERATING STATION (06-AFC-9C)
Petition To Amend the Final Decision
EXECUTIVE SUMMARY
Eric Veerkamp

INTRODUCTION

On March 14, 2014, Pacific Gas and Electric Company (PG&E), filed a petition with the California Energy Commission (Energy Commission), requesting to amend the Final Decision for the Colusa Generating Station (CGS).

The purpose of the Energy Commission's review process is to assess the impacts of this proposal on environmental quality and on public health and safety. The review process includes an evaluation of the consistency of the proposed changes with the Energy Commission's Decision and a determination on whether the facility, as modified, would remain in compliance with applicable laws, ordinances, regulations, and standards (20 Cal. Code of Regs., § 1769).

Energy Commission staff (staff) has completed its review of all materials received. The Staff Analysis below is staff's independent assessment of the project owner's proposal to modify the project description.

PROJECT LOCATION AND DESCRIPTION

The combined-cycle, natural gas-fired, air-cooled, 660-megawatt electricity-generating facility was certified by the Energy Commission in its Decision on April 23, 2008, and began commercial operation on December 22, 2010. The facility is located in an unincorporated area of Colusa County, California, approximately six miles north of the community of Maxwell, four miles west of Interstate 5.

DESCRIPTION OF PROPOSED MODIFICATIONS

The modification(s) proposed in the petition would alter the way in which the CGS obtains water for the project; although the CGS is air-cooled, it needs water for normal operations. Instead of drawing water from the project supplier, Glenn Colusa Irrigation District (GCID) via the Tehama Colusa Canal (TCC), water would be drawn directly from the GCID's Glenn Colusa Canal (GCC) and trucked approximately one mile to the site via water trucks.

NECESSITY FOR THE PROPOSED MODIFICATIONS

Drought-related reductions in the water supply from the Central Valley Project have resulted in the temporary cessation of operation of the TCC, leaving the CGS unable to receive water via the TCC. Thus the CGS must have an alternative way to obtain water,

and PG&E is proposing to temporarily truck project water to the site until a new alternate water supply pipeline can be constructed to tap directly into the GCC. The owner has indicated they plan to submit an Amendment for a permanent rerouted water supply pipeline early in the second quarter of 2014. This unforeseen circumstance will not increase water use by the CGS, nor will it cause GCID to find new water sources to serve the CGS. PG&E's proposed modifications to the conditions of certification are needed to conform the conditions to the proposed changes in the project description.

STAFF'S ASSESSMENT OF THE PROPOSED PROJECT CHANGES

The technical area sections contained in this Staff Analysis include a modified condition of certification **Soil & Water S&W-8** and new conditions of certification, **Soil and Water S&W-11** and **Air Quality AQSC-12**,. Staff believes the changes would be beneficial because they would allow the project to continue operations largely unchanged, save for the alternate water delivery system. Staff has concluded that the environmental impacts associated with the temporary trucking of project water to the site would not result in any impacts that were not present during project construction and that the activity would not result in any other adverse environmental impacts or risks to public health.

Staff's conclusions in each technical area are summarized in **Executive Summary Table 1**, below.

Energy Commission technical staff reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations and standards (LORS). Staff has determined that the technical or environmental areas of Alternatives, Cultural Resources, Efficiency, Facility Design, Geological Hazards and Resources, Hazardous Materials Management, Paleontological Resources, Reliability, Transmission Line Safety and Nuisance, Transmission System Engineering, Waste Management, and Worker Safety and Fire Protection are not affected by the proposed changes, and no revisions or new conditions of certification are needed to ensure the project remains in compliance with all applicable LORS for these areas.

Staff in the technical areas of Biological Resources, Land Use, Noise and Vibration, Public Health, Socioeconomics, Traffic and Transportation, and Visual Resources determined there is no possibility that the modifications may have a significant effect on the environment and the modification will not result in a change or deletion of a condition adopted by the Commission in the Final Decision or make changes that would cause the project not to comply with any applicable LORS (20 Cal. Code Regs., § 1769(a)(2). The staff analyses are included by reference to this document.

Staff determined, however, that the technical areas of **Soil and Water** and **Air Quality** would be affected by the proposed changes, and staff proposes a modified condition of certification **Soil & Water S&W-8** and new conditions of certification, **Soil and Water S&W-11** and **Air Quality AQSC-12**, detailed in the attached **Soil and Water** and **Air Quality** staff analyses.

Executive Summary Table 1
Summary of Impacts for Each Technical Area

TECHNICAL AREAS REVIEWED	STAFF RESPONSE			Revised or New Conditions of Certification Recom-mended
	Technical Area Not Affected	No Significant Environmental Impact*	Process As Amendment	
Air Quality			X	X
Alternatives	X			
Biological Resources		X		
Cultural Resources	X			
Efficiency	X			
Facility Design	X			
Geological Resources	X			
Hazardous Materials Management	X			
Land Use		X		
Noise & Vibration		X		
Paleontological Resources	X			
Public Health		X		
Reliability	X			
Socioeconomics		X		
Soils & Water Resources			X	X
Traffic & Transportation		X		
Transmission Line Safety & Nuisance	X			
Transmission System Engineering	X			
Visual Resources		X		
Waste Management	X			
Worker Safety & Fire Protection	X			

*There is no possibility that the proposed modifications would have a significant effect on the environment, and the modifications would not result in a change in or deletion of a condition adopted by the Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (20 Cal. Code Regs., § 1769 (a)(2)).

STAFF RECOMMENDATIONS AND CONCLUSIONS

Staff concludes that the following required findings, mandated by Title 20, California Code of Regulations, section 1769 (a)(3) can be made, and staff recommends approval of the petition by the Energy Commission:

- The proposed modification(s) would not change the findings in the Energy Commission's Final Decision pursuant to Title 20, California Code of Regulations, section 1755;
- There would be no new or additional unmitigated, significant environmental impacts associated with the proposed modification(s);
- The facility would remain in compliance with all applicable laws, ordinances, regulations, and standards;
- The modification(s) proposed in the petition would not cause an increase or other undue negative consequence on water use;
- The proposed modification(s) would be beneficial to the public, because the facility would be able to continue operating in normal fashion with no significant change, and, as part of the state's gas-fired fleet, the CGS will help fill the lack of hydroelectric generation over the summer and fall of 2014; and
- The proposed modification(s) are justified because there has been a substantial change in circumstances since the Energy Commission certification, in that the normal water supply mechanism has been disrupted due to the statewide drought conditions, warranting a modification in the mechanism.

COLUSA GENERATING STATION (06-AFC-9C)

Petition to Amend the Final Decision
Air Quality
Jacquelyn Record

ANALYSIS OF SPECIFIC AMENDMENT REQUESTS

On April 23, 2008, the California Energy Commission (Energy Commission) granted a license to Pacific Gas & Electric Company (PG&E) to construct and operate the Colusa Generating Station (CGS). The Final Decision was docketed on April 25, 2008. On July 29, 2008, PG&E began construction of the CGS. CGS began commercial operations on December 22, 2010.

On March 14, 2014, CGS owner PG&E filed an emergency Petition to Amend (PG&E 2014) to allow temporary withdrawal of water from the Glenn Colusa Canal (GCC) during drought conditions where there is insufficient water in the Tehama Colusa Canal (TCC) to supply the CGS, as the original project description had provided. PG&E requests the Energy Commission to approve the petition prior to April 15, 2014, to ensure that the CGS can continue operations in compliance with the license in the event that the current California drought conditions prohibit withdrawal of water from the Tehama Colusa Canal (TCC). The Glen Colusa Irrigation District (GCID) would set up a temporary diesel-fueled pump with a Tier 3 diesel engine at the GCC, with PG&E responsible for conveyance of the water from that point to the CGS[1]. This analysis will focus on conveyance of water from the temporary pump station to the project site.

TEMPORARY WATER TRUCK DELIVERY ANALYSIS

During the peak of the facility's construction period, August, 2008, through September, 2008, as many as seven water trucks operated during construction hours, with as many as 200 daily trips total to the TCC.

In contrast, the facility owner has stated in the petition that the projected trip frequency necessary to deliver the amount of water the CGS needs would be approximately one water truck every 30 minutes, based on historical water usage. This projected frequency would require on average 27 truck trips, with a maximum of 39 truck trips per day during the summer months and as few as 1 trip per day during the winter months. The GCID would be responsible for setting up and operating the temporary water pump station at the GCC. All trips would be done on already existing paved roads (PG&E 2014). Staff has estimated air pollution emissions based on the maximum number of truck trips during the summer months, assuming 39 truck trips per day. All water delivery activities would occur during daytime hours. The CGS would be using water trucks that meet Tier 3 air emissions standards. These emission rates were used and are reflected in the emission rate estimates in **Air Quality Table 1**.

[1] PG&E 2014 page 1

The requested transport of water by truck would be temporary. According to staff's **Air Quality Table 1**, most impacts associated with the truck trips would be mobile emission-related, as all trips would be on paved roads. The required truck trip distance is approximately one mile each way from the CGS location to the GCC. The results shown in **Air Quality Table 1** used the emission rates from ARB's EMFAC 2011 during the summer season of 2014, using Heavy-Heavy Duty Diesel Utility Fleet Truck (T7), and assuming 40 tons estimated weight with Tier 3 engines. Emissions on a daily basis can be compared to the worst-case daily values from **Air Quality Table 3** from the Commission Decision.

Air Quality Table 1
Operational Water Truck Estimated Emissions[a] (pounds/day)

Vehicle Type	Trips/ Day	Miles/Day per Vehicle	Total Starts/Day	CO lb/day	VOC lb/day	NO_X lb/day	PM2.5 lb/day	PM10[d] lb/day
Water Truck[b]	39	78	78	0.1049	0.0319	0.2848	0.0048	0.23
Worst-case Daily[c]	--	--	--	17.1	5.4	33.4	4.8	16.9

Note: Totals may not match sum of individual values because of rounding.
Total miles per day are based on round-trip distances times the number of truck trips estimated by the facility owner.
[a] Estimated Emissions are calculated using emission rates from ARB EMFAC2011 for calendar year, 2014, summertime, T7 utility vehicles
(http://www.arb.ca.gov/emfac/; accessed March 19, 2014).
[b] Estimated average use based on expected truck trips needed.
[c] Values are from **AQ Table 3** of the Commission Decision, based on 10-hour day; emissions included all vehicle emissions, not just water trucks, during August, 2008, through September, 2008.
[d] Fugitive and exhaust are combined.

CONCLUSIONS AND RECOMMENDATIONS

Air Quality staff recommends approval of temporarily transporting the necessary water by truck to the CGS site, approximately one mile from the GCC. The resulting emissions from the modifications are anticipated to be minor and temporary. With the implementation of **AQ-SC12,** requiring use of Tier 3 engines throughout the temporary water delivery time period, estimated emissions would remain low. The project description modification would not affect CGS's ability to continue to comply with all laws, ordinances, regulations, and standards (LORS), and would have no significant air quality impact with the included mitigation measure.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Bold and underlined are used for new language. The new **Air Quality** Condition of Certification will be **AQ-SC12**.

AQ-SC12 Diesel-Fueled Engine Control: When using diesel-fueled pumps or water trucks to pump water out of the canal and transport it to the facility due to the unavailability of other means of transporting water, the facility owner shall submit to the CPM, in Quarterly Reports, a

table that lists all diesel-fueled pumping equipment and water trucks used to pump water and transport it to the site and their engine Tier ratings, to ensure that all are equipped at a minimum with Tier 3 engines. The facility owner or owner's representative shall sign the report to certify that these are the only diesel-fueled equipment used to pump water from the canal or transport it to the site.

Verification: During any periods where water trucks are used to transport water to the site, the facility owner shall include in the corresponding Quarterly Report the following to minimize diesel engine tailpipe emissions:

a. **A table listing all equipment used to pump water or transport it to the site during the reporting period, including the Tier level of each engine;**
b. **A letter from each owner certifying that their equipment has been properly maintained; and**
c. **Any other documentation deemed necessary by the CPM to verify compliance with this condition.**

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

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

COLUSA GENERATING STATION (06-AFC-9C)
Petition to Amend the Final Decision
BIOLOGICAL RESOURCES
Andrea Martine

INTRODUCTION

Staff has reviewed Pacific Gas &Electric Company's (PG&E) Petition for Amendment, dated March 14, 2014, which proposes to modify condition of certification **SOIL & WATER-8**, allow the withdrawal of water from the Glen Colusa Canal (GCC), install the same "facilities[,] and truck the water from the GCC to the site in the same manner employed during construction" for the Colusa Generating Station (CGS) (CGS 2014, p. 2).

OPERATION

The majority of these activities involve driving a water truck on an existing paved road, with minor activity off road while pumping water from the GCC.

CONCLUSIONS

There would be no changes to the conditions of certification for **Biological Resources**, and impacts would be less than significant if the following conditions of certification would be applied during the water truck activity described in the petition.
A Designated Biologist and/or a Biological Monitor would be present (**BIO-1** through **BIO-4**) during deployment of a pump suction hose into the GCC, to avoid impacts to sensitive resources. A Worker Environmental Awareness Program (**BIO-5**) would be given to inform personnel about sensitive biological resources in the area where this activity would be on-going. Employ the use of screens on hoses and pumps in a manner that will avoid entrainment and impingement of fish (**BIO-13**), and, as stated in the Biological Opinion, use a net or some other type of fish screen on the end of the dewatering pump during the removal of water from GCC. Other conditions of certification may apply if the Designated Biologist or Biological Monitor feels they are warranted.

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

CGS 2014—Colusa Generating Station/Charles Price (tn: 201931), Data Request Response re Trucking Water to the CGS, March 27, 2014.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

COLUSA GENERATING STATION (06-AFC-9C)

Petition to Amend the Final Decision
LAND USE
James Adams

INTRODUCTION

Staff has reviewed Pacific Gas & Electric's (PG&E) Petition to Amend, dated March 14, 2014, which proposes to allow temporary delivery of water by truck from the Glen Colusa Canal (GCC) to the Colusa Generating Station (CGS), in the same manner as authorized during construction.

OPERATION

The Glen Colusa Irrigation District would set up a small temporary pump station at the GCC on the canal road approximately one mile east of CGS. Water would be delivered to the CGS by truck via Dirk's Road, with an average of 27 truck trips per day during summer months and as little as one trip per day during the winter months.

CONCLUSIONS

The project modification would have no land use impacts. It would not affect any nearby farmland, and there is no existing community in the project area that could be impacted. The project modification would not affect conditions of certification **LAND-1** (building standards) or **LAND-2** (parcel map and zoning classification) in the April, 2008 Energy Commission Decision in the CGS proceeding , and would require no new conditions.

REFERENCES

CEC 2008—California Energy Commission (Tn. 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

PG&E 2014—Pacific Gas & Electric Company (Tn. 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

COLUSA GENERATING STATION (06-AFC-9C)
Petition to Amend the Final Decision
SOCIOECONOMICS
James Adams

INTRODUCTION

Staff has reviewed Pacific Gas & Electric's (PG&E) Petition to Amend (PTA), dated March 14, 2014, which proposes to allow temporary delivery of water by truck from the Glen Colusa Canal (GCC) to the Colusa Generating Station (CGS). The Glen Colusa Irrigation District would set up a temporary pump station at the GCC about one mile east of the CGS. For this work, a maximum of two truck drivers would be needed during extremely hot days in the summer.

OPERATION

PG&E intends to hire Lenehan Water Trucking, located in Maxwell approximately 10 miles south of the CGS, to deliver water to the CGS. PG&E proposes to truck the water to the CGS until it obtains authorization from the Energy Commission to install a permanent pipeline to the GCC, which the applicant estimates may take up to as long as six months. Staff concludes that the proposed amendment would not:

- Induce substantial population growth in an area, directly or indirectly;
- Displace substantial numbers of existing housing;
- Displace substantial numbers of people or necessitate construction of replacement housing elsewhere; or
- Impact public services, including fire and police protection, schools, parks, and other public facilities.

CONCLUSIONS

Staff also concludes the proposed modification would have no significant socioeconomic impacts and that, given the maximum of two local water truck drivers and the short period the modification would be in effect, the proposed amendment to the CGS would be consistent with the **Socioeconomics** section and condition of certification **SOCIO-1** (use of local contractors) in the April, 2008 Energy Commission Decision in the CGS proceeding, and would require no new conditions. Condition of Certification **SOCIO-2** (school development fee) would not apply.

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

CGS 2014—Colusa Generating Station/Charles Price (tn:. 201931), Data Request Response re Trucking Water to the CGS, March 27, 2014.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

COLUSA GENERATING STATION (06-AFC-9C)
Petition to Amend the Final Decision
SOIL & WATER RESOURCES
Marylou Taylor, P.E.

INTRODUCTION

The Colusa Generating Station (CGS) project owner, Pacific Gas & Electric Company (PG&E), has filed an emergency Petition to Amend (PTA) to allow temporary withdrawal and transport of water by truck from the Glenn Colusa Irrigation District's (GCID) Glenn Colusa Canal (GCC) to the CGS site, in the same manner that was authorized during project construction, the period from July 29, 2008, to December 22, 2010. Currently, the only approved water source for project operation is water delivered to the site via a pipeline from the Tehama Colusa Canal (TCC).

The CGS site is situated between the GCC and the TCC (which is owned by the Bureau of Reclamation and operated by the Tehama Colusa Canal Authority). Although water is provided by GCID, the TCC was preferred for the intake over GCC because the TCC is at a higher elevation, so flow is assisted by gravity, and the TCC allowed for more reliable delivery of the supply. The TCC is typically maintained at a consistent water level with very little fluctuation throughout the year, and its concrete lining does not provide potential habitat for sensitive species. Conversely, the GCC flow rate fluctuates throughout the year, and its elevation relative to the CGS site would require more energy to withdraw water. Also, the GCC is unlined and receives natural flows from the Sacramento River, which increases the likelihood of biological resources being present in the canal. Although GCID does not own the TCC, a water transfer agreement allows the transfer of GCID water rights and use of water from the TCC to supply CGS.

In a letter dated March 11, 2014, to PG&E, GCID indicated that all deliveries from TCC could be suspended in upcoming months for an unknown length of time as a result of California's ongoing drought. The PTA requests use of the GCC as a backup water source when the TCC cannot sufficiently supply water for the CGS. Because GCID owns and operates the GCC, it has the ability to supplement flows in the GCC through other means, such as water reuse, conjunctive use of groundwater, and water rights from Stony Creek in Glenn County.

ANALYSIS

Condition of certification **SOIL&WATER-8** states in part that "[t]he project owner shall use raw water from the Tehama-Colusa Canal (TCC) for all industrial, landscape irrigation, and sanitary purposes." Given this requirement, where water delivery is tied specifically to the TCC, the project owner is restricted from taking water from the GCC.

However, staff notes that when the project was certified, the project owner (at that time, E & L Westcoast) was required to provide a copy of a signed agreement for the sale and delivery of construction water in accordance with condition of certification

SOIL&WATER-4. This agreement was approved, and it included use of GCID supplies from the GCC. The use of water from the GCC during construction activities is the same as what is proposed in the present PTA for operations.

In Condition of Certification **SOIL&WATER-7**, the project owner was required to provide copies of the "Agreement for Transfer, Conveyance and Delivery of Water" for turn-out and delivery of water from the TCC for CGS operational needs. The State Clearinghouse California Environmental Quality Act Database shows this water agreement for CGS operations was filed as a Notice of Exemption (NOE)[1]. In that agreement:

> "GCID has agreed to sell to E&L, or E&L's successors and assigns, up to 180 acre-feet annually of GCID's CVP Project Water supply, or, if GCID's CVP Project Water cannot be made available as anticipated under the agreement, other surplus water available to GCID under its existing water rights, for use at E&L's proposed Power Plant."

As discussed above, the project owner was previously approved to use GCID water from the GCC for initial project construction in accordance with **SOIL&WATER-4**. The proposed temporary delivery of operations water from GCC as a back-up supply would replicate what was approved for construction water supply. Because the proposed use of GCC water is consistent with previously approved activities at the site, staff believes that there would be no significant impacts from use of water from the GCC for project operation. Staff also concludes that use of the GCC when water may not be deliverable through the TCC complies with "…other surplus water available to GCID under its existing water rights…" and is within the scope of the water supply agreement previously approved by the Energy Commission.

CONCLUSIONS AND RECOMMENDATIONS

Modifications to the conditions of certification are required to allow for temporary use of the water supply from the GCC for operation.

PG&E proposed modification of **SOIL&WATER-8** to allow for delivery of the GCID water supply through the GCC. Staff agrees that **SOIL&WATER-8** should be revised. However, the owner proposes that the condition include requirements to address air quality and biological resources issues. Because the Air Quality Resources section addresses Tier 3 air quality standards and the Biological Resources Section addresses the need for proper fish screening, staff did not include these items in the revisions to **SOIL&WATER-8**. Also, staff believes the owner should include a summary of water used from each source in the Annual Compliance Report. This requirement was added to **SOIL&WATER-8**, as well as the maximum amount of water allowed per year from combined use of primary and back-up water sources.

[1] State Clearinghouse Number 2007098346: Agreement Between GCID, E&L Westcoast L.L.C. (E&L) and Colusa Co. for the Transfer, Conveyance, and Delivery of Up to 180 Acre-Feet Annually of Water for Colusa Power Glenn-Colusa Irrigation District (www.opr.ca.gov/docs/sop/N-September_16-30-2007.pdf).

Because **SOIL&WATER-4** applies only to construction activities, staff proposes a similar condition of certification for the use of the GCC as a back-up water supply for project operation. This new condition of certification is **SOIL&WATER-11**.

The facility modification would not affect CGS's ability to continue to comply with all Laws, Ordinances, Regulations and Standards (LORS), and would have no significant impacts to soil and water resources with the included mitigation measures, if approved, for the proposed project modifications.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Staff has proposed modifications to the **Soil and Water Resources** Conditions of Certification as shown below. Deleted language is shown as ~~strikethrough~~, and new language is shown as **bold** and underlined.

SOIL&WATER-8: The project owner shall use raw water from the Tehama- Colusa Canal (TCC) **as its primary source** for all industrial, landscape irrigation, and sanitary purposes. Prior to the use of TCC water for any purpose, the project owner shall install and maintain metering devices as part of the water supply and distribution system to monitor and record in gallons per day the total volume of water supplied to the CGS from the TCC. These metering devices shall be operational for the life of the project and must be able to record the volume of raw water consumed for industrial use, landscape irrigation, and potable and sanitary purposes. **In the case of emergency where GCID cannot provide water to the CGS via the TCC, the project owner may use raw water withdrawn from the Glenn Colusa Canal as a backup water source. The project's combined use of primary and back-up water sources shall not exceed 180 acre-feet per year.**

The project owner shall prepare an annual water use summary, which will include the monthly range and monthly average of daily raw-water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. Potable water use on site shall be recorded on a monthly basis. Following the initial report, 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 60 days prior to commercial operation of the ~~GCS~~**CGS**, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the raw and potable water supply and distribution systems the project owner shall submit a water use summary to the CPM in the Annual Compliance Report. The report shall **include the total amount of water used from each source for the year and** distinguish the recorded water uses for industrial, landscape irrigation, and potable and sanitary purposes **for each month**. The project

owner shall provide a report on the servicing, testing, and calibration of the metering devices in the Annual Compliance Report.

SOIL&WATER-11: The project owner shall provide two signed copies of the Water Agreement (Agreement) issued by the Glenn Colusa Irrigation District (GCID) for sale and delivery of water from the Glenn Colusa Canal (GCC) for project operation. The project shall not begin delivery or use of GCC water for project operation without the final Agreement in place. The project owner shall provide the CPM copies of all monitoring or other reports required by the Agreement, as well as any changes made to the Agreement related to the delivery or sale of water required for project operation. The CPM shall be notified of any violations of the Agreement requirements.

Verification: At least 10 days prior to initial use of GCC water for project operation, the project owner shall submit copies of the signed Agreement to the CPM. Any changes to the Agreement shall be submitted to the CPM within 10 days of their submittal to the project owner. The project owner shall submit related metering and/or monitoring reports required by the Agreement to the CPM in the Annual Compliance Report. The project owner shall submit any notice of violations from GCID to the CPM within 10 days of receipt and fully explain the corrective actions taken in the next Annual Compliance Report. For calculating the total water use, the term "year" will correspond to the date established for the Annual Compliance Report submittal.

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

E&L Westcoast 2006—E&L Westcoast, L.L.C.(tn: 38511), Submittal of AFC for the Colusa Generating Station Project, November 6, 2006.

SRSC&USBR 2004—Sacramento River Settlement Contractors & U.S. Bureau of Reclamation, Sacramento River Basinwide Water Management Plan, Technical Memorandum No. 3: Water Resources Characterization, October, 2004.

COLUSA GENERATING STATION (06-AFC-9C)
Petition to Amend the Final Decision
TRAFFIC AND TRANSPORTATION
James Adams

INTRODUCTION

Staff has reviewed the Petition to Amend, dated March 14, 2014, which proposes the temporary trucking of water from the Glen Colusa Canal (GCC) via a private portion of Dirk's Road. The Glen Colusa Irrigation District would set up a temporary pump station at the GCC on the canal road approximately one mile east of Colusa Generating Station (CGS). Pacific Gas &Electric (PG&E) would be responsible for the conveyance of the water from the temporary pump station to the CGS.

OPERATION

PG&E proposes to truck the water to the CGS until it obtains authorization from the Energy Commission to install a permanent pipeline to the GCC, which staff estimates may take up to as long as six months. Based on historical water usage, PG&E estimates the projected frequency for the proposed daytime-only water delivery would average 27 truck trips per day (one trip every 30 minutes) during the summer months and as little as one trip per day during the winter months. Peak delivery in the summer would require the use of one or two trucks, with a maximum of two trucks during extremely hot days. The PTA notes that Dirk's Road is very infrequently used by any user other than PG&E.

CONCLUSIONS

The **TRAFFIC AND TRANSPORTATION** section of the April, 2008 Energy Commission Decision in the CGS proceeding noted that the Level of Service (LOS) for Dirk's Road was A (free flowing traffic), although daily traffic and peak hour traffic volumes were not available. Staff believes the LOS has not changed significantly on this rural agricultural road. Colusa County does not have jurisdiction over the private portion of Dirk's Road that would be used for water transport to the CGS.

The proposed project modification would have no traffic and transportation impacts and would not affect Conditions of Certification **TRANS-1** (encroachment permits and easements), **TRANS-2** (construction traffic control plan), **TRANS-3** (local road mitigation plan), or **TRANS-4** (temporary Jumper Bridge) identified in the 2008 Energy Commission Decision in the CGS proceeding, and would not require new conditions.

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

CGS 2014—Colusa Generating Station/Charles Price (tn: 201931), Data Request Response re Trucking Water to the CGS, March 27, 2014.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

COLUSA GENERATING STATION (06-AFC-9C)

Petition to Amend the Final Decision

VISUAL RESOURCES

James Adams

INTRODUCTION

Staff has reviewed the Petition to Amend (PTA) dated March 14, 2014 which involves temporary trucking of water from the Glen Colusa Canal (GCC) via a private portion of Dirk's Road. Pacific Gas & Electric (PG&E) proposes to set up a temporary pump station at the GCC and would be responsible for the conveyance of the water from that point to the Colusa Generating Station (CGS). This same process occurred during the construction of the CGS though the frequency of truck trips was much greater.

OPERATION

The projected frequency for the proposed water delivery is approximately one truck every 30 minutes based on historical water usage and will take an average of 27 truck trips per day (daytime hours) during the summer months, and as little as one trip per day during the winter months. The PTA notes that Dirk's Road is very infrequently used by any user other than PG&E. The petition also includes a photo of a truck at the pumping station during construction of the CGS. The pumping station is a small scale operation.

CONCLUSIONS

The truck delivery of water to the CGS would not have a substantial adverse effect on a scenic vista or substantially degrade the existing visual character or quality of Dirk's Road, the project site, or the surrounding area. The number of potential viewers is very low in this rural agricultural area. The visual resources conditions of certification in the April 2008 Energy Commission Decision in the Colusa Generating Station project proceeding would not be affected and there would no visual resources impacts.

REFERENCES

CEC 2008—California Energy Commission (tn: 46033), Final Commission Decision for the Colusa Generating Station (06-AFC-9C), April 25, 2008.

CGS 2014—Colusa Generating Station/Charles Price (tn: 201931), Data Request Response re Trucking Water to the CGS, March 27, 2014.

PG&E 2014—Pacific Gas & Electric Company (tn: 201876), Emergency Petition to Amend the Colusa Generating Station (06-AFC-9C), March 14, 2014.

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5112
www.energy.ca.gov

NOTICE OF DETERMINATION

PETITION FOR CONSTRUCTION OF A PERMANENT BACK-UP WATER SUPPLY PIPELINE FOR THE COLUSA GENERATING STATION (06-AFC-9C)

On May 28, 2014, Pacific Gas and Electric (PG&E) filed a petition with the California Energy Commission (Energy Commission) requesting to modify the Final Decision for the Colusa Generating Station, or the CGS (06-AFC-9C). The combined-cycle, natural gas-fired, electricity-generating 660-megawatt facility was certified by the Energy Commission in its Decision on April 23, 2008, and began commercial operation on December 22, 2010. The facility is located in an unincorporated area of Colusa County, California, approximately 6 miles north of the community of Maxwell and 4 miles west of Interstate 5.

DESCRIPTION OF PROPOSED MODIFICATION

PG&E is proposing to construct a new permanent underground pipeline along the access road to directly draw water from the Glen Colusa Irrigation District's Glen Colusa Canal. This change has been necessitated by drought related water supply reductions that were instituted in late winter of 2013. The petition is to construct the pipeline to be used only if there is insufficient water in the Tehama Colusa Canal (TCC), the CGS's currently approved water delivery mechanism. The petition is available on the Energy Commission's CGS webpage at http://www.energy.ca.gov/sitingcases/colusa.

ENERGY COMMISSION STAFF REVIEW AND DETERMINATION

Energy Commission technical staff reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations, and standards (LORS). Staff has determined that the technical or environmental areas of Alternatives, Efficiency, Reliability, Transmission Line Safety and Nuisance, Transmission System Engineering, and Visual Resources are not affected by the proposed changes, and no revisions or new conditions of certification are needed to ensure the project remains in compliance with all applicable LORS and existing conditions of certification for these areas.

For the technical areas of Air Quality, Biological Resources, Cultural Resources, Facility Design, Geological Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Paleontological Resources, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, and Worker Safety and Fire Protection, and Waster Management, staff has determined the project would continue to comply with applicable LORS and would not change any conditions of certification. Staff notes the following for these technical areas:

- Air Quality. With the implementation of existing conditions of certification, the proposed modification would continue to comply with applicable LORS and would not change any conditions of certification; the applicant should pay particular attention to continued implementation of AQSC-1 thru AQSC-5 and AQSC-12 pertaining to construction activities. Staff has indicated that the petition should be processed as a Staff Approved Project Modification (SAPM).

- Biological Resources. With the implementation of the avoidance and minimization measures proposed in the petition and the existing conditions of certification, the proposed modification would continue to comply with applicable LORS and would not change any conditions of certification; the applicant should pay particular attention to BIO-1 thru BIO-6, BIO-13, BIO-14. Staff has indicated that the petition should be processed as a SAPM.

- Cultural Resources. With the implementation of existing conditions of certification, the proposed modification would continue to comply with applicable LORS and would not change any conditions of certification. Staff has indicated an emphasis be placed on CUL-1, and CUL-3 through CUL-7. In the event of a change in personnel, the project owner is obligated to carry out the actions described under CUL-2. Staff has indicated that the petition should be processed as a SAPM.

- Facility Design. With the implementation of existing conditions of certification, the proposed modification would continue to comply with applicable LORS and would not change any conditions of certification. Staff has indicated that the petition should be processed as a SAPM.

- Geological Resources. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Hazardous Materials Management. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Land Use. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Noise and Vibration. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Paleontological Resources. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Public Health. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Socioeconomics. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment; the applicant shall continue to emphasize the implementation of SOCIO-1 to ensure that

construction materials and supplies are procured within Colusa and Glenn County. Staff has indicated that the petition should be processed as a SAPM.

- Soil and Water. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the following Conditions of Certification would be in full force and effect and will require action on the applicant's part. Staff has indicated that the petition should be processed as a SAPM.

  - The Drainage, Erosion, and Sediment Control Plan required in **SOIL&WATER-2** must be updated to include the proposed activities with necessary Best Management Practices.

  - "Emergency" in **SOIL&WATER-8** constitutes any situation under which there is insufficient water in the Tehama Colusa Canal affecting the Colusa Generating Station operations.

  - The maximum limit of 180 acre-feet per year found in **SOIL&WATER-8** includes water use for construction activities of the proposed amendment.

  - The GCC is a separate "source" from the TCC. Metering devises required in **SOIL&WATER-8** are also required for the GCC water, in order to report the total amount of water used from each source.

  - The signed Water Agreement required in **SOIL&WATER-11** must be in place prior to initial use of GCC water for the proposed amendment, which includes construction activities.

- Traffic and Transportation. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment; the applicant shall pay particular attention to compliance with TRANS-2 to adopt a traffic control plan to identify the traffic control measures to be implemented to ensure a safe construction zone. Staff has indicated that the petition should be processed as a SAPM.

- Waste Management. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

- Worker Safety and Fire Protection. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment. Staff has indicated that the petition should be processed as a SAPM.

Staff's conclusions for each technical or environmental area are summarized in the table on the following page.

Summary of Staff Responses to Petition

TECHNICAL/ENVIRONMENTAL AREAS REVIEWED	STAFF RESPONSE			Revised Conditions of Certification Recom-mended
	Technical Area Not Affected	No Significant Environmental Impact* (SAPM)	Process As Amendment	
Air Quality		X		
Alternatives	X			
Biological Resources		X		
Cultural Resources		X		
Efficiency	X			
Facility Design		X		
Geological Resources		X		
Hazardous Materials Management		X		
Land Use		X		
Noise & Vibration		X		
Paleontological Resources		X		
Public Health		X		
Socioeconomics		X		
Soil & Water Resources		X		
Traffic & Transportation		X		
Transmission Line Safety & Nuisance	X			
Transmission System Engineering	X			
Visual Resources	X			
Waste Management		X		
Worker Safety & Fire Protection		X		

*There is no possibility that the proposed modifications would have a significant effect on the environment, and the modifications would not result in a change in or deletion of a condition adopted by the Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (20 Cal. Code Regs., § 1769 (a)(2)).

Section 1769(a)(2), Title 20, California Code of Regulations states, “(w)here staff determines that there is no possibility that the modifications may have a significant effect on the environment, and if the modifications will not result in a change or deletion of a condition adopted by the commission in the final decision or make changes that would cause the project not to comply with any applicable laws, ordinances, regulations, or standards, no commission approval is required…”

Pursuant to that section, Energy Commission staff has determined for this petition that approval by the full Commission is not required and the proposed modifications meet the criteria for approval at the staff level because:

- The modification[s] will not have any significant effect on the environment;
- Existing conditions of certification are sufficient to cover the proposed modification without changes to, or deletions of, any conditions of certification; and
- The project as modified will maintain full compliance with applicable LORS.

This Notice of Determination is being provided to interested parties and property owners adjacent to the facility site. This Notice has been mailed to the CGS mail list and sent electronically to the CGS listserv.

Any person may file an objection to staff's determination within 14 days of the date of this Notice on the grounds that the project modification does not meet the criteria set forth in section 1769(a)(2). Absent any relevant objections, this petition will be approved 14 days after this notice is docketed. An objection to staff's determination may be submitted using the Energy Commission's e-commenting feature, as follows: Go to the Energy Commission's CGS webpage and click on the "Submit e-Comment" link. Provide contact information—a full name, e-mail address, comment Title, and either a comment or an attached document are required. The comment Title should be "[Your Name]'s Comments re CGS (Water Pipeline) Determination." Type your comments into the "Comment Text" field, or upload a document with your comments. The maximum upload file size is 10MB, and only .doc, .docx, or .pdf attachments will be accepted. Enter the CAPTCHA that is used to prevent spamming. Then click on the "Agree and Submit your Comments" button to submit your comments to the Energy Commission Dockets Unit for review. When your comments are approved and docketed, you will receive an e-mail with a link to them on the facility webpage.

Written comments or objections may also be mailed or hand-delivered to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 06-AFC-9C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with and approved by the Dockets Unit will be added to the facility Docket Log and be publically accessible on the Energy Commission's webpage for the facility.

If you have questions about this Notice, please contact Eric Veerkamp, Compliance Project Manager, at (916) 654-4611, or by fax to (916) 654-3882, or via e-mail at eric.veerkamp@energy.ca.gov.

For information on participating in the Energy Commission's review of the CGS (Water Pipeline) petition, please contact the Energy Commission's Public Adviser at (916) 654-

4489, or at (800) 822-6228 (toll-free in California). The Public Adviser's Office can also be contacted via e-mail at publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at mediaoffice@energy.ca.gov.

Date: _____

_____

CHRISTOPHER J. MARXEN, Manager
Compliance Office
Siting, Transmission, & Environmental Protection Division

Mail List # 7182
Colusa Generating Station listserv

Attachment E
Summary of Missed Deadlines

Per Com-7 Item 5 we are to provide: "An explanation for any submittal deadlines that have been missed, accompanied by an estimate of when the information will be provided"

No submittal deadlines have been missed for 2014.

Attachment F
Governmental Agency Submittals and Issuances

The following is a listing of filings submitted to, or permits issued by, other governmental agencies during the year;

CGS Agency Submittals; January 1, 2014 – December 31, 2014

Colusa County Air Pollution Control District

Title V Draft Comments -1/16/14
Quarterly Operating Report (Permit Condition 17) - 1/28/2014; 4/29/2014; 7/29/2014; 10/29/2014
Source Test Protocol (AQ-7) –10/02/2014

EPA

Semi Annual CEMs Report (X.G.5) – 1/28/2014; 7/28/2014
Source Test Protocol (X.C.6) – 10/15/2014

CUPA

Revised Hazardous Materials Business Plan via CERS - 5/29/14

State Water Resources Control Board

Annual Stormwater Report – 6/30/2014

Attachment G
Projected Compliance Activities 2015

Per Com-7 Item 7 we are to provide; "A projection of project compliance activities scheduled during the next year."

In 2015 PG&E intends to continue reporting on the standard required compliance items. These include but are not limited to;

- Quarterly CEMS Reports/Operations Reports
- Annual Compliance Reports
- Notifications of Source Testing and Associated Source Test Reports
- Annual Storm Water Report

Attachment H
Additions to On-Site Compliance Files

Per Com-7 Item 8 we are to provide; "A listing of this year's additions to the on-site compliance files."

All of the above noted items in Attachment F which were submitted to agencies other than the CEC, as well as those item submitted to the CEC have been added to the site compliance files.

Attachment I
Contingency Plan Evaluation

Per Com-7 Item 9 we are to provide; "An Evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions for bringing the plan up to date."

Upon Review of the Site Contingency Plan there have been no changes in operations or company business practices to warrant changing of the on-site contingency plan for unplanned facility closure.

Attachment J
Complaints / NOVs /Citations

Per Com-7 Item 10 we are to provide: "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"

There were no complaints, notices of violation, official warnings or citations received in 2014.