

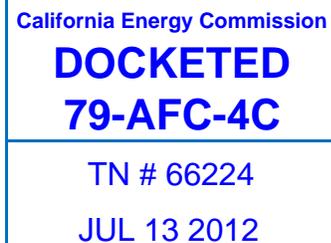
**CALIFORNIA ENERGY COMMISSION**

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SACRAMENTO, CA 95814-5512  
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July 13, 2012

Brian Harms  
General Manager  
Bottle Rock Power, LLC  
7385 High Valley Road  
PO Box 326  
Cobb, CA 95426

**BOTTLE ROCK GEOTHERMAL POWER PLANT (79-AFC-4C) COMPLIANCE CONDITION OF CERTIFICATION NOISE 16-1**

Dear Mr. Harms:

This letter is to inform you that the California Energy Commission (Energy Commission) is in receipt of information that the Bottle Rock Geothermal Power Plant (BRP) appears to be out of compliance with Condition of Certification **NOISE 16-1**, based on the Noise Surveys conducted at BRP from November 28 through November 30, 2011, and from February 17 through February 24, 2010. Recent equipment upgrades appear to have addressed the offsite nuisance noise, but did not bring noise levels into compliance at the immediate property line. Discussions with Lake County indicate that there is some flexibility in interpreting compliance with the County's noise limit for a given setting.

**BACKGROUND**

Pursuant to Public Resources Code (PRC) section 25532, the Energy Commission shall assure that any facility certified by the Energy Commission pursuant to the PRC is operating in compliance with conditions adopted or established by the Energy Commission or specified in the written decision on the application. In addition, California Code of Regulations, Title 20, Section 1770 states that the Energy Commission shall provide adequate monitoring of all conditions and measures set forth in the final decision required to mitigate potential impacts and to assure that the facility is operated in compliance with all applicable laws.

The 55 MW BRP project was approved by the Energy Commission on November 5, 1980, with commercial operation beginning in February 1985. The project was placed in cold shutdown in November 1990. Under new ownership in 2001, the project was restarted in 2007 albeit at the significantly reduced generating capacity of 12 MW due to geothermal steam limitations. Between 1980 and 2007, Lake County modified their noise ordinance. The new, more restrictive noise limitations were incorporated into the amended BRP permit issued by the Energy Commission for restart of the facility on December 13, 2006.

**CONDITION OF CERTIFICATION COMPLIANCE**

On May 22, 2009, Lake County forwarded a noise complaint to BRP on behalf of an adjacent property owner, Mr. David Coleman. On August 26, 2009, Mr. Coleman sent an e-mail to Lake County (with a carbon copy to the Energy Commission) questioning excessive noise and a high pitched sound coming from the plant site and requesting a formal noise survey at BRP.

The Energy Commission authorized a noise monitoring survey that was performed by Brown and Buntin Associates from February 17, 2010 to February 24, 2010. The noise levels at Mr. Coleman's house, about a third of a mile from the project generating equipment, were typically in the range of 45 decibels. However, the measured noise level at the property fence line adjacent to the equipment pads was typically 65 decibels, which is above the limit allowed in the current condition of certification. The project owner identified two oxidizer blowers as the likely source of the offsite noise and the high pitch tones. The owner initiated an effort to size and procure replacement blowers that could meet current and future operating requirements, but at lower noise levels.

On April 28, 2010, Mr. Coleman filed another complaint with the Energy Commission regarding a high-pitched tone emanating from BRP. The Energy Commission immediately requested information from BRP about proposed sound mitigation measures that resulted from the earlier noise survey (replacement of the two existing oxidizer blowers and installation of some sound barriers). On May 3, 2010, the Energy Commission received information from BRP that the replacement oxidizer blowers were on order and that physical sound barriers had been installed adjacent to the blowers.

On August 1, 2011, the Energy Commission received another noise complaint from Mr. Coleman. The Energy Commission contacted BRP to get an update on the arrival of the oxidizer blowers. On October 20, 2011, the first of two oxidizer blowers was installed.

On October 26, 2011, Energy Commission staff visited BRP and also met with Mr. Coleman. Staff confirmed the installation of one blower and sound mitigation measures, and the delivery of the second blower to the site. Staff confirmed in a walking tour of the site that the ambient noise of the new blower was significantly less than the ambient noise of the old blower. Later, when staff met with Mr. Coleman at his property, he related that the noise coming from BRP was noticeably less with the recent replacement of one of the oxidizer blowers. On November 11, 2011, the second replacement oxidizer blower was installed.

On November 28, 2011, a second noise survey was performed by Brown and Buntin Associates. On December 20, 2011, the Energy Commission received the results of the second noise survey confirming that the noise levels at the Mr. Coleman's house were lower than the first noise survey (typically in the range of 40 decibels).

The BRP project is currently in compliance with **NOISE 16-1** at the Coleman house and it appears that the high-pitched noise (and nuisance) has been eliminated. However, the noise level at the fence line of the BRP property (typically 60 decibels) is above the limit allowed in the current condition of certification.<sup>1</sup> There have been no complaints about project noise at this fence line and no noise-sensitive receptor exists at or in proximity of the fence line. In a January 27, 2012 email communication between Lake County and staff, the County indicated that if a project exceeds the County's noise standards, but the local property owners are not disturbed by it, the County does not generally take any action. Staff concurs with this approach, and in particular, for this property line, and considers this complaint to be resolved.

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<sup>1</sup> Staff appreciates your efforts to provide handheld noise measurements at and off the project site (your June 22, 2012 letter), but we do not believe these measurements can be determinant of compliance.

We appreciate your efforts to resolve the noise complaints to our and Mr. Coleman's satisfaction. While noise levels at the immediate property line can be as high as 60 decibels, we believe that the County's approach of allowing flexibility based on impacts to receptors is appropriate for this setting and this property line. However, this does not absolve you from acknowledging and responding to any future noise complaints in a timelier manner than the amount of time that elapsed to resolve the most recent complaints. Please contact me at (916) 651-0587 or e-mail me at [cmarxen@energy.ca.gov](mailto:cmarxen@energy.ca.gov) if you wish to discuss this further.

Sincerely,

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

cc: Docket Unit, California Energy Commission  
Mr. David Coleman  
Mr. Rick Coel, Lake County