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December 22, 2015

Mr. John Dennis
Los Angeles Department of Water & Power
111 North Hope Street, Suite 921
Los Angeles, CA 90012

RE: LADWP PETITION FOR RECONSIDERATION OF AMENDED APPLICATIONS FOR RENEWABLES PORTFOLIO STANDARD (RPS) CERTIFICATION FOR THE SCATTERGOOD, HARBOR, VALLEY AND HAYNES GENERATING STATIONS USING BIOMETHANE FROM 2009 SHELL AND ATMOS CONTRACTS, RPS ID 61596A, 61597A, 61598A, 61599A

Dear Mr. Dennis:

This is in response to Los Angeles Department of Water & Power's (LADWP) petition for reconsideration of the amended RPS certification applications for the Scattergood, Harbor, Valley, and Haynes Generating Stations based on biomethane procured under the 2009 Shell and Atmos contracts.

The petition was submitted to me in response to a February 28, 2014, Energy Commission staff determination that the biomethane fuel procured under the 2009 Shell and Atmos contracts, and included in the amended applications, was not eligible for the RPS. This petition follows an extensive process to thoroughly examine the facts after many consultations between LADWP and Energy Commission staff. Energy Commission staff in July 2011 notified LADWP staff about the ineligibility of the biomethane procured under the 2009 Shell and Atmos contracts, and there have been multiple discussions between the staffs of the Energy Commission and LADWP on this issue over the course of several years.

I have considered the information provided in LADWP's petition and in the enclosed response by Energy Commission staff, and support staff's determination that the subject facilities do not qualify for RPS eligibility based on the biomethane procured by LADWP under its 2009 Shell and Atmos contracts.

For the reasons described in the enclosure, the petition is denied and the existing RPS certification of the subject facilities will not be amended to include biomethane procured under the 2009 Shell and Atmos contracts.

If you have further questions about this matter, please contact Gabe Herrera at Gabe.Herrera@energy.ca.gov or 916-654-4328.

Sincerely,

Robert P. Oglesby
Executive Director

Enclosure: memo from staff to Executive Director including Exhibits 1 through 9

cc: Suzanne Korosec
Gabe Herrera

State of California **California Natural Resources Agency**

M e m o r a n d u m

To: Robert P. Oglesby, Executive Director
Drew Bohan, Chief Deputy Director

Date: November 30, 2015

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Suzanne Korosec, Renewable Energy Division
Gabe Herrera, Staff Counsel, Office of Chief Counsel
From : California Energy Commission
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Subject: LADWP Petition for Reconsideration Regarding the RPS Certification of the Scattergood, Harbor, Valley and Haynes Generating Stations Using Biomethane From 2009 Shell and Atmos Contracts, RPS ID 61596A, 61597A, 61598A, and 61599A

Summary

This memo addresses the petition for reconsideration submitted by the Los Angeles Department of Water & Power (LADWP) regarding the Renewables Portfolio Standard (RPS) certification of the Scattergood, Harbor, Valley, and Haynes Generating Stations using biomethane from LADWP's 2009 Shell and Atmos contracts.

The petition is dated March 28, 2014, and was received by the Energy Commission on April 1, 2014.[1] The petition was submitted pursuant to the Energy Commission's *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition* (*RPS Guidebook, 7th Edition*), which allows applicants to petition the Energy Commission's Executive Director for reconsideration if their application for RPS certification is denied or revoked. Such petitions will be considered only upon a showing that factors other than those described in the Energy Commission's guidelines for the RPS were applied by the Energy Commission in denying or revoking RPS certification.[2]

For the Scattergood, Harbor, Valley, and Haynes facilities to qualify for RPS certification based on the use of biomethane procured under the 2009 Shell and Atmos contracts, LADWP must demonstrate that it satisfied the requirements specified in the *RPS Guidebook, 4th Edition* in place in July 2011 when LADWP submitted its applications for RPS certification.[3]

1 The petition is referred in this memo as "petition" or "LADWP's petition."
2 *RPS Guidebook, 7th Edition,* p. 113.
3 The *RPS Guidebook, 4th Edition*, was adopted by the Energy Commission on December 15, 2010, and was in effect when LADWP submitted its applications to amend the RPS certification of the Scattergood, Harbor, Valley and Haynes facilities in July 2011. Among other things, this edition of the guidebook clarified the delivery requirements for pipeline methane. Refer to the Energy Commission's *Notice to Consider Adoption of the Renewable Portfolio Standard Eligibility*

The *RPS Guidebook, 4th Edition* included specific biomethane delivery requirements, including the requirement that the applicant, or authorized party, must enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California.

As explained in Energy Commission staff's February 28, 2014, denial letter, as well as in prior emails from staff to LADWP on July 20, 2011, and October 31, 2011, the biomethane procured under the 2009 Shell and Atmos contracts is not RPS eligible because it did not meet the delivery requirements in the *RPS Guidebook*, *4th Edition*. Biomethane under these contracts was procured as a gas exchange, which is not an acceptable delivery method under the requirements of the *RPS Guidebook, 4th Edition.*

Energy Commission staff therefore recommend that the petition be denied because the petition does not demonstrate Energy Commission staff applied factors other than those described in the *RPS Guidebook, 4th Edition,* in denying the applications to amend the RPS certification of the Scattergood, Harbor, Valley, and Haynes Generating Stations based on biomethane from LADWP's 2009 Shell and Atmos contracts.

Instead, the petition identifies various other reasons why, in LADWP's view, staff's denial of the applications to amend the certification of these facilities should be reconsidered by the Energy Commission. However, it is clear from the petition itself that the Scattergood, Harbor, Valley and Haynes Generating Stations do not qualify for RPS eligibility based on the biomethane procured by LADWP under its 2009 Shell and Atmos contracts, and therefore the existing RPS certification of these facilities should not be amended to include biomethane procured under these contracts.

Detailed information supporting staff's recommendation is provided below including background on the pertinent facts from July 2011 through February 2014, a discussion of applicable RPS eligibility requirements, and the basis for LADWP's petition.

Background

This section provides detailed information on pertinent facts from July 2011 through February 2014. This information is necessary, because LADWP's petition does not accurately characterize dates and actions of Energy Commission staff during this period.

On July 6, 2011, LADWP submitted applications to pre-certify the Scattergood, Harbor, Valley and Haynes Generation Stations for the RPS using biomethane procured under LADWP's contracts with Shell Energy North America, L.P., and Atmos

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Guidebook and the Overall Program Guidebook for the Renewable Energy Program, dated November 17, 2010, which is available at: http://www.energy.ca.gov/portfolio/notices/2010-12-01_Notice_to_Consider_Adoption_RPS_Guidebook_Overall_Guidebook.pdf.

Energy Marketing, LLC.[4] These applications were received by the Energy Commission on July 8, 2011.

On July 20, 2011, Energy Commission staff contacted LADWP staff by email regarding the July 6, 2011 applications and informed LADWP staff that the applications were incomplete and that the biomethane procured under the 2009 Shell and Atmos contracts did not satisfy the delivery requirements specified in the *RPS Guidebook, 4th Edition.* Specifically, LADWP was informed that it needed to submit a completed CEC-RPS-1B:S5 supplemental information form for each biomethane source and entity responsible for delivering the biomethane, and that the Energy Commission could not accept any other documentation in lieu of these completed forms. Additionally, LADWP staff was informed that the *RPS Guidebook, 4th Edition,* "requires the use of transportation contracts with the pipeline operators that will deliver the gas," and that when completing the CEC-RPS-1B:S5 form for each biomethane source, LADWP needed to submit "additional information on the delivery contracts, including a list of all pipelines that will be transporting the biomethane from the injection point to the delivery point within California, the entity responsible for nominating the delivery, and whether delivery is firm or interruptible." (Refer to the July 20, 2011, email included as part of the email string attached as Exhibit 1.)

On October 14, 2011, LADWP staff notified Energy Commission staff by email that LADWP had decided to apply for full RPS certification, rather than pre-certification, of the Scattergood, Harbor, Valley, and Haynes facilities. (Refer to the October 14, 2011, email included as part of the email string attached as Exhibit 1.) On October 17, 2011, the Energy Commission received LADWP's application for certification of the four facilities.

On October 31, 2011, Energy Commission staff contacted LADWP staff by email regarding the October 17, 2011, applications and informed LADWP staff that the certification applications were deficient for the same or similar reasons as the pre-certification applications received on July 8, 2011. Specifically, LADWP staff was informed i) that separate CEC-RPS-1B:S5 forms must be submitted for each biomethane source, ii) that the CEC-RPS-1B:S5 form, including the attestations on the form, must be submitted unaltered from the version printed in the *RPS Guidebook, 4th Edition*, and iii) that a representative of the delivery entity, in this case Shell, must attest that the delivery of the biomethane meets the requirements specified in the *RPS Guidebook, 4th Edition*. (Refer to the October 31, 2011, email included as part of the email string attached as Exhibit 1.)

4 According to the petition, LADWP entered into the contract with Shell Energy North America, L.P. (Shell), on or about February 1, 2008. The petition states this contract was originally for the sale and purchase of natural gas, but was later amend on July 27, 2009, to include landfill gas, and amended a second time in March 2010, to include additional sources of landfill gas. The petition states LADWP entered into the contract with Atmos Energy Marketing, LLC (Atmos), on or about July 30, 2009, and that this contract was for the sale and purchase of natural gas from landfill sources. The petition refers to the Shell contract, as amended in 2009 and 2010, as the "2009 Shell Contract," and the contract with Atmos as the "2009 Atmos Contract." Collectively, these contracts are referred to as the "2009 Shell and Atmos contracts."

On November 1, 2011, LADWP staff contacted Energy Commission staff by email and informed Energy Commission staff that LADWP wanted to disregard the 2009 Shell and Atmos contracts originally submitted with LADWP's July 2011 applications, because these "contracts do not use a physical contract path, so certification is an issue." Additionally, Energy Commission staff was informed that LADWP was "negotiating a new contract with Shell that will include a physical contract path." LADWP staff asked if it was possible to get "pre-certified on the basis of this new Shell contract, while disregarding the contracts from 2009." (Refer to the November 1, 2011 email included as part of the email string attached as Exhibit 1.)

On November 8, 2011, LADWP staff contacted Energy Commission staff by email, attaching new applications for the pre-certification of the Scattergood, Harbor, Valley, and Haynes facilities, and requesting an expedited review. (Refer to November 8, 2011, email included as part of email string attached as Exhibit 2.)

On November 28, 2011, Energy Commission staff contacted LADWP staff by email regarding the November 8, 2011, pre-certification applications and informed LADWP staff that the applications needed to be revised and that LADWP needed to confirm that its previous applications submitted in July and October 2011 for the four facilities were voided. Specifically, LADWP was informed that because it had made numerous submissions to the Energy Commission, providing pieces of necessary documentation, as well as extra documents that were not valid, LADWP needed to confirm which of these documents it now considered part of its latest applications for pre-certification. Energy Commission staff identified the documents in their possession that LADWP had submitted for the Scattergood, Harbor, Valley and Haynes facilities, and explained which of these documents were acceptable and why for purposes of processing the latest applications for pre-certification of the facilities. Energy Commission recommended that LADWP revise its applications based on these acceptable documents and gave LADWP the option of either resubmitting its applications based on these acceptable documents, or authorizing the Energy Commission to process the latest applications using just the acceptable documents and voiding all other documents and prior applications for these facilities. (Refer to the November 28, 2011, email included as part of the email string attached as Exhibit 2.)

On November 29, 2011, LADWP staff contacted Energy Commission staff by email and authorized them to i) revise LADWP's applications for the Scattergood, Harbor, Valley and Haynes facilities using the acceptable documents suggested by Energy Commission staff on November 28, and ii) void all other documents. (Refer to November 29, 2011, email included as part of email string attached as Exhibit 2.)

On December 2, 2011, Energy Commission staff approved LADWP's applications for pre-certification of the Scattergood, Harbor, Valley, and Haynes facilities. The pre-certification of these facilities was based on the applications originally submitted on July 8, 2011, but subsequently revised and amended by LADWP staff on November 29, 2011, and included only the biomethane LADWP intended to procure under its 2011 contract with Shell. Unlike the 2009 Shell and Atmos contracts, which provided gas through a gas exchange with no physical contract paths for gas delivery, the 2011

Shell contract did provide for gas deliveries via long-haul transportation through contracted pipeline paths. Under the 2011 Shell contract, LADWP expected to receive biomethane starting on January 1, 2012, from four landfill sources – the Imperial Landfill, Greentree Landfill, Turkey Creek Landfill and Live Oak Landfill. (Refer to the letters dated December 2, 2011 attached as Exhibit 3.)

On January 2, 2012, LADWP submitted certification applications for the Scattergood, Harbor, Valley and Haynes Generation Stations based on their use of biomethane under the 2011 Shell contract, which commenced on January 1, 2012. These applications were incomplete and did not include needed information using the correct supplemental information forms. (Refer to the email dated February 17, 2012 included in the email string attached as Exhibit 4.)

On March 28, 2012, LADWP submitted revised applications for certification of the Scattergood, Harbor, Valley, and Haynes facilities. The revised applications included the necessary information using the correct supplemental information forms.

On March 28, 2012, the Energy Commission suspended the biomethane eligibility rules in the *RPS Guidebook, 4th Edition*. It was these rules that allowed an electrical generation facility (i.e., a power plant) to be certified as RPS-eligible if the facility used biomethane to generate electricity as specified in the RPS Guidebook. The biomethane eligibility rules were suspended, because of changes in the RPS law under Senate Bill X1-2 (SBX1-2, Stats. 2011, 1st ex. sess., ch. 1), which established a preference for electricity generation that provides more environmental benefits to the state by displacing in-state fossil fuel consumption, reducing air pollution within the state, and helping the state meet its climate change goals by reducing emissions of greenhouse gases (GHG) associated with electrical generation. The rules related to the RPS eligibility of biomethane were adopted by the Energy Commission prior to SBX1-2, and it was not clear whether, or to what extent, the rules advanced the environmental goals of SBX1-2. For example, the rules did not require that the use of biomethane displace fossil fuel consumption or reduce air pollution, did not require a showing that the use of biomethane results in GHG emission reductions, and did not establish rigorous requirements to verify that the claimed quantity of biomethane was actually used by the designated power plant, or that the necessary biomethane attributes were transferred to the power plant operator for purposes of the RPS and not double counted for other purposes. Consequently, the Energy Commission suspended the rules related to biomethane, so that it could evaluate the issues and ensure the intended benefits of SBX1-2 were realized. The suspension took effect at 5:00 p.m. on March 28, 2012, subject to the conditions specified by the Energy Commission in Resolution No. 12-0328-3, which, among other things, provided that the Energy Commission would defer consideration of the status of pending applications until some future date.[5]

5 For additional information on the suspension refer to the Energy Commission's *Notice to Consider Suspension of the RPS Guidelines Related to Biomethane*, dated March 16, 2012, and Resolution No. 12-0328-3, which are available on the Energy Commission's website at http://www.energy.ca.gov/portfolio/notices/2012-03-28_biomethane_notice/2012-03-28_Biomethane_Suspension_Notice.pdf, and http://www.energy.ca.gov/portfolio/notices/2012-04-05_Notice_of_Correction_to_Resolution_on_Suspension_Biomethane_TN-64618.pdf, respectively.

On or about September 27, 2012, LADWP submitted applications for "limited certification" of the Scattergood, Harbor, Valley and Haynes facilities based on the criteria specified in Section III.A.6 of the *RPS Guidebook, 6th Edition*.[6] These applications were received by the Energy Commission on October 1, 2012. However, "limited certification" was not available to these facilities, because LADWP was seeking certification based on the facilities' use of biomethane. As discussed above, the Energy Commission had suspended its RPS eligibility rules related to biomethane. Consequently, Energy Commission staff did not process these LADWP applications.

On September 27, 2012, the Governor signed into law Assembly Bill 2196 (AB 2196, Stats. 2012, ch. 605), which clarified the RPS eligibility of biomethane in light of changes in law under SBX1-2 and established new RPS eligibility requirements for biomethane. Among other things, AB 2196 defined "biomethane" as landfill gas or digester gas, consistent with Public Resources Code section 25741, and grandfathered the procurement of electricity from generating facilities using biomethane delivered through a common carrier pipeline under the rules in place at the time the biomethane procurement contract was executed, including the *RPS Guidebook, 4th Edition*, subject to additional requirements specified in AB 2196. AB 2196 established retroactive RPS-eligibility requirements for any quantities of biomethane associated with biomethane procurement contracts executed on or after March 29, 2012, or for amendments made after March 29, 2012, to existing contracts initially executed before this date. AB 2196 required all biomethane sellers and purchasers of biomethane, irrespective of the date of the biomethane procurement contract, to comply with a system for tracking and verifying the use of biomethane, established by the Energy Commission. In addition, for biomethane-based electricity generation to count for the RPS procurement requirements of a retail seller or local publicly owned electric utility (POU), AB 2196 required that sufficient renewable and environmental attributes of the biomethane production and capture be transferred to the retail seller or POU using the biomethane to ensure that there are zero-net emissions associated with the production of the electricity from the generating facility using the biomethane.

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6 "Limited certification" was established pursuant to Public Utilities Code section 399.16 (d), as enacted by SBX1-2, and allowed facilities that did not meet the current RPS eligibility requirements to obtain limited RPS certification, so that the retail seller or local publicly owned electric utility (POU) that owned the facility or procured electricity from it could count the facility's generation for the RPS. To qualify for "limited certification," the following criteria needed to be satisfied: i) the facility did not meet the eligibility requirements in the current *RPS Guidebook*, ii) the facility was under contract with, or owned by, a retail seller or POU with the ownership or contract agreement having been originally executed prior to June 1, 2010, iii) the facility was eligible for the RPS under the rules in the *RPS Guidebook* as of the date when the contract was executed, and iv) for electrical corporations, the contract was approved by the California Public Utilities Commission. Additionally, amendments to the original contract were limited. Refer to *RPS Guidebook, 6th Edition*, available at http://www.energy.ca.gov/2012publications/CEC-300-2012-006/CEC-300-2012-006-CMF.pdf.7 The *RPS Guidebook, 4th Edition*, was adopted by the Energy Commission on December 15, 2010, and took effect on this date. Among other things, this edition of the guidebook clarified the delivery requirements for pipeline methane. Refer to the Energy Commission's *Notice to Consider Adoption of the Renewable Portfolio Standard Eligibility Guidebook and the Overall Program Guidebook for the Renewable Energy Program*, dated November 17, 2010, which is available at: http://www.energy.ca.gov/portfolio/notices/2010-12-01_Notice_to_Consider_Adoption_RPS_Guidebook_Overall_Guidebook.pdf

On April 30, 2013, the Energy Commission adopted its *RPS Guidebook, 7th Edition,* to implement the new RPS eligibility requirements for biomethane under AB 2196, and concurrently lifted the suspension of its RPS eligibility rules for biomethane. Among other things, the *RPS Guidebook, 7th Edition,* established new biomethane rules consistent with AB 2196 and required all applicants of electrical generation facilities using biomethane that were RPS certified or had applied for certification prior to the biomethane suspension to submit additional information using the CEC-RPS-2196 supplemental form in order to maintain or establish RPS eligibility under the new biomethane rules.

On June 17, 2013, LADWP submitted completed CEC-RPS-2196 supplemental forms and related information to update its applications for certification of the Scattergood, Harbor, Valley, and Haynes facilities. As part of these completed forms, LADWP acknowledged that the Scattergood, Harbor, Valley, and Haynes facilities each satisfied the new biomethane requirements under AB 2196 to certify the facilities for the RPS under the *RPS Guidebook, 7th Edition*. LADWP's updated applications for the Scattergood, Harbor, Valley and Haynes facilities superseded the applications for certification LADWP submitted for these facilities on March 28, 2012. LADWP's updated applications for these facilities were based on the biomethane procured under LADWP's 2011 Shell contract. The updated application for the Scattergood facility also included biomethane from the Hyperion Treatment Plant, which is delivered through a dedicated pipeline to the Scattergood facility. The updated applications for the Scattergood, Harbor, Valley, and Haynes facilities all indicate that delivery of biomethane under the 2011 Shell contract started on January 1, 2012.

On July 3, 2013, Energy Commission staff approved LADWP's applications for the certification of the Scattergood, Harbor, Valley, and Haynes facilities based on biomethane procured under LADWP's 2011 Shell contract. As noted above, under this contract LADWP receives biomethane from four landfill sources – the Imperial Landfill, Greentree Landfill, Live Oak Landfill, and Turkey Creek Landfill. (Refer to letters dated July 3, 2013, attached as Exhibit 5.)

On July 19, 2013, LADWP submitted a second set of CEC-RPS-2196 supplemental forms to amend the certification of the Scattergood, Harbor, Valley, and Haynes facilities based on the biomethane procured under the 2009 Shell and Atmos contracts.

In November and again in December 2013, Energy Commission staff contacted LADWP staff by phone to explain the problems with the biomethane procured under the 2009 Shell and Atmos contracts. These phone calls were made by Kate Zocchetti of the Energy Commission's Renewable Energy Office. The calls, one on December 11 and a second call on December 19, were to Randy Howard of LADWP. During these phone calls Ms. Zocchetti provided information to Mr. Howard regarding LADWP's applications to amend the certification of the Scattergood, Harbor, Valley, and Haynes facilities based on biomethane procured under the 2009 Shell and Atmos contracts, and explained that biomethane under these contracts was delivered via

displacement and were previously identified by Energy Commission staff as ineligible for the RPS under any adopted *RPS Guidebook*.

On February 28, 2014, Energy Commission notified LADWP that its applications to amend the certification of the Scattergood, Harbor, Valley, and Haynes facilities to use biomethane procured under the 2009 Shell and Atmos contracts was denied. The denial letter explains that the biomethane procured under the 2009 Shell and Atmos contracts is not RPS eligible, because the biomethane did not meet the delivery requirements. Biomethane under these contracts was procured as a gas exchange, rather than delivered through direct long-haul transportation. A gas exchange is not an acceptable delivery method under the requirements of the *RPS Guidebook, 4th Edition*, which requires the applicant, or authorized party, to enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California. It was this denial letter that gave rise to the instant petition by LADWP. A copy of the February 28, 2014, denial letter was included with LADWP's petition.

Applicable RPS Eligibility Requirements

For the Scattergood, Harbor, Valley, and Haynes facilities to qualify for RPS certification based on the use of biomethane procured under the 2009 Shell and Atmos contracts, LADWP must demonstrate that it satisfied the requirements specified in the *RPS Guidebook, 4th Edition* – the RPS Guidebook in place when LADWP submitted its applications for RPS certification in July of 2011.[7] Specifically, LADWP must demonstrate that the biomethane procured under the 2009 Shell and Atmos contracts met the eligibility requirements specified in Section II.B.2 of the *RPS Guidebook, 4th Edition*, applicable to biogas, including pipeline biomethane.[8] Section II.B.2 provides in pertinent part as follows:

> "***Pipeline Biomethane Delivery via Injection Into a Natural Gas Pipeline***
> RPS-eligible pipeline biomethane, also referred to as biomethane, may be injected into a natural gas transportation pipeline system and delivered into California (or delivered to the electric generation facility if the electric generation facility is located outside of California) for use in an RPS-certified facility. The resulting generation will be considered RPS-eligible electricity, if all other eligibility requirements have been met. It should be noted that the biomethane must meet strict heat content and quality requirements within a narrow band of tolerance to qualify as pipeline-quality gas.

7 The *RPS Guidebook, 4th Edition*, was adopted by the Energy Commission on December 15, 2010, and took effect on this date. Among other things, this edition of the guidebook clarified the delivery requirements for pipeline methane. Refer to the Energy Commission's *Notice to Consider Adoption of the Renewable Portfolio Standard Eligibility Guidebook and the Overall Program Guidebook for the Renewable Energy Program*, dated November 17, 2010, which is available at: http://www.energy.ca.gov/portfolio/notices/2010-12-01_Notice_to_Consider_Adoption_RPS_Guidebook_Overall_Guidebook.pdf

8 "Pipeline biomethane" refers to biogas that has been upgraded or otherwise conditioned to meets the gas quality standards applicable to natural gas transportation pipeline into which the biogas is first accepted for transportation. (*Overall Program Guidebook for the Renewable Energy Program, 3rd Edition*, January 2011, CEC-300-2010-008-CMF, p.26.)

Quantifying RPS-eligible energy production requires accurate metering of the volume of the biomethane injected into the transportation pipeline system and the measured heat content of the injected biomethane. Although blending the biomethane into the transportation pipeline system mixes the biomethane with other pipeline gas, biomethane entering the system must be designated for use at a specific power plant or designated to a pipeline system owned by the local publicly owned electric utility (POU) or other load-serving entity (LSE) procuring the biomethane, with the POU or LSE then designating which facility will consume the biomethane. The facility to which biomethane is designated must be certified as RPS-eligible, recognizing that the facility may use a blend of RPS-eligible and ineligible fuels.

As described in Section II.B.8: Renewable Facilities Using Multiple Energy Resources, certain renewable facilities may use a de minimis amount of fossil fuel and count 100 percent of the generation for RPS. For facilities that use biomethane and fossil fuel or other nonrenewable fuel inputs but exceed the applicable de minimis amount of nonrenewable fuel that would allow them to count 100 percent of the electricity generated as RPS-eligible, only the portion of generation attributable to biomethane will count as RPS eligible.[9] The amount of RPS-eligible electricity produced shall be calculated by multiplying the generation of the facility (in MWh) by the ratio of the energy of the biomethane injected and delivered to the total energy of the gases, biomethane and natural gas, used by the facility, in BTUs. The electricity generated and gas used must be measured over an equal and overlapping period (such as electricity [MWh] produced per month and gas (BTU) used in the same month), see Section II C [sic] for more information on how to measure the renewable generation from multi-fuel facilities.

Any production or acquisition of biomethane that is directly supplied to the gas transportation pipeline system and used to produce electricity may generate RPS-eligible electricity as follows:

1. The biomethane must be produced from an RPS-eligible resource, such as biomass, digester gas, or landfill gas.
2. The biomethane must be injected into a natural gas pipeline system that is either within the WECC region or interconnected to a natural gas pipeline system located in the WECC region that delivers gas into California (or delivers to the electric generation facility if the electric generation facility is located outside California) and the gas is delivered as specified below.
3. The applicant, or authorized party, must enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California (or to the electric generation facility if the electric generation facility

9 Footnote omitted from *RPS Guidebook* excerpt.

is located outside of California). Delivery contracts with the pipeline operators may be for delivery with or against the physical flow of the gas in the pipeline.

4. The energy content produced and supplied to the transportation pipeline system must be measured on a monthly basis and reported annually, illustrated by month. Reporting shall be in units of energy (for example, MMBtu) based on metering of gas volume and adjustment for measured heat content per volume of each gas). In addition, the total amount of gas used at the RPS-eligible facility must be reported in the same units measured over the same period, and the electricity production must be reported in MWh.
5. The biomethane must be used at a facility that has been certified as RPS-eligible. As part of the application for certification, the applicant must attest that the RPS-eligible biomethane will be designated to that facility or to the LSE-owned pipeline serving the designated facility.
6. In its annual RPS Procurement Verification report,[10] the Energy Commission will calculate the RPS-eligible energy produced using the same methodology discussed above, if it determines this is necessary.

In addition to the attestations described above, applications for RPS pre-certification or certification must include a completed "Pipeline Biomethane Delivery Attestation" found in the attestations supplemental form, CEC-RPS-1A/B:S5, for each entity responsible for the delivery of the pipeline biomethane. The supplemental forms can be found in appendix B."
(*RPS Guidebook, 4th Edition*, pp. 19-21)

The requirements of condition 3 above clearly indicate that applicants must enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California. Gas exchanges and other natural gas transport methods, such as "displacements" or "backhauls," do not actually deliver gas from the injection site to the extraction site, and are commonly used to avoid transportation costs. As Energy Commission staff understand, displacement is a method of natural gas transportation where gas is injected into the natural gas pipeline and an equivalent amount of gas is extracted downstream; however, the injected gas is not scheduled to be delivered to the extraction point. Backhaul is basically the same as displacement, except that backhaul is used in cases where the gas in the pipeline flows from the extraction point towards the injection point.

In contrast to gas exchanges, gas delivered through firm or interruptible service does result in actual gas delivery. As Energy Commission staff understand, firm transportation service guarantees gas delivery without interruption (except in extraordinary circumstances) at the customer's primary firm delivery point. Interruptible transportation service refers to transportation service offered to customers under schedules or contracts on an as-available basis.

10 Footnote omitted from *RPS Guidebook* excerpt.

The Energy Commission established delivery requirements for biogas transported through the natural gas transportation pipeline system in order to satisfy the fuel "use" provisions of then Public Resources Code section 25741(b)(1).[11] The RPS eligibility of such biogas was premised on the satisfaction of section 25741(b)(1), which defined an "in-state renewable electricity generation facility" for purposes of the RPS to mean a "facility that meets all of the following criteria: (1) The facility uses biomass, . . . digester gas, . . . landfill gas, . . ." (Pub. Resources Code, sec.25741 (b)(1), as amended by SB 107 [Stats. 2006, ch. 464]) The only way an electricity generation facility could actually use biogas transported through the natural gas transportation pipeline system is if the biogas was delivered (or had the potential to be delivered) into California for use at the nominated facility. Hence, the need for a physical contract path from the injection point on the natural gas pipeline system to the extraction point in California.

Basis of LADWP's Petition

LADWP's petition lays out the following reasons for challenging staff's denial of the RPS certification of the Scattergood, Harbor, Valley and Haynes Generation Stations based on biomethane procured under the 2009 Shell and Atmos contracts.

1. The use of biomethane procured under the 2009 Shell and Atmos contracts is eligible for RPS under the *RPS Guidebook, 3rd Edition*, and *RPS Guidebook, 4th Edition*.

2. Delivery of biomethane under the 2009 Shell and Atmos contracts conforms with the delivery practices and standards of the U.S. pipeline gas industry (and the Federal Energy Regulatory Commission's regulatory market design).

3. The biomethane delivery requirements in the *RPS Guidebook, 3rd Edition*, and *RPS Guidebook, 4th Edition*, should not be interpreted to disallow gas exchanges as an eligible delivery method for biomethane, because such delivery requirements could not co-exist with the regulatory standards for pipeline operations and would be inconsistent with how gas shippers operate under Federal and California regulations.

4. The Energy Commission is required to certify for the RPS the resources LADWP included in its voluntary RPS program implemented pursuant to former Public Utilities Code section 387.

5. Staff's delayed actions in responding to LADWP's applications for certification of the subject facilities prevented LADWP from purchasing renewable energy credits during the first compliance period of the RPS program.

11 These fuel "use" provisions are now addressed in Public Resources Code section 25741(a)(1).

6. Denying RPS certification of the subject facilities based on biomethane under the 2009 Shell and Atmos contracts will place LADWP in a procurement shortfall of nearly 3 percent from its RPS compliance requirements for the first compliance period, and cost LADWP an estimated $78 million.

7. The legislative policy goals of Public Utilities Code section 399.11 are satisfied with the use of landfill gas at the subject facilities.

The petition identifies the above reasons why, in LADWP's view, staff's denial of RPS certification should be reconsidered, but the petition does not show that staff misapplied the eligibility requirements and related factors in the *RPS Guidebook, 4th Edition*, or applied criteria and factors other than those found in the *RPS Guidebook, 4th Edition,* in denying the certification of the subject facilities based biomethane procured under the 2009 Shell and Atmos contracts.

The reasons identified in LADWP's petition for challenging staff's denial of RPS certification do not form a basis for revisiting this denial under Section VIII.C of the *RPS Guidebook, 7th Edition*. Each of these reasons and staff's response is discussed below.

1. Biomethane Procured Under the 2009 Shell and Atmos Contracts

The biomethane procured under the 2009 Shell and Atmos contracts is not eligible for RPS under the *RPS Guidebook, 3rd Edition,* or the *RPS Guidebook, 4th Edition*. As explained in the February 28, 2014, denial letter and Energy Commission staff's email of July 20, 2011, and October 31, 2011, biomethane under the 2009 Shell and Atmos contracts was procured as a gas exchange, rather than delivered through direct long-haul transportation. Section II.B.2., item 3, of the *RPS Guidebook, 4th Edition*, specifically states that "the applicants, or authorized representative, must enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California. . . ." LADWP did not enter into contracts for the delivery of biomethane under the 2009 Shell and Atmos contracts. LADWP's 2009 Shell contract states:

> "The parties understand that this RB [renewable biomethane] will be delivered to Buyer through an exchange rather than through direct long-haul transportation. Specifically, the environmental attributes will be unbundled from the gas at or near the landfill source, and the resulting gas without environmental attributes will be sold by Seller in the local market. The gas will be replaced with an equal volume of gas and re-bundled with environmental attributes for delivery to Buyer at the specified Delivery Point as RB."
> (Transaction Confirmation between LADWP and Shell Energy North America, L.P., effective August 1, 2009, dated July 27, 2009, p.2, attached as Exhibit 6.)

LADWP's 2009 Atmos contract states:

> "The parties understand that this Landfill Gas will be delivered to Buyer through an exchange rather than through direct long-haul transportation. Specifically, that Environmental Attributes will be unbundled from the gas near the landfill source, and the resulting gas without Environmental Attributes will be sold by Seller in the local market. The gas will be replaced with an equal quantity of gas and re-bundled with Environmental Attributes for delivery to Buyer at the specified Delivery Point as Standard Base Load."
> (Transaction Confirmation between LADWP and Atmos Energy Marketing, effective September 1, 2009, dated August 20, 2009, p. 3, attached as Exhibit 7.)

In a November 1, 2011, email to the Energy Commission, LADWP staff acknowledged that the biomethane procured under the 2009 Shell and Atmos contracts did not meet the applicable delivery requirements for RPS eligibility. In that email, LADWP staff requested that Energy Commission staff disregard the 2009 Shell and Atmos contracts for purposes of certifying the Scattergood, Harbor, Valley and Haynes facilities, because these "contracts do not use a physical contract path, so certification is an issue." (Refer to copy of November 1, 2011, email included as part of email string attached as Exhibit 1.)

As explained earlier, the Energy Commission applied the requirements of the *RPS Guidebook, 4th Edition*, to LADWP's applications to amend the RPS certification of the Scattergood, Harbor, Valley, and Haynes facilities, because the *RPS Guidebook, 4th Edition*, was adopted by the Energy Commission on December 15, 2010, and in effect when LADWP submitted its applications for these facilities in July 2011.[12] However, the *RPS Guidebook, 3rd Edition,* also required biomethane delivery, stating that biogas injected into a natural gas transportation pipeline must be "delivered into California for use in an RPS-certified multifuel facility" for the facility's generation to be considered RPS-eligible electricity.[13]

The Energy Commission considers the biogas delivery requirements in the *RPS Guidebook, 3rd Edition*, and *RPS Guidebook, 4th Edition*, to be largely the same, with some additions to the 4th Edition that were intended to clarify the requirements in the 3rd Edition.[14]

The Energy Commission fully expected biogas to be delivered into California when it first adopted rules for the RPS eligibility of biogas in the *RPS Guidebook, 2nd Edition*, in March 2007. These delivery requirements were repeated in the *RPS Guidebook, 3rd Edition.*[15] As explained above, the delivery requirements were necessary, since the RPS eligibility of biogas was premised on the fuel "use" provisions of then Public Resources Code section 25741(b)(1). And the only way an electricity generation

12 The *RPS Guidebook, 3rd Edition*, was adopted by the Energy Commission on December 19, 2007, and was in effect from this date until December 15, 2010, when the *RPS Guidebook, 4th Edition*, was adopted.
13 *RPS Guidebook, 3rd Edition*, p. 20.
14 This is explained in the *RPS Guidebook, 7th Edition*, p. 12, n.16.
15 Compare biogas delivery requirements in the text of the *RPS Guidebook, 3rd Edition*, pp.20-21, to the text in the *RPS Guidebook, 2nd Edition*, pp. 22-23. Both guidebooks are available at http://www.energy.ca.gov/renewables/documents/old_guidebooks.html#rps

facility could actually use biogas transported through the natural gas transportation pipeline system is if the biogas was delivered (or had the potential to be delivered) into California for use at the nominated facility. Hence, there must be a physical contract path from the injection point on the natural gas pipeline system to the extraction point in California. This necessarily excludes gas exchanges and other natural gas transport methods such as "displacements" or "backhauls."

The Energy Commission's position regarding the delivery requirements for biogas transported through the natural gas transportation pipeline system has not changed since it first adopted rules for the RPS eligibility of such biogas in 2007. In fact, it had occasion to explain the delivery requirements to at least one of LADWP's gas suppliers, Cambrian Energy Management, LLC, back in 2009. (Refer to the September 22, 2009, letter from the Energy Commission Executive Director, Melissa Jones, to Evan William of Cambrian Energy Management, LLC, attached hereto as Exhibit 8.[16])

In its petition, LADWP argues that there are no limitations on the delivery of biogas under the *RPS Guidebook, 4th Edition*, because Section II.B.2., condition 3, of the guidebook allows delivery under a natural gas transport contract to take place "with or against the physical flow of gas in the pipeline." (LADWP petition, p. 7.) LADWP misreads the language of Section II.B.2., condition 3. This language does not permit displacement or backhauls, it merely clarifies that with respect to the firm or interruptible delivery service, the gas may be delivered against the physical flow of gas in the pipeline.

2. Conformance with Delivery Practices and Standards of the U.S. Pipeline Gas Industry

In its petition, LADWP argues that the 2009 Shell and Atmos contracts conform with the gas delivery practices and standards for the U.S. pipeline gas industry and are consistent with "open access" regulatory and policies established by the Federal Energy Regulatory Commission (FERC), and, therefore, these contracts should be found to satisfy the Energy Commission biogas delivery requirements. (LADWP petition, p. 6.) To support its position on this point, LADWP relies on a report prepared by Benjamin Schlesinger and Associates, LLC, entitled *CEC's RPS Compliance Guidelines for Biogas and the U.S. Pipeline Network: Special Report to the Los Angeles Department of Water and Power*, dated March 26, 2014. A copy of this report, hereafter referred to as the "Schlesinger Report," was included as part of LADWP's petition.

The Schlesinger Report offers conclusions on various issues in support of LADWP's petition. The report concludes that biogas from landfills is a renewable resource that

16 In its petition, LADWP misinterprets the Energy Commission's reference to the letter to Cambrian Energy Management, LLC, and suggests that Energy Commission staff is relying on the letter as being "instructive about how the U.S. pipeline system operates." (LADWP petition, p. 6.) Energy Commission is not relying on this letter for this purpose. Energy Commission staff referenced the letter merely to show that the Energy Commission has consistently interpreted the 3rd and 4th Editions of the guidebook to include a biogas delivery requirement.

can be transported on the nation's gas pipeline network. (Schlesinger Report, pp. 5-8.) The report concludes that biogas under 2009 Shell and Atmos contracts is injected into natural gas pipelines that are interconnected to the U.S. gas transmission pipeline network, and that gas through the transportation pipeline network can be delivered into California. (Schlesinger Report, pp. 9-11.) The report concludes that the 2009 Shell and Atmos contracts conform to and are consistent with the delivery standards and operations in the U.S. gas transmission pipeline network. (Schlesinger Report, pp. 12-15.) The report also concludes that an interpretation of the Energy Commission's biogas delivery requirements that precludes deliveries through natural gas transport methods, such as backhauls, would "run counter to the regulatory and commercial mechanisms that are in place throughout the grid" and "would altogether preclude the use of natural gas pipelines to make biogas deliveries." (Schlesinger Report, p. 19.)

The Energy Commission does not dispute the conclusions offered on many of the issues addressed in the Schlesinger Report. It agrees, for example, that biogas derived from landfill gas can be a renewable resource. As such, the use of biogas by an electricity generation facility may result in RPS-eligible electricity. Likewise, it has no reason to dispute the conclusion that biogas procured under the 2009 Shell and Atmos contracts is injected into natural gas pipelines that are interconnected to the U.S. gas transmission pipeline network, and that gas flowing through the transmission pipeline network can be delivered into California. Nor does it have any reason to dispute the conclusion that the 2009 Shell and Atmos contracts conform to and are consistent with the delivery standards and operations in the U.S. gas transmission pipeline network.

However, the Energy Commission does challenge the report's conclusion that an interpretation of the Energy Commission's biogas delivery requirements that precludes deliveries through transport methods such as backhauls, would "run counter to the regulatory and commercial mechanisms that are in place throughout the grid" and "would altogether preclude the use of natural gas pipelines to make biogas deliveries." As discussed earlier, the Energy Commission's biogas delivery requirements were necessary, because the RPS eligibility of biogas is premised on the fuel "use" provisions of Public Resources Code section 25741. Moreover, the biogas delivery requirements do <u>not</u> preclude the use of natural gas pipelines to make biogas deliveries for purposes of California's RPS. If the Energy Commission's delivery requirements precluded the use of natural gas pipelines to make biogas deliveries, LADWP would not have been able to certify its Scattergood, Harbor, Valley and Haynes facilities based on biogas procured under the 2011 Shell contract from the Imperial Landfill, Greentree Landfill, Turkey Creek Landfill, and Live Oak Landfill. All of these landfills are located outside of California and are able to deliver biogas to LADWP's facilities in accordance with the Energy Commission's biogas delivery requirements.

The Schlesinger Report also explains how biogas from the Johnson County Landfill in Kansas is procured under the 2009 Shell contract and "delivered to California using its [LADWP's] firm capacity contract on [the] Kern River [Pipeline]." (Schlesinger Report, p. 14.) It is unclear what the Schlesinger Report means when it refers to LADWP's

firm capacity contract on the Kern River Pipeline. As discussed above, the 2009 Shell contract does not include provisions for the delivery of biomethane in accordance with the Energy Commission's delivery requirements. The 2009 Shell contract specifically states that biomethane "will be delivered to Buyer through an exchange rather than through direct long-haul transportation." And, LADWP staff acknowledged that the biomethane procured under the 2009 Shell and Atmos contracts does not use a physical contract path for gas delivery.

3. Guidebook Requirements Should Not Be Interpreted to Exclude Gas Exchanges

In its petition, LADWP argues that the biogas delivery requirements in the *RPS Guidebook, 3rd Edition*, and *RPS Guidebook, 4th Edition*, should not be interpreted to disallow gas exchanges, because such delivery requirements would require that the natural gas transportation pipeline system function in a way "that cannot co-exist with the regulatory standards for pipeline operations" and "in a way that is inconsistent with how gas shippers operate under federal and California regulations." (LADWP petition, p. 8.) These arguments have no merit. As discussed above, it is possible to satisfy the Energy Commission's biogas delivery requirements in a manner that can co-exist with the regulatory standards for pipeline operations and in a manner that is consistent with how gas shippers operate under federal and California regulations. LADWP demonstrated this with its 2011 Shell contract. Under this 2011 contract, the biogas procured by LADWP is delivered through either firm transportation or through the type of interruptible transportation most similar to firm transportation that is available.

This is explained in Section 2 of the Special Provisions of the Transaction Confirmation of the 2011 Shell contract, which provides in pertinent parts as follows:

> "Buyer and Seller acknowledge and agree that: . . . (ii) sale by Seller or RB [Renewable Biomethane] is subject to the availability of Seller of transportation and the successful flow of scheduled RB from the Projects to the Delivery Point. Notwithstanding the foregoing, Seller is obligated at all times to reasonably contractually arrange for Firm transportation if offered by a transporting entity (and if Firm transportation is not available, for the type of Interruptible transportation most similar to Firm that is available) and the successful flow of scheduled RB from the Projects to the Delivery Point through a physical contract path, and such contractual arrangements shall not allow Seller or the transportation entity to case the cessation of transportation of the RB to the Delivery Point solely or in part for financial reasons or at the mere election of Seller or the transportation entity or entities."
> (Transaction Confirmation between LADWP and Shell Energy North America, L.P., dated December 20, 2011, pp. 2-3, attached as Exhibit 9.)

In its petition, LADWP also argues an interpretation of the Energy Commission's biogas delivery requirements that would "prevent a system designed to function in accordance with FERC standards for the U.S. gas pipeline industry would be an interpretation counter to the basic operations of interstate commerce." (LADWP petition, p. 8.) It is not clear what LADWP means by this statement. However, the

Energy Commission's biogas delivery requirements do not prevent the natural gas transportation pipeline system from functioning in accordance with FERC standards. As evident by the 2011 Shell contract, it is possible for LADWP to procure biogas and have it transported through the natural gas transportation pipeline system in accordance with FERC standards.

Moreover, the Energy Commission's biogas delivery requirements are not intended to impinge upon the operations of interstate commerce. The biogas delivery requirements apply only to biogas used for purposes of California's RPS. Biogas that is procured for this purpose and transported through the natural gas transportation pipeline system must be "used" by the electrical generation facility to qualify for the RPS in accordance with Public Resources Code section 25741. The delivery requirements do not apply to biogas or other forms of natural gas that are procured and used for other purposes. Furthermore, the Energy Commission has applied the biogas delivery requirements consistently to all applicants and electrical generation facility seeking to use biogas delivered through the natural gas transportation pipeline system for purposes of the RPS.

4. Required Certification of LADWP Resources under Public Utilities Code Section 387

LADWP argues that the Legislature intended the Energy Commission to certify resources that were used by a local publicly owned electric utility (POU) to satisfy its voluntary RPS program pursuant to former Public Utilities Code section 387, and therefore the Energy Commission should certify the subject facilities to use biomethane procured under the 2009 Shell and Atmos contracts, because LADWP's voluntary RPS program permitted this type of biomethane procurement. (LADWP petition, pp. 11-14)

While it is true that former Public Utilities Code section 387 gave POUs discretion to develop and implement their own voluntary RPS programs, the law does not require the Energy Commission to certify all resources that were included in a POU's voluntary RPS program pursuant to section 387.[17] The Energy Commission is required to certify only those POU resources that meet the "grandfathering" provisions of Public Utilities Code section 399.12.5 (e)(1)(C), as enacted by Senate Bill X1-2.[18]

Public Utilities Code section 399.12.5 (e)(1)(C) provides in pertinent part as follows:

17 Former Public Utilities Code section 387 required POUs to implement and enforce a renewables portfolio standard that recognized the "intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvements." RPS programs implemented by POUs under section 387 are often referred to as "voluntary" programs, because the law did not include requirements or provisions for the enforcement of such programs as it did for the RPS programs of retail sellers of electricity. Public Utilities Code section 387 was repealed in 2011 by Senate Bill X1-2.

18 SB X1-2 (Stats. 2011, 1st ex. sess., ch. 1), effective December 10, 2011.

(e) “Eligible renewable energy resource” means an electrical generating facility that meets the definition of a “renewable electrical generation facility” in Section 25741 of the Public Resources Code, subject to the following:
(1) [...]
(C) A facility approved by the governing board of a local publicly owned electric utility prior to June 1, 2010, for procurement to satisfy renewable energy procurement obligations adopted pursuant to former Section 387, shall be certified as an eligible renewable energy resource by the Energy Commission pursuant to this article, **if the facility is a “renewable electrical generation facility” as defined in Section 25741 of the Public Resources Code**.”
(Pub. Util. Code sec. 399.12.5, subd. (e)(1)(A). Emphasis added.)

Public Resources Code section 25741 (a)(1) defines a “renewable electrical generation facility” as follows:

(a) “Renewable electrical generation facility” means a facility that meets all of the following criteria:
(1) The facility **uses** biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, **landfill gas**, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.
[…]”
(Pub. Res. Code sec. 25741, subd. (a)(1). Emphasis added.)

Under the grandfathering provision of Public Utilities Code section 399.12.5 (e)(1)(C), the Energy Commission may certify a facility only if it was approved for procurement by the POU prior to June 1, 2010, and it meets the definition of a “renewable electrical generation facility” by using one of the resources specified in Public Resources Code section 25741 (a)(1).

For a facility to qualify based on the “use” of landfill gas, the facility must actually use landfill gas as specified by the Energy Commission. And for landfill gas delivered as biomethane via the natural gas transportation pipeline system, the *RPS Guidebook, 4th Edition*, required the biomethane to be delivered into California by entering into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California. As discussed earlier, biomethane under the 2009 Shell and Atmos contracts was procured as a gas exchange, so there were no contracts for the firm or interruptible delivery of the gas with every pipeline operator from the injection point to California. Hence, the landfill gas procured under the 2009 Shell and Atmos contracts could not be “used” by the Scattergood, Harbor, Valley or Haynes facilities.

Had the Legislature intended the grandfathering provision of Public Utilities Code section 399.12.5 (e)(1)(C) to apply to all procurement approved by a POU prior to June 1, 2010, as LADWP argues, then portions of the POU-specific exceptions granted under Public Utilities Code sections 399.30 (g), (h), (i), (j), and (k) and

portions of the new RPS eligibility criteria in section 399.12 (e)(1)(A), applicable to hydroelectric generations units not exceeding 40 MW that are operated as part of water supply and conveyance system, would not have been necessary because these resources would have been already grandfathered by virtue of Public Utilities Code section 399.12.5 (e)(1)(C).

For example, LADWP's RPS policy, as amended in April 2008, identifies "Los Angeles Aqueduct hydroelectric plants" as an eligible resource under the RPS policy. (LADWP petition – attachments- *LADWP Board Approval Letter*, dated April 30, 2008, and attached *City of Los Angeles Department of Water and Power Renewables Portfolio Standard Policy As Amended April 2008*, pg. 2.) To the extent these aqueduct hydroelectric plants exceed the 30 MW limit for small hydroelectric facilities under Public Utilities Code section 399.12, as existed prior to SBX1-2, the hydroelectric plants would have come within the grandfathering provision of Public Utilities Code section 399.12.5 (e)(1)(C). As such, the new RPS eligibility category in Public Utilities Code section 399.12 (e)(1)(A) for 40 MW hydroelectric generations units that are operated as part of a water supply and conveyance system would not have been necessary, since these hydroelectric units would have been grandfathered under LADWP's interpretation of Public Utilities Code section 399.12.5 (e)(1)(C). The fact that the Legislature created a new RPS eligibility category for 40 MW hydroelectric units that are operated as part of a water supply and conveyance system clearly shows the Legislature did <u>not</u> intend these hydroelectric units to be grandfathered by virtue of Public Utilities Code section 399.12.5 (e)(1)(C).

<u>Former Public Resources Code Section 25741 (b)(2)</u>

As further support for its argument that the subject facilities should be certified based on the "grandfathering" provisions of Public Utilities Code section 399.12.5 (e)(1)(C), LADWP point to the language of Public Resources Code section 25741 (b)(2), as it existed in 2009, and to the language of Public Utilities Code section 399.12.6(a)(1), as enacted by Assembly Bill 2196. (LADWP petition, pp. 9, 11-12.) In both statutes the Legislature recognizes the rules that were in effect at the time. However, LADWP's reliance on these statutes is misplaced, because neither statute supports LADWP's "grandfathering" argument.

The provisions of former Public Resources Code section 25741(b)(2)(C)(ii), as existed in 2009, were not intended to grandfather a POU's existing resources as LADWP suggests.[19] Former section 25741(b) provided in pertinent as follows:

> (b) "In-state renewable electricity generation facility" means a facility that meets all of the following criteria:
> (1) The facility uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave,

19 The provisions of former Public Resources Code section 25741(b)(2)(C)(ii) were amended by SBX1-2 and are now included in Public Resources Code section 25741(a)(2)(C)(ii).

ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology.
(2) The facility satisfies one of the following requirements:
(A) The facility is located in the state or near the border of the state with the first point of connection to the transmission network within this state and electricity produced by the facility is delivered to an in-state location.
(B) The facility has its first point of interconnection to the transmission network outside the state and satisfies all of the following requirements:
(i) It is connected to the transmission network within the Western Electricity Coordinating Council (WECC) service territory.
(ii) It commences initial commercial operation after January 1, 2005.
(iii) Electricity produced by the facility is delivered to an in-state location.
(iv) It will not cause or contribute to any violation of a California environmental quality standard or requirement.
(v) If the facility is outside of the United States, it is developed and operated in a manner that is as protective of the environment as a similar facility located in the state.
(vi) It participates in the accounting system to verify compliance with the renewables portfolio standard by retail sellers, once established by the Energy Commission pursuant to subdivision (b) of Section 399.13 of the Public Utilities Code.
(C) The facility meets the requirements of clauses (i), (iii), (iv), (v), and (vi) in subparagraph (B), but does not meet the requirements of clause (ii) because it commences initial operation prior to January 1, 2005, if the facility satisfies either of the following requirements:
(i) The electricity is from incremental generation resulting from expansion or repowering of the facility.
(ii) The facility has been part of the existing baseline of eligible renewable energy resources of a retail seller established pursuant to paragraph (2) of subdivision (b) of Section 399.15 of the Public Utilities Code or has been part of the existing baseline of eligible renewable energy resources of a local publicly owned electric utility established pursuant to Section 387 of the Public Utilities Code.
(Former Pub. Res. Code sec. 25741, subd. (b). Circa 2009)

Section 25741(b)(2)(C)(ii) established alternative eligibility criteria for existing electrical generation facilities that are located out of state and commenced initial commercial operations prior to January 1, 2005. Under section 25741(b)(2)(B), these out-of-state existing electrical generation facilities did not qualify for the RPS. Section 25741(b)(2)(C) created a narrow exception for these out-of-state existing electrical generation facilities and allowed them to qualify for the RPS if i) the electricity produced by the facility was incremental generation resulting from an expansion or repowering of the facility, OR ii) the facility was part of the existing baseline of eligible renewable energy resources of a retail seller established pursuant to Public Utilities Code section 399.15(b)(2) or was part of the existing baseline of eligible renewable energy resources of a POU established pursuant to Public Utilities Code section 387.

Section 25741(b)(2)(C) did not "grandfather" these out-of-state existing electrical generation facility and allow them to qualify for RPS merely because the facilities had been included as part of a retail seller or POU's baseline of eligible renewable energy resources. Instead, it established alternative eligibility criteria for these out-of-state existing facilities. In order for these out-of-state existing facilities to qualify for the RPS, the facilities needed to satisfy the alternative criteria in section 25741(b)(2)(C) and needed to satisfy all other eligibility criteria, including the requirements in section 25741(b)(1) pertaining to the "use" of a renewable fuel or resource, as discussed earlier.

An out-of-state existing facility that satisfied the alternative criteria of section 25741(b)(2)(C), but failed to demonstrate its "use" of a renewable fuel or resource under section 25741(b)(1), as specified in the Energy Commission's RPS Guidebook, would not be eligible for the RPS.

Public Utilities Code Section 399.12.6(a)(1), as Amended by AB 2196

LADWP's reliance on AB 2196 is likewise misplaced. AB 2196 was enacted after the Energy Commission suspended its RPS eligibility guidelines for biomethane. AB 2196 clarified the RPS eligibility of biomethane in light of changes in law under SBX1-2 and established new RPS eligibility requirements for biomethane. Among other things, AB 2196 grandfathered the procurement of electricity from generating facilities using biomethane delivered through a common carrier pipeline under a contract executed by a retail seller or POU and reported to the Energy Commission prior to March 29, 2012, and otherwise eligible "under the rules in place at the time the contract was executed, including the Fourth Edition of the Energy Commission's Renewables Portfolio Standard Eligibility Guidebook… ." (Pub. Util. Code sec. 399.12.6(a)(1).) The "rules in place" referenced in AB 2196 are the Energy Commission's rules, not the rules of a POU as LADWP argues.

This is explained in the Energy Commission's paper on the implementation of AB 2196 – *Concept Paper for the Implementation of Assembly Bill 2196 for the Renewable Portfolio Standard*.[20] Section B.3. of the concept paper explains the rationale for this interpretation, including staffs' belief that the Legislature intended to allow eligibility for facilities using biomethane for the RPS under executed contracts that were already certified, pre-certified, or had pending applications for RPS certification with the Energy Commission prior to the Energy Commission's biomethane suspension on March 28, 2012. The Legislature was well aware of the Energy Commission's practice of certifying facilities based on the RPS Guidebook in place at the time an application for certification was received by the Energy Commission, and specifically referenced the Energy Commission's *RPS Guidebook, 4th Edition*, in AB 2196. Therefore, it follows that the "rules in place" referred to in AB 2196 are the Energy Commission's rules. Had the Legislature intended the "rules in place" to refer to a POU's rules, it would have further qualified this provision, rather

20 Available at http://www.energy.ca.gov/2013publications/CEC-300-2013-001/CEC-300-2013-001.pdf

than specifically identifying the "Fourth Edition of the Energy Commission's Renewables Portfolio Standard Eligibility Guidebook."

5. Staff's Delays Prevented LADWP from Purchasing RECs During the First Compliance Period

LADWP argues that the delays of Energy Commission staff in processing the application for certification of the Scattergood, Harbor, Valley and Haynes facilities should be considered in determining the RPS eligibility of these facilities, because these delays prevented LADWP from procuring additional resources to meets is RPS procurement obligations. (LADWP petition, pp. 14-15.) The delays in processing an application for certification cannot serve as a basis for challenging staff's denial of RPS certification. As explained above, to challenge staff's denial of RPS certification it must be shown that staff misapplied the eligibility criteria and factor in the *RPS Guidebook, 4th Edition*, or applied criteria and factors other than those found in the *RPS Guidebook, 4th Edition*, in denying certification.

The *RPS Guidebook, 4th Edition*, clearly describes the RPS eligibility requirements for electrical generation facilities using biomethane delivered through a natural gas transportation pipeline system. Section II.B.2, condition 3, of the *RPS Guidebook, 4th Edition*, requires applicants to enter into contracts for the delivery (firm or interruptible) or storage of the gas with every pipeline or storage facility operator transporting or storing the gas from the injection point to California. These requirements were in place when LADWP first submitted its applications for the Scattergood, Harbor, Valley and Haynes facilities to the Energy Commission in July 2011. Moreover, the biogas delivery requirement in the *RPS Guidebook, 3rd Edition*, are largely the same as the delivery requirements for the *RPS Guidebook, 4th Edition*, so LADWP's application for the Scattergood, Harbor, Valley and Haynes facilities would have similarly been denied had the applications been submitted when the 3rd Edition of the guidebook was in effect.

LADWP should not have been surprised by staff's determination that the Scattergood, Harbor, Valley and Haynes facilities could not be certified based on the biomethane procured under the 2009 Shell and Atmos contracts. As early as November 2011, LADWP staff acknowledged that these facilities could not be certified based on the 2009 Shell and Atmos contracts. (Refer to the November 1, 2011 email included as part of the email string attached as Exhibit 1.)

It is worth noting that when LADWP amended its RPS policy in April 2008 to expand the list of eligible renewable resources for its RPS program, it specifically referenced the Energy Commission's revisions to the RPS Guidebook in December 2007,[21] but did not accept all of the eligibility requirements in this Guidebook for its treatment of biogas injected into a natural gas pipeline. As amended, LADWP's RPS policy states:

21 *LADWP Board Approval Letter, dated April 30, 2008*, indicates the Energy Commission updated its Renewables Portfolio Standard Eligibility Guidebook in "January, 2008," rather than in December 2007. (LADWP petition – attachments – *LADWP Board Approval Letter, April 30, 2008*, pg. 2.)

> "3. Eligible Resources:
> Electricity produced from the following technologies constitute "eligible" resources: …renewable derived biogas (meeting the heat content and quality requirements to qualify as pipeline-grade gas) injected into a natural gas pipeline for use in renewable facility; …"
> (LADWP petition – attachments – *LADWP Board Approval Letter, April 30, 2008*, and attached *City of Los Angeles Department of Water and Power Renewables Portfolio Standard Policy As Amended April 2008*, pg. 2.)

LADWP's amended RPS policy did not include other eligibility requirements from the RPS Guidebook for biogas, including the delivery requirements for biogas transported through the natural gas transportation pipeline system.

LADWP also argues that the Energy Commission's regulations to implement SBX1-2 were adopted more "than two years late" and that this delay severely prejudiced LADWP. (LADWP petition, pg.15.) While it is true that the regulations were adopted more than two years after the adoption date specified in SBX1-2 – July 1, 2011,[22] - it is unfair to suggest the regulations were more than two years late. As explained above, SBX1-2 did not take effect until December 10, 2011. This is more than five months after the July 1, 2011, adoption date specified in SBX1-2. It was legally impossible for the Energy Commission to adopt regulations by the July 1, 2011, date, since the Energy Commission did not have authority to adopt these regulations until after the law took effect on December 10, 2011. Moreover, the July 1, 2011, date does not recognize the time the Energy Commission needed to hold various public workshops and hearings, solicit public input and comments, and coordinate with the state's various POUs to develop, finalize and adopt the required regulations.

Additionally, LADWP argues that the Energy Commission is treating POUs differently than investor owned utilities (IOUs) with respect to resources procured by POUs and IOUs prior to SBX1-2. (LADWP petition, p. 16.) This is not correct. The Energy Commission is treating POUs the same as IOUs and is applying the RPS eligibility requirements for biogas delivered through the natural gas transportation pipeline system to LADWP in the same manner the Energy Commission has applied these requirements to the IOUs and other POUs.

6. Denying RPS Certification Places LADWP in a Procurement Shortfall and Costs LADWP an Estimated $78 Million

LADWP argues that denying certification of the Scattergood, Harbor, Valley, and Haynes facilities using biomethane from the 2009 Shell and Atmos contracts will shortfall LADWP's RPS compliance by nearly 3 percent. According to the petition, this equates to a cost of almost $78 million over the first RPS compliance period (2011-2013), assuming the loss of Portfolio Content Category 1 electricity products valued at $40 per renewable energy credit. (LADWP petition, p. 15)

22 Public Utilities Code section 399.30(m) states that "On or before July 1, 2011, the Energy Commission shall adopt regulations specifying procedures for enforcement of this article…."

As discussed above, LADWP should not have been surprised by staff's determination that the Scattergood, Harbor, Valley, and Haynes facilities could not be certified based on the biomethane procured under the 2009 Shell and Atmos contracts. Energy Commission staff informed LADWP in writing in July and October 2011 that these facilities could not be certified for the RPS based on the 2009 Shell and Atmos contracts. This was acknowledged by LADWP staff in November 2011. (Refer to the July 20, October 31, and November 1, 2011, emails included as part of the email string attached as Exhibit 1.)

LADWP should have known when it entered into the 2009 Shell and Atmos contracts that the contracts could not be used to support RPS certification under the Energy Commission's requirements, because the biomethane was procured as a gas exchange. Energy Commission staff presume that when LADWP amended its RPS policy in April 2008 to expand the list of eligible renewable resources, that LADWP purposely decided not to include biomethane delivery requirements (consistent with the Energy Commission's RPS requirements) to avoid the transportation costs associated with the delivery requirements.

While LADWP's shortfall in RPS compliance and related costs cannot serve as a basis for challenging staff's denial of the certification of the Scattergood, Harbor, Valley, and Haynes facilities, LADWP may consider these costs when establishing cost limitations on procurement expenditures in accordance with Title 20, California Code of Regulations, section 3206(a)(3). Additionally, LADWP may raise, as mitigating factors of noncompliance in accordance with Title 20, California Code of Regulations, section 1240(d), any costs or delays alleged in its petition. LADWP may also raise staff's delays in responding to LADWP's petition as a mitigating factor of noncompliance in accordance with section 1240(d).

Similarly, delays associated with the RPS certification of the Scattergood, Harbor, Valley, and Haynes facilities under AB 2196, based on biomethane procured under the 2011 Shell contract, may be raised as a mitigating factor of noncompliance in accordance with section 1240(d). Although these and other POU facilities were ultimately certified for the RPS, the delays associated with the Energy Commission's suspension of its biomethane rules in March 2012, and the Energy Commission's subsequent adoption of new biomethane rules in April 2013 to implement AB 2196, may have affected a POU's procurement decisions in a way that impacted the POU's compliance with the RPS.

7. Use of Landfill Gas at the Subject Facilities Satisfies Legislative Policy Goals of Public Utilities Code Section 399.11

Lastly, LADWP argues that the Scattergood, Harbor, Valley and Haynes facilities should be certified based on biomethane procured under the 2009 Shell and Atmos contracts, because the use of this biomethane furthers the legislative policy goals of the RPS as expressed in Public Utilities Code section 399.11. Specifically, LADWP states the legislative goals of the RPS are realized by reducing emissions of

greenhouse gases, which are negatively impacting climate change. Additionally, biomethane is also ideal for electricity generation, because it can be readily treated to meet natural gas pipeline standards, easily transported on existing gas pipelines, and burned for generation with lower emissions than other fuels, all of which contribute to providing a fuel source with a predictable electricity supply. (LADWP petition, pp. 16-17.)

The test for determining the RPS eligibility of the Scattergood, Harbor, Valley and Haynes facilities cannot be based on the legislative goals alone. Eligibility must be based on the requirements in the statute, including the fuel "use" requirements in Public Resources Code section 25741 as implemented by the Energy Commission. The legislative goals of the RPS must be considered in light of the statutory requirements in the law. Arguably, using landfill gas produced anywhere in the U.S., or in the continent for that matter, to generate electricity, rather than venting that gas directly into the atmosphere, will reduce emissions of greenhouse gases in furtherance of the legislative goals of the Public Utilities Code section 399.11. However, these landfill gas resources cannot be considered "eligible renewable energy resources" for the RPS if the gas is not "used" by an electrical generation facility in a way that meets the statutory requirements.

Exhibit 1

Email String between Energy Commission and LADWP Staff
Beginning July 20, 2011, through November 1, 2011

From: "Hodel, Robert" <Robert.Hodel@ladwp.com>
To: 'Mark Kootstra' <mkootstr@energy.state.ca.us>
Date: 11/1/2011 10:29 AM
Subject: RE: FW: RPS Certification Application of FourLADWPFacilities(61596C-61599C)

Hi Mark,

Thanks for the clarification. Sorry for the confusion on my part.

Another issue is we want to disregard, for now, at least, the biogas contracts we originally sent with our applications back in July. These are the Shell and Atmos deals from 2009. As you mentioned, they do not use a physical contract path, so certification is an issue.

However, we are negotiating a new contract with Shell that will include a physical contract path, which we sent with our application "update" on 10/14/2011. After we make the corrections (which you requested below), would it be possible to get pre-certified on the basis of this new Shell contract, while disregarding the contracts from 2009?

Thanks,

Robert

-----Original Message-----
From: Mark Kootstra [mailto:mkootstr@energy.state.ca.us]
Sent: Monday, October 31, 2011 4:42 PM
To: Hodel, Robert
Subject: RE: FW: RPS Certification Application of Four LADWPFacilities(61596C-61599C)

Hi Robert,

Sorry for the confusion. We need an attestation from the entity contracting with the pipelines from the injection point to California. It appears that for your situation this will only be Shell, but if another entity is responsible for signing contracts with the pipelines for a portion of the delivery path, then you will need one from them as well.

Sincerely,

>>> "Hodel, Robert" <Robert.Hodel@ladwp.com> 10/31/11 11:24 AM >>>
Hi Mark,

Thanks for the clarification.

On item number 3 below, must we obtain an attestation from each pipeline company? For example, the Imperial Landfill delivers gas to California via TETCO (Texas Eastern Transmission Company), NGPL (National gas Pipeline Company of America), and EPGN (El Paso Natural Gas Company). Should we get individual attestations from each, or can we simply get an attestation from Shell?

Thanks,

Robert

-----Original Message-----
From: Mark Kootstra [mailto:MKootstr@energy.state.ca.us]
Sent: Monday, October 31, 2011 10:29 AM
To: Hodel, Robert

Cc: Aung, Than; Dong, Barry
Subject: Re: FW: RPS Certification Application of Four LADWP Facilities(61596C-61599C)

Hi Robert,

The Energy Commission has received the applications for certification of the facilities, but I have not yet had the chance to review them. The applications currently have a beginning on date of July 8, 2011, so if these applications for certification are approved all generation tracked in WREGIS from July 2001 forward will be considered RPS eligible, but only if, and after, certification is awarded to the facilities.

It is possible to add an additional biomethane source to the application at anytime before the review is complete, so long as the source is actually providing biomethane to the generator.

While I have not had a chance to complete the initial review of the applications, I did notice some issues with the CEC-RPS-1A:S5 application. Before I can continue my review of the application I will the CEC-RPS-1A:S5 to be resubmitted with the following corrections:

1. A separate CEC-RPS-1A:S5 must be submitted for each biomethane source.

2. The CEC-RPS-1A:S5 and the attestations on the forms must be unaltered from what is printed in the Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition.

3. A representative of the delivery entity, in this case Shell Energy North America, must attest to that the delivery of the biomethane meets the requirements of the Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition.

Finally, while we recognize that one or more of these biomethane supply contracts were executed under the Renewables Portfolio Standard Eligibility Guidebook, Third Edition, the applications for the certification of any facility not previously RPS certified by the California Energy Commission must be evaluated under the guidebook in effect at the time of submission.

If you have any questions or concerns please feel free to contact me.

Sincerely,

Mark Kootstra
Renewables Portfolio Standard Program
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814
phone: (916) 653-4487
mkootstr@energy.state.ca.us

>>> "Hodel, Robert" <Robert.Hodel@ladwp.com> 10/28/2011 10:16 AM >>>
Hi Mark,

What is the status of LADWP's biogas certification applications? LADWP is anticipating receiving additional gas from Shell imminently, so the certification of our plants is extremely urgent. Is it possible to give these applications priority? Please let me know if you require any additional information.

Thanks,

Robert Hodel
Mechanical Engineering Assoc.

Resource Planning, Procurement, and Development
Geothermal & Biomass
JFB Room 968
213-367-3802

From: Aung, Than
Sent: Friday, October 14, 2011 9:32 AM
To: 'RPSTrack@energy.state.ca.us'; 'Mark Kootstra'
Cc: Alvarez, Oscar; Koch, Brian; Hodel, Robert; Dong, Barry
Subject: RPS Certification Application of Four LADWP Facilities (61596C-61599C)

Hello Mark,

Attached are CEC-RPS-1A forms for the Scattergood Generating Station (61596C), the Harbor Generating Station (61597C), the Valley Generating Station (61598C), and the Haynes Generating Station (61599C). As you requested, we have provided

* Commercial operation dates for each plant and
* S5 attestations from each gas supplier.

Furthermore, LADWP has decided to apply for full CEC certification for these plants since (1) Shell and Atmos have been delivering pipeline biomethane since August 1, 2009 and September 1, 2009, respectively, and (2) all LADWP gas-fired plants have now been registered with WREGIS.

Also attached are the S5 attestations from Atmos, Shell, and the Los Angeles Department of Public Works. Please note the Scattergood Generating Station is located next to the Public Works Hyperion Sewage Treatment Plant, and Public Works supplies digester gas only to the Scattergood Generating Station via a short (less than one mile), dedicated internal pipeline. Additionally, please note LADWP is a publicly owned utility (POU.)

Forthcoming in the mail are hardcopies of this submittal. If additional information is necessary concerning this matter, please contact me at (213) 367-3367.

Best regards,

Than Aung

Los Angeles Department of Water & Power
Power System
Regulatory Standards & Compliance Group
Office (213) 367-3367

-----Original Message-----
From: Mark Kootstra [mailto:MKootstr@energy.state.ca.us]
Sent: Wednesday, July 20, 2011 1:17 PM
To: Alvarez, Oscar; Aung, Than
Subject: RPS Pre-Certification of Four LADWP Facilities (61596C-61599C)

Hi Oscar,

I am performing the initial review of the Scattergood Generating Station (61596C), the Harbor Generating Station (61597C), the Valley Generating Station (61598C), and the Haynes Generating Station (61599C) pre-certification applications. Before I can complete my review I will need a commercial operations date for each facility and a completed CEC-RPS-1B:S5 form for each biomethane source and entity responsible for delivering the biomethane. The Energy Commission cannot accept any documentation in lieu of this form.

Additionally, language in the supplied attestations is a cause for concern. Specifically, whether or not the contracts will be in compliance with the definition of "green attributed" as defined in the Renewable Energy Program Overall Program Guidebook, Third Edition, taken from the CPUC in Decision 08-08-028 on August 21, 2008. The Overall Program Guidebook can be found online at http://www.energy.ca.gov/renewables/documents/index.html#rps.

Additionally, the phrase "the parties understand that this Landfill Gas will be delivered to Buyer through an exchange rather than through direct long-haul transportation." The Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition, requires the use of transportation contracts with the pipeline operators that will deliver the gas. When submitting a completed CEC-RPS-1B:S5 for each individual source, please submit additional information on the delivery contracts, including a list of all pipelines that will be transporting the biomethane from the injection point to the delivery point within California, the entity responsible for nominating the delivery, and whether the delivery is firm or interruptible.

If you have any questions on the application process or eligibility requirements please feel free to contact me.

Sincerely,

Mark Kootstra

Renewables Portfolio Standard Program

California Energy Commission

1516 9th Street, MS-45

Sacramento, CA 95814

phone: (916) 653-4487

mkootstr@energy.state.ca.us

Exhibit 2

Email String between Energy Commission and LADWP Staff Beginning November 3, 2011, through November 30, 2011

From: Mark Kootstra
To: Barry Dong; Oscar Alvarez
CC: Brian Koch; Brian McCollough; Robert Hodel; Than Aung
Date: 11/30/2011 12:19 PM
Subject: RE: California RPS Precertification of Four LADWP BiomethaneFacilities (61596C-61599C)

Hi Barry,

We are working to void all the extra documents and properly order all the remaining documents. If we have any questions we will be sure to contact you.

I would like to make you aware of a concern staff has about how this facility will be tracked in WREGIS once certified. Since you are already tracking the use of biomethane that is delivered via exchange contracts you will be to be able to ensure that no RECs associated with ineligible generation are claimed for California's RPS, while still accurately tracking eligible generation. This is not an issue that needs to be addressed now, but it will become important when you apply for certification.

Sincerely,

Mark Kootstra
Renewables Portfolio Standard Program
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814
phone: (916) 653-4487
mkootstr@energy.state.ca.us

>>> "Dong, Barry" <Barry.Dong@WATER.LADWP.com> 11/30/2011 8:55 AM >>>
Hi, Mark,

With Mr. Alvarez's e-mail below, just want to make sure you have everything needed to proceed with the review and approval process.
Thanks.

Barry

-----Original Message-----
From: Alvarez, Oscar
Sent: Tuesday, November 29, 2011 6:42 AM
To: 'MKootstr@energy.state.ca.us'
Cc: Dong, Barry; Hodel, Robert; Aung, Than; Koch, Brian
Subject: FW: California RPS Precertification of Four LADWP Biomethane Facilities (61596C-61599C)

Mr. Kootstra, please proceed and revise the applications as described below and void all documents not listed in the suggested changes.

Let me know if you have any questions or need additional information. Thank you.

Oscar A. Alvarez
LADWP
Manager of Regulatory Standards and Compliance
(213) 367-0677

-----Original Message-----
From: Mark Kootstra [mailto:MKootstr@energy.state.ca.us]
Sent: Monday, November 28, 2011 9:41 AM

To: Dong, Barry
Cc: Brian McCollough; Koch, Brian; Guardado, Mauricio; Webster, Michael; Alvarez, Oscar; Hodel, Robert; Aung, Than
Subject: California RPS Precertification of Four LADWP Biomethane Facilities (61596C-61599C)

Hi Barry,

I was able to spend some time with the precertification applications for the Scattergood Generating Station (61596C), the Harbor Generating Station (61597C), the Valley Generating Station (61598C), and the Haynes Generating Station (61599C). Since we are working with numerous submissions providing pieces of the necessary documents and extra documents that are not valid at this time, I would like to confirm what documents LADWP considers to be part of the submission for the precertification applications.

The Energy Commission is currently in possession of the following information for each of the four facilities:

1. A CEC-RPS-1A form.
2. A CEC-RPS-1A:S1 form.
3. An incomplete CEC-RPS-1A:S5 form referencing attachments.
4. A CEC-RPS-1A:S5 form containing a number of attestations from LADWP, various fuel suppliers, and fuel supplier on behalf of a pipeline delivery entity. The majority of these attestations have been revised or edited from the original version that is printed in the RPS guidebook, fourth edition, and posted online, making them invalid. Also included are several attestations not originating with the Energy Commission RPS application forms which cannot be used in place of the RPS application form. This packet does contain what appears to be a completed CEC-RPS-1B:S5 Fuel Production Facility Attestation for the Imperial Landfill Gas company, LLC and the Greentree Landfill Gas Company, LLC signed by James Schretter of Enxco LGF holding, LLC, on behalf of Beacon Landfill Gas Holdings, LLC.
5. A CEC-RPS-1B form.
6. A CEC-RPS-1B:S1 form.
7. An incomplete CEC-RPS-1B:S5 form that references a number of attached contracts describing gas supply arrangements with exchange delivery contracts which do not meet the requirements of the RPS guidebook, fourth edition, and thus cannot be considered an eligible supply arrangement.
8. A complete CEC-RPS-1B:S5 for the Turkey Creek Landfill in Alvarado, Texas. LADWP submitted the cover page and the Electric Generating Facility Attestation, and Shell submitted the Fuel Production Facility Attestation and the Pipeline Biomethane Delivery Attestation.
9. A partial CEC-RPS-1B:S5 form for the Imperial Landfill Gas Company, LLC and the Greentree Landfill Gas Company, LLC. LADWP submitted the cover page and the Electric Generating Facility Attestation, and Shell submitted the Pipeline Biomethane Delivery Attestation. No Fuel Production Facility Attestation was provided with this form.
10. Two Pipeline Biomethane Delivery Attestations submitted by Shell using the CEC-RPS-1A:S5 attestations. This are cannot be used for precertification and the precertification versions have already been submitted, see points 8 and 9.
11. For only the Scattergood Generation Station the Energy Commission has also received a CEC-RPS-1B:S5 form for the Hyperion Treatment Plant which, according to the application, supplies biogas that is not delivered via the natural gas pipeline.

Several documents appear to align with the RPS requirements for the precertification of a facility using pipeline biomethane. I suggest revising each application so it contains only the following:

1. The CEC-RPS-1B form received on July 8, 2011.
2. The CEC-RPS-1B:S1 application, also received on July 8, 2011.
3. The complete CEC-RPS-1B:S5 for the Turkey Creek Landfill in Alvarado, Texas. LADWP submitted the cover page and the Electric Generating Facility Attestation, signed November 8, 2011, and Shell submitted the Fuel Production Facility Attestation and the Pipeline Biomethane Delivery Attestation, both signed November 7, 2011.
4. The partial CEC-RPS-1B:S5 form for the Imperial Landfill Gas Company, LLC and the Greentree Landfill Gas Company, LLC. LADWP submitted the cover page and the Electric Generating Facility Attestation, signed November 8, 2011, and Shell submitted the Pipeline Biomethane Delivery Attestation, signed November 7, 2011.
5. The completed CEC-RPS-1B:S5 Fuel Production Facility Attestation for the Imperial Landfill Gas company, LLC and the Greentree Landfill Gas Company, LLC signed on September 26, 2011, by James Schretter of Enxco LGF holding, LLC, on behalf of Beacon Landfill Gas Holdings, LLC.
6. For only the Scattergood Generation Station the Energy Commission the CEC-RPS-1B:S5 form for the Hyperion Treatment Plant signed on November 8, 2011, by LADWP and on November 11, 2011, by Steve Fan representing the Hyperion Treatment Plant.

All other submitted documents do not appear to benefit the application, or would cause the facility to be ineligible for California's RPS. Before I can complete my review of the applications I need your permission to revise the applications as described above and void all documents not listed in the suggested changes. I will also need Oscar Alvarez to be agree to the revisions as he signed the original precertification attestations.

If any of these changes are not acceptable to you please specify your alternative in detail. You also have the option of resubmitting the precertification application as you see fit, and may even request the previous submitted documents be returned for your review and re-submission. If you are requesting significant changes, wish to add new information, or have any questions or confusion about what will be reviewed I strongly suggest you request the forms be returned to you for your review and re-submission so you can have complete control over the contents of the applications being reviewed.

Once I have your permission to make these changes I will compile the applications for the remainder of the review. If you have any questions please feel free to contact me.

Sincerely,

Mark Kootstra
Renewables Portfolio Standard Program
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814
phone: (916) 653-4487
mkootstr@energy.state.ca.us

>>> "Dong, Barry" <Barry.Dong@WATER.LADWP.com> 11/17/2011 2:26 PM >>>
Hi Mark and Brian,

Than is out of the office until 11/29/11. This is to follow up his e-mail below.
Could you confirm if the final review and approval process can be complete by or before 12/1/2011?
Please contact me if you have questions.

Best Regards,

Barry Dong
213-367-1203

From: Aung, Than
Sent: Thursday, November 10, 2011 6:44 AM
To: 'Mark Kootstra'; 'bmccollo@energy.state.ca.us'
Cc: Alvarez, Oscar; Guardado, Mauricio; Webster, Michael; Koch, Brian; Dong, Barry
Subject: Expedited Review Request for Pre-Certification of Four LADWP Facilities (61596C-61599C)

Dear Mark and Brian:

This is to request CEC to perform an expedited review of the RPS pre-certification of the four LADWP facilities (61596C-61599C).

LADWP is in the process of finalizing an agreement with Shell Energy North America to purchase biomethane for four LADWP facilities as noted in our RPS-1B submittals. This purchase will provide significant amount of supply for LADWP to generate renewable energy to reach its RPS targets.

The CEC pre-certification of these facilities is vital prior to signing the agreement in order for LADWP to receive certainty from CEC that the energy from these units are biomethane RPS-eligible.

LADWP would appreciate if the CEC completes its final review and approval process by or before 12/1/2011.

Consequences if the final review is not complete on time:

* Biomethane supply may not be available.

* Price may increase and subsequently create a significant financial impact to the LADWP and its rate payers.

* May delay ability of LADWP to reach its RPS targets.

* May delay arrangements for supply, transportation and storage which will impact the delivery schedule of the biomethane supply.

* The delay of the pre-certification will generate uncertainty in finalizing our agreement.

Your expedited review of the RPS-1B applications for these four facilities is greatly appreciated.

Please contact me if you have any questions.

Than Aung

Los Angeles Department of Water & Power

Power System

Regulatory Standards & Compliance Group

Office (213) 367-3367

-----Original Message-----

From: Mark Kootstra [mailto:MKootstra@energy.state.ca.us]

Sent: Wednesday, November 09, 2011 10:24 AM

To: Dong, Barry

Cc: Brian McCollough

Subject: RE: Follow up from our meeting yesterday - Shell;RPSPre-Certification of Four LADWP Facilities (61596C-61599C)

Hi Barry,

Unfortunately, I cannot expedite the review of these applications without a written request that outlines the need for an expedited review, the specific date by when the final review must be complete, and consequences if the review is not complete. Once I have that information we will be able to evaluate whether or not we can expedite the review. Even if we do expedite the review we cannot guarantee that the applications will receive approval by the requested date.

If you have any questions please feel free to contact me.

Sincerely,

Mark Kootstra

Renewables Portfolio Standard Program

California Energy Commission

1516 9th Street, MS-45

Sacramento, CA 95814

phone: (916) 653-4487

mkootstr@energy.state.ca.us

>>> "Dong, Barry" <Barry.Dong@WATER.LADWP.com> 11/9/2011 10:14 AM >>>

Hi Mark,

Thanks for the e-mail. The originals were mailed by Than to you yesterday 11/8/11. The FedEx tracking number is 8770-9489-2580.

Greatly appreciated for your expediting the review process.

Barry

213-367-1203

-----Original Message-----

From: Mark Kootstra [mailto:MKootstr@energy.state.ca.us]

Sent: Wednesday, November 09, 2011 9:36 AM

To: Brian McCollough; Aung, Than

Cc: Guardado, Mauricio; Alvarez, Oscar; Hodel, Robert; Dong, Barry; Mak, Ken

Subject: RE: Follow up from our meeting yesterday - Shell; RPSPre-Certification of Four LADWP Facilities (61596C-61599C)

Hi Than,

It appears that once I get the originals I will have a complete application that I can begin to review. If I have any questions I will contact you.

Sincerely,

Mark Kootstra

Renewables Portfolio Standard Program

California Energy Commission

1516 9th Street, MS-45

Sacramento, CA 95814

phone: (916) 653-4487

mkootstr@energy.state.ca.us

>>> "Aung, Than" <Than.Aung@ladwp.com> 11/8/2011 9:59 AM >>>

Hello Brian/Mark,

Per your request, attached please find the revised CEC-RPS-1B:S5 pre-certification forms for the LADWP's Harbor GS (61597C), Valley GS (61598C), Haynes GS (61599C), Scattergood GS (61596C), and the Production Facility Attestation for Hyperion, including complete attestation language for Scattergood GS.

Forthcoming in the FedEx mail are hardcopies of the above. Please note that the Fuel Production Facility Attestations and the Pipeline Biomethane Delivery Attestations have been submitted separately by Shell.

If additional information is necessary concerning this matter, please contact me at (213) 367-3367. I will be out of the office from 11/11/11 to 11/28/11, please contact Mauricio Guardado (Mauricio.Guardado@ladwp.com<mailto:Mauricio.Guardado@ladwp.com>, 213-367-0375) during my absence, please also cc your responses to Barry Dong (barry.dong@ladwp.com<mailto:barry.dong@ladwp.com>, 213-367-1203) and Oscar Alvarez (Oscar.Alvarez@ladwp.com<mailto:Oscar.Alvarez@ladwp.com>, 213-367-0677).

Best regards,

Than Aung

Los Angeles Department of Water & Power

Power System

Regulatory Standards & Compliance Group

Office (213) 367-3367

From: Obadia, Cynthia E SENA-STE/37

Sent: Thursday, November 03, 2011 1:10 PM

To: Brian McCollough; MKoolstr@energy.state.ca.us

Cc: Hodel, Robert; Dong, Barry; Morris, Carey SENA-STE/35; Ingwers, Thomas W SENA-STE/37

Subject: Follow up from our meeting yesterday

Hi Brian/Mark,

Attached is PDF of the Pipeline Biomethane Delivery Attestations for the 4 LADWP Generating Stations (Scattergood, Haynes, Valley and Harbor) for the 2 landfills from Beacon Landfill Holdings and the one from the Turkey Creek Renewables, LLC. I will send the originals by courier today.

I will follow up with Robert and Barry from LADWP on the other changes that you need in the current application which are:

1) Resubmit the Electric Generator Facility Attestation which the whole attestation language

2) Resubmit the Production Facility Attestation for Hyperion which the whole attestation language.

Somehow the attestation language was cut off in both of these forms.

Brian - Thanks again for your time yesterday and thanks to Mark for setting it up.

Cynthia

Cynthia Obadia

Director, Environmental Products

Shell Energy North America, LLC

4445 East Gate Mall

San Diego, CA 92121

Office: (858)526-2116

Cel: (858)382-2741

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Exhibit 3

Letters from Energy Commission Staff dated December 2, 2011

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

12/2/2011

Oscar Alvarez
111 North Hope Street
Los Angeles, CA 90012

RE: APPROVAL OF APPLICATION FOR CALIFORNIA'S RENEWABLES PORTFOLIO STANDARD

Dear Applicant:

Your application on behalf of **Scattergood Generating Station** has been approved for:

_X_ Pre-certification: Eligible for Renewables Portfolio Standard

____ Certification: Eligible for Renewables Portfolio Standard

Please note that **an award of pre-certification status does not guarantee that a facility will be eligible for certification in the future**, the information submitted on the application will be subject to further verification once the pre-certified facility has been completed.

A certificate confirming your eligibility is enclosed. The certificate also contains your identification number for purposes of the RPS, which is: **61596C**. Please use this number in all future correspondence with the Energy Commission regarding this facility's certification status under the RPS.

To maintain the certification status of this project, you must comply with all applicable requirements for certified or pre-certified facilities contained in the *Renewables Portfolio Standard Eligibility Guidebook, 4th Edition* (publication number CEC-300-2010-007-CMF). You must also notify the Energy Commission immediately if there are any material changes in the information submitted in your application for certification (CEC-RPS-1A) or pre-certification (CEC-RPS-1B), or face disqualification. Any changes to the information provided in a certification or pre-certification application should be reported on an amended application form which supersedes the original application.

The Energy Commission may conduct periodic or random reviews to verify records submitted for certification or pre-certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the requirements for certification or pre-certification, and may request additional information as necessary to monitor compliance with the certification and or pre-certification requirements specified in the *Renewables Portfolio Standard Eligibility Guidebook*. If you do not respond to the Energy Commission's request for an information update in a timely manner, you risk losing your certification status.

The Energy Commission will list certified facilities on its website. Any changes in a facility's certification status will also be posted on the Energy Commission's website.

By applying for certification or pre-certification, you have also agreed to participate in the Energy Commission's generation tracking system. For more information about the tracking system, please refer to the section in the *Renewables Portfolio Standard Eligibility Guidebook* entitled, "RPS Tracking, Reporting and Verification."

If you have any questions about your certification, please do not hesitate to contact Brian McCollough by phone at (916) 653-1648 or by e-mail at <bmccollo@energy.state.ca.us>.

Sincerely,

Tony Gonçalves
Renewable Energy Program

Enclosure

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO. CA 95814-5512

12/2/2011

Oscar Alvarez
111 North Hope Street
Los Angeles, CA 90012

RE: APPROVAL OF APPLICATION FOR CALIFORNIA'S RENEWABLES PORTFOLIO STANDARD

Dear Applicant:

Your application on behalf of **Harbor Generating Station** has been approved for:

_X_ Pre-certification: Eligible for Renewables Portfolio Standard

____ Certification: Eligible for Renewables Portfolio Standard

Please note that **an award of pre-certification status does not guarantee that a facility will be eligible for certification in the future**, the information submitted on the application will be subject to further verification once the pre-certified facility has been completed.

A certificate confirming your eligibility is enclosed. The certificate also contains your identification number for purposes of the RPS, which is: **61597C**. Please use this number in all future correspondence with the Energy Commission regarding this facility's certification status under the RPS.

To maintain the certification status of this project, you must comply with all applicable requirements for certified or pre-certified facilities contained in the *Renewables Portfolio Standard Eligibility Guidebook, 4th Edition* (publication number CEC-300-2010-007-CMF). You must also notify the Energy Commission immediately if there are any material changes in the information submitted in your application for certification (CEC-RPS-1A) or pre-certification (CEC-RPS-1B), or face disqualification. Any changes to the information provided in a certification or pre-certification application should be reported on an amended application form which supersedes the original application.

The Energy Commission may conduct periodic or random reviews to verify records submitted for certification or pre-certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the requirements for certification or pre-certification, and may request additional information as necessary to monitor compliance with the certification and or pre-certification requirements specified in the *Renewables Portfolio Standard Eligibility Guidebook*. If you do not respond to the Energy Commission's request for an information update in a timely manner, you risk losing your certification status.

The Energy Commission will list certified facilities on its website. Any changes in a facility's certification status will also be posted on the Energy Commission's website.

By applying for certification or pre-certification, you have also agreed to participate in the Energy Commission's generation tracking system. For more information about the tracking system, please refer to the section in the *Renewables Portfolio Standard Eligibility Guidebook* entitled, "RPS Tracking, Reporting and Verification."

If you have any questions about your certification, please do not hesitate to contact Brian McCollough by phone at (916) 653-1648 or by e-mail at <bmccollo@energy.state.ca.us>.

Sincerely,

Tony Gonçalves
Renewable Energy Program

Enclosure

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

12/2/2011

Oscar Alvarez
111 North Hope Street
Los Angeles, CA 90012

RE: APPROVAL OF APPLICATION FOR CALIFORNIA'S RENEWABLES PORTFOLIO STANDARD

Dear Applicant:

Your application on behalf of **Valley Generating Station** has been approved for:

_X_ Pre-certification: Eligible for Renewables Portfolio Standard

____ Certification: Eligible for Renewables Portfolio Standard

Please note that **an award of pre-certification status does not guarantee that a facility will be eligible for certification in the future**, the information submitted on the application will be subject to further verification once the pre-certified facility has been completed.

A certificate confirming your eligibility is enclosed. The certificate also contains your identification number for purposes of the RPS, which is: **61598C**. Please use this number in all future correspondence with the Energy Commission regarding this facility's certification status under the RPS.

To maintain the certification status of this project, you must comply with all applicable requirements for certified or pre-certified facilities contained in the *Renewables Portfolio Standard Eligibility Guidebook, 4th Edition* (publication number CEC-300-2010-007-CMF). You must also notify the Energy Commission immediately if there are any material changes in the information submitted in your application for certification (CEC-RPS-1A) or pre-certification (CEC-RPS-1B), or face disqualification. Any changes to the information provided in a certification or pre-certification application should be reported on an amended application form which supersedes the original application.

The Energy Commission may conduct periodic or random reviews to verify records submitted for certification or pre-certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the requirements for certification or pre-certification, and may request additional information as necessary to monitor compliance with the certification and or pre-certification requirements specified in the *Renewables Portfolio Standard Eligibility Guidebook*. If you do not respond to the Energy Commission's request for an information update in a timely manner, you risk losing your certification status.

The Energy Commission will list certified facilities on its website. Any changes in a facility's certification status will also be posted on the Energy Commission's website.

By applying for certification or pre-certification, you have also agreed to participate in the Energy Commission's generation tracking system. For more information about the tracking system, please refer to the section in the *Renewables Portfolio Standard Eligibility Guidebook* entitled, "RPS Tracking, Reporting and Verification."

If you have any questions about your certification, please do not hesitate to contact Brian McCollough by phone at (916) 653-1648 or by e-mail at <bmccollo@energy.state.ca.us>.

Sincerely,

Tony Gonçalves
Renewable Energy Program

Enclosure

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

12/2/2011

Oscar Alvarez
111 North Hope Street
Los Angeles, CA 90012

RE: APPROVAL OF APPLICATION FOR CALIFORNIA'S RENEWABLES PORTFOLIO STANDARD

Dear Applicant:

Your application on behalf of **Haynes Generating Station** has been approved for:

_X_ Pre-certification: Eligible for Renewables Portfolio Standard

____ Certification: Eligible for Renewables Portfolio Standard

Please note that **an award of pre-certification status does not guarantee that a facility will be eligible for certification in the future**, the information submitted on the application will be subject to further verification once the pre-certified facility has been completed.

A certificate confirming your eligibility is enclosed. The certificate also contains your identification number for purposes of the RPS, which is: **61599C**. Please use this number in all future correspondence with the Energy Commission regarding this facility's certification status under the RPS.

To maintain the certification status of this project, you must comply with all applicable requirements for certified or pre-certified facilities contained in the *Renewables Portfolio Standard Eligibility Guidebook, 4th Edition* (publication number CEC-300-2010-007-CMF). You must also notify the Energy Commission immediately if there are any material changes in the information submitted in your application for certification (CEC-RPS-1A) or pre-certification (CEC-RPS-1B), or face disqualification. Any changes to the information provided in a certification or pre-certification application should be reported on an amended application form which supersedes the original application.

The Energy Commission may conduct periodic or random reviews to verify records submitted for certification or pre-certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the requirements for certification or pre-certification, and may request additional information as necessary to monitor compliance with the certification and or pre-certification requirements specified in the *Renewables Portfolio Standard Eligibility Guidebook*. If you do not respond to the Energy Commission's request for an information update in a timely manner, you risk losing your certification status.

The Energy Commission will list certified facilities on its website. Any changes in a facility's certification status will also be posted on the Energy Commission's website.

By applying for certification or pre-certification, you have also agreed to participate in the Energy Commission's generation tracking system. For more information about the tracking system, please refer to the section in the *Renewables Portfolio Standard Eligibility Guidebook* entitled, "RPS Tracking, Reporting and Verification."

If you have any questions about your certification, please do not hesitate to contact Brian McCollough by phone at (916) 653-1648 or by e-mail at <bmccollo@energy.state.ca.us>.

Sincerely,

Tony Gonçalves
Renewable Energy Program

Enclosure

Exhibit 4

Email String between Energy Commission and LADWP Staff Beginning February 17, 2012, through March 22, 2012

From: Christina Crume
To: Than Aung
Date: 3/22/2012 11:22 AM
Subject: RE: CEC Certification 61596A-61599A

Hi Than,

We are happy to point out deficiencies or incomplete information from our initial review of a submitted application, and to answer specific questions to clarify the information requested in the forms, as is our practice. However, as we discussed, we cannot provide multiple reviews of an application to determine completeness in light of the deadline of March 28. We will be reviewing all applications as time permits, but complete reviews will not necessarily be before March 28. I appreciate your understanding and cooperation.

Thank you,

Christina Crume
Renewables Portfolio Standard
California Energy Commission
1516 9th Street MS-45
Sacramento, CA 95814
916-654-4674
ccrume@energy.ca.gov

>>> "Aung, Than" <Than.Aung@ladwp.com> 3/20/2012 1:37 PM >>>
Hi Christina,

I was wondering whether our applications are completed. I would appreciate it if you let us know the status of our applications for CEC Certification (61596A -61699A).

Please let me know if you need additional information.

Thank you for your time and support.

Sincerely,

Than Aung

Los Angeles Department of Water & Power
Power System
Regulatory Standards & Compliance Group
Office (213) 367-3367

From: Aung, Than
Sent: Tuesday, February 28, 2012 1:57 PM
To: 'Christina Crume'
Subject: RE: CEC Certification 61596A-61599A

Dear Christina,

Attached please find the Tables in the Microsoft excel format (2003).

Please let me know if you have any questions.

Thanks,

Than Aung

Los Angeles Department of Water & Power

Power System

Regulatory Standards & Compliance Group

Office (213) 367-3367

-----Original Message-----
From: Christina Crume [mailto:CCrume@energy.ca.gov]
Sent: Tuesday, February 28, 2012 1:49 PM
To: Aung, Than
Subject: RE: CEC Certification 61596A-61599A

Than,

The information sent was not it a table, can you send it as an attachment?

Christina Crume

Renewables Portfolio Standard

California Energy Commission

1516 9th Street MS-45

Sacramento, CA 95814

916-654-4674

ccrume@energy.ca.gov

>>> "Aung, Than" <Than.Aung@ladwp.com> 2/28/2012 12:42 PM >>>

Dear Christina,

Below please find the percentage of fossil fuel (natural gas) and biogas for each of the facilities you requested. Information

is actual for years 2010 and 2011, and projected for year 2012. Also the hours of operation are included in the Tables. The Natural Gas and Biogas information in the CEC RPS Certification form was generally based on the 2010 data (Table 1).

Table 1 - Biogas by Plant 2010

Plant	Total Hours	Total MMBtu	Natural Gas	Digester Gas	Biogas	% Natural Gas	% Biogas	%Digester
Harbor	1,625	2,220,348	2,194,220					

26,128

98.82%

1.18%

0.00%

Haynes

8,759

35,268,659

31,275,487

3,993,172

88.68%

11.32%

0.00%

Scattergood

7,962

11,618,182

10,344,013

1,252,383

21,786

89.03%

0.19%

10.78%

Valley

4,303

11,433,218

11,115,031

318,187

97.22%

2.78%

0.00%

Table 2 - Biogas by Plant 2011

Plant

Total Hours

Total MMBtu

Natural Gas

Digester Gas

Biogas

% Natural Gas

% Biogas

%Digester

Harbor

922

1,055,555

1,055,555

0

100.00%

0.00%

0.00%

Haynes

8,748

28,161,690

24,631,563

3,530,127

87.46%

12.54%

0.00%

Scattergood

8,538

10,911,056

9,411,970

1,498,214

872

86.26%

0.01%

13.73%

Valley

3,956

9,239,701

8,511,464

728,237

92.12%

7.88%

0.00%

Table 3 - Estimated Biogas by Plant 2012

Plant

Total Hours

Total MMBtu

Natural Gas

Digester Gas

Biogas

% Natural Gas

% Biogas

%Digester

Harbor

3,514

4,450,038

4,383,466

66,571

98.50%

1.50%

0.00%

Haynes

4,873

17,654,744

13,787,348

3,867,396

78.09%

21.91%

0.00%

Scattergood

8,250

11,264,619

9,868,396

1,375,299

20,925

87.61%

0.19%

12.21%

Valley

6,617

21,584,804

17,580,442

4,004,362

81.45%

18.55%

0.00%

The Harbor Generating Station (61597A) WREGIS numbers are: W2268, W2269, W2270, W2287, W2288, W2289, W2290, and W2291.

Please let me know if you have any questions.

Sincerely,

Than Aung

Los Angeles Department of Water & Power

Power System

Regulatory Standards & Compliance Group

Office (213) 367-3367

-----Original Message-----

From: Alvarez, Oscar

Sent: Friday, February 17, 2012 10:03 AM

To: Aung, Than

Subject: RE: CEC Certification 61596A-61599A

Importance: High

Than, please follow-up. Thanks - Oscar

-----Original Message-----

From: Christina Crume [mailto:CCrume@energy.ca.gov]<mailto:%5bmailto:CCrume@energy.ca.gov%5d>

Sent: Friday, February 17, 2012 8:36 AM

To: Alvarez, Oscar

Cc: Mark Kootstra

Subject: CEC Certification 61596A-61599A

Oscar,

Can you please confirm the percentage of fossil fuel (natural gas) and biogas that each of the following facilities will be using. In addition, can you please give an estimate of how many hours each facility will be operating and the BTUs for the facility.

61596A - Scattergood Generating Station

823.3 MW

99.86% natural gas

0.14% biogas

61597A - Harbor Generating Station

462 MW

98.62% natural gas

1.38% biogas

61598A - Valley Generating Station

788 MW

97.00% natural gas

3.00% biogas

61599A - Haynes Generating Station

1,750.30 MW

88.19% natural gas

11.81% biogas

In addition, for the Harbor Generating Station (61597A) some of the WREGIS numbers are illegible, can you please include these numbers so we may update your application.

If you have any questions, feel free to contact either myself or Mark Kootstra.

Thank you.

Christina Crume

Renewables Portfolio Standard

California Energy Commission

1516 9th Street MS-45

Sacramento, CA 95814

916-654-4674

ccrume@energy.ca.gov<mailto:ccrume@energy.ca.gov>

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Exhibit 5

Energy Commission Staff Approval of Certification dated July 3, 2013 Based on Biomethane Procured Under 2011 Shell Contract

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

7/3/2013

Oscar Alvarez
Los Angeles Department of Water and Power
111 N Hope Street
Los Angeles, CA 90012

RE: Approval of Application for RPS Certification, **Scattergood Generating Station** Facility, RPS ID **61596F**.

Dear Mr. **Alvarez:**

The California Energy Commission has evaluated the application you submitted on behalf of **City of Los Angeles** for the **Scattergood Generating Station** facility for certification and determined that the facility is eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition*, publication number CEC-300-2013-005-ED7-CMF, April 2013. The facility is assigned CEC-RPS-ID number **61596F**. Please use this number in all future correspondence with the Energy Commission regarding this facility's RPS certification status. A certificate confirming the RPS certification of the facility is enclosed.

This certification is effective on **July 8, 2011**, and will remain in effect unless certification is voluntarily withdrawn by an authorized representative of the facility, the facility is permanently shut down or decommissioned, or the certification is revoked by the Energy Commission because of noncompliance with the applicable RPS requirements. Beginning with the month containing **July 8, 2011**, all generation from **Scattergood Generating Station** may be used for RPS compliance purposes if all of the requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*, continue to be met.

This certification is based on an evaluation of the RPS-eligibility of the facility, as described in the application and supporting documentation you submitted to the Energy Commission in **June 2013**, the accuracy of which was attested to by **Oscar Alvarez**, the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

As described in the submitted application, the facility is using **biomethane** as the primary renewable energy resource for electricity generation and will be using the **combustion technologies and fuel cell technologies** to determine the contribution of the primary and all secondary energy resources to generate electricity. A complete list of all renewable and nonrenewable energy resources listed in the application for certification is included on the enclosed certificate. California RPS-eligible renewable energy credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the *RPS Eligibility Guidebook, Seventh Edition*, and sufficient evidence has been submitted in support of compliance with those requirements after the close of the generation year.

To maintain the certification of this facility, you must comply with all applicable requirements for certified facilities set forth in the *RPS Eligibility Guidebook, Seventh Edition*. The Energy Commission must be notified promptly of any changes to the information included in the application for RPS certification of the facility. Failure to do so within 90 days of the change in

the information may result in the suspension of the facility's RPS certification. Any changes in the information submitted in the application for RPS certification must be reported to the Energy Commission in an amended certification application (CEC-RPS-1), and the amended application will supersede the original application. If any supporting documentation is necessary for the certification of the facility, it must be submitted with the amended application. The applicant may submit a letter confirming the applicant's desire to use the previously submitted supporting documentation and confirming that the documentation previously submitted is the most accurate and current information available for the facility in lieu of resubmitting the supporting documentation.

The Energy Commission may request additional information to monitor compliance with RPS requirements, and may conduct periodic or random reviews to verify records submitted for certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the certification requirements specified in the *RPS Eligibility Guidebook, Seventh Edition.* If you do not respond to the Energy Commission's request for an information update in a timely manner, the facility's RPS certification status may be suspended.

As noted on the enclosed certificate for the **Scattergood Generating Station**, this certification is subject to the following:

1. The application for certification identifies one or more sources of biomethane are being used at the facility. Only biomethane procured from the identified sources, produced in the manner specified, and delivered as indicated in the application, was considered when evaluating the certification application of the facility. These source(s) and information on the production method and quantity are listed in the enclosed certificate. For more information on this condition please refer to Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

2. This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below and in the certificate. Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility. See Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

The Energy Commission will list facilities that are participating in the RPS or have applied for participation in the RPS on its website. Any changes in a facility's certification or precertification status will also be posted on the Energy Commission's website.

If you have any questions about your certification, please do not hesitate to contact Christina Crume by phone at 916-654-4674 or by e-mail at <christina.crume@energy.ca.gov>.

Sincerely,

Kate Zocchetti
Renewable Energy Office

Enclosure

Cc: **City of Los Angeles**

Certified Eligible for California's Renewables Portfolio Standard

This is to officially state that beginning on ***July 8, 2011****, the facility:*

Scattergood Generating Station

Owned by City of Los Angeles,
Located in Playa Del Ray, CA,
Having Commenced Commercial Operations on:
December 1, 1958
And begun Using Renewable Fuel on:
August 1, 2009

Is certified by the California Energy Commission as eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the ***Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition,*** *publication number CEC-300-2013-005-ED7-CMF, April 2013, and assigned CEC-RPS-ID number:*

61956F

The application for RPS certification of this renewable electrical generation facility was submitted by **Oscar Alvarez**, of **Los Angeles Department of Water and Power**, on behalf of the facility owner **City of Los Angeles**. The accuracy of the information in the submitted application for RPS certification was attested to by **Oscar Alvarez,** the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

The facility has a total nameplate capacity, measured in alternating current, of

823.2 MW

Using the following renewable energy resource(s):

Biomethane

And using the following nonrenewable energy resource(s):

Natural Gas

The contribution of each energy resource to the electrical generation is based on the ***combustion technologies and fuel cell technologies*** *measurement methodology, as identified in the submitted application for RPS certification. California RPS-eligible Renewable Energy Credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition, and sufficient evidence has been submitted in support of compliance with those requirements.*

The application for certification identifies information on the following sources of biomethane fuel that are currently being used by the electrical generation facility to generate electricity:

	Type of Biomethane	Producer of the Biomethane	MMBTU/Month	Delivery Method
1	Digester Gas	Hyperion Treatment Plant	123,000	Dedicated Pipeline

Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility.

This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below.

The application for certification identifies information on the following sources of biomethane fuel that are identified as currently being used by the electrical generation facility to generate electricity:

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility.

The RPS certification of the Scattergood Generating Station facility may be revoked if any of the information presented in the application for RPS certification, or supporting documentation, submitted to the California Energy Commission is determined to be false or inaccurate.

The California Energy Commission must be promptly notified of any changes to the information included in the application for RPS certification of the facility, including changes in the facility's operations, ownership, or representation, as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition. Failure to do so within 90 days of the change in the information may result in the revocation of the facility's RPS certification.

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

7/3/2013

Oscar Alvarez
Los Angeles Department of Water and Power
111 N Hope Street
Los Angeles, CA 90012

RE: Approval of Application for RPS Certification, **Harbor Generating Station** Facility, RPS ID **61597F**.

Dear Mr. **Alvarez:**

The California Energy Commission has evaluated the application you submitted on behalf of **City of Los Angeles** for the **Harbor Generating Station** facility for certification and determined that the facility is eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition*, publication number CEC-300-2013-005-ED7-CMF, April 2013. The facility is assigned CEC-RPS-ID number **61597F**. Please use this number in all future correspondence with the Energy Commission regarding this facility's RPS certification status. A certificate confirming the RPS certification of the facility is enclosed.

This certification is effective on **July 8, 2011**, and will remain in effect unless certification is voluntarily withdrawn by an authorized representative of the facility, the facility is permanently shut down or decommissioned, or the certification is revoked by the Energy Commission because of noncompliance with the applicable RPS requirements. Beginning with the month containing **July 8, 2011**, all generation from **Harbor Generating Station** may be used for RPS compliance purposes if all of the requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*, continue to be met.

This certification is based on an evaluation of the RPS-eligibility of the facility, as described in the application and supporting documentation you submitted to the Energy Commission in **June 2013**, the accuracy of which was attested to by **Oscar Alvarez**, the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

As described in the submitted application, the facility is using **biomethane** as the primary renewable energy resource for electricity generation and will be using the **combustion technologies and fuel cell technologies** to determine the contribution of the primary and all secondary energy resources to generate electricity. A complete list of all renewable and nonrenewable energy resources listed in the application for certification is included on the enclosed certificate. California RPS-eligible renewable energy credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the *RPS Eligibility Guidebook, Seventh Edition*, and sufficient evidence has been submitted in support of compliance with those requirements after the close of the generation year.

To maintain the certification of this facility, you must comply with all applicable requirements for certified facilities set forth in the *RPS Eligibility Guidebook, Seventh Edition.* The Energy Commission must be notified promptly of any changes to the information included in the application for RPS certification of the facility. Failure to do so within 90 days of the change in

the information may result in the suspension of the facility's RPS certification. Any changes in the information submitted in the application for RPS certification must be reported to the Energy Commission in an amended certification application (CEC-RPS-1), and the amended application will supersede the original application. If any supporting documentation is necessary for the certification of the facility, it must be submitted with the amended application. The applicant may submit a letter confirming the applicant's desire to use the previously submitted supporting documentation and confirming that the documentation previously submitted is the most accurate and current information available for the facility in lieu of resubmitting the supporting documentation.

The Energy Commission may request additional information to monitor compliance with RPS requirements, and may conduct periodic or random reviews to verify records submitted for certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the certification requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*. If you do not respond to the Energy Commission's request for an information update in a timely manner, the facility's RPS certification status may be suspended.

As noted on the enclosed certificate for the **Harbor Generating Station**, this certification is subject to the following:

1. The application for certification identifies one or more sources of biomethane are being used at the facility. Only biomethane procured from the identified sources, produced in the manner specified, and delivered as indicated in the application, was considered when evaluating the certification application of the facility. These source(s) and information on the production method and quantity are listed in the enclosed certificate. For more information on this condition please refer to Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

2. This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below and in the certificate. Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility. See Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

The Energy Commission will list facilities that are participating in the RPS or have applied for participation in the RPS on its website. Any changes in a facility's certification or precertification status will also be posted on the Energy Commission's website.

If you have any questions about your certification, please do not hesitate to contact Christina Crume by phone at 916-654-4674 or by e-mail at <christina.crume@energy.ca.gov>.

Sincerely,

Kate Zocchetti

Kate Zocchetti
Renewable Energy Office

Enclosure

Cc: **City of Los Angeles**

Certified Eligible for California's Renewables Portfolio Standard

This is to officially state that beginning on ***July 8, 2011****, the facility:*

Harbor Generating Station

Owned by City of Los Angeles,
Located in Wilminton, CA,
Having Commenced Commercial Operations on:
January 31, 1995
And begun Using Renewable Fuel on:
August 1, 2009

Is certified by the California Energy Commission as eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the ***Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition,*** *publication number CEC-300-2013-005-ED7-CMF, April 2013, and assigned CEC-RPS-ID number:*

61597F

The application for RPS certification of this renewable electrical generation facility was submitted by **Oscar Alvarez**, of **Los Angeles Department of Water and Power**, on behalf of the facility owner **City of Los Angeles**. The accuracy of the information in the submitted application for RPS certification was attested to by **Oscar Alvarez,** the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

The facility has a total nameplate capacity, measured in alternating current, of

462 MW

Using the following renewable energy resource(s):

Biomethane

And using the following nonrenewable energy resource(s):

Natural Gas

The contribution of each energy resource to the electrical generation is based on the ***combustion technologies and fuel cell technologies*** *measurement methodology, as identified in the submitted application for RPS certification. California RPS-eligible Renewable Energy Credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition, and sufficient evidence has been submitted in support of compliance with those requirements.*

This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below.

The application for certification identifies information on the following sources of biomethane fuel that are identified as currently being used by the electrical generation facility to generate electricity:

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility.

The RPS certification of the Harbor Generating Station facility may be revoked if any of the information presented in the application for RPS certification, or supporting documentation, submitted to the California Energy Commission is determined to be false or inaccurate.

The California Energy Commission must be promptly notified of any changes to the information included in the application for RPS certification of the facility, including changes in the facility's operations, ownership, or representation, as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition. Failure to do so within 90 days of the change in the information may result in the revocation of the facility's RPS certification.

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

7/3/2013

Oscar Alvarez
Los Angeles Department of Water and Power
111 N Hope Street
Los Angeles, CA 90012

RE: Approval of Application for RPS Certification, **Valley Generating Station** Facility, RPS ID **61598F**.

Dear Mr. **Alvarez:**

The California Energy Commission has evaluated the application you submitted on behalf of **City of Los Angeles** for the **Valley Generating Station** facility for certification and determined that the facility is eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition*, publication number CEC-300-2013-005-ED7-CMF, April 2013. The facility is assigned CEC-RPS-ID number **61598F**. Please use this number in all future correspondence with the Energy Commission regarding this facility's RPS certification status. A certificate confirming the RPS certification of the facility is enclosed.

This certification is effective on **July 8, 2011**, and will remain in effect unless certification is voluntarily withdrawn by an authorized representative of the facility, the facility is permanently shut down or decommissioned, or the certification is revoked by the Energy Commission because of noncompliance with the applicable RPS requirements. Beginning with the month containing **July 8, 2011**, all generation from **Valley Generating Station** may be used for RPS compliance purposes if all of the requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*, continue to be met.

This certification is based on an evaluation of the RPS-eligibility of the facility, as described in the application and supporting documentation you submitted to the Energy Commission in **June 2013**, the accuracy of which was attested to by **Oscar Alvarez**, the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

As described in the submitted application, the facility is using **biomethane** as the primary renewable energy resource for electricity generation and will be using the **combustion technologies and fuel cell technologies** to determine the contribution of the primary and all secondary energy resources to generate electricity. A complete list of all renewable and nonrenewable energy resources listed in the application for certification is included on the enclosed certificate. California RPS-eligible renewable energy credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the *RPS Eligibility Guidebook, Seventh Edition*, and sufficient evidence has been submitted in support of compliance with those requirements after the close of the generation year.

To maintain the certification of this facility, you must comply with all applicable requirements for certified facilities set forth in the *RPS Eligibility Guidebook, Seventh Edition*. The Energy Commission must be notified promptly of any changes to the information included in the application for RPS certification of the facility. Failure to do so within 90 days of the change in

the information may result in the suspension of the facility's RPS certification. Any changes in the information submitted in the application for RPS certification must be reported to the Energy Commission in an amended certification application (CEC-RPS-1), and the amended application will supersede the original application. If any supporting documentation is necessary for the certification of the facility, it must be submitted with the amended application. The applicant may submit a letter confirming the applicant's desire to use the previously submitted supporting documentation and confirming that the documentation previously submitted is the most accurate and current information available for the facility in lieu of resubmitting the supporting documentation.

The Energy Commission may request additional information to monitor compliance with RPS requirements, and may conduct periodic or random reviews to verify records submitted for certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the certification requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*. If you do not respond to the Energy Commission's request for an information update in a timely manner, the facility's RPS certification status may be suspended.

As noted on the enclosed certificate for the **Valley Generating Station**, this certification is subject to the following:

1. The application for certification identifies one or more sources of biomethane are being used at the facility. Only biomethane procured from the identified sources, produced in the manner specified, and delivered as indicated in the application, was considered when evaluating the certification application of the facility. These source(s) and information on the production method and quantity are listed in the enclosed certificate. For more information on this condition please refer to Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

2. This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below and in the certificate. Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility. See Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

The Energy Commission will list facilities that are participating in the RPS or have applied for participation in the RPS on its website. Any changes in a facility's certification or precertification status will also be posted on the Energy Commission's website.

If you have any questions about your certification, please do not hesitate to contact Christina Crume by phone at 916-654-4674 or by e-mail at <christina.crume@energy.ca.gov>.

Sincerely,

Kate Zocchetti
Renewable Energy Office

Enclosure

Cc: **City of Los Angeles**

Certified Eligible for California's Renewables Portfolio Standard

This is to officially state that beginning on ***July 8, 2011****, the facility:*

Valley Generating Station

Owned by City of Los Angeles,
Located in Sun Valley, CA,
Having Commenced Commercial Operations on:
August 17, 2001
And begun Using Renewable Fuel on:
August 1, 2009

Is certified by the California Energy Commission as eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the ***Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition,*** *publication number CEC-300-2013-005-ED7-CMF, April 2013, and assigned CEC-RPS-ID number:*

61598F

The application for RPS certification of this renewable electrical generation facility was submitted by **Oscar Alvarez**, of **Los Angeles Department of Water and Power**, on behalf of the facility owner **City of Los Angeles**. The accuracy of the information in the submitted application for RPS certification was attested to by **Oscar Alvarez,** the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

The facility has a total nameplate capacity, measured in alternating current, of

788 MW

Using the following renewable energy resource(s):

Biomethane

And using the following nonrenewable energy resource(s):

Natural Gas

The contribution of each energy resource to the electrical generation is based on the ***combustion technologies and fuel cell technologies*** *measurement methodology, as identified in the submitted application for RPS certification. California RPS-eligible Renewable Energy Credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition, and sufficient evidence has been submitted in support of compliance with those requirements.*

This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below.

The application for certification identifies information on the following sources of biomethane fuel that are identified as currently being used by the electrical generation facility to generate electricity:

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility.

The RPS certification of the Valley Generating Station facility may be revoked if any of the information presented in the application for RPS certification, or supporting documentation, submitted to the California Energy Commission is determined to be false or inaccurate.

The California Energy Commission must be promptly notified of any changes to the information included in the application for RPS certification of the facility, including changes in the facility's operations, ownership, or representation, as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition. Failure to do so within 90 days of the change in the information may result in the revocation of the facility's RPS certification.

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

7/3/2013

Oscar Alvarez
Los Angeles Department of Water and Power
111 N Hope Street
Los Angeles, CA 90012

RE: Approval of Application for RPS Certification, **Haynes Generating Station** Facility, RPS ID **61599F**.

Dear Mr. **Alvarez:**

The California Energy Commission has evaluated the application you submitted on behalf of **City of Los Angeles** for the **Haynes Generating Station** facility for certification and determined that the facility is eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition*, publication number CEC-300-2013-005-ED7-CMF, April 2013. The facility is assigned CEC-RPS-ID number **61599F**. Please use this number in all future correspondence with the Energy Commission regarding this facility's RPS certification status. A certificate confirming the RPS certification of the facility is enclosed.

This certification is effective on **July 8, 2011**, and will remain in effect unless certification is voluntarily withdrawn by an authorized representative of the facility, the facility is permanently shut down or decommissioned, or the certification is revoked by the Energy Commission because of noncompliance with the applicable RPS requirements. Beginning with the month containing **July 8, 2011**, all generation from **Haynes Generating Station** may be used for RPS compliance purposes if all of the requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*, continue to be met.

This certification is based on an evaluation of the RPS-eligibility of the facility, as described in the application and supporting documentation you submitted to the Energy Commission in **June 2013**, the accuracy of which was attested to by **Oscar Alvarez**, the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

As described in the submitted application, the facility is using **biomethane** as the primary renewable energy resource for electricity generation and will be using the **combustion technologies and fuel cell technologies** to determine the contribution of the primary and all secondary energy resources to generate electricity. A complete list of all renewable and nonrenewable energy resources listed in the application for certification is included on the enclosed certificate. California RPS-eligible renewable energy credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the *RPS Eligibility Guidebook, Seventh Edition*, and sufficient evidence has been submitted in support of compliance with those requirements after the close of the generation year.

To maintain the certification of this facility, you must comply with all applicable requirements for certified facilities set forth in the *RPS Eligibility Guidebook, Seventh Edition.* The Energy Commission must be notified promptly of any changes to the information included in the application for RPS certification of the facility. Failure to do so within 90 days of the change in

the information may result in the suspension of the facility's RPS certification. Any changes in the information submitted in the application for RPS certification must be reported to the Energy Commission in an amended certification application (CEC-RPS-1), and the amended application will supersede the original application. If any supporting documentation is necessary for the certification of the facility, it must be submitted with the amended application. The applicant may submit a letter confirming the applicant's desire to use the previously submitted supporting documentation and confirming that the documentation previously submitted is the most accurate and current information available for the facility in lieu of resubmitting the supporting documentation.

The Energy Commission may request additional information to monitor compliance with RPS requirements, and may conduct periodic or random reviews to verify records submitted for certification. The Energy Commission may also conduct on-site audits and facility inspections to verify compliance with the certification requirements specified in the *RPS Eligibility Guidebook, Seventh Edition*. If you do not respond to the Energy Commission's request for an information update in a timely manner, the facility's RPS certification status may be suspended.

As noted on the enclosed certificate for the **Haynes Generating Station**, this certification is subject to the following:

1. The application for certification identifies one or more sources of biomethane are being used at the facility. Only biomethane procured from the identified sources, produced in the manner specified, and delivered as indicated in the application, was considered when evaluating the certification application of the facility. These source(s) and information on the production method and quantity are listed in the enclosed certificate. For more information on this condition please refer to Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

2. This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below and in the certificate. Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility. See Section II C: Biomethane of the *Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition.*

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

The Energy Commission will list facilities that are participating in the RPS or have applied for participation in the RPS on its website. Any changes in a facility's certification or precertification status will also be posted on the Energy Commission's website.

If you have any questions about your certification, please do not hesitate to contact Christina Crume by phone at 916-654-4674 or by e-mail at <christina.crume@energy.ca.gov>.

Sincerely,

Kate Zocchetti
Renewable Energy Office

Enclosure

Cc: **City of Los Angeles**

Certified Eligible for California's Renewables Portfolio Standard

This is to officially state that beginning on ***July 8, 2011****, the facility:*

Haynes Generating Station

Owned by City of Los Angeles,
Located in Long Beach, CA,
Having Commenced Commercial Operations on:
September 2, 1962
And begun Using Renewable Fuel on:
August 1, 2009

Is certified by the California Energy Commission as eligible for California's Renewables Portfolio Standard (RPS) under the criteria specified in the ***Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition,*** *publication number CEC-300-2013-005-ED7-CMF, April 2013, and assigned CEC-RPS-ID number:*

61599F

The application for RPS certification of this renewable electrical generation facility was submitted by **Oscar Alvarez**, of **Los Angeles Department of Water and Power**, on behalf of the facility owner **City of Los Angeles**. The accuracy of the information in the submitted application for RPS certification was attested to by **Oscar Alvarez,** the **Electrical Engineer** of **Los Angeles Department of Water and Power**.

The facility has a total nameplate capacity, measured in alternating current, of

1750.3 MW

Using the following renewable energy resource(s):

Biomethane

And using the following nonrenewable energy resource(s):

Natural Gas

The contribution of each energy resource to the electrical generation is based on the ***combustion technologies and fuel cell technologies*** *measurement methodology, as identified in the submitted application for RPS certification. California RPS-eligible Renewable Energy Credits will not be created for any electricity resulting from the use of nonrenewable energy resources, except in cases where the use of nonrenewable energy resources does not exceed a de minimis quantity or other allowance as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition, and sufficient evidence has been submitted in support of compliance with those requirements.*

This facility received certification using biomethane fuel source(s) that were contracted with and reported to the Energy Commission before March 29, 2012, and are eligible under the existing biomethane procurement contracts only for the procured under the contract(s) signed and reported to the Energy Commission prior to March 29, 2012. The quantities of biomethane from each contract, source, or both are limited to the quantities specified in the contract and identified below.

The application for certification identifies information on the following sources of biomethane fuel that are identified as currently being used by the electrical generation facility to generate electricity:

Contract:	Shell / LADWP	**Execution Date:**	12/20/2011
Start Date:	1/1/2012	**End Date:**	11/1/2021
Maximum Quantities:	35,930,000 MMBtu	**Maximum Daily Quantities:**	10,000 MMBtu/Day
	Producer of Biomethane		
Source 1	Imperial Landfill		
Source 2	Greentree Landfill		
Source 3	Turkey Creek Landfill		
Source 4	Live Oak Landfill		

Only biomethane procured from these sources, produced in the manner specified, and delivered as indicated, was considered when evaluating the certification application of the facility.

The RPS certification of the Haynes Generating Station facility may be revoked if any of the information presented in the application for RPS certification, or supporting documentation, submitted to the California Energy Commission is determined to be false or inaccurate.

The California Energy Commission must be promptly notified of any changes to the information included in the application for RPS certification of the facility, including changes in the facility's operations, ownership, or representation, as specified in the Renewables Portfolio Standard Eligibility Guidebook, Seventh Edition. Failure to do so within 90 days of the change in the information may result in the revocation of the facility's RPS certification.

Exhibit 6

Transaction Confirmation between LADWP and Shell, Effective August 1, 2009, dated July 27, 2009

TRANSACTION CONFIRMATION
FOR IMMEDIATE DELIVERY

EXHIBIT A

Shell Energy North America (US), L.P.	Effective Date: August 1, 2009

This Transaction Confirmation is subject to the NAESB Base Contract between Seller and Buyer dated February 1 2008 . The terms of this Transaction Confirmation shall be binding upon execution by the parties.

SELLER:	**BUYER:**
Shell Energy North America (US), L.P. ("Shell Energy") 909 Fannin, Plaza Level One Houston, Texas 77010 Attn: Contract Administration Phone: 713.767.5400 Fax: 713.265.2171 Base Contract No. 010-NG-BS-08129	Los Angeles Department of Water and Power ("LADWP") Energy Control Center 111 North Hope Street, Room 1148 Los Angeles, CA 90012 Attn: Brad Packer Phone: 818-771-6555 Fax: 818-771-6510 Transporter: Kern River Gas Transmission Company Transporter Contract Numbers: 1706,1006

Contract Price:
Fixed price:

a) The Contract Price is $9.80 per MMBtu for the quantity documented as Renewable Biomethane ("RB") as metered and delivered from the designated Landfill(s) (see Attachment A) on a monthly basis.

b) The Contract Price is $5.80 per MMBtu for the quantity delivered of Standard Baseload gas on a monthly basis that is in excess of documented metered and delivered RB gas from designated Landfill(s).

Delivery Period: Begin: August 1, 2009 End: June 30, 2014

Performance Obligation and Contract Quantity: Seller shall sell to Buyer, and Buyer shall purchase from Seller, 3,500 MMBtu per Day for August 1, 2009 through August 31, 2009 and 8,200 MMBtu per Day for September 1, 2009 through June 30, 2014 ("Contract Quantity") consisting of both RB and Standard Baseload gas as set forth in the Special Conditions. Seller agrees to dedicate solely to Buyer all of the RB that Seller has contracted for with the designated landfills set forth in Attachment A as of the Effective Date of this Transaction Confirmation up to the Contract Quantity hereof. Seller further agrees that all deliveries of RB received by Seller under said contracts with the designated landfills shall be delivered to Buyer under this Transaction Confirmation up to the Contract Quantity. Notwithstanding the foregoing, Buyer and Seller acknowledge and agree that RB is interruptible and is subject to the successful flow of scheduled RB from the facility".

During the Delivery Period hereunder, Seller may offer to Buyer and Buyer may agree to purchase supplementary volumes of RB from an additional landfill facility that is qualified and approved by Seller. Such additional RB volumes would be set forth in an Attachment 'A' to this Transaction Confirmation.

Firm (Fixed Quantity):	**Firm (Variable Quantity):**	**Interruptible:**
[X] MMBtus/Day	_____ MMBtus/Day Minimum	Up to [ ] MMBtus/Day
☐ EFP	_____ MMBtus/Day Maximum	

Delivery Point(s): Opal

Special Conditions:

General Terms and Conditions and Definitions:

"Project" means any of the four landfill source facilities set forth in Attachment A to the Transaction Confirmation hereof.

"Renewable Biomethane" ("RB"): means gas produced from the Project that:

(I) consists of Landfill Gas, as that term is defined in the California Energy Commission's ("CEC") Renewable Energy Program Overall Program Guidebook (January 2008); and

(II) contains all the environmental attributes associated with the use of Landfill Gas-derived fuel for the generation of electric power, but excluding (a) any federal or state tax credits associated with the collection, production, transfer or sale of such Landfill Gas, (b) any emission reduction credits required or available for the operation of a Landfill Gas processing facility at the Landfill to collect and process Landfill Gas, and (c) any credits or payments associated with the reduction in or avoidance of Greenhouse Gas emissions at the Landfill, including emission reduction credits, verified emission reductions, voluntary emission reductions, offsets, allowances, voluntary carbon units, avoided compliance costs, emission rights and authorizations, and CO2 reduction and sequestration. For purposes hereof, "Greenhouse Gas" means carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, or any other substance or combination of substances that may become regulated or designated as Greenhouse Gases under any federal, state or local law or regulation, or any emission reduction registry, trading system, or reporting or reduction program for Greenhouse Gas emission reductions that is established, certified, maintained, or recognized by any international, governmental (including U.N., federal, state, or local agencies), or non-governmental agency from time to time, in each case measured in increments of one metric tonne of carbon dioxide equivalent.

Standard Baseload gas is the positive difference between the total gas delivery and the RB delivered each month.

The Parties acknowledge that RB, as defined herein, is a qualifying resource under the Buyer's Renewable Portfolio Standard ("RPS") program in effect as of the execution date of this Transaction Confirmation, and neither Party makes any further representation in this regard.

Seller's Support of Buyer's RPS Program: Seller will provide an attestation identifying the specific landfill source, stating the RB source is Landfill Gas, that the RB is injected into a pipeline at the landfill and is measured in BTU's. The parties understand that this RB will be delivered to Buyer through an exchange rather than through direct long-haul transportation. Specifically, their environmental attributes will be unbundled from the gas at or near the landfill source, and the resulting gas without environmental attributes will be sold by Seller in the local market. The gas will be replaced with an equal volume of gas and be re-bundled with the environmental attributes for delivery to Buyer at the specified Delivery Point as RB. Seller shall provide any additional documentation or information related to the supply of RB, to the Buyer, as reasonably required to support Buyer's ongoing reporting compliance with Buyer's RPS program.

If the CEC, through its Renewable Energy Program Overall Program Guidebook (January 2008) or by other means alters its rules or guidelines for renewables compliance and disallows any or all of the RB facilities under this Transaction Confirmation, such action shall neither excuse Buyer from performance of its obligation hereunder nor give rise to any right of Buyer to a refund or any retroactive adjustment of the Contract Price hereof.

Reports, Invoices and Statements: Seller agrees to provide Buyer with a Monthly statement showing the amount of RB as metered from the individual landfill facilities along with the Standard Baseload gas comprising the previous Month's deliveries.

Seller: **Shell Energy North America (US), L.P.**	Buyer: **Los Angeles Department of Water and Power**
By: _____	By: _____
Title: _____	Title: Director of Resource Planning Procurement and Development
Date: Patricia L. Butler Contracts Manager	Date: 7/27/09

Attachment-A

(1) Rumpke Sanitary Landfill, located in Cincinnati, OH.
(2) Fort Smith Landfill, located in Fort Smith, AR.
(3) Greenwood Farms Landfill, located in Tyler, TX.
(4) Jefferson Davis Parish Sanitary Landfill, located in Welsh, LA.

RSH
7/27/09

7/27/09

Attachment-B

Seller Representation and Warranty:

Seller represents, warrants and covenants to Buyer that Seller has for the purposes of supplying Buyer under the terms and conditions of this Transaction Confirmation entered into NAESB Base Contracts for the Sale and Purchase of Natural Gas and RB with all of the four landfill facilities, for the dedicated output of RB listed in Attachment A hereof:

- Cambrian Energy / South Tex-Fort Smith Treaters, LLC effective July 21, 2009
- JDP Renewables, LLC effective July 24, 2009
- East Texas Renewables, LLC effective July 24, 2009
- GSF Energy, LLC effective July 23, 2009

RSH
7/27/09

7/27/09

Buyer

Exhibit 7

Transaction Confirmation between LADWP and Atmos, Effective September 1, 2009, dated August 20, 2009

TRANSACTION CONFIRMATION
FOR IMMEDIATE DELIVERY

ATMOS energy
Atmos Energy Marketing

Date: August 21, 2009
Transaction Confirmation #:

This Transaction Confirmation is subject to the Base Contract between Seller and Buyer dated effective upon execution by the LADWP. The terms of this Transaction Confirmation are binding unless disputed in writing within 2 Business Days of receipt unless otherwise specified in the Base Contract.

SELLER:	**BUYER:**
Atmos Energy Marketing, LLC ("AEM") 13430 Northwest Freeway, Suite 700 Houston, Tx. 77040 Attn: Jude Mariea Phone: 615-595-1203 Fax: 713-688-1625 Base Contract No. LADWP 96 125-516 Transporter: Kern River Transmission (KRT) Transporter Contract Number: _____	City of Los Angeles acting by and through the Department of Water and Power ("LADWP") 111 North Hope St, Room 1150, Los Angeles, CA 90012 Attn: Natural Gas Manager Phone: 213-367-1735 Fax: 213-367-1772 Base Contract No. 96 125-516 Transporter: Kern River Gas Transmission Transporter Contract Number: 1006, 1706

Contract Price: $ 9.80 per MMBtu

Delivery Period: Begin: September 1, 2009 End: July 31, 2014

Performance Obligation and Contract Quantity: Seller shall sell to Buyer, and Buyer shall purchase from Seller, up to 5,000 MMBtus per Day ("Contract Quantity") for the Delivery Period, consisting of both Environmental Attributes and Standard Base Load gas as set forth in the Special Conditions. Seller agrees to dedicate solely to Buyer all of the Environmental Attributes that Seller has contracted for with the designated landfill set forth in Attachment A as of the Effective Date of this Transaction Confirmation up to the Contract Quantity hereof. Seller further agrees that all deliveries of Landfill Gas received by Seller under said contract with the designated landfill shall be delivered to Buyer under this Transaction Confirmation up to the Contract Quantity. Notwithstanding the foregoing, buyer and Seller acknowledge and agree that Landfill Gas is interruptible and is subject to the successful flow of scheduled Landfill Gas from the facility.

During the Delivery Period hereunder, Seller may offer to Buyer and Buyer may agree to purchase supplementary quantities of Landfill Gas from additional landfill facilities that are qualified and approved by Seller.

Delivery Point(s): KRT - Opal, Wyoming

Special Conditions:

General Terms and Conditions and Definitions:

Transaction No.
0909005

Natural Gas Supply Business Group
Los Angeles Department of Water & Power
P.O. Box 51111, Rm 1150
Los Angeles, CA 90051-0100
Phone (213) 367-1748
Fax (213) 367-1772

21 Aug 09

Attn: Confirmation Dept
Rep: Marc Tronzo
Company: Atmos Energy Marketing
Fax: (713) 688-1625

Award and Confirmation Letter
Natural Gas Purchase, Sales, or Exchange

This letter serves to confirm the following transaction between your company and the Los Angeles Department of Water and Power.

Seller: Atmos Energy Marketing
Buyer: LADWP
Start: 01 Sep 09
End: 31 Jul 14
Type: Purchase
Price ($/MMBtu): As per Exhibit A
Volume: As per Exhibit A
Point of Sale, Purchase, Exchange: Opal/Kern Rec
Additional Terms and Conditions:

Los Angeles Department Of Water and Power

By: As per Exhibit A

Date: As per Exhibit A

Attestation

The undersigned hereby attests that the product being sold by GSF to Atmos Energy Marketing, LLC contains all the environmental attributes associated with pipeline quality gas generated from the conversion of raw landfill gas at GSF's processing facilities located at the McCarty Road Landfill in Houston, Texas ("Environmental Attributes"). The Environmental Attributes exclude (a) any federal or state tax credits associated with the collection, production, transfer or sale of such landfill gas, (b) any emission reduction credits required or available for the operation of a landfill gas processing facility at the Landfill to convert collected Landfill Gas to pipeline quality gas standards, and (c) any credits or payments associated with the capture and destruction of methane or the reduction in or avoidance of Greenhouse Gas emissions at the Landfill, including emission reduction credits, verified emission reductions, voluntary emission reductions, offsets, allowances, voluntary carbon units, avoided compliance costs, emission rights and authorizations, and CO2 reduction and sequestration. For purposes hereof, "Greenhouse Gas" means carbon dioxide (CO2), methane (CH4), nitrous oxide (NO2), hydroflourocarbons, perfluorocarbons, sulphur hexafluoride, or any other substance or combination of substances that may become regulated or designated as Greenhouse Gases under any federal, state or local law or regulation, or any emission reduction registry, trading system, or reporting or reduction program for Greenhouse Gas emission reductions that is established, certified, maintained, or recognized by any international, governmental (including U.N., federal, state, or local agencies), or non-governmental agency from time to time, in each case measured in increments of one metric ton of carbon dioxide equivalent.

The undersigned further attests that GSF has not agreed to sell the environmental attributes associated with any gas to be delivered to Atmos Energy Marketing, LLC to any other party.

"Project" means the landfill source facility set forth in Attachment A to the Transaction Confirmation hereof.

"Standard Base Load" means gas produced from the Project that:

(i) consists of Landfill Gas, as that term is defined in the California Energy Commission's ("CEC") Renewable Energy Program Overall Program Guidebook (January 2008); and

(ii) contains all the Environmental Attributes associated with the use of Landfill Gas derived fuel for the generation of electric power, but excluding (a) any federal or state tax credits associated with the collection, production, transfer or sale of such Landfill Gas, (b) any emission reduction credits required or available for this operation of a Landfill Gas processing facility at the Landfill to collect and process Landfill Gas, and (c) any credits or payments associated with the reduction in or avoidance of Greenhouse Gas emissions at the Landfill, including emission reduction credits, verified emission reductions, voluntary emission reductions, offsets, allowances, voluntary carbon units, avoided compliance costs, emission rights and authorizations and CO2 reduction and sequestration. For purposes hereof, "Greenhouse Gas" means carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, or any other substance or combination of substances that may become regulated or designated as Greenhouse Gases under any federal, state or local law or regulation, or any emission reduction registry, trading system, or reporting or reduction program for Greenhouse Gas emission reductions that is established, certified, maintained, or recognized by any international, governmental (including U.N., federal, state, or local agencies), or non-governmental agency from time to time, in each case measured in increments of one metric ton of carbon dioxide equivalent.

The parties acknowledge that Landfill Gas, as defined herein is a qualifying resource under the Buyer's Reneweble Portfolio Standard ("RPS") policy in effect as of the execution date of this Transaction Confirmation, and neither party makes any further representation in this regard.

Seller's Support of Buyer's RPS Program:

Seller will provide an attestation identifying the specific landfill source, stating that the supply source is Landfill Gas and that the Landfill Gas is injected into a pipeline at the landfill and is measured in BTU's. The parties understand that this Landfill Gas will be delivered to Buyer through an exchange rather than through direct long-haul transportation. Specifically, that Environmental Attributes will be unbundled from the gas near the landfill source, and the resulting gas without Environmental Attributes will be sold by Seller in the local market. The gas will be replaced with an equal quantity of gas and re-bundled with the Environmental Attributes for delivery to Buyer at the specified Delivery Point as Standard Base Load. Seller shall provided any additional documentation or information related to the supply of Standard Base Load, to the Buyer; as reasonably required to support Buyer's ongoing reporting compliance with Buyer's RPS program.

Should the California Energy Commission's ("CEC"), through its Renewable Energy Program Overall Program Guidebook (January 2008) or by other means, alter its rules or guidelines for renewable compliance and disallow any or all the Landfill facilities under this Transaction Confirmation, such action shall neither excuse Buyer from performance of its obligation hereunder nor give rise to any right of Buyer to a refund or any retroactive adjustment of the Contract Price hereof.

Notwithstanding anything in the Base Contract to the contrary, the Parties agree and acknowledge that title to all Gas sold by Seller and purchased by Buyer under this Transaction Confirmation shall pass from Seller to Buyer at the Delivery Point specified herein.

Seller: Atmos Energy Marketing, LLC	Buyer: City of Los Angeles acting by and through the Department of Water and Power
By: Mark Thams	By: Randy S. Howard
Title: Sr. VP	Title: Director of Resource Planning, Procurement and Development
Date: August 20, 2009	Date: 8/20/2009

Attachment –A

1. McCarty Road Landfill, located in Houston, Tx.

Exhibit 8

Letter from Energy Commission to Cambrian Energy Management, Dated September 22, 2009

STATE OF CALIFORNIA – THE RESOURCES AGENCY
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

ARNOLD SCHWARZENEGGER, *Governor*

September 22, 2009

Mr. Evan Williams
Cambrian Energy Management, LLC
624 South Grand Avenue, Suite 2420
Los Angeles, CA 90017-3325

RE: Letter of Interpretation - California Renewables Portfolio Standard Biogas Injected Into a Natural Gas Pipeline

Dear Mr. Williams:

The California Energy Commission is in receipt of your memorandum dated June 11, 2009 regarding the above issue, a copy of which is enclosed for your reference. The memorandum requested clarification of the biogas delivery scenarios that would be eligible for biogas injected into a natural gas pipeline under the state's Renewables Portfolio Standard (RPS).

The memorandum asked if transport and delivery of biogas could be "accomplished by an exchange of a quantity of gas at or within one of the interconnecting natural gas pipeline systems for an equal quantity of gas...to be delivered at a delivery location on a natural gas pipeline system within either the WECC region, including the State of California, without the requirement to pay for transportation costs across each of the interconnecting natural gas pipeline systems." This letter is in response to your inquiry.

According to the *Renewables Portfolio Standard Eligibility Guidebook, Third Edition*, biogas injected into a natural gas transportation pipeline must be "delivered into California for use in an RPS-certified multi-fuel facility"[1] to result in the facility's generation being considered as RPS-eligible electricity. Consequently, there must be a physical contract path from the injection facility to a point within the state of California. Other natural gas transport mechanisms are not satisfactory methods of delivery. For example, selling biogas at an out-of-state hub and purchasing an equivalent amount of gas from an in-state hub is not a satisfactory method of demonstrating delivery into California and would not meet the RPS eligibility requirements.

Biogas injected into a natural gas pipeline may be delivered as either firm or interruptible. However, only the biogas that is delivered may be counted towards the renewable component of the designated electric generation facility. In the event of an audit, at a minimum the parties must provide monthly invoices demonstrating delivery at each delivery point along the physical contract path. Further documentation may be required at the discretion of Energy Commission staff.

[1] California Energy Commission, January 2008, *Renewables Portfolio Standard Eligibility Guidebook, Third Edition*, page 20. CEC # 300-2007-006-ED3-CMF.

Your interest in California's RPS is appreciated. Please contact Kate Zocchetti, the Renewables Portfolio Standard Program Supervisor, at kzocchet@energy.state.ca.us or (916) 653-4710 if you have further questions or wish to discuss the contents of this letter.

Sincerely,

MELISSA JONES
Executive Director

Enclosure

cc: Chairman Karen Douglas
Commissioner Julia Levin
Harrison Clay, Esq.
Robert Laurie, Esq.

Exhibit 9

Transaction Confirmation between LADWP and Shell, Dated December 20, 2011

TRANSACTION CONFIRMATION
FOR IMMEDIATE DELIVERY

(Renewable Biomethane)

Date: December 20, 2011 ("Execution Date")
Transaction Confirmation #: _____

This Transaction Confirmation is subject to the Base Contract for Sale and Purchase of Natural Gas between Seller and Buyer dated December 20, 2011 (the "Base Contract"). Notwithstanding the terms and conditions of the Base Contract, this Transaction Confirmation is only binding upon execution by both Buyer and Seller.

SELLER:
Shell Energy North America (US), L.P.
909 Fannin, Plaza Level One
Houston, Texas 77010
Attn: Contract Administration
Phone: 713.767.5400
Fax: 713.265.2171
Base Contract No. _____

BUYER:
City of Los Angeles Acting By and Through the Department of Water and Power
111 North Hope St., Rm 1150
Los Angeles, CA 90012
Attn: Natural Gas Manager
Phone: 213.367.1735
Fax: 213.367.1772
Base Contract No. _____
Transporter: _____
Transporter Contract Number: _____

Contract Price:
Fixed price:

The Contract Price is $10.85 per MMBtu for the quantity documented as Renewable Biomethane ("RB") from the Projects (defined below) that is delivered to the Delivery Point.

Delivery Period: Begin: January 1, 2012 End: The first day of the Month following expiration of 118 Months from the Execution Date.

Delivery Point(s): SoCal Ehrenberg

Performance Obligation and Contract Quantity: Seller shall sell to Buyer, and Buyer shall purchase from Seller, up to the Maximum Daily Volume of RB per Day throughout the Delivery Period ("Contract Quantity"), except as set forth elsewhere in this Transaction Confirmation. Seller agrees to dedicate solely to Buyer all of the RB that Seller has contracted for with the Projects as of the Execution Date of this Transaction Confirmation up to the Contract Quantity (except for Pre-Sold RB, if any). Seller further agrees that all deliveries of RB received by Seller under said contracts with the Projects shall be delivered to Buyer under this Transaction Confirmation up to the Contract Quantity. Except for Ad-hoc RB delivered through Ad-hoc Projects, Seller will make commercially reasonable efforts to select Project(s) for all RB delivered under this Transaction Confirmation which are reasonably likely to generate RB up to the MDV and to deliver RB to Buyer up to the MDV for the Delivery Period of this Transaction Confirmation, and Seller will have binding agreements in place between Seller and the Project(s) which reasonably ensure that all RB generated from the Project(s) is provided to Seller (except for the Pre-Sold RB, if any, for a particular Project), and which agreements do not allow either Seller or the Project(s) to terminate or reduce such supply arrangements solely or in part for financial reasons (excluding termination rights (a) substantially similar to those allowed in Sections 4, 6 or 7(c) of this Transaction Confirmation or (b) any such other right allowing Seller solely to terminate such supply arrangements for which Seller hereby agrees not to exercise such termination rights without Buyer's written consent, which written consent, if requested by Seller, can be withheld by Buyer at Buyer's sole discretion) or at the mere election of either Seller or the Project(s).

In the event Seller or Seller's supplier of RB from a Project has the right to terminate a supply agreement which supply agreement is in conformance with the requirements of above paragraph: (1) if Seller has the right to terminate the supply agreement, Seller shall not terminate the agreement prior to (i) expending funds in an amount equal to the Compliance Threshold, if in the reasonable opinion of Seller such expenditure of funds is a feasible or practical method of resolving the issue in the supply agreement that led to Seller having a termination right in that supply agreement and (ii) thereafter requesting and failing to receive Buyer's agreement to reimburse Seller for Seller's expenditure above the Compliance Threshold (which agreement by Buyer to reimburse Seller may be withheld by Buyer at Buyer's discretion), such failure to be demonstrated by Buyer's written statement regarding such matter or Buyer's lack of agreement for such reimbursement following the expiration of 90 days following Seller's delivery of written notice to Buyer requesting confirmation whether Buyer will agree to such reimbursement; and (2) if Seller's supplier has the right to terminate the supply agreement, Seller shall, if Seller reasonably expects to be able to maintain the supply agreement, (i) expend funds in an amount equal to the Compliance Threshold in order to maintain the supply agreement, if in the reasonable opinion of Seller such expenditure of funds is a feasible or practical method of resolving the issue in the supply agreement that led to Seller's supplier having a termination right in that supply agreement and (ii) coordinate in good faith with Buyer (to the extent practicable) to offer Buyer a 90 day period to determine whether Buyer will fund amounts necessary to cause Seller's supplier to not terminate the supply agreement.

Notwithstanding the foregoing, Buyer and Seller acknowledge and agree that the production of RB varies and is subject to the successful flow of scheduled RB from the Projects to Seller.

Maximum Daily Volume ("MDV") **(MMBtu/Day):** 10,000 (the "Initial Volume"), as measured on a calendar year basis, with the first and last calendar years of the Delivery Period pro-rated proportionally, and as may be decreased pursuant to Section 6 below.

No RB Delivery Until Pre-Certification or Waiver by Buyer: Notwithstanding any other provision of this Transaction Confirmation, Seller shall not provide, and Buyer will not receive or pay for, RB under this Transaction Confirmation unless and until Buyer's Haynes and Valley Natural Gas Generation Stations are pre-certified (or certified, if not pre-certified) by the CEC or other relevant Governmental Authority, if any, to burn RPS-eligible RB provided under this Transaction Confirmation. After the Execution Date, Buyer will use its best efforts to have those generation stations so pre-certified, and will send written notice of such certification within 10 days of the date Buyer receives notice that the generation stations are pre-certified (the "Pre-Certification Notice"). Deliveries of RB under this Transaction Confirmation will begin as soon as feasible (but in any event no more than 10 days) after the Pre-Certification Notice is received by Seller. Buyer may waive this provision at any time by sending a written pre-certification wavier notice ("Pre-Certification Waiver Notice") to Seller, effective upon receipt by Seller. After the receipt of the Pre-Certification Wavier Notice by Seller, deliveries of RB will proceed under the same timeline as though a Pre-Certification Notice had been issued by Buyer.

SPECIAL PROVISIONS:

1. Gas Nominations. Seller agrees to nominate RB volumes for delivery to Buyer by 9:00 a.m. PST on the Business Day prior to any weekday or holiday and on or before 9:00 a.m. PST on Friday for delivery on Saturday, Sunday and Monday.

2. RB Availability. If a Project does not produce RB, the quantity of RB delivered hereunder shall be reduced accordingly and could equal zero, although Seller will select Project(s) and have suitable agreements in place with those Project(s) in conformance with this Transaction Confirmation, including without limitation the section entitled "Performance Obligation and Contract Quantity" above. Buyer and Seller acknowledge and agree that: (i) all sales hereunder are subject to availability of RB from the Projects selected by Seller, which will vary from time to time and (ii) sale by Seller of RB is subject to the availability to Seller of transportation and the successful flow of scheduled RB from the Projects to the Delivery Point. Notwithstanding the foregoing, Seller is obligated at all times to reasonably contractually arrange for Firm transportation if offered by a transporting entity (and if Firm transportation is not available, for the type of Interruptible transportation most similar to Firm that is available) and the successful flow of scheduled RB from the Projects to the Delivery Point through a physical contract path, and

such contractual arrangements shall not allow Seller or the transportation entity to cause the cessation of transportation of the RB to the Delivery Point solely or in part for financial reasons or at the mere election of Seller or the transportation entity or entities. Any non-availability of RB or of the transportation of RB, both as referred to in this section, shall relieve Seller from any obligation to sell or deliver affected quantities of RB to Buyer, and Seller shall not be liable for any damages associated with the resulting failure to sell or deliver such quantities (subject to Section 7(a) below). Seller's relief from certain damages as set forth in this section does not affect Buyer's termination rights as set forth in this Transaction Confirmation, including without limitation the termination rights in Section 6 of the Special Provisions.

3. Representations and Warranties. Seller represents and warrants that the Gas delivered to Buyer hereunder is RB from the Projects, that the RB shall be delivered to Buyer in accordance with and shall otherwise meet the requirements of the Renewables Portfolio Standard Eligibility Guidebook and that upon delivery of the RB by Seller to Buyer, Seller shall transfer to Buyer all Green Attributes associated with the production of such RB and shall retain no Green Attributes for its own use. With regard to the Cap and Trade Regulations and the Mandatory Reporting Regulations, Seller makes no representation or warranty about whether (a) the RB will create a carbon, or other liability, under such regulations or (b) CARB or any other Governmental Authority will determine that the importation of RB into California or the usage of RB to create electricity is 'carbon neutral' (or other similar categorization).

4. Supporting Documentation and Certification. Prior to and following delivery of the RB to Buyer, Seller or its designee shall, at Seller's cost, provide Buyer with any documentation required by the CEC, CARB, WREGIS or any other relevant Governmental Authority (excluding Buyer) to evidence that the RB production and the transportation of the RB from its point of production to the Delivery Point is consistent with the requirements of the Renewables Portfolio Standard Eligibility Guidebook, including without limitation any affidavits or attestations required by the CEC, CARB, WREGIS or any other relevant Governmental Authority (excluding Buyer), and further including without limitation and by way of example, the CEC-RPS-1A and CEC-RPS-1B forms. Seller shall, at its cost (the "Compliance Costs"), provide Buyer with all necessary information and assistance (including without limitation any required documentation, affidavits or attestations) in conducting verification of the RB in the manner required under the Mandatory Reporting Regulations or the Cap and Trade Regulations. If certification of the Project(s) becomes required by the CEC, CARB, WREGIS or any other relevant Governmental Authority (excluding Buyer) (a) in order for the RB generated from the Project(s) to qualify as RPS-eligible RB fuel, or (b) in order to receive or generate any GHG Attribute under the Mandatory Reporting Regulation or other benefit under the Cap and Trade Regulations, Seller must use commercially reasonable efforts to obtain and maintain such certification up to the Compliance Threshold. In the event Seller's total actual, direct and documented Compliance Costs incurred through the exercise of ordinary care exceed the Compliance Threshold, then Seller may provide written notice to Buyer requesting compensation for some or all of the Compliance Costs that exceed the Compliance Threshold. In the event the parties cannot reach agreement on the allocation of the Compliance Costs that exceed the Compliance Threshold prior to the expiration of 90 Days following the delivery of Seller's notice to Buyer, Seller may elect to terminate this Transaction Confirmation and as a result of such termination, neither party shall have any further obligations to the other hereunder (other than for performance already completed prior to such termination).

5. Production Data. On Buyer's written request, Seller shall provide Buyer with information and supporting documentation regarding historical RB production, and forecasts of future RB production from the Projects. Buyer acknowledges that any forecast of future RB production from the Projects (a) shall be prepared by Seller's suppliers, (b) is confidential and shall not be disclosed to third parties without Seller's written consent or as required by law, regulation or court order, and (c) is a projection only and not a guarantee, warranty or promise of the RB production and Seller does not warrant the accuracy of such RB production projection. Each party shall provide the other party cooperation and additional documentation (as may be reasonably available) pursuant to any audit of this Transaction Confirmation by a Governmental Authority.

6. Reduction of MDV or Early Termination of Transaction Confirmation Due to Reduced Delivery. Buyer has the right to reduce the MDV by written notice to Seller, effective when Seller receives such notice, if after July 1, 2012, the daily average delivery of RB during any period of 6 consecutive Months (the "Six Months Average") falls

below 75% of the MDV for any cause whatsoever, including without limitation those listed in Section 2 of the Special Provisions above, or Force Majeure. The new MDV resulting from Buyer's election pursuant to this Section shall be determined by Buyer, and advised to Seller in Buyer's notice, but shall not be less than the Six Months Average. Without limitation and by way of example, if the MDV is 10,000 MMBtu and the Six Months Average is 5,000 MMBtu, Buyer may reduce the MDV to an amount between 5,000 MMBtu and 9,999 MMBtu. Buyer has the right to terminate this Transaction Confirmation by written notice to Seller, effective when Seller receives such notice, if the Six Months Average falls below 5,000 MMBtu, such termination notice to be sent not later than 60 days following the end of the relevant six consecutive Month period.

7. Specialized Remedies.

(a) Seller Obligated RB Breach. In the absence of Force Majeure, Seller shall be in breach of its contractual obligation to deliver RB hereunder if: (i) the Projects produce RB in any quantity up to the MDV other than Pre-Sold RB ("Obligated RB"), and (ii) Seller delivers any of the Obligated RB to any party other than Buyer hereunder or the Project(s) deliver Obligated RB to a party other than Seller, unless Buyer has breached its obligations under the Base Contract and Seller sells RB to a third party during the period of Buyer's breach. In such event, Seller shall reimburse Buyer for the amount Buyer incurs to replace or would have paid to replace the quantity of RB sold or delivered by Seller to a third party or not delivered by the Project(s) to Seller ("Sold Or Undelivered RB"), based on the provisions of either a) Section 3.2 of the Base Contract (Cover Standard) if Buyer is able to secure a quantity of RB equal to the Sold Or Undelivered RB or b) Section 3.2 (Spot Price Standard) if Buyer is not able to secure or elects not to secure a quantity of RB equal to the Sold Or Undelivered RB, and in the case of both a) and b), to be calculated as though the obligation to deliver Sold Or Undelivered RB were a Firm obligation. Buyer is under no obligation to replace or attempt to replace Sold Or Undelivered RB but may instead elect in writing to be reimbursed by the Spot Price Standard.

(b) RB not Satisfying RB Definition Due to Seller's Fault. In the absence of (i) Force Majeure, (ii) Buyer's failure to perform its obligations hereunder, or (iii) a change in the RPS, the Renewable Portfolio Standard Eligibility Guidebook, the Overall Program Guidebook, the Mandatory Reporting Regulations or any law, rule or regulation of any Governmental Authority occurring after the Execution Date ("Additional Disqualifying Regulation") that would result in the RB subject to this Transaction Confirmation to no longer meet the definition of RB (but excluding an Additional Disqualifying Regulation which can be complied with by Seller through expenditures up to the Compliance Threshold), and further excluding such Additional Disqualifying Regulations whose compliance expenditures by Seller beyond the Compliance Threshold are tendered by Seller and Buyer agrees to fund), and due to a fault of Seller or its contractors, agents or affiliates, if any Gas delivered by Seller hereunder does not meet the definition of RB (including if the Gas is not accompanied with Green Attributes) ("Affected Gas"), then Seller shall reimburse Buyer for an amount equal to the quantity of the Affected Gas multiplied by (i) the green attributes price component ("Green Attributes Price Component") for Gas, which shall be equal to $5.35 per MMBtu.

(c) Early Termination of Transaction Confirmation Due to RB Determination. Buyer (but not Seller) has the right to terminate this Transaction Confirmation upon 60 Days' written notice given to Seller if an Additional Disqualifying Regulation occurs that would result in the RB subject to this Transaction Confirmation to no longer qualify as RB and/or an RPS eligible fuel or the energy generated by such RB to no longer count towards Buyer's electrical RPS obligations, whether due to the production issues, transportation path issues, or otherwise, but not due to Buyer's fault or negligence (including, but not limited to, Buyer's lack of compliance with any applicable law, regulation or rule of any Governmental Authority involving expenses up to but not greater than the Compliance Threshold).

(d) Termination Due to Certification Process.

(i) **Pre-Certification Terminations**: if Seller has not received a Pre-Certification Notice or Pre-Certification Waiver Notice from Buyer by 5:00 pm PPT on February 29, 2012 ("Seller Termination Deadline"), Seller may terminate this Transaction Confirmation upon written notice to Buyer, effective

upon receipt of such notice by Buyer. Seller's right to issue this termination notice will expire in the event Buyer delivers a Pre-Certification Notice or Pre-Certification Waiver Notice to Seller. If, despite Buyer's efforts, Buyer's Haynes and Valley Natural Gas Generation Stations have not been pre-certified (or certified, if not pre-certified) by the CEC or other relevant Governmental Authority, if any, to burn RPS-eligible RB provided under this Transaction Confirmation by six (6) Months after the Execution Date, Buyer may terminate this Transaction Confirmation upon delivery of written notice to Seller, effective upon receipt of such notice by Seller, such notice to be delivered not later than 30 Days following expiration of such 6 Month period.

(ii) **Certification Terminations**: if, despite Buyer's efforts, Buyer's Haynes and Valley Natural Gas Generation Stations have not been finally certified (whether or not those generation stations have been pre-certified) by the CEC or other relevant Governmental Authority, if any, to burn RPS-eligible RB provided under this Transaction Confirmation by ten (10) Months after the Execution Date, Buyer may terminate this Transaction Confirmation upon sixty (60) days' written notice to Seller. Buyer's right to issue this termination right will expire one year from the Execution Date. Buyer shall be liable to Seller for all RB delivered by Seller to Buyer prior to the effectiveness of such termination notice.

8. Additional Projects. Seller may add one or more additional Projects ("Additional Project") to this Transaction Confirmation upon delivery of a written, signed request letter ("Request Letter") to Buyer and receipt of Buyer's consent indicated by signing the Request Letter, such consent not to be unreasonably withheld. The Request Letter shall contain no additional contractual terms or conditions whatsoever, but will only identify the Additional Project(s) to be added. Each proposed Additional Project shall be capable of producing RB as defined herein and Seller may utilize such Additional Project to provide the MDV up to the Initial Volume. Although Additional Projects may be added, in no event can the RB provided under this Transaction Confirmation exceed the Initial Volume. If the Additional Projects have any Pre-Sold RB commitments, those Pre-Sold RB commitments will be specified in the Request Letter, as well as all other information in the data categories as are set forth for Projects in Attachment A. After Buyer's consent to Additional Project(s), Seller will within 90 days provide to Buyer an updated version of Attachment A reflecting the new Additional Projects, which updated version will then replace the prior Attachment A. All terms, conditions and obligations of this Transaction Confirmation and the Base Contract, including without limitation and by way of example, the obligation that RB meet the requirements of the Renewable Portfolio Standard Eligibility Guidebook, apply fully and equally to any Additional Projects that may be utilized under this Transaction Confirmation and to any RB that may be supplied from those Additional Projects.

9. Ad-hoc RB. If, despite arranging to obtain RB from Project(s) pursuant to the terms of this Transaction Confirmation and the Base Contract, Seller is unable to deliver RB up to the MDV from those Project(s), Seller may at its discretion supply replacement RB to Buyer under terms and conditions identical to those set forth in this Transaction Confirmation and the Base Contract ("Ad-hoc RB") until such time as the Project(s) produce RB up to the MDV. Before supplying Ad-hoc RB to Buyer, Seller will provide Buyer with a notice of the anticipated quantity of such Ad-hoc RB to be provided and the projects ("Ad-hoc Project") from which the Ad-hoc RB will originate. Such notice will be in the form of a written, signed ad-hoc RB request letter ("Ad-hoc Request Letter") delivered by Seller to Buyer, which Buyer will consent to by signing the Ad-hoc Request Letter, such consent not to be unreasonably withheld. The Ad-hoc Request Letter will contain no additional contractual terms or conditions whatsoever, but will only identify the Ad-hoc Project(s) to be used for supplying Ad-hoc RB. All terms, conditions and obligations of this Transaction Confirmation and the Base Contract, including without limitation and by way of example, the obligation that RB meet the requirements of the Renewable Portfolio Standard Eligibility Guidebook, apply fully and equally to any Ad-hoc RB that may be supplied and to any Ad-hoc Projects that may be utilized under this Transaction Confirmation.

10. Credit Terms. With respect to RB sales hereunder, the Green Attributes Price Component of the Contract Price as identified in Section 7(b) shall be excluded from the definition of "Market Value", as set forth in Section 10.3.1 of the Base Contract, for the purposes of calculating "Contract Exposure" (as defined in Section 7 of Exhibit B of the Base Contract).

11. Compliance Threshold Cumulative. Seller is required under various sections of this Transaction Confirmation (e.g. (a) the last paragraph of the "Performance Obligation and Contract Quantity" section, (b) section

4 and (c) section 7(b)) to expend funds for various reasons relating to the Compliance Threshold. Seller's obligation to expend such amounts is cumulative such that upon Seller's aggregate expenditures under this Transaction Confirmation of an amount equal to the Compliance Threshold, Seller shall be deemed to have satisfied its obligation under all such provisions herein. Likewise, Buyer under various sections of this Transaction Confirmation may expend funds up to the Compliance Threshold, and Buyer's expenditures up to the Compliance Threshold are cumulative, such that upon Buyer's aggregate expenditures under this Transaction Confirmation of an amount equal to the Compliance Threshold, Buyer will be deemed to have satisfied its obligation under all such provisions herein.

DEFINITIONS:

"**California Renewables Portfolio Standard**" or "**RPS**" means the renewable energy program and policies established by California State Senate Bills 1038, 1078, and X1 2, codified in California Public Utilities Code Sections 399.11 through 399.20 and California Public Resources Code Sections 25740 through 25751, and as all of the foregoing may be amended, replaced or supplemented from time to time.

"**Cap and Trade Regulations**" means the regulation entitled "California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms", as approved by the California Air Resources Board on December 16, 2010, which will be set forth in division 3, chapter 1, subchapter 10, article 5 of title 17 of the California Code of Regulations, and as all of the foregoing may be amended, replaced or supplemented from time to time.

"**CARB**" means the California Air Resources Board or its successor agency.

"**CEC**" means the California Energy Commission or its successor agency.

"**Compliance Threshold**" means an amount (in USD) equal to $400,000.

"**GHG Attribute**" means: any avoided emissions of carbon dioxide (CO2), methane (CH4) and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere, and the reporting rights to these attributes.

"**Governmental Authority**" means any federal, state, local, or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority. Governmental Authority includes, but is not limited to, the CEC and the California Public Utilities Commission or their successor agencies and, for the purposes of Sections 7(b) and (c), excludes Buyer and the City of Los Angeles).

"**Green Attributes**" means any and all credits, benefits, emissions reductions, offsets, and allowances, however entitled or defined, attributable to the production and delivery of RB to be transported to Buyer and Buyer's use of the RB to generate renewable energy. Green Attributes include but are not limited to:

(i) GHG Attributes;

(ii) the ability to generate renewable electricity certificates or similar instruments in respect of the electricity generated from combusting the RB at a power plant certified by the CEC as an eligible renewable resource; and

(iii) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants, including, without limitation, those pollutants covered by the "United Nations Framework Convention on Climate Change ("UNFCC").

Green Attributes do **not** include:

(i) any energy, capacity, reliability or other power attributes from a generating facility;

(ii) production tax credits or benefits associated with the construction or operation of energy projects and other financial incentives in the form of credits, reductions, or financial tax allowances associated with an energy project that are applicable to a state or federal income taxation obligation;

(iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular pre-existing pollutants or the promotion of local environmental benefits;

(iv) emission reduction credits encumbered or used by a generating facility for compliance with local, state, or

federal operating and/or air quality permits (excepting GHG Attributes); or

(v) any credits or payments (other than offset credits or GHG Attributes) associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.

"**Mandatory Reporting Regulations**" means the regulation for the mandatory reporting of greenhouse gas emissions promulgated by the California Air Resources Board as set forth in division 3, chapter 1, subchapter 10, article 2 of title 17 of the California Code of Regulations, specifically excluding the verification process and any reporting obligations pursuant to the Cap and Trade Regulations, and as all of the foregoing may be amended, replaced or supplemented from time to time.

"**Overall Program Guidebook**" means the CEC's Renewable Energy Program Overall Program Guidebook, Third Edition (January 2011), or subsequent versions or functional replacements thereof.

"**Pre-Sold RB**" means the maximum volume of RB committed to a third party by Seller or a Project as of the Execution Date, or for Additional Projects, as of the date Seller signs the relevant Request Letter.

"**Projects**" means collectively (i) the projects listed in Attachment A to this Transaction Confirmation, and (ii) all Additional Projects.

"**Renewable Biomethane**" or "**RB**" means (a) Pipeline Biomethane (as defined in the Overall Program Guidebook) that is generated by a Project and (b) all Green Attributes associated with such Pipeline Biomethane.

"**Renewables Portfolio Standard Eligibility Guidebook**" means the CEC's Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition, January 2011, or subsequent versions or functional replacements thereof.

"**Western Renewable Energy Generation Information System**" or "**WREGIS**" means the renewable energy registry and tracking organization located in Salt Lake City, UT or its successor agency.

Seller: **SHELL ENERGY NORTH AMERICA (US), L.P.**	Buyer: **CITY OF LOS ANGELES ACTING BY AND THROUGH THE DEPARTMENT OF WATER AND POWER**
By: Beth Bowman	By: Ronald O. Nichols
Name: **Beth Bowman**	Name: **Ronald O. Nichols**
Title: **Sr. Vice President**	Title: **General Manager - LADWP**
Date: December 11, 2011	Date: December 13, 2011

APPROVED AS TO FORM AND LEGALITY
CARMEN A. TRUTANICH, CITY ATTORNEY

DEC 07 2011

BY: _____

DEPUTY