

## DOCKETED

<b>Docket Number:</b>	06-AFC-09C
<b>Project Title:</b>	Colusa Generating Station - Compliance
<b>TN #:</b>	201985
<b>Document Title:</b>	Colusa Amendment Cover Letter/Executive Summary
<b>Description:</b>	Summary and Staff Analyses for Colusa Amendment requesting to truck water to the site
<b>Filer:</b>	Eric Veerkamp
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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**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](mailto: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](mailto: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](mailto: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**

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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**

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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**

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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**

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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**

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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**

<b>TECHNICAL AREAS REVIEWED</b>	<b>STAFF RESPONSE</b>			Revised or New Conditions of Certification Recommended
	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

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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**

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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<sup>1</sup>. This analysis will focus on conveyance of water from the temporary pump station to the project site.

## **TEMPORARY WATER TRUCK DELIVERY ANALYSIS**

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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**.

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<sup>1</sup> 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<sup>a</sup> (pounds/day)**

Vehicle Type	Trips/Day	Miles/Day per Vehicle	Total Starts/Day	CO lb/day	VOC lb/day	NO <sub>x</sub> lb/day	PM2.5 lb/day	PM10 <sup>d</sup> lb/day
Water Truck <sup>b</sup>	39	78	78	0.1049	0.0319	0.2848	0.0048	0.23
Worst-case Daily <sup>c</sup>	--	--	--	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.

<sup>a</sup> 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).

<sup>b</sup> Estimated average use based on expected truck trips needed.

<sup>c</sup> 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.

<sup>d</sup> 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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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)<sup>1</sup>. 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**

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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.

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<sup>1</sup> 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](http://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**

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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 ~~GCSCGS~~, 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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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**

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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.