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Jack P. Broadbent EXECUTIVE OFFICER/APCO

Robert Sarvey Rob Simpson Helping Hands Tools 501 W. Grantline Rd. Tracy, CA 95376

Dear Mr. Sarvey and Mr. Simpson:

The Bay Area Air Quality Management District (District) has received your comments regarding the District's draft Title V permit for the Gateway Generating Station.

The District has considered your comments, along with other comments that were submitted, and has made a determination that the draft Title V permit meets the requirements of the District's Regulation 2 Rule 6. The District is therefore issuing the Title V permit to the Gateway Generating Station. The comments that you submitted regarding the draft Title V permit are addressed below. The District appreciates your interest and values your input into this permitting process.

Comment 1: GHG Applicable Requirements

Your letter states that the draft Title V permit did not include BACT requirements and emission limits for greenhouse gases (GHGs). It states that the permit must be modified to include such requirements for GHGs as "applicable requirements".

Response to Comment 1

The Title V permitting program does not impose any new substantive operating requirements on regulated facilities. The substantive requirements that apply to a facility are imposed through pre-construction permits (e.g., a CEC license, a District Authority to Construct, or a federal Prevention of Significant Deterioration (PSD) permit), through emissions standards contained in the District's regulations, and through similar mechanisms such as state and federal air quality regulations. The purpose of the Title V permit is simply to collect all such applicable regulatory requirements—known as "applicable requirements" in the language of Title V permitting—in a single regulatory document to improve compliance, transparency, and enforceability.

The BACT requirements for GHGs that you refer to are substantive standards that are imposed through the federal PSD permit program under 40 CFR Section 52.21, not through the Title V program. PSD is a pre-construction permitting requirement, and covered facilities must obtain a federal PSD permit before they construct or install a new or modified source. Applicable PSD BACT standards—including any requirements for GHGs, if applicable—are imposed as permit conditions at the time the PSD permit is issued. All such permit conditions contained in a facility's PSD permit then become "applicable requirements" for Title V purposes and must be included in the facility's Title V permit. The Title V permitting process therefore incorporates such requirements into the Title V permit if they were included as conditions in the PSD permit, but it does not

provide an independent mechanism for imposing new BACT requirements if they were not included as PSD permit conditions.

With respect to the Gateway Generating Station, the facility was built and in operation prior to the GHG BACT requirements being added to the PSD permit program. Accordingly, there are no PSD BACT permit limits for GHGs that apply to the facility. The Title V permit is not required to include any GHG BACT requirements because there are no such requirements contained in the PSD permit for the facility. That is, there are no BACT requirements for GHGs that constitute "applicable requirements" that must be included in the Title V permit.

Comment 2: Gateway Generating Station PSD permit

Your letter states that the facility does not have a valid PSD permit. The letter objects to the issuance of the Title V permit on these grounds.

Response to Comment 2

The facility did obtain a valid PSD permit in 2001 during the original permit process. Although the facility allowed the permit to expire, EPA has addressed the PSD non-compliance issues created by that situation through a consent decree entered into in its enforcement action regarding this facility. (See *United States v. PG&E*, Civil Action No. 09-4503 SI, United States District Court for the Northern District of California.) The federal District Court entered the consent decree authorizing continued operation of the facility subject to the revised PSD emissions limitations and other requirements of the consent decree. As a result of this enforcement action, there are no current ongoing PSD non-compliance issues that would prevent the issuance of the Title V permit.

Comment 3: Gateway Generating Station ATC and FDOC

The comment letter states that the California Energy Commission determined that the "Gateway Generating Station did not obtain a valid Final Determination of Compliance or an Authority to Construct before construction." The letter states that the District may not issue a Title V permit for a facility without a valid Final Determination of Compliance (FDOC) and Authority to Construct (ATC).¹

¹ In this regard, the letter references District Regulation 2-1-304 and states that this regulation prohibits the District from issuing a Title V permit for a facility that is not in compliance with any District, state or federal air quality requirement. Section 2-1-304 applies to authorities to construct and permits to operate required under District Regulations 2-1-301 and 2-1-302, however. It does not apply to Title V major facility review permits under District Regulation 2, Rule 6. Furthermore, the facility is not currently out of compliance with any such regulatory requirements as discussed below in response to Comment 6.

Response to Comment 3

This comment concerns an investigation by the CEC regarding a complaint that the facility did not have a valid FDOC and ATC. At the conclusion of its investigation the CEC stated that "These allegations are true, but there is no violation. The Gateway facility required neither an FDOC nor an ATC, as both were subsumed in the Energy Commission's exclusive 'one-stop' certificate." But this statement is legally and factually incorrect. The facility was required to go through the District's normal permitting process for power plants under District Regulation 2, Rule 3, and it did so. The District issued both an FDOC and an ATC for the facility. The District does not know why the CEC made these statements. The permit conditions in the CEC's license were developed out of the FDOC process, and they are included in the District's ATC. These permit conditions establish many of the applicable requirements that are being included in the Title V permit.

Comment 4: Gateway Generating Station BACT requirements

The letter states that the facility was required to update BACT permit limits when the facility's Authority to Construct was renewed in 2003, 2005, and 2007 under District Regulation 2, Rule 1, Section 407. The letter states that the draft permit does not meet Federal and District BACT requirements, and that the Title V permit may not be issued until these requirements are met.

Response to Comment 4

As explained above in response to Comment 1, the Title V permit does not impose any new substantive BACT requirements on the facility, it simply incorporates the existing BACT requirements included in the facility's authority to construct into a single permitting document (along with all other "applicable requirements") to improve compliance, transparency, and enforceability. The draft Title V permit accurately included all such BACT requirements for this facility as "applicable requirements". To the extent that this comment contends that control technologies have improved since the facility was permitted, or otherwise raises concerns about the substance of the BACT limits that were imposed in the Authority to Construct, the Title V permit process is not a mechanism for raising such concerns. To the contrary, the Title V process is a mechanism to incorporate existing BACT requirements into a single permitting document—the Title V permit.

Furthermore, the District disagrees with the contention that the BACT permit limits that were established for the facility during the original permitting in 2001 were required to be updated when the Authority to Construct was renewed. The Authority to Construct was renewed under Regulation 2, Rule 1, Section 407.3, which provides for renewal under the existing BACT limits where substantial use of the Authority to Construct has been made. The original applicant made substantial use of the Authority to Construct through the purchase of the gas turbines for the project and other activities. The project was therefore not required to update any BACT requirements, since it met the provisions of Regulation 2, Rule 1, Section 407.3. The issuance of the Title V permit for the facility does not trigger additional BACT review requirements.

Comment 5: Monitoring for Particulate Matter emissions

The comment letter objected to the monitoring used to assure compliance with the facility's particulate matter emissions limits, which is done through (i) continuous monitoring of fuel

usage and (ii) the calculation of particulate matter emissions from fuel usage data using emission factors established through annual source testing. The comment letter states that the frequency of the source testing used to establish the emission factors is inadequate. The comment states that the source testing needs to be conducted more frequently in order to provide an adequate assurance that the facility is meeting its particulate matter limits. The comment suggests that the frequency of source testing must match the averaging time used to determine compliance—i.e., source testing over every hourly and daily compliance period. The comment states that the District did not adequately justify its rationale for the particulate matter monitoring provisions in the statement of basis, and that the District should provide further explanation of its rationale. The comment letter also states that the stringent particulate matter limits of 7.5 pounds per hour contained in the permit are considered voluntary by the District.

Response to Comment 5

The District has further reviewed the adequacy of the particulate matter monitoring requirements in light of these comments. Based on this review, the District has concluded that continuous parametric monitoring using emission factors established through annual source tests will be sufficient to monitor the facility's compliance with its particulate matter emissions limits. The District's determination is based on the following reasons.

First, as noted in the comment letter, there is no approved continuous emission monitor for particulate matter, and any direct measurement of particulate matter emissions therefore requires the use of labor-intensive manual source testing. Such direct testing by its very nature cannot be used to determine compliance on a continual basis, and can be conducted only on a periodic basis. Parametric monitoring using emissions factors established through periodic source testing is therefore the only monitoring approach available for assuring compliance with particulate matter limits.

Moreover, parametric monitoring using an established emission factor is appropriate for particulate matter monitoring because—unlike many emissions streams for which direct monitoring is used—particulate matter emissions are not controlled by an add-on control device. As a result, particulate matter emissions are not subject to concerns about failure of the control device, and the emissions factors established during a source test can be expected to remain relatively stable. Particulate matter emissions therefore present a different situation than emissions streams such as the gas turbines' NOx emissions, which are controlled by an SCR system. For NOx emissions, if the SCR system were to malfunction for some reason, emissions could easily jump by a factor of 10 or more in a very short period of time, and it is therefore important to monitor emissions directly on a continuous basis to be able to identify such situations. This is not the case with particulate matter emissions, where emissions factors will be much more stable over time. In such a situation, it is appropriate to monitor operating parameters such as fuel use and then use an emissions factor established through periodic source testing to determine particulate matter emission rates. The emissions factor established during the source testing will be sufficiently reliable to determine the amount of particulate matter that is emitted during future short-term compliance periods (i.e., for purposes of ensuring compliance with limits such as hourly or daily limits).²

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² Note also that the facility is required to use continuous emission monitors for nitrogen oxides and carbon monoxide emissions, which will ensure that the combustors are operating properly with good combustion conditions. Proper combustor operation and good

Repeating the source testing annually to confirm the validity of the emissions factors is an appropriate frequency for ensuring compliance with the particulate matter limits. Particulate matter emissions are not expected to fluctuate widely (relative to other types of emissions streams) as noted above, and there would not be a great amount of additional benefits to be gained by repeating the source testing more frequently than once per year. The amount of any such additional benefit would not outweigh the added burdens of more frequent source testing, including the monetary costs of conducting the tests and the operational burdens on the facility. For these reasons, establishing emissions factors through annual source testing is a standard regulatory approach that is commonly used by air quality agencies throughout the country for particulate matter monitoring at power plants, including EPA and others. The District finds this source testing frequency to be the appropriate frequency for establishing the emissions factors for particulate matter monitoring at the Gateway Generating Station.

For all of these reasons, the District disagrees with the assertion that the particulate matter emissions monitoring provisions in the draft permit are not adequate to determine ongoing compliance with the applicable particulate limits.

Finally, the District also disagrees with the assertion that the particulate matter limits are voluntary. These limits are mandatory, enforceable limits, and the facility will be subject to enforcement action in the event that the limits are exceeded. Reference to the term "voluntary" arose in the context of issuance of the District's Permit to Operate under Regulation 2-1-302, and it simply reflects the fact that certain limits were included in the Permit to Operate at the request of the applicant because they are required under the consent decree, not because they are legally required by anything in District Regulation 2, Rules 1 and 2 (the regulations that govern the District Permit to Operate). Now that they are included in the Permit to Operate, they are binding legal obligations and are "applicable requirements" for purpose of the Title V permit. To avoid any potential for confusion on this point, the District is removing references to the term "voluntary" from the Title V permit.

Comment 6: Gateway Compliance Status

The comment letter states that Gateway is a "Significant High Priority Violator" according to a USEPA Compliance and Enforcement website. The letter claims that the website states that the facility has been out of compliance for 12 quarters in a row. The letter also expresses a concern about "compliance issues that the project has had" with the CEC and notes the applicant was fined by the CEC for failure to abide by its conditions of certification. The letter states that the Title V permit needs a schedule of compliance to address these issues.

combustion conditions will help ensure that particulate matter emissions are minimized. It is not possible to use continuous direct emissions monitoring for particulate matter to ensure good combustion conditions because no such monitor exists for particulate matter as noted above, but the continuous NOx and CO monitors will provide sufficient assurance of good combustion conditions.

Response to Comment 6

The permit contains a schedule of compliance in Section V that includes the elements required by District Regulation 2-6-409.10, which are a statement that the facility shall comply with the applicable requirements listed in the permit pursuant to subsection 409.10.1 and a statement that the facility shall comply with any applicable requirements that become effective during the permit term on a timely basis pursuant to subsection 409.10.2. The schedule of compliance does not require a plan by which the facility will achieve compliance with applicable requirements under subsection 409.10.3 because the facility is not currently out of compliance with any applicable requirement.

The EPA website referred to in this comment is cryptic and it is not clear exactly what the information listed there is intended to represent, but it appears that the website's indications of violations at the facility refer to the PSD violations that EPA has addressed though the enforcement action and consent decree discussed above. As noted above, that enforcement action, and consent decree that resulted from it, resolved those violations and authorized continued operation of the facility subject to the revised PSD emissions limitations and other requirements of the consent decree. There is nothing further to be done to achieve compliance with respect to these violations, and so there is no need for the schedule of compliance to include a plan for doing so.

Regarding the CEC's enforcement action, the CEC determined that when the applicant built the facility it installed a different preheater and a different firepump engine that the equipment that had been approved in the CEC's certification. The CEC imposed a fine of \$10,000 for the non-compliance. As with EPA's enforcement action over the PSD violations, the conclusion of this enforcement action resolved the outstanding CEC non-compliance issues. There is nothing further to be done to achieve compliance with respect to these violations, and so there is no need for the schedule of compliance to include a plan for doing so.

Regarding any other violations of applicable requirements that would require a plan to achieve compliance under subsection 409.10.3, the District is not aware of any existing violations that have not been resolved, and the comment letter does not cite any. The District evaluated the facility's compliance status as summarized in compliance record memorandum dated April 15, 2013 (See Appendix B of the Statement of Basis), and that evaluation determined that there is no ongoing non-compliance or recurring pattern of non-compliance that would require any such plan under subsection 409.10.3. Furthermore, the District does not have any evidence of any non-compliance since that evaluation was undertaken. For all of these reasons, the District does not agree with the assertion that the Title V permit requires anything additional in the permit's schedule of compliance.

If you have any further questions regarding the Gateway Generating Station, please call me at (415) 749-4623, (fax 415-749-5030).

Sincerely,

Signed by Brian K. Lusher Brian K Lusher Senior Air Quality Engineer