DOCKETED

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CALIFORNIA ENERGY COMMISSION
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SACRAMENTO, CA 95814-5512
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DATE: April 2, 2014

TO: Interested Parties

FROM: Mary Dyas, Compliance Project Manager

SUBJECT: Midway-Sunset Cogeneration Company (85-AFC-3C)
Staff Analysis of Proposed Divestiture of a Portion of Steam Line

On November 21, 2013, the Midway Sunset Cogeneration Company (MSCC) filed a petition with the California Energy Commission (Energy Commission) requesting to allow the divestiture of approximately 9,000 feet of the existing steam distribution system that is no longer needed to operate the Midway Sunset Cogeneration project (Midway Sunset). Staff prepared an analysis of this proposed change, and a copy is enclosed for your information and review.

The MSCC project is a 225-megawatt cogeneration power plant that uses cogeneration steam to aid in an enhanced oil recovery process. The project is located in Fellows, Kern County, California. The project was certified by the Energy Commission on May 14, 1987, and began commercial operation on May 1, 1989. The Energy Commission's certificate included approval of the construction of a steam distribution system, which was considered appurtenant to the power plant itself and thus a part of the project.

In October 2014, MSCC will remove from service approximately 9,000 feet of the steam distribution system in order to maintain pressure and quality throughout the distribution system at reduced flow rates. The original system was designed for steam output from three CTGs, and steam production from one CTG is not enough to maintain the required pressure, temperature, and quality at distant injection wells

Energy Commission staff reviewed the petition and assessed the impacts of this proposal on environmental quality, and on public health and safety. It is staff's opinion that the project would remain in compliance with applicable laws, ordinances, regulations, and standards and that the proposed divestiture of a portion of the steam pipeline would not result in a significant adverse direct or cumulative impact to the environment (20 Cal. Code of Regs. § 1769).

The amendment petition and staff's analysis have been posted on the Energy Commission's project docket log webpage at https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=85-AFC-03C .

Energy Commission staff intends to recommend approval of the petition at the May 14, 2014, Business Meeting of the Energy Commission.

Agencies and members of the public who wish to provide comments on the amendment petition or staff analysis are asked to submit their comments by 5:00 p.m. May 2, 2014, using the Energy Commission's e-commenting feature by going to the Energy Commission's e-filing webpage http://www.energy.ca.gov/e-filing/index.html, and clicking on the "Submit e-Comment" link. A full name, e-mail address, comment title, and either a comment or an attached document (in the .doc, .docx, or .pdf format) are mandatory. After entering a challenge-response test used by the system to ensure that responses are generated by a human user and not a computer, click on the "Agree & Submit Your comment" button to submit the comment to the Energy Commission Dockets Unit. Written comments may also be mailed or hand delivered to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 85-AFC-3C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with the Dockets Unit will become part of the public record of the proceeding.

If you have any questions, please contact Mary Dyas, Compliance Project Manager, at (916) 651-8891, or by fax to (916) 654-3882, or via e-mail at: mary.dyas@energy.ca.gov.

If you desire information on participating in the Energy Commission's amendment process, please contact the Energy Commission's Public Adviser's Office, at (916) 654-4489 or toll free in California, at (800) 822-6228. The Public Adviser's Office can also be contacted via email 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.state.ca.us.

Enclosure

Mail to list #764

MIDWAY-SUNSET COGENERATION COMPANY (85-AFC-3C)

Petition to Amend Commission Decision

EXECUTIVE SUMMARY

Mary Dyas

INTRODUCTION

On November 25, 2013, the Midway Sunset Cogeneration Company (MSCC) filed a petition with the California Energy Commission (Energy Commission) requesting to allow the divestiture of approximately 9,000 feet of the existing steam distribution system that is no longer needed to operate the Midway Sunset Cogeneration project (Midway Sunset). The 225-megawatt project was certified by the Energy Commission on May 14, 1987, and began commercial operation on May 1, 1989. Midway Sunset is a cogeneration facility located in Fellows, Kern County, California. The facility uses cogeneration steam to aid in an enhanced oil recovery process. Staff has completed its review of all materials received.

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

DESCRIPTION OF PROPOSED MODIFICATIONS

The Energy Commission's certificate included approval of the construction of a steam distribution system, which was considered appurtenant to the power plant itself and thus a part of the project. The MSCC has filed a petition to allow the sale of an approximately 9,000 foot portion of the steam distribution system that is no longer needed to operate the facility.

The original system was designed for steam output from three combustion turbine generators (CTGs), and steam production from one CTG is not enough to maintain the required pressure, temperature, and quality at distant injection wells. To maintain pressure and quality throughout the distribution system at reduced flow rates, MSCC will, in October 2014, remove from service approximately 9,000 feet of the steam distribution system, isolating the furthest portion of the distribution system. The steam host, who, as a 50-percent partner, already owns half of the distribution system, is purchasing the remaining interest in the abandoned line from MSCC for use in their local steam distribution.

NECESSITY FOR THE PROPOSED MODIFICATIONS

MSCC is a cogeneration facility comprised of three CTGs, three heat recovery steam generators (HRSGs), and three bypass stacks. The facility's three GE Frame 7E CTGs

were designed to produce electricity for sale to utilities and to produce steam for an adjacent steam host, who is a 50-percent owner of MSCC. The steam host uses all the steam generated by the CTGs in the adjacent oil field for thermally enhanced oil recovery. Over the past 24 years of operation, oil production and, subsequently, steam demand has declined. Starting in November 2010, the steam host required steam from only two CTGs, and, starting in October 2014, steam demand will drop further and require steam from only one CTG.

STAFF'S ASSESSMENT OF THE PROPOSED PROJECT CHANGE

Energy Commission technical staff reviewed the petition to amend for potential environmental effects and consistency with applicable LORS. Staff has determined that the technical or environmental areas of Air Quality, Biological Resources, Cultural Resources, Efficiency, Facility Design, Geological and Paleontological Resources, Hazardous Materials Management, Noise and Vibration, Public Health and Safety, Reliability, Socioeconomics, Traffic And Transportation, Transmission Line Safety and Nuisance, Transmission System Engineering, Visual Resources, 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.

Staff in the technical or environmental areas of Soil and Water Resources determined that the project would continue to comply with applicable LORS and would not change any conditions of certification, but additionally noted the following:

- **Soil and Water Resources**. Staff notes that the divestiture would not result in major physical changes to the facility because the 9,000 feet of "abandoned" line would be used by the steam host's local steam distribution. Water use would decrease when two of the three CTGs are no longer needed. Staff concludes that divestiture as described would not significantly affect the quality of storm water runoff or increase the amount of process water needed.

Staff's conclusions for each technical or environmental area are summarized in **Executive Summary Table 1**.

STAFF RECOMMENDATIONS AND CONCLUSIONS

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

A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed change;

B. The facility will remain in compliance with all applicable laws, ordinances, regulations, and standards;

C. The change will be beneficial to the project owner because it will allow the project to continue efficiently providing steam to the steam host.

D. There has been a substantial change in circumstances since the Energy Commission certification justifying the changes.

Executive Summary Table 1
Summary of Impacts to Each Technical Area

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

*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 laws, ordinances, regulations, or standards (LORS) (20 Cal. Code Regs., § 1769 (a)(2)).

MIDWAY SUNSET COGENERATION COMPANY (85-AFC-3C)

Petition to Amend Commission Decision

COMPLIANCE

Mary Dyas

INTRODUCTION

On November 25, 2013, the Midway Sunset Cogeneration Company (MSCC) filed a petition with the California Energy Commission (Energy Commission) requesting to allow the divestiture of approximately 9,000 feet of the existing steam distribution system that is no longer needed to operate the Midway Sunset Cogeneration project (Midway Sunset). The 225-megawatt project was certified by the Energy Commission on May 14, 1987, and began commercial operation on May 1, 1989. Midway Sunset is a cogeneration facility located in Fellows, Kern County, California. The facility uses cogeneration steam to aid in an enhanced oil recovery process.

The original system was designed for steam output from three combustion turbine generators (CTGs), and steam production from one CTG is not enough to maintain the required pressure, temperature, and quality at distant injection wells. To maintain pressure and quality throughout the distribution system at reduced flow rates, MSCC will, in October 2014, remove from service approximately 9,000 feet of the steam distribution system, isolating the furthest portion of the distribution system. The steam host, who, as a 50-percent partner, already owns half of the distribution system, is purchasing the remaining interest in the abandoned line from MSCC for use in their local steam distribution.

BACKGROUND

MSCC is a cogeneration facility comprised of three CTGs, three heat recovery steam generators (HRSGs), and three bypass stacks. The facility's three GE Frame 7E CTGs were designed to produce electricity for sale to utilities and to produce steam for an adjacent steam host, who is a 50-percent owner of MSCC. The steam host uses all the steam generated by the CTGs in the adjacent oil field for thermally enhanced oil recovery. Over the past 24 years of operation, oil production and, subsequently, steam demand has declined. Starting in November, 2010, the steam host required steam from only two CTGs, and, starting in October, 2014, steam demand will drop further and require steam from only one CTG.

ANALYSIS

Pursuant to Public Resources Code section 25500, the Energy Commission has the exclusive power to certify all sites and related facilities within the state. The issuance of a certificate by the Energy Commission is in lieu of any permit, certificate, or similar document required by any state, local, or regional agency, or federal agency to the extent permitted by federal law. The Energy Commission's jurisdiction extends to any

thermal power plant with a generating capacity of 50 megawatts or more, and "any facility appurtenant thereto" (Public Resources Code section 25120).

At the time that MSCC was originally granted a certificate by the Energy Commission in 1987, the facility was considered to be a "co-generation" power plant as defined in Public Resources Code section 25134. The Energy Commission's certificate included approval of the construction of a steam distribution system, which was considered appurtenant to the power plant itself and thus a part of the project.

According to MSCC, in October, 2014, the project owner will remove from service approximately 9,000 feet of the steam distribution system. The steam host is purchasing the remaining interest in the abandoned line from MSCC for use in their local steam distribution. Because that portion of the steam line is being disconnected and removed from the co-generation steam distribution system, that steam line would, upon removal, no longer be considered appurtenant to the MSCC.

Energy Commission technical and environmental 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 Air Quality, Alternatives, Biological Resources, Facility Design, Geological Hazards and Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Paleontological Resources, Power Plant Efficiency, Power Plant Reliability, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Transmission System Engineering, Visual Resources, Waste Management, and Worker Safety and Fire Protection are not affected by the proposed pipeline divestiture, 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.

Since the pipeline would no longer be used by the project, and would be sold to the steam host to use in their local steam distribution, the approximately 9,000 feet of steam pipeline would no longer be under the Energy Commission's jurisdiction.

CONCLUSIONS AND RECOMMENDATIONS

Staff concludes that the divestiture of approximately 9,000 feet of the existing steam pipeline does not change or undermine the assumptions or findings of the Energy Commission's Final Decision. The construction of a steam distribution system, which was considered appurtenant to the power plant itself and thus a part of the project, was approved in the project license. The project, as modified, would remain in compliance with all applicable LORS, subject to the provisions of Public Resources Code section 25525, and have no impact on the environment, nearby property owners, or the public.

In addition, the project would continue to comply with condition of certification **EFF-1** which states that the project owner "…shall operate the facility as a cogeneration system as proposed in the Application for Certification and certified by this Commission

(i.e., operate in accordance with the definition of cogeneration contained in PRC Sections 25134(a) and (b); 18 CFR 292.205(a)(1) and (a)(2)(i)(b); 10 CFR 500.2."

The facility would continue to comply with Condition of Certification **EFF-1** which states that the project owner "…shall operate the facility as a cogeneration system as proposed in the Application for Certification and certified by the Energy Commission (i.e., operate in accordance with the definition of cogeneration contained in PRC Sections 25134(a) and (b); 18 CFR 292.205(a)(1) and (a)(2)(i)(b); 10 CFR 500.2." Simple cycle operation is expected to be infrequent, and the facility would continue to operate in a manner consistent with the cogeneration facility definition pursuant to Public Resources Code Section 25134 as required by **AQ-15**. The facility is required, per Condition of Certification **AQ-15**, to "…operate as a cogeneration facility pursuant to Public Resources Code Section 25134 for thermally enhanced oil recovery operations unless prior SJVUAPCD and Energy Commission approval is granted to operate otherwise." **AQ-15** states that "…the project owner shall maintain records on steam production as a portion of the operating log and that the records shall include hours of operation of the turbines and HRSGs, pounds per hour of steam produced, and temperature and pressure of steam produced."

REFERENCES

MSCC 2013—Midway Sunset Cogeneration Company, Petition to Amend to Replace Units A&B Combustion Systems with DLN1+TE Combustion Systems. November 19, 2013.