

TRANSMITTAL

0150-11779-0000

TO The Council	DATE 07/26/21	COUNCIL FILE NO.
FROM The Mayor	COUNCIL DISTRICT	

Proposed Amendment No. 1 to Contract No. 123575 with Constellation NewEnergy, Inc. for the Development, Design, Construction, Operation, and Maintenance of the Hyperion Treatment Plant Digester Gas Utilization Project

Approved and transmitted for processing.
See the City Administrative Officer report attached.


MAYOR

(Rich Llewellyn for)

MWS:JPQ:10210134t

Report From
OFFICE OF THE CITY ADMINISTRATIVE OFFICER
Analysis of Proposed Contract
(\$25,000 or Greater and Longer than Three Months)

To: The Mayor	Date: 07-09-21	C.D. No. All	CAO File No.: 0150-11779-0000				
Contracting Department/Bureau: PW Bureau of Sanitation		Contact: Octavio Murillo, (310) 648-5876 Nancy Lantin, (213) 485-2158					
Reference: Transmittal from the Board of Public Works dated October 13, 2020							
Purpose of Contract: To develop, design, construct, operate, and maintain the Hyperion Treatment Plant Digester Gas Utilization Project.							
Type of Contract: () New contract (X) Amendment, Contract No. C-123575		Contract Term Dates: April 29, 2017 to April 28, 2027					
Contract/Amendment Amount: \$0							
Proposed amount \$0 + Prior award(s) \$263,713,834.48 = Total \$263,713,834.48							
Source of funds: Sewer Capital Fund and Sewer Operations and Maintenance Fund							
Name of Contractor: Constellation NewEnergy, Inc.							
Address: 1310 Point St, 13th Floor, Baltimore, MD 21231							
	Yes	No	N/A	Contractor has complied with:	Yes	No	N/A
1. Council has approved the purpose	X			8. Business Inclusion Program	X		
2. Appropriated funds are available	X			9. Equal Benefits & First Source Hiring Ordinances	X		
3. Charter Section 1022 findings completed	X			10. Contractor Responsibility Ordinance	X		
4. Proposals have been requested	X			11. Slavery & Border Wall Disclosure Ordinances	X		
5. Risk Management review completed	X			12. Bidder Certification CEC Form 50	X		
6. Standard Provisions for City Contracts included	X			13. Prohibited Contributors (Bidders) CEC Form 55			X
7. Workforce that resides in the City: 6.7%				14. California Iran Contracting Act of 2010	X		

RECOMMENDATION

That the Council, subject to the approval of the Mayor, authorize the President or two members of the Board of Public Works and the Director of the Bureau of Sanitation to execute the proposed Amendment No. 1 to Contract No. 123575 with Constellation NewEnergy, Inc. in order to update contract elements for the development, design, construction, operation, and maintenance of the Hyperion Treatment Plant Digester Gas Utilization Project, subject to approval by the City Attorney and compliance with the City's contracting requirements.

SUMMARY

In accordance with Executive Directive No. 3, the Board of Public Works (Board), on behalf of the Bureau of Sanitation (Bureau), requests authority to execute the proposed Amendment No. 1 (Amendment) to Contract No. 123575 with Constellation NewEnergy, Inc. (CNE) for the development, design, construction, operation, and maintenance of the Hyperion Treatment Plant Digester Gas Utilization Project (DGUP). The original contract has a term starting on January 21, 2014 and ending once the ten year operating period has been completed with a cost of \$227,555,000. The Amendment is effective for a ten year term starting April 29, 2017 and does not change the cost of the contract,

Jessica Quach			
JPQ	Analyst	10210134	City Administrative Officer

only scope elements. The starting date memorializes when operations for the DGUP commenced and provides for an ending date to the contract.

The DGUP is a design-build-operate-maintain project designed to capture digester gas, which is a by-product of the wastewater treatment process. The gas is then combusted at the Hyperion Bioenergy Facility (HBF) and converted into electricity that can be used at the plant. Contract No. 123575 provided contracts for both the design-build process as well as the operation and maintenance process which would last for ten years after the commencement of operations. Operations started in 2017 and the ten year operating period began. Under the terms of the contract, CNE has operated the HBF, which utilizes 95 percent of the digester gas captured, to produce steam and electricity for the anaerobic digesters at the plant.

Since approval in 2013, multiple change orders have been issued and approved by the Board for various reasons including project scope changes, regulatory changes, and unforeseen activities. The original contract cost of \$227,555,000 has increased by \$36,158,834 to a revised cost of \$263,713,834 as a result of change orders and contingency. As the DGUP is a capital project with construction and maintenance components, the Board has authority to approve change orders as needed. The proposed Amendment will codify these changes as they affect the design-build process, the operations and maintenance process, as well as the equipment that will be turned over to the City at the end of the contract.

The proposed Amendment includes the following changes:

- Language that addresses the unforeseen conditions and delays met by CNE and was agreed upon in Supplemental Change Order No. 33 (Change Order 33). Change Order 33 provided for the purchase of several major equipment additions which were not part of the original design and affected the final design, project timeline, and future operation and maintenance activities.
- Updated warranties, liabilities, design-build process, and operation and maintenance process to include carbon dioxide catalysts, the selective catalytic reduction system, and exhaust collectors. These pieces of equipment were added as the result of the Southern California Air Quality Management District's (SCAQMD) changes to their permit which decreased the amount of nitrogen oxides emissions allowable. As the design was changed after the contract was executed, CNE is not liable for the failure of the specific systems affected by the change in the SCAQMD permit. The changes are necessary to maintain compliance with the SCAQMD permit.
- City responsibility for utilities and chemicals. CNE and the City have agreed that Appendix 47, which relates to the City's involvement in CNE's natural gas procurement process, is no longer needed. As such, Appendix 47 will be deleted from the contract and the City will be able to procure natural gas from a different vendor instead of participating in CNE's procurement process.

In accordance with the Los Angeles Administrative Code Section 10.5(a), Council approval is required as the term of the contract exceeds three years.

FISCAL IMPACT STATEMENT

There is no General Fund impact. The proposed Amendment does not change the total cost of the project.

FINANCIAL POLICIES STATEMENT

The recommendations in this report complies with the City's financial policies as expenditures of special funds are limited to the mandates of the funding source.

Attachment

MWS:JPQ:10210134

BOARD OF PUBLIC WORKS
MEMBERS

GREG GOOD
PRESIDENT

AURA GARCIA
VICE PRESIDENT

DR. MICHAEL R. DAVIS
PRESIDENT PRO TEMPORE

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CITY OF LOS ANGELES

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ERIC GARCETTI
MAYOR

OFFICE OF THE
BOARD OF PUBLIC WORKS

DR. FERNANDO CAMPOS
EXECUTIVE OFFICER

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ROOM 361, CITY HALL
LOS ANGELES, CA 90012

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<http://bpw.lacity.org>

October 13, 2020

BPW-2020-0636

The Honorable Mayor Garcetti
City Hall – Room 320
Los Angeles, CA 90012
Attn: Heleen Ramirez

The Honorable City Council
Room No. 395
City Hall

**CONTRACT AMENDMENT NO. 1 - CONSTELLATION NEW ENERGY, INC. -
HYPERION WATER RECLAMATION PLANT DIGESTER GAS PROCESSING SYSTEM**

As recommended in the accompanying report from the Directors of the Bureaus of Sanitation and Contract Administration, which this Board has adopted, the Board of Public Works (Board) recommends that the Mayor and the City Council:

1. APPROVE the request that the Board of Public Works be authorized to execute Amendment No. 1 to the Hyperion Water Reclamation Plant Digester Gas Processing System; and
2. AUTHORIZE the President or two members of the Board of Public Works to execute the contract amendment upon the Mayor's and Council's authorization.

(W.O. SHWRDGUP, C-123575)

Fiscal Impact: There is no impact to the General Fund.

Sincerely,

A handwritten signature in black ink, appearing to read "F. Campos", is written over a circular stamp.

DR. FERNANDO CAMPOS,
Executive Officer, Board of Public Works

FC:lc



DEPARTMENT OF PUBLIC WORKS

BUREAU OF SANITATION
BUREAU OF CONTRACT ADMINISTRATION
JOINT BOARD REPORT NO. 1
OCTOBER 13, 2020

ADOPTED BY THE BOARD
PUBLIC WORKS OF THE CITY
of Los Angeles, California
AND REFERRED TO THE MAYOR
OCT 13 2020

AND REFERRED TO THE CITY COUNCIL
Executive Officer
Board of Public Works

CD: 11

AUTHORITY TO EXECUTE AMENDMENT NO. 1 TO THE HYPERION WATER RECLAMATION PLANT DIGESTER GAS PROCESSING SYSTEM CONTRACT NO. C-123575 WITH CONSTELLATION NEW ENERGY FOR THE BENEFICIAL USE OF DIGESTER GAS (W.O. SHWRDGUP)

RECOMMENDATIONS

1. Approve and forward this report with transmittals to the Mayor and City Council (Council) with the request that the Board of Public Works (Board) be authorized to execute Amendment No. 1 to the Hyperion Water Reclamation Plant (HWRP) Digester Gas Processing System No. C-123575.
2. Upon the Mayor's and Council's authorization, the President or two members of the Board of Public Works will execute the contract amendment.
3. Return the executed contract amendment to LA Sanitation and Environment (LASAN) for further processing. Contact Octavio Murillo at (310) 648-5876 to arrange for pick up.

TRANSMITTALS

1. Copy of the LASAN Board Report No. 1, adopted November 28, 2012 recommending LASAN to negotiate contract with top ranked contractors for the implementation of the HWRP Digester Gas Utilization Project.
2. Copy of the LASAN and Bureau of Contract Administration Joint Board Report No. 1, adopted November 25, 2013, authorizing LASAN to award the contract for the HWRP Digester Gas Processing System to Constellation NewEnergy, Inc. (CNE).
3. Copy of the LASAN and Bureau of Engineering Joint Board Report No. 2, adopted March 14, 2018 authorizing the City Engineer to approve and revise construction budget and issue Supplemental Agreement Change Order No. 33.
4. Copy of proposed Amendment No. 1 to Contract No. C-123575.

FISCAL IMPACT STATEMENT

There will be no impact to the General Fund as a result of the proposed Amendment No. 1.

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DISCUSSION

The Hyperion Water Reclamation Plant (HWRP) anaerobic digesters produce approximately 7 million cubic feet per day of digester gas (DG) as a by-product of the wastewater treatment process. DG, a mixture primarily of methane and carbon dioxide, is processed and then combusted at the Hyperion Bioenergy Facility (HBF) to produce electricity and steam for plant operations.

The HBF consists of two 11.35 megawatt (MW) Solar Mars Combustion Turbine Generator (CTG) built and packaged by Solar Turbines. Each CTG has a dedicated Heat Recovery Steam Generator (HRSG) that uses the waste heat from the CTGs to produce steam. The HRSG steam is piped to a 7.8 MW single extraction Steam Turbine Generator (STG), which produces additional power and supplies up to 70,000 pounds per hour of steam to heat HWRP's anaerobic digesters.

Constellation NewEnergy, Inc (CNE) commenced commercial operation of the HBF on April 29, 2017, and under the terms and conditions of the HWRP DG Processing System, has operated the HBF to utilize at least 95% of the HWRP DG to produce electricity and steam on an annual basis. Since the time of the original contract negotiation and during the course of operations, project scope changes, regulatory changes and unforeseen maintenance activities require the contract language to be updated.

The amendment only contains terms and sections being added or modified. Original contract language that was not modified is not included in the amendment. The following are reasons for amending the contract:

- The proposed amendment contains language agreed to by the City and CNE and approved by the Board of Public Works as Change Order 33. This amendment is intended to conform with approved Supplemental Agreement Change Order 33 for settlement of claims and additional costs acquired by the Contractor. The amended language is composed to coincide with unforeseen conditions during construction and changes to building codes and air permits.
- On September 29, 2016, Southern California Air Quality Management District (SCAQMD) approved the final Air Permit, where conditions for nitrogen oxides emission decreased from 25 parts per million (ppm) to 18.8 ppm. As a result, the HRSG had to be redesigned to include the installation of a CO catalyst. Without the installation of the CO catalyst, the City would not have been able to meet the stringent environmental regulations.
- Due to SCAQMD Air Permit changes, the original design of certain systems needed modification after the contract was executed. As part of the amendment, CNE is not liable for failure of specific systems affected by the changes in the Air Permit.

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- The contract requires new language for making purchases such as: replacing the CO catalyst, SCR System, and Exhaust Collector. The new Additional Services section allows the City to make such purchases expeditiously. Without the amendment, there is no procedure for purchasing and replacing equipment that may fail unexpectedly.
- Both CNE and the City are in agreement that the terms for Appendix 47, Natural Gas Procurement, have been met and this language is no longer needed. Deleting Appendix 47 allows the City to seek a vendor that can provide natural gas at a competitive price that will save the City cost. Without the amendment, natural gas procurement can be delayed and will increase electricity usage.

The changes to the contract listed above associated with the construction phase have already been approved and paid for under Supplemental Change Order No. 33 that was approved by your Board on March 14, 2018. They are being incorporated into the contract language at this time as they are material to either the operations phase or the equipment to be turned over to the City at the end of the contract.

Scope of Work

The scope of this agreement authorizes CNE to continue providing the required services for the City's DG beneficial use. This amendment includes additional services that will enhance the performance, operation, and management of the system.

Cost Estimate

The total cost ceiling of this contract of \$263,713,834.48 remains the same and does not change by exercising this amendment.

Term

There is no extension of the contract term in this proposed amendment. Contract duration is for 10 years from April 29, 2017 to April, 28, 2027.

Subcontractor Outreach Program

At the time of distribution of the RFP, the City had established an MBE/WBE/OBE Subcontractor Outreach Program for this project with anticipated MBE and WBE participation levels of 10 and 2 percent respectively. At the time of contract award, CNE pledged participation levels were 1.18 percent MBE, 3.14 percent WBE, and 3.73 percent OBE. As of December 31, 2019, the achieved MBE/WBE/OBE subcontractor participation levels for CNE are 4.38 percent MBE, 18.12 percent WBE, and 46.06 percent OBE (See Table 1 below).

Gender/Ethnicity Codes:

AA = African American
SAA = Subcontinent Asian American
C = Caucasian
M = Male

HA = Hispanic American
APA = Asian Pacific American
NA = Native American
F = Female

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Table 1: The achieved MBE/WBE/OBE subcontractor participation levels for CNE as of December 31, 2019 are as follows:

Listed Subcontractor	MBE/WBE/ EBE	Gender/ Ethnicity	% of Contract Amount Invoiced	Contract Amount Invoiced
Vanderweil Engineers	OBE	-	5.51%	\$9,014,196
Stantec Consulting Services Inc. (formerly MWH Americas, Inc.)	OBE	-	2.34%	\$3,824,273
Morrow Meadows Electric	WBE	F/C	17.75%	\$29,007,742
OneSource Supply Solutions	MBE	M/HA	3.91%	\$6,383,912
Performance Mechanical Inc.	OBE	-	39.21%	\$64,100,000
Safety Dynamics Group, Inc.	WBE	F/C	0.37%	\$612,700
Maarky Thermal Systems	OBE	-	0.47%	\$770,726
Total MBE Participation			3.91%	\$6,383,912
Total WBE Participation			18.12%	\$29,620,442
Total OBE Participation			47.54%	\$77,709,195
Total MBE/WBE/OBE Participation			69.57%	\$113,713,549
Total Contract Invoiced				\$163,460,834

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Table 2: The design-build phase of the contract is complete. CNE is exclusively fulfilling the O&M phase of the contract. No subcontractors are being utilized for the O&M phase; therefore, for Amendment No. 1 the pledged MBE/WBE/OBE subcontractor participation levels are as follows:

Listed Subcontractor	MBE/WBE/OBE	Gender/Ethnicity	% of Contract Pledged	Contract Amount Pledged
Vanderweil Engineers	OBE	-	3.42%	\$9,014,196
Stantec Consulting Services Inc. (formerly MWH Americas, Inc.)	OBE	-	1.45%	\$3,824,273
Morrow Meadows Electric	WBE	F/C	11.00%	\$29,007,742
OneSource Supply Solutions	MBE	M/HA	2.42%	\$6,383,912
Performance Mechanical Inc.	OBE	-	24.31%	\$64,100,000
Safety Dynamics Group, Inc.	WBE	F/C	0.23%	\$612,700
Maarky Thermal Systems	OBE	-	0.29%	\$770,726
Total MBE Pledged Participation			2.42%	\$6,383,912
Total WBE Pledged Participation			11.23%	\$29,620,442
Total OBE Pledged Participation			29.47%	\$77,709,195
Total MBE/WBE/OBE Pledged Participation			43.12%	\$113,713,549
Total Contract Amount				\$263,713,834

Other City Requirements

CNE shall continue to comply with all of the CITY's requirements including:

- Non-Discrimination, Equal Employment Practices, Affirmative Action Provisions
- Living Wage and Worker Retention Ordinances
- Prevailing Wage Ordinance
- Americans with Disabilities Act

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- Insurance Requirements
- Child Support Obligation Ordinance
- City Business Tax Registration Certificate
- Equal Benefits Ordinance
- Slavery Disclosure Ordinance
- Non-collusion Affidavit
- City of Los Angeles Contract History
- Los Angeles Residence Information
- First Source Hiring Ordinance
- Municipal Lobbying Ordinance
- Contract Bidder Campaign Contribution and Fundraising Restrictions
- Public Infrastructure Stabilization Ordinance (PISO) / Project Labor Agreement (PLA)
- Iran Contracting Act of 2010 Compliance Affidavit
- Notice Regarding Restrictions on Campaign Contributions and Fundraising in City Elections
- Contractors' Use of Criminal History for Consideration of Employment Applications Ordinance
- Confidential Information
- Disclosure of Border Wall Contracting Ordinance

Notification of Intent to Contract

The required "Notification of Intent to Contract" was filed with the City Administrative Office (CAO) Clearinghouse on November 13, 2019.

Charter Section 1022

The CAO made a Charter Section 1022 determination on November 14, 2019 and concluded that there was insufficient number of City staff to perform these services and that it is more feasible to contract these services out.

Contractor Performance Evaluation

In accordance with Article 13, Chapter 1, Division 10 of the City of Los Angeles Administrative Code, the appropriate City personnel responsible for the quality control of this personal services contract shall submit Contractor Performance Evaluation Reports to the Bureau of Contract Administration (Department of Public Works) upon completion of this contract.

Contract Responsibility Ordinance

All contractors participating in this project are subject to compliance with the requirements specified in the City of Los Angeles' Contractor Responsibility Ordinance #173677, [Article 14, Chapter 1, Division 10, L.A.A.C.]. Failure to comply with all requirements specified in the Ordinance will render the bidder's contract subject to termination pursuant to the conditions expressed therein.

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Contract Administration

Responsibility for administration of the contract will be with the Hyperion Water Reclamation Plant Division, LA Sanitation.

Headquarters and Workforce Information

The headquarters address of CNE is at 1310 Point St., 13th Floor, Baltimore, MD 12131. The contractor will have a maximum staff of 15 employees assigned to this contract, 2 of whom reside in the City of Los Angeles.

PROJECT REVIEW BY COMMITTEE (PRC) APPROVAL

The PRC approved a total construction budget of \$163,461,834, including contingency, for the HWRP Digester Gas Utilization Plan Facility on February 14, 2018.

STATUS OF FINANCING

There is no impact to the General Fund. There is no change to the total funding for this project, which is not to exceed \$100,253,000 over the course of 10 years. Funding for Fiscal Year 2020-21 in the amount of \$11,102,000 is available in the Sewer Operations and Maintenance Fund No. 760, Appropriation Unit No. 50TX82. The remaining funding will be budgeted within the Sewer Operations and Maintenance Fund.

Funds and Appropriations for future fiscal years are not yet identified and existing appropriations may change based on available cash balances. Therefore, funds and appropriations will be determined by the Director and General Manager of LASAN or designee.

Funding as of the date of this Board Report has been verified and approved by the Director of the Office of Accounting subject to terms and conditions and cash availability described above.

Notwithstanding any other provision of this Contract, including any exhibits or attachments incorporated therein, and in order for the City to comply with its governing legal requirements, the City shall have no obligation to make any payments to the Contractor unless the City shall have first made an appropriation of funds equal to or in excess of its obligation to make any payments as provided in this Contract.

The Contractor agrees that any services provided by the Contractor, purchases made by the Contractor or expenses incurred by the Contractor in excess of the appropriation(s) shall be free and without charge to the City and the City shall have no obligation to pay for the services, purchases or expenses. The Contractor shall have no obligation to provide any services, provide any equipment, or incur any expense in excess of the appropriation amount(s) until the City appropriates additional funds for this Contract.

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10 Year Contract	Estimated Cost (\$)
4/29/2017 – 4/28/2018	\$7,044,882*
4/29/2018 – 4/28/2019	\$8,114,802*
4/29/2019 – 4/28/2020	\$7,145,068
4/29/2020 – 4/28/2021	\$8,759,100
4/29/2021 – 4/28/2022	\$9,197,055
4/29/2022 – 4/28/2023	\$9,656,908
4/29/2023 – 4/28/2024	\$10,139,753
4/29/2024 – 4/28/2025	\$10,646,741
4/29/2025 – 4/28/2026	\$11,179,078
4/29/2026 – 4/28/2027	\$11,738,032
Total Estimated Cost (\$)	\$93,621,419

*Actual costs shown for these years

The City's liability under this contract shall only be to the extent of the present City appropriation to fund the contract. However, if the City shall appropriate funds for any succeeding years, the City's liability shall be extended to the extent of such appropriation, subject to the terms and conditions of the contract.

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Respectfully submitted,



ENRIQUE C. ZALDIVAR, P.E.
Director and General Manager
Bureau of Sanitation

COMPLIANCE REVIEW PERFORMED
AND APPROVED BY:

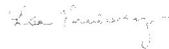


LYNDA MCGLINCHEY, Program Manager II
Office of Contract Compliance
Bureau of Contract Administration



JOHN L. REAMER JR.
Inspector of Public Works
Bureau of Contract Administration

REVIEWED AND APPROVED BY:



Digitally signed by Lisa B. Mowery
DN: cn=Lisa B. Mowery, email=Lisa.Mowery@city.org, c=US
Date: 2020.09.17 08:51:07 -07'00'

LISA B. MOWERY, Chief Financial Officer
Bureau of Sanitation
Date: 9/17/20

APPROVED AS TO FUNDS:



MIGUEL DE LA PEÑA, Director
Office of Accounting
760/50/50TX82 \$11,102,000
Date: 09/30/2020

Prepared by:

Octavio Murillo, HWRP
(310) 648-5876

Majid Sadeghi, HWRP
(310) 648-5495

DEPARTMENT OF PUBLIC WORKS

BUREAU OF SANITATION
BOARD REPORT NO. 1
November 28, 2012

CD: ALL

RECOMMENDATION TO NEGOTIATE CONTRACT WITH TOP RANKED PROPOSAL
FOR THE HYPERION TREATMENT PLANT DIGESTER GAS UTILIZATION PROJECT

RECOMMENDATION

- (1) Authorize the BUREAU OF SANITATION (SANITATION) to negotiate a contract with Constellation Energy (a subsidiary of Exelon Corporation) for implementation of the Digester Gas Utilization Project (DGUP).
- (2) Authorize SANITATION to negotiate sequentially with the second ranked proposer, NORESKO, or third ranked proposer, DCO in the event negotiations with Constellation Energy prove unsuccessful.
- (3) Direct SANITATION to return to the Board of Public Works at the successful conclusion of negotiations for recommendation to award the contract.
- (4) Find that the three remaining proposals (Ameresco's High Btu Bio-methane Gas proposal, and Ameresco and UTS Cogeneration proposals) considered in the final evaluation process did not meet the minimum technical threshold requirement, and that they be removed from further consideration for DGUP.

TRANSMITTALS

1. Copy of the adopted Board Report No. 1, dated January 14, 2011, authorizing the Bureau to distribute a "REQUEST FOR PROPOSALS (RFP) AND NEGOTIATE CONTRACT(S) FOR USE OF HTP'S DIGESTER GAS TO EITHER: (1) PROVIDE STEAM FOR HYPERION TREATMENT PLANT (HTP) DIGESTERS AND HTP ELECTRICAL ENERGY FOR CURRENT AND FUTURE PLANT OPERATIONS; OR (2) PROVIDE A MONETARY BENEFIT THAT CAN BE UTILIZED TO OFFSET THE PURCHASE OF ELECTRICITY FOR HTP PLANT OPERATIONS."
2. Copy of the adopted Board Report No. 1, dated March 21, 2012, "GOOD FAITH EFFORT EVALUATION OF PROPOSALS FOR THE HYPERION TREATMENT PLANT DIGESTER GAS UTILIZATION PROJECT."
3. Letter to Southern California Gas Company, dated August 2, 2012, "BUREAU OF SANITATION'S "REQUEST FOR PROPOSALS FOR A DEVELOPMENT PROJECT TO MAKE THE BEST USE OF HYPERION TREATMENT PLANT DIGESTER GAS FOR THE CITY OF LOS ANGELES" – PRELIMINARY EVALUATION OF PROPOSALS."
4. Copy of "Withdrawal" Letter from DTE, Steve Earhart to Ken Weston, August 13, 2012, "Bureau of Sanitation's "Request for Proposals for a Development Project to make Best Use of Hyperion Treatment Plant Digester Gas for the City of Los Angeles"

REFERENCES

1. "RFP FOR A DEVELOPMENT PROJECT TO MAKE THE BEST USE OF HYPERION TREATMENT PLANT DIGESTER GAS FOR THE CITY OF LOS ANGELES," (Original release date was January 14, 2011 and was updated by several Addenda. All files are posted on the City of Los Angeles – Business Assistance Virtual Network (www.labavn.org). The project is listed as a "closed project" and the BAVN ID number is 10899.)

SUMMARY

The delivery model for DGUP is a comprehensive package that includes demolition, design, construction, finance, operation and transfer of assets to SANITATION at the end of the 10-year operating period beyond full commissioning of the project.

Previously, SANITATION Staff completed the preliminary evaluation (See Section 9.3 of Reference 2.) of the eight proposals (Ameresco Cogeneration, Ameresco High Btu bio-methane Gas, Constellation, DCO, DTE, NORESKO, Southern California Gas/Sempra Utilities and UTS) that passed the Good Faith Effort process (See Transmittal #2.). During that process, one proposal (Southern California Gas/Sempra Utilities) was found not to have passed the Preliminary Evaluation requirements (See Transmittal #3.).

During the subsequent final evaluation process (See Section 9.4 of Reference 2.), one company (DTE) chose to withdraw their proposal (See Transmittal #4.), leaving 6 proposals. SANITATION Staff completed the technical review of the six remaining proposals and determined that three proposals (Ameresco High Btu Bio-methane gas, and UTS and Ameresco Cogeneration proposals) did not meet the requirements of the Final Evaluation process. SANITATION further determined that three proposals (Constellation, DCO, and NORESKO cogeneration) did meet the minimum technical requirements so their cost proposals were subsequently evaluated.

After reviewing the cost proposals of those three proposers, SANITATION ranked the proposals based on the combined technical and financial ranking in the following order:

1. Constellation Energy
2. NORESKO
3. DCO

SANITATION, therefore, recommends that contract negotiations commence with Constellation Energy to develop a contract for DGUP. Should negotiations fail, SANITATION will negotiate with the second, or the third ranked proposer, as necessary.

DISCUSSION

Project Background

Sanitation and the Los Angeles Department of Water and Power (LADWP) currently have energy exchange agreements whereby digester gas is transferred from the Hyperion Treatment Plant (HTP) to LADWP's Scattergood Generating Station (SGS) to be burned as fuel. In return, LADWP provides HTP with electricity and steam. SANITATION expects the current agreements to remain in effect until 2015.

In 2010, SANITATION initiated a schedule-constrained project with a broad set of technical and financial parameters that sought the best beneficial use of HTP's digester gas that would:

- Significantly lower operational costs for steam and electricity for SANITATION/HTP at project completion as compared to no project,
- Improve beneficial use of a renewable energy source compared to current use, and
- Lower emissions associated with digester gas flaring as compared to no project and the current use.

With a schedule dictated by external circumstances and limited available funding for a large capital project, SANITATION determined that an innovative delivery model through a private partnership would serve the best interests of the City and provide the highest likelihood of completing a successful project before the termination of existing agreements with LADWP. The selected project delivery model places technical and financial responsibility upon the Contractor by tying payments to meeting specified performance requirements. DGUP will include design, construction, commissioning, operation, and financing of a facility located at HTP, as well as the transfer of assets/ownership to SANITATION at the end of a negotiated period of operation.¹ This model has been implemented by other public entities to execute projects, large and small, in shorter time periods than traditional design-bid-build processes. SANITATION released the initial RFP on January 14, 2011 and completed addenda on April 20, 2011 (See Reference #1.).

The Project goal is to begin operation in 2015.

Summary of Good Faith Effort Evaluation

On May 4, 2011 SANITATION received 10 proposals in response to the RFP, briefly summarized in the following table.²

¹ This "alternate delivery" model is commonly referred to as "DBOOT," for Design, Build, Own, Operate and Transfer (of ownership).

² There were two distinct approaches proposed, co-generation and "gas purification." Co-generation proposals use digester gas directly to generate electricity and steam for HTP operations. Gas purification approaches remove carbon dioxide from the digester gas and create a "Bio-methane" product similar to natural gas. Bio-methane could be sold to offset HTP's cost for purchasing electricity and would be a source of renewable energy for a purchasing entity.

Proposer	Basic Proposal
Ameresco	High Btu Bio-methane gas for export using Guild PSA process: purchase all electricity, use existing boilers to supply steam
Ameresco	Co-generation: 5+1 Solar Mercury-50 GTGs
BioFuels Hyperion	High Btu Bio-methane gas for export using the Air Liquide membrane process: purchase all electricity, use existing boilers to supply steam
Constellation	Co-generation: 2xSolar Mars-100 GTGs + STG + duct firing
DCO	Co-generation: 3xSolar Taurus-60 GTGs + STG + duct firing
NORESKO	Co-generation: 6xSolar Mercury-50 GTGs
DTE	Co-generation: 3xSolar Taurus-60 GTGs + STG + duct firing
Southern California Gas	High Btu Bio-methane gas for export using a PSA process: purchase all electricity, use new boilers to supply steam (using either digas or natural gas).
Southern California Gas	Co-generation: 3xSolar Taurus-60 GTGs + STG + duct firing
UTS	Co-generation: 2xSolar Mars-100 GTGs

GTG: Gas Turbine Generator, STG: Steam Turbine Generator, PSA: Pressure-Swing-Adsorption

One company, BioFuels Hyperion, subsequently (February 24, 2012) withdrew their proposal and a second company, Southern California Gas Company, withdrew their co-generation option (August 2011), before the completion of the GFE process. SANITATION found that each of the remaining proposals passed the GFE requirements as outlined in the RFP, Appendix V (See Transmittal #2.). The proposers that passed the GFE requirements were Ameresco (2 options), Constellation Energy (Constellation), DCO, DTE, NORESKO, Southern California Gas and UTS.

Summary of Preliminary Evaluation

Per section 9.3 of the RFP (Reference #1), proposals are required to score 60 points or more on both a technical AND a financial evaluation, relying mostly on the information in the proposals received May 4, 2011. On April 16th, 2012 SANITATION requested supplemental information to the proposals that was necessary to complete the preliminary evaluation; that information was received in early May 2012.

The purpose of the preliminary technical review was to determine which proposals would meet CITY technical requirements for the DGUP project. As outlined in the RFP, SANITATION had technical review teams review specific technical criteria grouped into five (5) general categories specified in Table 9-1 of the DGUP RFP (Reference #1); the table is included in this report.

The table also includes the weight given to each general category. The review teams were composed of specialized technical experts with experience in design/engineering, construction, contract compliance, environmental permitting and compliance, operations, maintenance, project management and project financing. Teams evaluated the proposals independently in each category. After completion of the scoring by the teams, results were reviewed with management to confirm consistency and adherence to project review guidelines. The required technical score threshold was an overall Technical Score greater than or equal to 60 points, accumulated across all five categories.

It was determined that seven proposals met the 60-point technical threshold (in alphabetical order):

- Ameresco (Bio-methane),
- Ameresco (Combined Heat and Power),
- Constellation (Combined Heat and Power),
- DCO (Combined Heat and Power),
- DTE (Combined Heat and Power),
- NORESKO (Combined Heat and Power), and
- UTS (Combined Heat and Power).

During the technical review process, Southern California Gas (SCG) confirmed that its Bio-methane proposal was a non-binding offer, contingent upon approval in the future from the California Energy Commission (in contrast to the RFP requirements for binding offers in Section 5.12 requirements). This was considered a fatal flaw; therefore, they were eliminated from further consideration.

The second, independent requirement for the Preliminary Evaluation was that proposals must meet or exceed a 60-point financial evaluation threshold. Therefore, in parallel to the technical evaluation, the cost proposals for each of the companies were evaluated by a financial review team. An NPV (net present value) was calculated for each proposal. The NPV was then converted to a normalized financial score with the lowest NPV receiving the best financial score and the other scores being scaled from there. The NPV calculation was based on costs to the City, including any payments for electricity and natural gas, from start-up through the 10 year operation by the Contractor and subsequent 10 year operation by the City, including capital repayment.

It was determined that the same seven proposals met or exceeded the 60-point financial threshold:

- Ameresco (Bio-methane),
- Ameresco (Combined Heat and Power),
- Constellation (Combined Heat and Power),
- DCO (Combined Heat and Power),
- DTE (Combined Heat and Power),
- NORESKO (Combined Heat and Power), and
- UTS (Combined Heat and Power).

The cost proposal from SCG did not meet the 60-point threshold (per section 9.3 of the RFP).

Table 9-1 Summary of DGUP Proposals Preliminary Evaluation Criteria

CRITERIA	POSSIBLE AWARDED POINTS
1. Team Experience and Financing	30
Biogas Operations Experience Biogas Development Experience Experience of Key Personnel Q&E of Subcontractors Experience in CA/Los Angeles Financial Strength Level of Development of Financing Plan	
2. Terms and Conditions	10
Agreement with CITY Terms New Terms Specified by Respondent Pending Lawsuits or Litigation	
3. Technology	30
Level of Technical Information Provided Technical Feasibility of Project Project Footprint and Land Requirements Ability to Use Digester Gas Ability to Meet Power/Steam Needs	
4. Project Implementation	20
Impact on HTP During Construction Reasonableness of EPC Plan EPC Contracting Status Interconnection Feasibility Permitting Feasibility Equipment Procurement Logistics Level of Detail of Project Schedule Ability to Meet Project Schedule	
5. Project Operations	10
Reasonableness of O&M Plan O&M Contracting Status Environmental Impacts Transition Plans Impact on HTP During Operations Project Availability	
TOTAL TECHNICAL POINTS	100
6. Financial Evaluation	100
NPV	
TOTAL POINTS	200

(from Section 9.3 of DGUP RFP, Reference #1)

On August 2, 2012, SCG was provided written notification (See Transmittal #3.) that its proposal failed to meet RFP requirements, receipt of which SCG acknowledged on August 3, 2012 by email.

Also, on August 2, 2012, letters were sent to the six proposers (7 proposals) that met both the technical and financial Preliminary Evaluation thresholds. Subsequent to the August 2, 2012 notification (See Transmittal #4.), DTE issued a letter withdrawing their proposal because of a lack of sufficient resources for the project. This left the following companies to be considered ("short-listed") in the final evaluation process: Ameresco (two options), Constellation, DCO, NORESKO, and UTS. All companies offered cogeneration configurations and Ameresco offered a separate, High Btu Bio-methane Gas option.

Summary of Final Evaluation

SANITATION followed the process defined in Section 9.4 of the RFP (Reference #1) to evaluate the 6 proposals listed in the previous table. In addition to the formal proposals submitted by each proposer, SANITATION

- Considered responses to questions directly related to the proposals in letters distributed to each proposer on August 9, 2012. The questions focused on technical issues, exceptions to requirements, proposed staffing, and schedule constraints. Responses from each proposer were received on August 28, 2012, and were considered with
- Site visits to each proposer's selected reference facility, and
- Interviews with individual proposer teams in September.

As described in the RFP, SANITATION had the same technical review teams review the proposals against the same criteria used in the preliminary evaluation and summarized in Table 9-1 of the RFP. As before, technical teams evaluated the proposals independently in each general area. After completion of the scoring by teams, results were reviewed by management for consistency and adherence to project review guidelines. The threshold to meet the technical requirement was an overall Technical Score greater than or equal to 70 points, accumulated across all five categories. This threshold requirement was higher than the Preliminary Evaluation threshold because it included supplemental information expected to raise the technical score. Per the RFP, "Top projects achieving a technical score of 70 (or greater) during the detailed technical evaluation will be further evaluated based on the same economic criteria as the preliminary evaluation for best value to the CITY."

Three proposals far exceeded the 70-point threshold: Constellation, DCO, and NORESKO.

Three proposals (both Ameresco options and UTS) did not meet the 70-point technical threshold mainly due to lack of redundancy, siting issues, and the uncertain ability to secure the necessary environmental clearances and permits. At this point, the Ameresco and UTS proposals were eliminated from further consideration because their technical evaluation score was less than 70 points (their cost proposals were not considered, as described in the evaluation process in the RFP).

The cost proposals for each of the three companies that met the Technical Score Threshold were then evaluated and scored; in contrast to the Preliminary Evaluation, there was no financial threshold. The NPV calculation was based on costs to the City, including any payments for electricity and natural gas, from start-up through the 10 year operation by the Contractor and subsequent 10 year operation by the City, including capital repayment. The NPV was then converted to a normalized financial score with the lowest NPV receiving the best financial score and the other scores being scaled from there.

The final evaluation process was constructed to give equal weight to Technical and Financial factors. In this light, the combined Technical and Financial scores for each of the three remaining proposals were calculated to rank the final three proposals in order of providing the best overall value to the City. The final order was:

FINAL EVALUATION RESULTS

RANK	PROPOSER
1	Constellation
2	NORESCO
3	DCO

STATUS OF FINANCING

It will be the responsibility of the Contractor to provide all financing for DGUP (demolition, design, construction and startup) until the commencement of operations and the satisfaction of performance requirements. No funding from the City will be required until Fiscal Year 2014-15. Funding for the Project will be from the Sewer Construction and Maintenance Fund and will be included in the annual budget process.

FUTURE ACTIONS

Upon approval, a SANITATION selected negotiating team will meet with Constellation Energy to negotiate finalized terms of the Contract. If SANITATION determines that successful negotiations are not possible, SANITATION will turn to the second ranked proposer, NORESKO, or third ranked proposer, DCO, in an effort to reach a mutually acceptable contractual agreement.

Upon completion of successful negotiations, SANITATION will return to the Board to recommend award.

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Respectfully submitted,

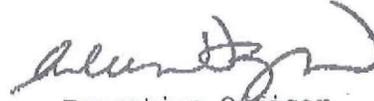


ENRIQUE C. ZALDIVAR, Director
Bureau of Sanitation

DEPARTMENT OF PUBLIC WORKS

BUREAU OF SANITATION
 BOARD REPORT NO. 1
November 18, 2013

ADOPTED BY THE BOARD
 PUBLIC WORKS OF THE CITY
 of Los Angeles California
AND REFERRED TO THE MAYOR
 NOV 25 2013


 Executive Officer

CD: 11

RECOMMENDATION TO AWARD CONTRACT FOR THE HYPERION TREATMENT
 PLANT DIGESTER GAS UTILIZATION PROJECT

RECOMMENDATIONS

1. Approve and forward this report with transmittals to the Mayor and City Council for authority to execute a contract with Constellation NewEnergy, Inc., a subsidiary of Exelon Corporation (CNE), in the amount of \$227,555,000 for implementation of the Digester Gas Utilization Project (DGUP).
2. Upon the Mayor's and Council's authorization, the President or two members of the Board of Public Works will execute said contract.
3. Return the executed contract to the Bureau of Sanitation (Sanitation) for further processing. Contact Ken Weston at (310) 648-5495 to arrange for pick up.

TRANSMITTALS

1. Copy of the adopted Board Report No. 1, dated January 14, 2011, authorizing the Bureau to distribute a "Request for Proposals (RFP) and Negotiate Contract(s) for Use of HTP's Digester Gas to Either: (1) Provide Steam for Hyperion Treatment Plant (HTP) Digesters and HTP Electrical Energy for Current and Future Plant Operations; or (2) Provide a Monetary Benefit that Can Be Utilized to Offset the Purchase of Electricity for HTP Plant Operations."
2. Copy of the adopted Board Report No. 1, dated March 21, 2012, "Good Faith Effort Evaluation of Proposals for the Hyperion Treatment Plant Digester Gas Utilization Project."
3. Copy of the adopted Board Report No. 1, dated November 28, 2012, "Recommendation to Negotiate Contract with Top Ranked Proposal for the Hyperion Treatment Plant Digester Gas Utilization Project."
4. Copy of the "Agreement for the Development of the Hyperion Treatment Plant Digester Gas Processing System."¹

* ¹ "The attached agreement contains minor edits that were not reflected in the agreement to the original report dated November 18, 2013. The edits were made to correct spelling, formatting, and references, delete and replace terms/phrases with corrected terminology, and to correct report titles, authorship, and publication dates."

REFERENCES

1. "RFP for a Development Project to Make the Best use of Hyperion Treatment Plant Digester Gas for the City of Los Angeles." (Original release date was January 14m 2011 and was updated by several Addenda. All files are posted on the City of Los Angeles – Business Assistance Virtual Network (www.labavn.org). The project is listed as a "closed project" and the BAVN ID number is 10899).

FISCAL IMPACT STATEMENT

There is no General Fund impact for the execution of this contract. Funding will be provided by the Sewer Construction and Maintenance Fund.

DISCUSSION

Project Background

Sanitation and the Los Angeles Department of Water and Power (LADWP) currently have energy exchange agreements whereby digester gas is transferred from HTP to LADWP's Scattergood Generating Station (SGS) to be utilized as fuel to produce electricity. In return, LADWP provides HTP with electricity and steam at reduced prices. LADWP has indicated that these agreements cannot be extended beyond December 31, 2016 because of the need to repower SGS.

In 2010, Sanitation initiated a project with a broad set of technical and financial parameters that sought the best beneficial use of HTP's digester gas that would:

- Improve beneficial use of a renewable energy source compared to current use;
- Significantly lower operational costs for steam and electricity for Sanitation/HTP at project completion as compared to no project; and
- Lower emissions associated with digester gas flaring as compared to no project and the current use.

With a schedule dictated by external circumstances and funding availability dependent on the outcome of an ongoing rate adjustment proposal, Sanitation determined that an innovative delivery model through a public-private partnership would serve the best interests of the City and provide the highest likelihood of completing a successful project before the termination of the existing agreements with LADWP. DGUP now includes design, construction, commissioning, and operation and maintenance (O&M) of a facility located at HTP. This project delivery model has been implemented by other public entities to execute projects, both large and small, with shorter time schedules than traditional design-bid-build methodology. Sanitation released the initial RFP on January 14, 2011 and completed addenda on April 20, 2011 (See Reference No. 1).

The Project goal is to begin operations in 2016.

Summary of Initial Evaluations

On May 4, 2011 Sanitation received ten proposals in response to the RFP from eight proposers. On March 21, 2012, the Board found that seven proposers met the GFE requirements (Transmittal No. 2).

Summary of Preliminary Evaluation

The proposals were evaluated on technical and financial criteria to determine the best value project. The purpose of the preliminary technical review was to determine which proposals would meet technical requirements for the DGUP project. As outlined in the RFP, Sanitation had teams review specific technical criteria grouped into five (5) general categories specified in Table 9-1 from the DGUP RFP (Reference No. 1), as summarized in Table 1 below:

Table 1: Evaluation Criteria

Criteria	Possible Points
1. Team Experience and Financing	30
1. Terms and Conditions	10
2. Technology	30
3. Project Implementation	20
4. Project Operations	10
Total Technical	100
Financial	100
Total	200

The review teams were composed of 16 specialized technical experts with experience in design/engineering, construction, contract compliance, environmental permitting and compliance, operations, maintenance, project management and project financing. The experts were drawn from the Bureaus of Sanitation, Engineering, and Contract Administration, and from outside of the City, providing more than 400 years of combined experience. Teams evaluated the proposals independently in each category. After completion of the scoring by the teams, results were reviewed with management to confirm consistency and adherence to project review guidelines. The required technical score threshold was an overall Technical Score greater than or equal to 60 points, accumulated across all five categories.

The second, independent requirement for the Preliminary Evaluation was that proposals met or exceeded a 60-point financial evaluation threshold. Therefore, in parallel to the technical evaluation, the cost proposals for each of the companies were evaluated by a financial review team. A net present value (NPV) was calculated based on each price proposal for design, construction, and ten years of operations plus the City's estimated costs to operate the facility for another ten years. The NPV was then converted to a normalized financial score with the lowest NPV receiving the best financial score and the other scores being scaled downward from that one.

In order to pass the preliminary evaluation, each proposal was required to achieve a minimum passing score of 60 points for both the technical and financial components. It was determined that all of the proposers passed the preliminary evaluation except for Southern California Gas, which had submitted a non-binding offer, which the City considered a fatal flaw of the proposal. Subsequent to the Preliminary Evaluation, DTE issued a letter withdrawing their proposal because of a lack of sufficient resources for the project.

Summary of Final Evaluation

Sanitation followed the process defined in Section 9.4 of the RFP (Reference No.1) to evaluate the 6 remaining proposals. In addition to reviewing the formal proposals submitted by each proposer, Sanitation

- Considered responses to questions directly related to the proposals in letters distributed to each proposer on August 9, 2012. The questions focused on technical issues, exceptions to project requirements, proposed contractor staffing, and schedule constraints;
- Visited sites relevant to each proposer's selected reference facility; and
- Conducted interviews with individual proposer teams in September 2012.

As described in the RFP, Sanitation had the same technical teams review the proposals, now augmented with the additional detailed information, against the same criteria used in the preliminary evaluation, as summarized in Table 9-1 of the RFP. As before, technical teams evaluated the proposals independently in each general area. After completion of the scoring by teams, results were reviewed by management for consistency and adherence to project review guidelines.

The threshold to meet the technical requirement was an overall Technical Score greater than or equal to 70 points, accumulated across all five categories. This threshold requirement was higher than the Preliminary Evaluation threshold because it included supplemental information and clarifications to the initial proposals, all expected to raise the technical score. Per the RFP, "Top projects achieving a technical score of 70 (or greater) during the detailed technical evaluation will be further evaluated based on the same economic criteria as the preliminary evaluation for best value to the CITY." Thus, in the final evaluation phase, proposals needed to first pass the technical evaluation in order to determine their operational viability, before moving into the financial evaluation phase.

Three proposals did not meet the 70-point technical threshold mainly due to lack of redundancy, siting issues, and the uncertain ability to secure the necessary environmental clearances and permits. Therefore, the Ameresco and UTS proposals were eliminated from further consideration because their technical evaluation score was less than 70 points (their cost proposals were not considered, as described in the evaluation process in the RFP).

Three proposals far exceeded the 70-point threshold: CNE, DCO, and NORESKO.

The cost proposals for each of the three companies that met the Technical Score Threshold were then evaluated and scored; in contrast to the Preliminary Evaluation, there was no financial threshold. The NPV calculation was based on costs to the City, including any payments for electricity and natural gas, design work, construction, facility start-up, and ten years of operations by the Contractor, plus a subsequent ten years of operations by the City. The NPV was then converted to a normalized financial score with the lowest NPV receiving the best financial score and the other scores being scaled from there.

The final evaluation process was constructed to give equal weight to Technical and Financial factors. On November 28, 2012, the Board authorized Sanitation to proceed with contract negotiations with CNE, who had submitted the best value proposal (Transmittal No. 3).

Contract Negotiations with CNE

During the course of negotiations, certain changes were made to the scope of the project to improve the value and address unforeseen issues that arose during the permitting process. Most of these changes would have occurred with any of the proposals that passed the final evaluation; therefore, these modifications did not impact the ranking developed through the final evaluation process. The modifications that would have been common to all of the proposals are described in Table 2 below. The cost changes shown were provided by CNE, with the exception of Item 1, which was estimated by the City. While the cost changes would have varied between the proposers, the order of magnitude would be the same, meaning that the final evaluation ranking would not have changed.

* The final contract documents that resulted from the negotiations with CNE are provided as Transmittal No. 4.

Table 2: Common Scope Modifications

Modification	Reason	Cost Design-Build	Cost O&M
1. Financing component removed from scope*	SCAQMD ownership requirements for equipment were modified	(\$7,000,000)	---
2. Revised Gas Compressor Design	Lower available gas pressure at project interface	\$1,570,000	--
3. Additional staffing and design modification	Revised performance guarantees	\$110,000	\$330,000/yr
4. Split bus electrical design	Provides additional redundancy	\$5,770,000	\$58,000/yr
5. Pricing refresh	Revised notice to proceed date	\$13,490,000	\$451,000/yr
6. Allowance for removal of hazardous materials	Construction is occurring in a facility with hazardous materials present	\$1,000,000	--
7. Allowance for differing site conditions	Account for issues discovered during the design process.	\$5,000,000	--
Subtotal additional costs for all proposals		\$19,940,000	\$839,000/yr

*Savings assume tax-exempt financing with interest rates 0.5% lower than taxable financing.

The largest change to the scope of work was the removal of the financing component. During the course of the RFP evaluation and contract negotiations, the South Coast Air Quality Management District (SCAQMD) revised their interpretation of the definition of an Essential Public Service used to determine if the project would have access to Priority Reserve Emissions Credits (PRCs) at no cost. During negotiations, the SCAQMD informed the City that the project equipment would have to be owned by the City, per their review of proposed contract language, in order to qualify for PRCs. The RFP had originally envisioned that the equipment would be owned by the Contractor and transferred to the City after ten years of operations. While it is difficult to predict the cost of purchasing the credits on the open market, a conservative estimate is that this would have added \$50 million to the cost of the project.

In fact, the cost could potentially be twice that amount due to the uncertainty of having such a large quantity of PRCs available on the open market.

Based on this change, the City removed the financing and ownership components of the project from the scope. This resulted in the additional benefit of allowing the City to use its own tax-exempt revenue bonds to finance the construction, resulting in a savings to the ratepayers compared to the taxable financing originally contemplated in the RFP.

City financing of the project was not included in the original project scope because of uncertainty about the level of funding the City would have for the wastewater program. Since the RFP was released, the City Council has adopted a multi-year series of rate adjustments that will maintain funding stability for years to come, allowing Sanitation to make this cost-saving modification to the project scope.

Table 3 lists modifications to the CNE proposal that may not have been needed with the second- and third-ranked proposals. The additional costs of these improvements were not enough to affect CNE's position as the best value proposal.

Table 3: CNE Scope Modifications

Modification	Reason	Cost Design-Build	Cost O&M
1. Re-price for utilization of existing stack	Design requirements became more complicated than originally anticipated.	\$4,130,000	\$65,000/yr
2. 2-year extended warranty	Provide additional protection when the City assumes O&M responsibilities.	\$2,557,000	—
3. Use of thermal oxidizers instead of flares or absorbent process to treat waste products from gas cleanup*	Reduced air pollution impacts/ reduced use of flares to remain within permit limits or reduced product being landfilled	\$3,540,000	\$71,000/yr
Subtotal additional costs for CNE proposal		\$10,227,000	\$136,000/yr

* This change would have been shared by the third-ranked proposer, but not the second-ranked one.

The additional scope revisions to the project that occurred during negotiations will result in cost increases of \$30,167,000 to the design-build work and \$975,000/year for the O&M work. These additional costs would not have changed the rankings determined by the final evaluations.

MBE/WBE/OBE Subcontractor Outreach Program

Transmittal No. 2 details the Board's previous findings on the Good Faith Effort Outreach performed by CNE and the other proposers.

At the time of the distribution of the RFP, the City established an MBE/WBE/OBE Subcontractor Outreach Program for this project with anticipated MBE and WBE participation levels of 10 percent and 2 percent respectively. CNE has pledged participation levels of 1.18 % MBE, 3.14% WBE, and 3.73% OBE, as shown in Table 4. As additional subcontracting opportunities are identified during the design-build phase, CNE will continue their outreach program.

Table 4: Subcontractor Participation

Subcontractor	MBE/ WBE/ OBE	Gender/ Ethnicity	% of Contract Amount	Amount
Morrow Meadows	WBE	F/ C	3.14%	\$4,000,000
OneSource Distributors	MBE	M/HA	1.18%	\$1,500,000
Vanderweil Engineers	OBE	M/C	2.75%	\$3,500,000
MWH Americas, Inc.	OBE	M/C	0.98%	\$1,250,000
Total MBE Participation			1.18%	\$1,500,000
Total WBE Participation			3.14%	\$4,000,000
Total OBE participation			3.73%	\$4,750,000
Total MBE/WBE/OBE Participation			8.05%	\$10,250,000
Total				\$127,302,000

Gender/Ethnicity:

- | | |
|------------------------------|------------------------------------|
| AA = African American | HA = Hispanic American |
| APA = Asian Pacific American | SAAC = Subcontinent Asian American |
| NA = Native American | C = Caucasian |
| M = Male | F = Female |

Other City Requirements

CNE shall be required to comply with all of the City's contracting requirements including:

- Nondiscrimination/Equal Employment Practices/Affirmative Action
- Living Wage and Service Contractor Worker Retention Ordinances
- Americans with Disabilities Act
- Insurance Requirements
- Child Support Obligations
- Business Tax Registration Certificate
- Equal Benefits Ordinance
- Slavery Disclosure Ordinance
- Municipal Lobbying Ordinance

- Non-collusion Affidavit
- City of Los Angeles Contract History
- Los Angeles Residence Information
- Contract Bidder Campaign Contribution and Fundraising Restrictions
- First Source Hiring Ordinance
- Public Infrastructure Stabilization Ordinance (PISO) / Project Labor Agreement (PLA)

Term and Value of Contracts

The design-build and O&M contracts are designed to form a single contract under the Development Agreement. The term of the design-build portion of the Contract shall be from execution until the Commencement of Commercial Operations, although certain of the provisions will remain in effect during the term of the O&M contract. The value for the design-build portion of the contract is \$127,302,000. The term of the O&M Contract shall be ten years from the commencement of Commercial Operations with a not-to-exceed amount of \$100,253,000, for a total contract value of \$227,555,000.

Notification of Intent to Contract

The required "Notification of Intent to Contract" was filed with the City Administrative Officer (CAO) Clearinghouse on July 29, 2010.

Charter Section 1022

The CAO made a Charter Section 1022 determination on December 14, 2010 and concluded that there was insufficient City expertise to perform these services and that it is more feasible to contract these services out.

Local Business Preference (LBP) Program

The LBP Program is not applicable since the RFP responses were received prior to the adoption of this ordinance.

Contractor Performance Evaluation

In accordance with Article 13, Chapter 1, Division 10 of the City of Los Angeles Administrative Code, the appropriate City personnel responsible for the quality control of the design-build and O&M contracts shall submit Contractor Performance Evaluation Reports to the Department's Bureau of Contract Administration upon completion of each contract.

Contract Responsibility Ordinance

All contractors participating in this project are subject to compliance with the requirements specified in the City of Los Angeles' Contractor Responsibility Ordinance #173677, [Article 14, Chapter 1, Division 10, L.A.A.C]. Failure to comply with all requirements specified in the Ordinance will render the bidder's contract subject to termination pursuant to the conditions expressed therein.

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Contract Administration

Responsibility for administration of this contract during the design-build and O&M phases will be with Hyperion Treatment Division, Bureau of Sanitation, with construction management support from the Bureau of Engineering and inspection support from the Bureau of Contract Administration.

Headquarters and Workforce information

The headquarters address of CNE is 100 Constellation Way, Baltimore, Maryland 21202, with a California headquarters address of 350 South Grand Ave., Suite 2370, Los Angeles, CA 90071. The Contractor will have a maximum staff of 15 employees assigned to this contract and 1 of the employees resides in the City of Los Angeles.

Approved as to Form

The proposed contract has been approved as to form by the Office of the City Attorney.

STATUS OF FINANCING

Total funding for this project, including contingencies, is \$233,920,000. Funding for this project will be made available as shown in the table below. Funds may be drawn from the Sewer Capital Fund No. 761, the Sewer Operations and Maintenance Fund No. 760, or any other funds established as a result of commercial paper or bond sales, at the discretion of the Director of Sanitation or appointed designee.

The contract contains a "Financial Liability Clause" that states that "The City's liability under this Contract shall not exceed the City's appropriation to fund the Contract at the time of Contract award. However, if the City shall appropriate funds for any successive years, the City's maximum liability shall not exceed the extent of such appropriation, subject to the terms and conditions of this Contract."

The following funding has been verified and approved by the Director of the Office of Accounting subject to the conditions described above:

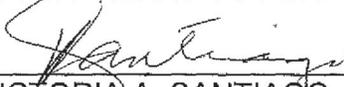
Fund No.	Appropriation Unit	Budget Fiscal Year	Contract	Contingencies	Total
Design-build					
TBD	50KDS7	2013/14	\$1,400,000	\$100,000	\$1,500,000
TBD	WCIP budget	Future	\$125,902,000	\$6,265,000	\$132,167,000
Subtotal DB			\$127,302,000	\$6,365,000	\$133,667,000
O&M					
760	Sanitation operating budget	Future	\$100,253,000	\$0	\$100,253,000
Total			\$227,555,000	\$6,365,000	\$233,920,000

Respectfully submitted,



ENRIQUE C. ZALDIVAR, Director
 Bureau of Sanitation

APPROVED AS TO FUNDS:



VICTORIA A. SANTIAGO, Director
 Office of Accounting
 Date: 11/7/2013

Department of Public Works

ADOPTED BY THE BOARD
PUBLIC WORKS OF THE CITY
of Los Angeles California

BPW-2018-0219

Bureau of Engineering
Bureau of Sanitation
Joint Report No. 2

MAR 14 2018

AS AMENDED**

March 14, 2018
CD No. 11

Executive Officer
Board of Public Works

AUTHORITY TO INCREASE THE BUDGET CONTINGENCY AND ISSUE SUPPLEMENTAL AGREEMENT CHANGE ORDER NO. 33 TO CONSTELLATION NEWENERGY, INC. (CONSTELLATION), (CONTRACT NO. C-123575) FOR THE DIGESTER GAS UTILIZATION PROJECT (DGUP), (WORK ORDER NO. SHTPDGAP)

RECOMMENDATIONS

**\$25,294,834.48

1. Authorize ~~\$25,293,834.48~~ in additional contingency and approve a revised construction budget of \$163,460,834.48 for this project.
2. Authorize the City Engineer to issue Supplemental Agreement Change Order No. 33 to Constellation for a not-to-exceed amount of \$35,315,686.39 for the DGUP to close out all open commercial issues associated with the design and construction of the project.

TRANSMITTALS

1. Copy of Bureaus of Engineering (BOE) and Sanitation (LASAN) Joint Report No. 1, adopted on October 23, 2015, authorizing the City Engineer to issue multiple change orders for this project, and \$4,500,000 in additional contingency.
2. Copy of Draft Supplemental Agreement Change Order No. 33, including "Term Sheet" exhibit.

DISCUSSION

Background

On January 29, 2014, the Board of Public Works (Board) executed the award of a contract to Constellation in the amount of \$127,302,000 with a contingency amount of \$6,365,000, for a total approved construction budget of \$133,667,000 to design and construct the DGUP. This project includes the reuse of the existing Hyperion Water Reclamation Plant (HWRP) Energy Recovery Building (ERB) to house a combined-cycle cogeneration system to provide the steam and electricity requirements of HWRP, with the use of HWRP's biogenic digester gas as the primary fuel source. Major components of the work include demolition of existing de-commissioned equipment within the ERB and the installation, testing, and operation of cogeneration equipment and appurtenant fuel gas, cooling, and emissions control systems. On October 23, 2015, the Board approved an increase in the construction contingency from \$6,365,000 to \$10,865,000 (Transmittal No. 1).

This design-build-operate contract, along with the necessary regulatory approvals and operating permits, were delivered and negotiated by the LASAN. Following execution of

the contract, the BOE was tasked with managing the design and construction efforts for the LASAN during the capital improvement phase of the project.

The facility has been in continuous operation since April 29, 2017. The Contractor continues to complete remaining construction and administrative activities with no major issues. Construction is anticipated to complete no later than June 2018.

Change Order No. 33

During the early development stages of the project, the City of Los Angeles (City) and Constellation identified several major differing site conditions concerning air emissions standards, influent water quality data, and electrical utility grid interconnection requirements as originally forecasted by the contract. Preliminary Change Orders (PCO) were issued by the City to account for these changes. It was anticipated that following issuance of these preliminary change orders that the associated design-build costs could be reasonably projected and subsequent Board budget authority be obtained based on the level of design information available to the project at that time. However, due to the magnitude of changes necessitated by these change orders, the Contractor had to take considerable measures to procure new major pieces of equipment, which included two custom-built titanium-based duplex cooling water heat exchangers, a fully redesigned boiler feedwater treatment system, and two up-sized heat recovery steam generators. As a result, these major equipment additions and upgrades imparted a cascade of unforeseen changes to the project's original basis of design. These unforeseen changes required additional engineering and installation (capital) efforts in order to implement.

Additionally, the contractor issued multiple requests for change orders (RFCO) relative to unforeseen geotechnical conditions and building regulations not initially, or partially acknowledged as compensable by the City.

Additionally, the Contractor issued a request for time extension and equitable adjustment with respect to mitigating the abovementioned project challenges' effect on the project schedule through accelerating the work. Acceleration of the work allowed the project to navigate through these challenges while still meeting the project's original objective of entering the commercial operations phase prior to the expiration of the HWRP-Department of Water and Power Energy agreement. Failure of the project to enter the commercial operations phase before expiration of the energy agreement would have resulted in the HWRP's purchasing power from the utility grid at significantly higher costs, as well as the flaring of HWRP's valuable digester gas.

The City and the contractor met on several occasions to discuss and resolve all abovementioned PCOs and RFCOs, including the contractor's claim for a time extension and costs associated with accelerating the work. As a result of these meetings, the City and the contractor reached a settlement wherein the City agreed to compensate the contractor for a portion of the total costs of the outstanding PCOs, RFCOs, and costs associated with accelerating and completing all construction work (Transmittal No. 2). Although the project entered the commercial operations phase, 178 calendar days later than originally anticipated in the design-build contract, the terms and conditions of

March 14, 2018
 Page 3

Change Order No. 33 include a non-compensable time extension to the actual date of commercial operations.

The total cost of Change Order No. 33 is expected to increase the project's construction budget such that the total construction contingency budget of the project will exceed 25 percent of the original contract amount ($\$36,159,834 \div \$127,302,000 = 0.28$). In accordance with the contract documents, a supplemental agreement is needed as part of Change Order No. 33. The terms and conditions of the supplemental agreement are included as part of the change order (See Exhibit "A" of Transmittal No. 2).

Status of Change Orders

A summary of the current change order status is presented below.

Summary of Change Orders as of January 2018			
Category	Total No. of Change Orders	Dollar (\$) Amount	Percent (%) Contract Amount
Fully Executed Change Orders	12	\$ 843,148	0.66%
Preliminary Change Orders	1	\$ 0	0.00%
Change Order per this Board Report	1	\$35,316,686	27.74%
Total	14	\$36,159,834	28.40%

Requested Contingency and Budget Authorization				
Original Contract	Current Contingency	Current Authorized Budget	Requested Additional Contingency	New Authorized Budget
\$127,302,000	\$10,865,000	\$138,167,000	\$25,293,834	\$163,460,834

City Attorney Review

The City Attorney's Office has reviewed this board report and associated Change Order No. 33 to the form and concurs with the City Engineer's recommendation herein.

STATUS OF FINANCING

There is no impact to the General Fund. The total funding for this Change Order No. 33 is not-to-exceed \$35,315,686.39. Funding is available in the funds and appropriation units shown below.

Fund No.	Appropriation Unit No.	Budget Fiscal Year	Amount
761	50NDS7	2016-17	\$16,316,737.39
761	50PDS7	2017-18	\$ 950,000.00
TBD*	TBD	TBD	\$18,048,949.00
Total			\$35,315,686.39

*TBD = To be determined.

The \$18,048,949 labeled as TBD is available within the Sewer Construction and Maintenance Fund; however, it is not located in the appropriation units associated with this project. The movement of appropriations to the correct project accounts will require action by the City Council and will be requested upon approval of Change Order No. 33 by the Board.

When those transfers occur, funds and appropriations will be determined by the Director of Sanitation or designee and will be communicated to the Director of the Office of Accounting or designee.

(MJS RMK KRR TJM LBM)

Report reviewed by:

BOE (ADM) and
LASAN (HTD and FMD)

Report prepared by:

Environmental Engineering Division

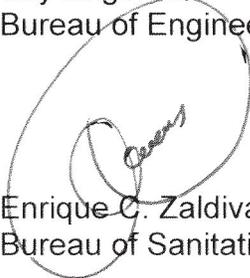
Michael J. Sarullo, PE
Division Engineer
Phone No. (310) 648-6120

Statement as to Funds Approved by:

Respectfully submitted,



Gary Lee Moore, PE, ENV SP
City Engineer
Bureau of Engineering

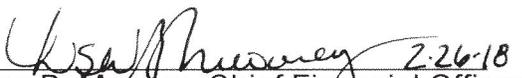


Enrique C. Zaldivar, Director
Bureau of Sanitation



Victoria A. Santiago, Director
Office of Accounting
Fund Ref. 761/50NDS7/FY2016-17/\$16,316,737.39
761/50PDS7/FY2017-18/\$950,000

Date: 2-27-18



Lisa B. Mowery, Chief Financial Officer
Bureau of Sanitation

MJS/DC/02-2018-0021.EED.gva

Questions regarding this report
may be referred to:
David Copp, Construction Manager
Phone No. (310) 648-6188
E-mail: David.Copp@lacity.org

**AMENDMENT NO. 1 TO
CONTRACT AGREEMENT C-123575**



**AGREEMENT FOR THE
DEVELOPMENT
OF THE
HYPERION WATER RECLAMATION PLANT DIGESTER GAS
PROCESSING SYSTEM**

Between

THE CITY OF LOS ANGELES

and

CONSTELLATION NEWENERGY, INC.

Dated

_____, 2020



AMENDMENT

This First Amendment (“Amendment 1”) to the Agreement for the Development of the Hyperion Treatment Plant Digester Gas Processing System (this “Agreement”) is made and entered into between the City of Los Angeles, a municipal corporation acting by order of and through its Board of Public Works (the “City”) and Constellation NewEnergy, Inc., a corporation organized and existing under the laws of the State of Delaware and authorized to do business in the State of California (the “Contractor”), with reference to the following facts:

A. The Agreement was fully executed and delivered on January 21, 2014. The Agreement was authorized by Resolution No. 13-1210-S1, adopted by the City’s Board of Public Works.

B. The Agreement includes two contracts: (1) The contract for the design and construction of the System by the Contractor (the “DB Contract”), and (2) The agreement for the operation and maintenance of the System by the Contractor (the “O&M Contract”). The Agreement also includes appendices that are common to the DB Contract and O&M Contract, which the Agreement defines as the “Project Documents.”

C. The Agreement is being amended to include, among other items, additional definitions common to the DB Contract, O&M Contract, and the Project Documents. It will also change the DB Contract Performance Testing. The City will procure natural gas in order for Contractor to meet the Performance Guarantees.

NOW, THEREFORE, the parties hereby agree as follows:

1. Amendment. The Agreement, including the DB Contract, O&M Contract, Project Documents, and all other all exhibits, attachments, and appendices thereto shall be amended as specified in Section A of this Amendment 1. For the avoidance of doubt, all references to “Attachment,” “Appendix,” “Exhibit,” “Article” or these terms in their plural forms in Section A of this Amendment 1 refer to attachments, appendices, exhibits, and articles to the Agreement.

2. Effective Date. The Agreement shall be deemed effective as of April 29, 2017.

3. Full Force and Effect. The City and Contractor agree that, except as specifically provided in this Amendment, the terms of the Agreement shall remain unchanged and in full force and effect.

4. Subparts. This Amendment may be executed in any number of original counterparts. All such counterparts shall constitute but one and the same Amendment.

[Balance of page intentionally left blank; signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed as of the day and year first written above.

CITY OF LOS ANGELES

CONSTELLATION NEWENERGY, INC.

By _____ President, Board of Public Works

Date: _____ Title: _____ Date: _____

APPROVED AS TO FORM:

MICHAEL N. FEUER, CITY ATTORNEY

By: Adena Hopenstand

Title: Deputy City Attorney

Date: _____

ATTEST:

HOLLY WOLCOTT, CITY CLERK

By: _____

Title: Deputy City Clerk

Date: _____

AMENDMENT 1

SECTION A

**ATTACHMENT 3
COMMON APPENDICES**

Appendix 1	Abbreviations and Defined Terms
Appendix 2	General Requirements
Appendix 3	Scope of Work
3-A	Scope of Design-Build Work
3-B	Scope of Operations and Maintenance Work
Appendix 4	Insurance Requirements
4-A	Insurance Requirements Sheet (Form Gen 146/IR)
4-B	Instructions and Information on Complying with City Insurance Requirements
Appendix 5	Guaranty
Appendix 6	Basis of Design
Appendix 7	MBE/WBE/OBE Subcontractor Outreach Program
Schedule B	MBE/WBE/OBE Utilization Profile
Schedule C	Final Subcontracting/ Subconsulting Report
Appendix 8	Required Contract Terms
Appendix 9	City Governmental Approvals
Appendix 10	Performance Testing
Appendix 11	Operations and Maintenance Requirements
Appendix 12	Drawings Showing Site

ATTACHMENT 3

COMMON APPENDICES

APPENDIX	TITLE	STATUS
1	Abbreviations and Defined Terms	Attached
2	General Requirements	Provided separately
3	Scope of Work	Attached
3-A	Scope of Design-Build Work	Attached
3-B	Scope of Operations and Maintenance Work	Attached
4	Insurance Requirements	Attached
4-A	Insurance Requirements Sheet (Form Gen 146/IR)	Attached
4-B	Instructions and Information on Complying with City Insurance Requirements	Attached
5	Guaranty	Attached
6	Basis of Design	Attached
7	MBE/WBE/OBE Subcontractor Outreach Program	Attached
Schedule B	Department of Public Works MBE/WBE/OBE Utilization Profile	Attached
Schedule C	Department of Public Works Final Subcontracting/Subconsulting Report	Attached
8	Required Contract Terms	Attached
9	City Governmental Approvals	Attached
10	Performance Testing	Attached
10-A	DB Contract Performance Testing	Attached
10-B	O&M Period Performance Testing	Attached
11	Not Used	N/A
12	Site Drawings	Attached

APPENDIX 1
ABBREVIATIONS AND DEFINED TERMS

MODIFY THE FOLLOWING ACRONYMS AND ABBREVIATIONS TO READ AS FOLLOWS:

ACRONYMS AND ABBREVIATIONS

The following are acronyms and abbreviations used throughout the Contract Documents:

AAMA	American Architectural Manufacturer's Association
AASHTO	American Association of State Highway and Transportation Officials
ABAND	Abandoned
ABS	Acrylonitrile – butadiene – styrene
ABUT	Abutment
AC	Alternating Current
ACI	American Concrete Institute
ACP	Asbestos cement pipe
ACRI	Air Conditioning and Refrigeration Institute
ACWS	Asphalt concrete wearing surface
ADA	Americans with Disabilities Act
AGA	American Gas Association
AGB	Alley grating basin
AGMA	American Gear Manufacturers' Association
AI	Asphalt Institute
AISC	American Institute of Steel Construction
AISI	American Iron & Steel Institute
AITC	American Institute of Timber Construction
ALT	Alternate
AMCA	Air Movement and Control Association
AMER STD	American Standard
ANSI	American National Standards Institute
APA	American Plywood Association
API	Application Programming Interface or American Petroleum Institute (depending on the context)
AQMD	Air Quality Management District
AREA	American Railway Engineering Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASQC	American Society for Quality Control
ASTM	American Society for Testing and Materials
ATSAC	Automated Traffic Surveillance and Control System
AWG	American Wire Gage (nonferrous wire)
AWPA	American Wood Preservers Association

AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
B/W	Back of wall
BAN	Abandon
BAVN	Business Assistance Virtual Network
BB	Beginning of Bridge
BC	Beginning of curve
BCR	Beginning of curb return
BDRY	Boundary
BF	Bottom of footing
BHMA	Building Hardware Manufacturer's Association
BM	Bench mark
BOS	Bureau of Sanitation
BPW	Board of Public Works
BSJ	Bell and spigot joint
BSL	Bureau of Street Lighting
BTRC	Business Tax Registration Certificate
BVC	Beginning of vertical curve
C&G	Curb and gutter
C/C	Center to center
CAB	Crushed aggregate base
CAC	California Administrative Code
CAL/ABL	State of California/Architectural Barriers Laws
CAL/OSHA	California Division of Occupational Safety and Health
CALTRANS	California Department of Transportation
CAP	Corrugated aluminum pipe
CB	Catch Basin
Cb	Curb
CBM	Certified Ballast Manufacturers
CBP	Catch Basin Connection Pipe
CBR	California Bearing Ratio
CCCF	Combined Cycle Cogeneration Facility
CCR	California Code of Regulations
CCTV	Closed Circuit TV
CEC	California Energy Commission
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CF	Curb face or Cubic foot
CFR	Code of Federal Regulations
CGB	Curbside grating basin
CIDH	Cast-in-drilled-hole
CIP	Cast iron pipe or Cast-in-place
CIPP	Cast-in place pipe
CITY	City of Los Angeles
CL	Clearance, center line

CLD	Control Logic Diagrams
CLF	Chain link fence
CLSM	Controlled Low Strength Material
CMB	Crushed miscellaneous base
CMC	Cement mortar-coated
CML	Cement mortar-lined
CMMS	Computerized Maintenance Management System
CO catalyst	Carbon Monoxide Catalyst
CO	Cleanout (sewer)
COL	Column
CONC	Concrete
CONN	Connection
CONST	Construct, Construction
COORD	Coordinate
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute
CSP	Corrugated steel pipe
CTB	Cement treated base
CTG	Combustion Turbine Generator
CV	Check valve
CY	Cubic yard
D	Load of pipe
DB	Decibels
DBE	Disadvantaged Business Enterprise
DBL	Double
DC	Direct Current
DCS	Distributed Control System
DCT/DCTWRP	Donald C. Tillman Water Reclamation Plant
DF	Douglas fir
DGUP	Digester Gas Utilization Project
DIA	Diameter
DIP	Ductile iron pipe
DL	Dead load
DMBB	Double metal beam barrier
DT	Drain Tile
DWG	Drawing
DWPPS	Los Angeles Department of Water & Power, Power System
DWPWS	Los Angeles Department of Water & Power, Water System
DWY	Driveway
DWY APR	Driveway approach
EA	Each
EB	End of bridge
EBO	Equal Benefits Ordinance (EBO), Section 10.8.2.1 of the Los Angeles Administrative Code
EC	End of curve
ECR	End of curb return
EF	Each face
EG	Edge of gutter

EGL	Energy grade line
EIA/TIA	Electronic Industries Association
EI	Elevation
EIC	Federal Earned Income Credit
ELC	Electrolier lighting conduit
ELT	Extra long ton
EMPAC	Enterprise Maintenance Planning and Control
ENGR	Engineer, Engineering
EP	Edge of pavement
EPA	Environmental Protection Agency and any successor agency
ESMT	Easement
ETB	Emulsion-treated base
ETL	Department of Building & Safety Electrical Test Laboratory
EVC	End of vertical curb
EW	Engineering Workstation
EXC	Excavation
EXP JT	Expansion joint
EXST	Existing
F	Fahrenheit
F&C	Frame and cover
F&I	Furnish and install
FAB	Fabricate
FAS	Flashing arrow sign
FCI	Fluid Control Institute, Inc.
FD	Floor drain
FDN	Foundation
FED SPEC	Federal Specification
FG	Finished grade
FH	Fire hydrant
FIA	Factory Insurance Association
FL	Flow line
FM	Factory Mutual Association
FS	Finished surface
FSHO	First Source Hiring Ordinance (FSHO), Section 10.44 et seq. of the Los Angeles Administrative Code
FTA	Fully traffic actuated
FTG	Footing
FT-LB	Foot-pound
FW	Face of wall
GA	Gauge
GA	Gypsum Association
GALV	Galvanized
GC	Grade change
GIP	Galvanized iron pipe
GL	Ground line or grade line
GM	Gas meter
GP	Guy pole
GR	Grade or General Requirements, depending on the context
GRI	Geosynthetic Research Institute
GRTG	Grating
GSP	Galvanized steel pipe

GTE	General Telephone Company
H	High or height
HB	Hose bib
HC	House connection
HDWL	Headwall
HGL	Hydraulic grade line
HORIZ	Horizontal
HP	Horsepower
HPG	High pressure gas
HPS	High pressure sodium (Light)
HRSG	Heat Recovery Steam Generator
HS	Historian Server
HTP or HWRP	Hyperion Treatment Plant or Hyperion Water Reclamation Plant
HW	Hardware
HYDR	Hydraulic
I/O	Input/Output
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
ID	Inside diameter
IEEE	Institute of Electrical and Electronics Engineers
INCL	Including
INSP	Inspection
INV	Invert
IP	Iron pipe
IPW	Inspector of Public Works
ISA	Instrument Society of America
JC	Junction chamber
JCT	Junction
JS	Junction structure
JT	Joint
L	Length
LA	City of Los Angeles
LAB	Laboratory
LABC	City of Los Angeles Building Code
LACDPW	Los Angeles County Department of Public Works
LADGS	Los Angeles Department of General Services
LADOT	Los Angeles Department of Transportation
LAG	LA – Glendale Water Reclamation Plant
LAGWRP	LA – Glendale Water Reclamation Plant
LAMC	City of Los Angeles Municipal Code
LAT	Lateral
LB	Pound
LD	Local depression
LF	Linear foot
LH	Lamp hole
LL	Live load
LO-CAT®	patented process for conversion of hydrogen sulfide to elemental sulfur
LOL	Layout line

LONG	Longitudinal
LP	Lamp post
LPS	Low pressure sodium (Light)
LS	Lump sum
LTS	Lime treated soil
LWO	Living Wage Ordinance, Section 10.37 et seq. of the Los Angeles Administrative Code
MA	Mast Arm
MAINT	Maintenance
MAX	Maximum
MB	Metal beam
MBB	Metal beam barrier
MBE	Minority Business Enterprise
MBGR	Metal beam guard railing
MCR	Middle of curb return
MEAS	Measure
MED	Median
MH	Manhole, maintenance hole
MIL SPEC	Military Specification
MISC	Miscellaneous
MOD	Modified, modify
MON	Monument
MSCF	Million Standard Cubic Feet
MSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MSM	Mandatory subcontracting minimum
MTA	Metropolitan Transportation Authority (of LA County)
MTH	Month
MTL	Material
MULT	Multiple
MVL	Mercury vapor light
MWD	Metropolitan Water district
NAAMM	National Architectural Association of Metal Manufacturers
NEC	National Electrical Code
NECA	National Electrical Contractors Association
NEMA	National Electrical Manufacturers Association
NFC	National Fire Code
NFPA	National Fire Protection Association
NOAA	National Oceanic and Atmospheric Administration (Dept. of Commerce)
NRCP	Nonreinforced concrete pipe
NWMA	National Wood Manufacturer's Association
NWWDA	National Wood Window and Door Association
O&M	Operations and Maintenance
OBE	Other Business Enterprise
OBS	Obsolete
OC	Operator Console
OD	Outside diameter

OE	Outer edge
OEM	Office of Emergency Management
OH	Overhead
OPP	Opposite
ORIG	Original
OSA	Office of the State Architect
OSHA	Occupational Safety and Health Administration (Dept. of Labor)
PACBELL	Pacific Bell (Pacific Telesis Group)
PB	Pull box
PC	Point of curvature
PCA	Portland Cement Association
PCC	Portland cement concrete or Point of compound curvature
PCM	Programmable Control Module
PCVC	Point of compound vertical curve
PE	Polyethylene
PI	Point of intersection
PL	Property line
PMB	Processed miscellaneous base
PMT	Program Management Team
POC	Point on curve
POT	Point on tangent
PP	Power pole
PRC	Point of reverse curve
PRVC	Point of reverse vertical curve
PSI	Pounds per square inch
PT	Point of tangency
PVC	Polyvinyl chloride
PVMT	Pavement
PVT R/W	Private right-of-way
Q	Rate of flow in cubic feet per second
QC	Quality Control
QUAD	Quadrangle, Quadrant
R	Radius
R&O	Rock and oil
R/W	Right-of-way
RA	Recycling agent
RA	Rule of General Application – Department & Safety
RAC	Recycled asphalt concrete
RAP	Reclaimed asphalt pavement
RBAC	Rubberized asphalt concrete
RC	Reinforced concrete
RCB	Reinforced concrete box
RCC	Rail Construction Corporation
RCE	Registered civil engineer
RCP	Reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
RCSC	Research Council on Structural Connections of the Engineering Foundation
RCV	Remote control valve
REC	Renewable energy credit
REF	Reference
REINF	Reinforced or reinforcement

RES	Reservoir
RFP	Request for Proposals
RGE	Registered geotechnical engineer
RI/O	Remote I/O
RR	Railroad
RSE	Registered structural engineer
RTE	Registered traffic engineer
S	Slope
SAMA	Scientific Apparatus Manufacturer's Association
SCAQMD	South Coast Air Quality Management District
SCCP	Steel cylinder concrete pipe
SCG	Southern California Gas Company
SCHED	Schedule
SCR	Selective Catalytic Reduction
SCRRA	Southern California Regional Rail Authority
SD	Storm drain
SDI	Steel Deck Institute
SDR	Standard thermoplastic pipe dimension ratio (Ratio of pipe O.D. to minimum wall thickness)
SEC	Section
SF	Square foot
SI	International System of Units (Metric)
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association
SOCB	Side opening catch basin
SPEC	Specifications
SPPWC	Standard Plans for Public Works Construction
SR	Standard ratio
SRJ	Steel ring joint (for RCP)
SS	Sanitary sewer
SSB	Select sub-base
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
ST HWY	State highway
STA	Station
STD	Standard
STR	Straight
STR GR	Straight grade
STRUC	Structural/Structure
SW	Software
SWD	Sidewalk drain
SWRCB	State Water Resources Control Board
SY	Square yard
T&M	Time and materials
TAN	Tangent
TC	Top of curb
TCP	Traffic control plan
TEL	Telephone
TF or T/F	Top of footing
TH	Test hole

TOPO	Topography
TR	Tract
TRANS	Transition
TS	Traffic signal or transition structure
TSC	Traffic signal conduit
TSS	Traffic signal standard
TW	Top of wall
TYP	Typical
UBC	Uniform Building Code, International Conference of Building Officials
UL	Underwriters Laboratories, Inc.
USA	Underground Service Alert
USGS	United States Geological Survey
VAR	Varies, Variable
VB	Valve box
VC	vertical curve
VCP	Vitrified clay pipe
VERT	Vertical
VOL	Volume
VT	Variable thickness
W	Wider or width
WATCH	Work Area Traffic Control Handbook
WBE	Women Business Enterprise
WCLIB	West Coast Lumber Inspection Bureau
WCRSI	Western Concrete Reinforcing Steel Institute
WI	Wrought iron
WIC	Woodwork Institute of California
WM	Water meter
WPJ	Weakened plane joint
WRI	Wire Reinforcement Institute
WRO	Worker Retention Ordinance
WUT	Western Union Telegraph
WWPA	Western Wood Products Association
XCONN	Cross connection
XSEC	Cross section

ADD THE FOLLOWING TERMS TO THE AGREEMENT:

DEFINED TERMS

“Additional Services” means (1) any work relating to the procurement, storage, testing, inspection, maintenance, or installation of new or replacement equipment, instrumentation, machinery, or parts, including but not limited to, CO catalysts, SCR systems, Exhaust Collectors, and Exhaust Bellows; (2) the provision of any third party services, inspections, sampling, evaluations, analyses, or testing relating to but not limited to (i) Digester Gas, other gas and chemicals, or emissions, or (ii) the performance, operation, or management of systems at the HTP Plant; (3) the operation of the System in excess of Contractor’s Performance Guarantees, as provided in Appendix 41, General Requirements 1. a, b and c.; (4) the sale to the City of California Green House Gas (GHG) allowances or offset credits

requested by the City for its compliance with the Cap and Trade Regulations, provided doing so is consistent with Applicable Law; and (5) the furnishing of any labor, materials, and equipment deemed reasonably necessary by the City.

“Air Permit Change Event” means any event materially impacting, interrupting, or preventing Contractor from operating or maintaining the System due to, or resulting from, any condition or requirement imposed by the then-existing air permit that either differs from, or is not expressly stated in, the conditions and requirements of (i) the application for SCAQMD Air Permit to Construct dated February 2011 and amended June 7, 2013, inclusive of Contractor comments transmitted August 22, 2013, (ii) the Scope of Work, or (iii) the Basis of Design, provided that the Contractor operates and maintains the System in accordance with Good Industry Practice.

“Cap and Trade Regulations” means the Mandatory Greenhouse Gas Emissions Reporting and California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms regulations (California Code of Regulations Title 17, Subchapter 10, Articles 2 and 5 respectively), as amended from time to time, promulgated by the California Air Resources Board of the California Environmental Protection Agency pursuant to the California Global Warming Solutions Act of 2006.

“CO Catalyst Failure” means any event rendering a CO catalyst inoperable, subject to replacement, or resulting in the material degradation of a CO catalyst, provided Contractor operates the siloxane removal system in accordance with Good Industry Practice and the siloxane removal system manufacturer’s specifications. Material degradation shall include, but not be limited to, an increase in differential pressure of 0.75 inches of H₂O when measured by plant instrumentation across a CO catalyst, degradation in the performance of a CO catalyst reasonably attributable to siloxane deposits on the CO catalyst, or a failure to comply with any air permit requirement related to CO emissions reasonably attributable to siloxane deposits on a CO catalyst.

“Excessive Backpressure” means the occurrence of backpressure at a CTG exhaust flange in excess of 18.6” w.g. caused by (i) siloxane fouling of any CO catalyst or SCR system, (ii) siloxane build-up downstream of a CTG exhaust flange, (iii) the degradation of the lining of the Project’s main exhaust stack (formerly known as the HERS stack), or (iv) modification of the main exhaust stack or associated breeching, provided Contractor operates the siloxane removal system in accordance with both Good Industry Practice and the siloxane removal manufacturer’s specifications.

“Exhaust Collector” and “Exhaust Bellows” means the Impacted Components as defined by Attachment A of Solar Turbines Exhaust Pressure Analysis Report Revision 0, Mars 100-16000 Gen-Set Gas Turbine.

“Premature SCR Catalyst Failure” means any event rendering a SCR system inoperable, subject to replacement, or resulting in the material degradation of a SCR system, provided Contractor operates the System in accordance with Good Industry Practice and SCR catalyst manufacturer specifications. Material degradation shall include, but not be limited to (i)

degradation in the performance of a SCR system reasonably attributable to siloxane deposits on the SCR catalyst, (ii) degradation in the performance of a SCR system resulting from a failure to comply with any air permit requirement related to NOx emissions, or (iii) ammonia slip reasonably attributable to siloxane deposits on a SCR catalyst.

MODIFY THE FOLLOWING TERM TO READ AS FOLLOWS:

“Relief Event” means any act, event or condition that materially and adversely increases the costs of performing the Contractor’s obligations hereunder or delays a critical path on the project schedule with respect to the DB Contract or delays a path that may become critical or performance of Management Services with respect to the O&M Contract, provided that such act, event or condition (or the effects thereof) could not have been avoided or prevented by due diligence and use of reasonable efforts by Contractor, subject to certain exclusions as specified herein.

- (1) Inclusions. Subject to the foregoing, Relief Events shall include:
 - (a) Listed Force Majeure Events;
 - (b) Changes in Law, except as provided in item 2 below;
 - (c) Differing Site Conditions (with respect to the DB Contract only);
 - (d) the delivery to the System of Digester Gas that fails to meet the standards and specifications set forth in Table 3.1 of Appendix 41 (with respect to Performance Testing under the DB Contract, or with respect to performance of the Management Services under the O&M Contract);
 - (e) any City-Caused Delay;
 - (f) Any acts of God (including earthquakes and tidal waves), acts of government in its sovereign capacity, riots, insurrections, wars, fires, floods, epidemics, quarantine restrictions, industry-wide strikes, freight embargoes, or unusually severe weather.
 - (g) CO Catalyst Failure;
 - (h) Premature SCR Catalyst Failure;
 - (i) Excessive Backpressure; and
 - (j) any Air Permit Change Event.

(2) Exclusions. It is specifically understood that none of the following acts, events or circumstances shall, on their own, constitute Relief Events unless they shall have been caused by an event which is otherwise a Relief Event as defined herein:

(i) terms, conditions and prices prevailing in the market for the processing of digester gas and sale of electricity and/or steam (with respect to the O&M Contract only);

(ii) any act, event or circumstance that would not have occurred if the Contractor had complied with its obligations hereunder;

(iii) changes in interest rates, inflation rates, labor costs, insurance premiums, commodity prices, currency values, exchange rates or other general economic conditions;

(iv) changes in the financial condition of any Contractor-Related Entity affecting the ability to perform its respective obligations;

(v) the consequences of error, neglect or omissions by any Contractor- Related Entity in the performance of the Contract;

(vi) union or labor work rules, requirements or demands which have the effect of increasing the number of employees employed at the System or otherwise increasing the cost to the Contractor of performance;

(vii) any impact of prevailing wage or similar law, customs or practices on the Contractor's costs;

(viii) any and all surface, subsurface and other conditions affecting the Site, which may increase cost of performing or cause delay in the performance of the Design-Build Work, including particularly any subsurface geotechnical conditions, except for Differing Site Conditions (with respect to the DB Contract only);

(ix) reasonably anticipated weather conditions;

(x) failure of the Contractor to secure any patent or other intellectual property right which is or may be necessary for the performance of the Work, unless such failure is caused by the City or a Relief Event;

(xi) a Change in Law pertaining to taxes; and

(xii) any Change in Law that does not impose more stringent or burdensome requirements than are otherwise imposed by the Contract Documents.

(3) Off-Site Residue Disposal Obligations. It is further specifically understood that, with respect to Off-Site Residue Disposal Obligations, the occurrence of a "Relief Event" shall entitle the Contractor to performance and

schedule relief, but shall not entitle the Contractor to an increase in the Service Fee under the O&M Contract.

**APPENDIX 4
INSURANCE REQUIREMENTS**

- 4 General Requirements
- 4-A Insurance Requirements Sheet (Form Gen 146/IR)
- 4-B Instructions and Information on Complying with City Insurance Requirements, Rev. 05/18

GENERAL REQUIREMENTS

A) GENERAL

MODIFY THE FOLLOWING SECTION TO READ AS FOLLOWS:

7) ACCEPTABLE EVIDENCE

Electronic submission via KwikComply, the City's online insurance compliance system (<https://kwikcomply.org/>), is the preferred method for submitting evidence of insurance. KwikComply can be used by insurance brokers and agents to submit Contractor insurance certificates directly to the City using the ACORD 25 Certificate of Liability Insurance in electronic format. Insurance Industry Certificates of Insurance other than the ACORD 25 may also be accepted. However all Certificates must provide a 30 days' notice provision (ten days for non-payment of premium) AND an Additional Insured Endorsement naming the City an additional insured completed by Contractor's insurance company or its designee. If the policy includes an automatic or blanket additional insured endorsement, the Insurance Certificate must state that the City is an automatic or blanket additional insured. An endorsement naming the City as an insured is required on all Builder's Risk policies. An endorsement naming the City as Loss Payee as its Interest may appear is required on all property, fidelity or Surety coverages.

Alternatively, the Contractor may submit a copy of the full insurance policy containing language which complies with subparagraphs 1) through 6) above.

Additional Insured Endorsements DO NOT apply to the following:

- Indication of compliance with statute, such as Workers' Compensation Law.
- Professional Liability insurance.

MODIFY THIS APPENDIX TO READ AS FOLLOWS:

**APPENDIX 4-B
INSTRUCTIONS AND INFORMATION ON COMPLYING WITH CITY INSURANCE
REQUIREMENTS, REV. 05/18**

**CITY OF LOS ANGELES
INSTRUCTIONS AND
INFORMATION
ON COMPLYING WITH CITY INSURANCE REQUIREMENTS**
(Share this information with your insurance agent or broker)

1. **Agreement/Reference** All evidence of insurance should identify the nature of your business with the CITY. Clearly show any assigned number of a bid, contract, lease, permit, etc. or give the project name and the job site or street address to ensure that your submission will be properly credited. Provide the **types of coverage and minimum dollar amounts** specified on the Required Insurance and Minimum Limits sheet (Form Gen. 146) included in your CITY documents.

2. **When to Submit** Normally, no work may begin until a CITY insurance certificate approval number ("CA number") has been obtained, so insurance documents should be submitted as early as practicable. For **As-needed Contracts**, insurance need not be submitted until a specific job has been awarded. **Design Professionals** coverage for new construction work may be submitted simultaneously with final plans and drawings, but before construction commences.

3. **Acceptable Evidence and Approval** Electronic submission is the required method of submitting your documents. **KwikComply** is the CITY's online insurance compliance system and is designed to make the experience of submitting and retrieving insurance information quick and easy. The system is designed to be used by insurance brokers and agents as they submit client insurance certificates directly to the City. It uses the standard insurance industry form known as the **ACORD 25 Certificate of Liability Insurance** in electronic format. **KwikComply** advantages include standardized, universally accepted forms, paperless approval transactions (24 hours, 7 days per week), and security checks and balances. The easiest and quickest way to obtain approval of your insurance is to have your insurance broker or agent access **KwikComply** at <https://kwikcomply.org/> and follow the instructions to register and submit the appropriate proof of insurance on your behalf.

Contractor must provide City a thirty (30) day notice of cancellation (ten (10) days for nonpayment of premium) AND an Additional Insured Endorsement naming the CITY an additional insured completed by your insurance company or its designee. If the policy includes an automatic or blanket additional insured endorsement, the Certificate must state the CITY is an automatic or blanket additional insured. An endorsement naming the CITY an Additional Named Insured and Loss Payee as Its Interests May Appear is required on property policies. All evidence of insurance must be authorized by a person with authority to bind coverage, whether that is the authorized agent/broker or insurance underwriter.

Additional Insured Endorsements DO NOT apply to the following:

- Indication of compliance with statute, such as Workers' Compensation Law.
- Professional Liability insurance.

Verification of approved insurance and bonds may be obtained by checking **KwikComply**, the CITY's online insurance compliance system, at <https://kwikcomply.org/>.

4. **Renewal** When an existing policy is renewed, have your insurance broker or agent submit a new Acord 25 Certificate or edit the existing Acord 25 Certificate through **KwikComply** at <https://kwikcomply.org/>. **Alternative Programs/Self-Insurance** Risk financing mechanisms such as Risk Retention Groups, Risk Purchasing Groups, off-shore carriers, captive insurance programs and selfinsurance programs are subject to separate approval after the CITY has reviewed the relevant

audited financial statements. To initiate a review of your program, you should complete the Page 2 of 2 Applicant's Declaration of Self Insurance form (<http://cao.lacity.org/risk/InsuranceForms.htm>) to the Office of the City Administrative Officer, Risk Management for consideration.

5. **General Liability** insurance covering your operations (and products, where applicable) is required whenever the CITY is at risk of third-party claims which may arise out of your work or your presence or special event on City premises. **Sexual Misconduct** coverage is a required coverage when the work performed involves minors. **Fire Legal Liability** is required for persons occupying a portion of CITY premises. Information on two CITY insurance programs, the SPARTA program, an optional source of low-cost insurance which meets the most minimum requirements, and the Special Events Liability Insurance Program, which provides liability coverage for short-term special events on CITY premises or streets, is available at (www.2sparta.com), or by calling (800) 420-0555.

6. **Automobile Liability** insurance is required only when vehicles are used in performing the work of your Contract or when they are driven off-road on CITY premises; it is not required for simple commuting unless CITY is paying mileage. However, compliance with California law requiring auto liability insurance is a contractual requirement.

7. **Errors and Omissions** coverage will be specified on a project-by-project basis if you are working as a licensed or other professional. The length of the claims discovery period required will vary with the circumstances of the individual job.

8. Workers' Compensation and Employer's Liability insurance are not required for single person contractors. However, under state law these coverages (or a copy of the state's Consent To Self Insure) must be provided if you have any employees at any time during the period of this contract. Contractors with no employees must complete a Request for Waiver of Workers' Compensation Insurance Requirement (<http://cao.lacity.org/risk/InsuranceForms.htm>). A Waiver of Subrogation on the coverage is required only for jobs where your employees are working on CITY premises under hazardous conditions, e.g., uneven terrain, scaffolding, caustic chemicals, toxic materials, power tools, etc. The Waiver of Subrogation waives the insurer's right to recover (from the CITY) any workers' compensation paid to an injured employee of the contractor.

9. Property Insurance is required for persons having exclusive use of premises or equipment owned or controlled by the CITY. Builder's Risk/Course of Construction is required during construction projects and should include building materials in transit and stored at the project site.

10. Surety coverage may be required to guarantee performance of work and payment to vendors and suppliers. A Crime Policy may be required to handle CITY funds or securities, and under certain other conditions. Specialty coverages may be needed for certain operations. For assistance in obtaining the CITY required bid, performance and payment surety bonds, please see the City of Los Angeles Contractor Development and Bond Assistance Program website address at <http://cao.lacity.org/risk/BondAssistanceProgram.pdf> or call (213) 258-3000 for more information.

11. **Cyber Liability & Privacy** coverage may be required to cover technology services or products for both liability and property losses that may result when a CITY contractor engages in various electronic activities, such as selling on the Internet or collecting data within its internal electronic network. **CONTRACTOR'S** policies shall cover liability for a data breach in which the CITY employees' and/or CITY customers' confidential or personal information, such as but not limited to, Social Security or credit card information are exposed or stolen by a hacker or other criminal who has gained access to the CITY'S or CONTRACTOR'S electronic network. The policies shall cover a variety of expenses associated with data breaches, including: notification costs, credit monitoring, costs to defend claims by state regulators, fines and penalties, and loss resulting from identity theft. The policies are required to cover liability arising from website media content, as well as property exposures from: (a) business interruption, (b) data loss/destruction, (c) computer fraud, (d) funds transfer loss, and (e) cyber extortion.

**APPENDIX 5
GUARANTY**

MODIFY SECTION 9 NOTICES TO READ AS FOLLOWS:

9. Notices. All demands, notices and other communications provided for hereunder shall, unless otherwise specifically provided herein, (a) be in writing addressed to the party receiving the notice at the address set forth below or at such other address as may be designated by written notice, from time to time, to the other party, and (b) be delivered by personal service (including express or courier service), by electronic communication, whether by telex, telegram or telecopying (if confirmed in writing sent by registered or certified mail, postage prepaid, return receipt requested), or by registered or certified mail, postage prepaid, return receipt requested. Notices shall be sent to the following addresses:

If to Counterparty:

Shahrouzeh Saneie
Hyperion Water Reclamation Plant
Harry Pregerson Technical Support
Facility 12000 Vista Del Mar
Playa Del Rey, CA 90293
Telephone No.: (310) 648-5239
Email:
shahrouzeh.saneie@lacity.org

With copies to:

Adena M. Hopenstand, Deputy City
Attorney
Office of the City Attorney
200 N. Main Street, 7th Fl.
Los Angeles, CA 90012
Telephone No.: (213) 978-8156
Fax: 213-978-8222
Email: adena.hopenstand@lacity.org

If to Guarantor:

Exelon Business Services Company
10 S. Dearborn, 49th Floor
Chicago, IL 60603
Attn: Associate General Counsel, Exelon Generation
Phone: 610-595-4234
Fax: 610-595-8922

With a copy to:

Constellation NewEnergy, Inc.
1310 Point St, 13th Floor
Baltimore, MD 21231
Attn: Assistant General Counsel
Phone: 410-470-6000
Fax: 410-468-3828

Either Guarantor or Counterpart may from time to time change its address for the purpose of notices by a similar notice specifying a new address, but no such change is effective until it is actually received by the party sought to be charged with its contents.

All notices and other communications required or permitted under this Guaranty which are addressed as provided in this Section 9 are effective upon delivery, if delivered personally or by overnight mail, and, are effective five days following deposit in the United States mail, postage prepaid if delivered by mail.

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**APPENDIX 8
REQUIRED CONTRACT TERMS**

MODIFY THIS SECTION TO READ AS FOLLOWS:

8-2 Mandatory Provisions Pertaining to Non-Discrimination in Employment.

Unless otherwise exempt, this Contract is subject to the applicable non-discrimination, equal benefits, equal employment practices, and affirmative action program provisions in LAAC Section 10.8 et seq., as amended from time to time.

- A. Contractor shall comply with the applicable non-discrimination and affirmative action provisions of the laws of the United States of America, the State of California, and City. In performing this Contract, Contractor shall not discriminate in any of its hiring or employment practices against any employee or applicant for employment because of such person's race, color, religion, national origin, ancestry, sex, sexual orientation, gender, gender identity, age, disability, domestic partner status, marital status or medical condition.
- B. The requirements of Section 10.8.2.1 of the LAAC, the Equal Benefits Ordinance, and the provisions of Section 10.8.2.1(f) are incorporated and made a part of this Contract by reference.
- C. The provisions of Section 10.8.3 of the LAAC are incorporated and made a part of this Contract by reference and will be known as the "Equal Employment Practices" provisions of this Contract.
- D. The provisions of Section 10.8.4 of the LAAC are incorporated and made a part of this Contract by reference and will be known as the "Affirmative Action Program" provisions of this Contract.

Any subcontract entered into by Contractor for work to be performed under this Contract must include an identical provision.

MODIFY THIS SECTION TO READ AS FOLLOWS:

8-3 Living Wage and Worker Retention Ordinances.

Contractor shall comply with the Living Wage Ordinance, LAAC Section 10.37 et seq., as amended from time to time. Contractor further agrees that it shall comply with federal law proscribing retaliation for union organizing. Any subcontract entered into by Contractor for work to be performed under this Contract must include an identical provision.

Contractor shall comply with the Worker Retention Ordinance, LAAC Section 10.36 et seq., as amended from time to time. Any subcontract entered into by Contractor for work to be performed under this Contract must include an identical provision

ADD THE FOLLOWING SECTION 8-16:

8-16 Iran Contracting Act.

In accordance with California Public Contract Code Sections 2200-2208, all contractors entering into, or renewing contracts with City for goods and services estimated at \$1,000,000 or more are required to complete, sign, and submit the “Iran Contracting Act of 2010 Compliance Affidavit.”

ADD THE FOLLOWING SECTION 8-17:

8-17 Restrictions on Campaign Contributions and Fundraising in City Elections.

Unless otherwise exempt, if this Contract is valued at \$100,000 or more and requires approval by an elected City office, Contractor, Contractor's principals, and Contractor's Subcontractors expected to receive at least \$100,000 for performance under the Contract, and the principals of those Subcontractors (the "Restricted Persons") shall comply with Charter Section 470(c)(12) and LAMC Section 49.7.35. Failure to comply entitles City to terminate this Contract and to pursue all available legal remedies. Charter Section 470(c)(12) and LAMC Section 49.7.35 limit the ability of the Restricted Persons to make campaign contributions to and engage in fundraising for certain elected City officials or candidates for elected City office for twelve months after this Contract is signed. Additionally, a Contractor subject to Charter Section 470(c)(12) is required to comply with disclosure requirements by submitting a completed and signed Ethics Commission Form 55 and to amend the information in that form as specified by law. Any Contractor subject to Charter Section 470(c)(12) shall include the following notice in any contract with any Subcontractor expected to receive at least \$100,000 for performance under this Contract:

“Notice Regarding Restrictions on Campaign Contributions and Fundraising in City Elections

You are a subcontractor on City of Los Angeles Contract #C-123575-1. Pursuant to the City of Los Angeles Charter Section 470(c)(12) and related ordinances, you and your principals are prohibited from making campaign contributions to and fundraising for certain elected City of Los Angeles (“City”) officials and candidates for elected City office for twelve months after the City contract is signed. You are required to provide the names and contact information of your principals to the Contractor and to amend that information within ten business days if it changes during the twelve month time period. Failure to comply may result in termination of this Contract and any other available legal remedies. Information about the restrictions may be found online at ethics.lacity.org or by calling the Los Angeles City Ethics Commission at (213) 978-1960.”

ADD THE FOLLOWING SECTION 8-18:

8-18 Contractors' Use of Criminal History for Consideration of Employment Applications

Contractor shall comply with the City Contractors' Use of Criminal History for Consideration of Employment Applications Ordinance, LAAC Section 10.48 et seq., as amended from time to time. Any subcontract entered into by Contractor for work to be performed under this Contract must include an identical provision.

ADD THE FOLLOWING SECTION 8-19:

8-19 Confidentiality.

All documents, information and materials provided to Contractor by City or developed by Contractor pursuant to this Contract (collectively “Confidential Information”) are confidential. Contractor shall not provide or disclose any Confidential Information or their contents or any information therein, either orally or in writing, to any person or entity, except as authorized by City or as required by law. Contractor shall immediately notify City of any attempt by a third party to obtain access to any Confidential Information. This provision will survive expiration or termination of this Contract.

ADD THE FOLLOWING SECTION 8-20:

8-20 Disclosure of Border Wall Contracting Ordinance

Contractor shall comply with Los Angeles Administrative Code Section 10.50 *et seq.*, 'Disclosure of Border Wall Contracting.' City may terminate this Contract at any time if City determines that Contractor failed to fully and accurately complete the required affidavit and disclose all Border Wall Bids and Border Wall Contracts, as defined in LAAC Section 10.50.1.

**APPENDIX 10
PERFORMANCE TESTING**

APPENDIX 10-A: DB CONTRACT PERFORMANCE TESTING
APPENDIX 10-B: O&M PERIOD PERFORMANCE TESTING

**APPENDIX 10A
DB CONTRACT PERFORMANCE TESTING**

MODIFY THIS SECTION TO READ AS FOLLOWS

1.1.1. The Contractor shall complete all performance tests to demonstrate that the installed equipment, system, and integrated unit performance satisfy the Subsystem Performance Guarantees listed in table below.

Guarantee*	Units	Expected Value ¹	Final Requirements ²
1. CTG-1 Electrical Output	kW	10,539	97.5% of Expected Value
2. CTG-2 Electrical Output	kW	10,539	97.5% of Expected Value
3. STG-1 Electrical Output	kW	7,630	100% of Expected Value
4. HRSG-1/2 Steam Output – unfired	lb/hr	40,380	100% of Expected Value
5. HRSG-1/2 Steam Output – fired	lb/hr	74,330	100% of Expected Value
6. CTG-1 Heat Rate	Btu/kW-hr (LHV)	11,120	102.5% of Expected Value
7. CTG-2 Heat Rate	Btu/kW-hr (LHV)	11,120	102.5% of Expected Value
8. STG-1 Full Condensing Steam Rate	lb/kW-hr	11.20	100% of Expected Value

¹ This column illustrates the expected values for electrical output and heat rate that Contractor expects to attain and shall be considered preliminary.

² This column illustrates the values for electrical output and heat rate that shall meet the performance testing requirements.

MODIFY THIS SUB-SECTION TO READ AS FOLLOWS:

2.4.4 If at any time during this thirty (30) day test of the Facility a partial outage or outages occur for an aggregate period of greater than 36 hours and result in an on-line availability factor of less than 95% for the CTG/HRSR trains, STG, or steam delivered to the System, then the Facility will be deemed to have failed the Operational Reliability Test and the Operational Reliability Test must be repeated in its entirety.

ADD SUB-SECTION 2.4.8 TO READ AS FOLLOWS:

2.4.8 Notwithstanding Section 2.4.7, if at any time during the thirty (30) day test period there is a continuous outage or partial outage to the System of more than 6 hours due to a CO Catalyst Failure, then the Operational Reliability Test shall be deemed successfully achieved

AMENDMENT NO. 1 TO
CONTRACT AGREEMENT C-123575



BUREAU OF SANITATION

**SPECIFICATIONS
FOR
HYPERION WATER RECLAMATION PLANT DIGESTER
GAS UTILIZATION PROJECT (DGUP)**

**CONDITIONS OF THE CONTRACT
AND
GENERAL REQUIREMENTS**

City of Los Angeles, California
Department of Public Works
Bureau of Sanitation and Bureau of Engineering
Hyperion Treatment Plant



**SECTION 01572
CONSTRUCTION AND DEMOLITION WASTE
MANAGEMENT**

MODIFY SECTION 1.3(C) TO READ AS FOLLOWS

1.3 Definitions

- C. "Construction and Demolition Recycling Guide": a publication by the Bureau of Sanitation's Solid Resources Citywide Recycling Division available at Solid Resources Citywide Recycling Division, 1149 S. Broadway, 10th Floor, Los Angeles, CA 90015, (213) 485-2260; FAX (213) 485-3671.

END OF SECTION

C-123575-1

AMENDMENT NO. 1 TO
CONTRACT AGREEMENT C-123575



**CONTRACT FOR THE
DESIGN AND CONSTRUCTION OF THE
HYPERION TREATMENT PLANT DIGESTER GAS PROCESSING
SYSTEM**

Between

THE CITY OF LOS ANGELES

and

CONSTELLATION NEWENERGY, INC.

Dated

_____, 2020



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EXHIBIT 1

COMMON TERMS

ARTICLE 1-2. REPRESENTATIONS AND WARRANTIES

ADD THE FOLLOWING ARTICLE TO READ AS FOLLOWS:

1-2.3. CO Catalyst Warranties

The Contractor shall, for the protection of the City, obtain from any vendor furnishing CO catalysts and related component parts or equipment, such warranties or guarantees as are normally provided with respect thereto. The Contractor shall also, upon request by the City, provide copies of such warranties and guarantees. Notwithstanding any other provision of the Contract Documents, the presentment of such warranties or guarantees in favor of the City shall relieve the Contractor of any additional warranty obligation with respect to any CO catalyst and related component part or equipment; however, Contractor warrants that any CO catalyst and related component part or equipment shall be of new or recent manufacture, of good quality, free from faults, and installed free of any defects in workmanship.

MODIFY THIS ARTICLE TO READ AS FOLLOWS:

1-7.3. EXCUSABLE DELAYS.

Neither party shall be liable for its delay or failure to perform any obligation under and in accordance with this Contract, if the delay or failure arises out of fires, floods, earthquakes, epidemics, quarantine restrictions, other natural occurrences, strikes, lockouts (other than a lockout by the party or any of the party's Subcontractors), freight embargoes, terrorist acts, insurrections or other civil disturbances, or other similar events to those described above, but in each case the delay or failure to perform must be beyond the control and without any fault or negligence of the party delayed or failing to perform (these events are referred to in this provision as "Force Majeure Events").

Notwithstanding the foregoing, a delay or failure to perform by a Subcontractor of Contractor shall not constitute a Force Majeure Event, unless the delay or failure arises out of causes beyond the control of both Contractor and Subcontractor, and without any fault or negligence of either of them. In such case, Contractor shall not be liable for the delay or failure to perform, unless the goods or services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit Contractor to perform timely. As used in this Contract, the term "Subcontractor" means a subcontractor at any tier.

In the event Contractor's delay or failure to perform arises out of a Force Majeure Event, Contractor agrees to use commercially reasonable best efforts to obtain the goods or services from other sources, and to otherwise mitigate the damages and reduce the delay caused by the Force Majeure Event.

MODIFY SUB-ARTICLE 1-7.13.2 TO READ AS FOLLOWS:

1-7.13.2. Contractor Notice Address.

Notices required to be given to the Contractor shall be addressed as follows:

Exelon Business Services Company
10 S. Dearborn, 49th Floor
Chicago, IL 60603
Attn: Associate General Counsel, Exelon Generation
Phone: 610-595-4234
Fax: 610-595-8922

In addition, copies of all notices to proceed and suspension, termination and default notices shall be delivered as follows (or as may otherwise be specified in writing from time to time by the Contractor:

Constellation NewEnergy, Inc.
1310 Point St, 13th Floor
Baltimore, MD 21231

Attn: Assistant General Counsel
Phone: 410-470-6000
Fax: 410-468-3828

Notwithstanding the foregoing, the Contractor shall maintain within Los Angeles County a duly authorized agent to accept service of legal process on its behalf, and shall keep the City advised of such agent's name and address during the duration of the Contract and for three years after the Final Payment is made under this Contract, or as long as the Contractor has warranty obligations under this Contract, whichever period terminates later. In the event that no such duly authorized agent is on file with the City, the Contractor agrees that the Secretary of State of the State of California shall be the Contractor's agent for service of legal process.

MODIFY SUB-ARTICLE 1-7.13.3 TO READ AS FOLLOWS:

1-7.13.3. City Notice Address.

Notices required to be given to the City shall be addressed as follows:

City of Los Angeles, Bureau of Sanitation
Hyperion Water Reclamation Plant,
3rd Floor, TSF Building
12000 Vista del Mar
Playa del Rey, California 90293
Attn: Shahrouzeh Saneie

Hyperion Water Reclamation Plant
Harry Pregerson Technical Support Facility
12000 Vista Del Mar
Playa Del Rey, CA 90293
Telephone No.: (310) 648-5239
Email:shahrouzeh.saneie@lacity.org

In addition, copies of all notices regarding nonpayment, suspension, disputes, termination and default shall be delivered to the City Attorney at the following address (or to such other address as may from time to time be specified in writing by the City):

Name: Adena M. Hopenstand, Deputy City Attorney
Address: Office of the City Attorney
200 N. Main Street, 7th Fl.
Los Angeles, CA 90012
Telephone No.: 213.978.8156
Fax: 213.978.8222
Email: adena.hopenstand@lacity.org

Each party shall provide to the other party, immediately after the receipt thereof, copies of

any notice of default, breach or non-compliance received by it under or in connection with any Governmental Approval, Subcontract or Contract Security.

EXHIBIT 2

DESIGN/BUILD TERMS

ARTICLE 2-5. FINAL ACCEPTANCE OF THE SYSTEM

ADD THE FOLLOWING SUB-ARTICLES TO READ AS FOLLOWS:

2-5.12. LIABILITY FOR CO CATALYST FAILURE.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by a CO Catalyst Failure, nor shall a CO Catalyst Failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.13. LIABILITY FOR SELECTIVE CATALYTIC REDUCTION SYSTEM.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Premature SCR Catalyst Failure, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.14. LIABILITY FOR EXCESSIVE BACKPRESSURE.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Excessive Backpressure, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.15. LIABILITY FOR AIR PERMIT CHANGE EVENTS.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Air Permit Change Events, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

C-123575-1

AMENDMENT NO. 1 TO
CONTRACT AGREEMENT C-123575



**CONTRACT FOR THE
OPERATION AND
MAINTENANCE OF THE
HYPERION WATER RECLAMATION PLANT DIGESTER GAS
PROCESSING SYSTEM**

Between

THE CITY OF LOS ANGELES

and

CONSTELLATION NEWENERGY, INC.

Dated

_____, 2020



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ARTICLE 1-2. REPRESENTATIONS AND WARRANTIES

ADD THE FOLLOWING ARTICLE TO READ AS FOLLOWS:

1-2.3. CO CATALYST WARRANTIES.

The Contractor shall, for the protection of the City, obtain from any vendor furnishing CO catalysts and related component parts or equipment, such warranties or guarantees as are normally provided with respect thereto. The Contractor shall also, upon request by the City, provide copies of such warranties and guarantees. Notwithstanding any other provision of the Contract Documents, the presentment of such warranties or guarantees in favor of the City shall relieve the Contractor of any additional warranty obligation with respect to any CO catalyst and related component part or equipment; however, Contractor warrants that any CO catalyst and related component part or equipment shall be of new or recent manufacture, of good quality, free from faults, and installed free of any defects in workmanship.

ARTICLE 1-7. MISCELLANEOUS PROVISIONS

MODIFY THIS ARTICLE TO READ AS FOLLOWS:

1-7.3. EXCUSABLE DELAYS.

Neither party shall be liable for its delay or failure to perform any obligation under and in accordance with this Contract, if the delay or failure arises out of fires, floods, earthquakes, epidemics, quarantine restrictions, other natural occurrences, strikes, lockouts (other than a lockout by the party or any of the party's Subcontractors), freight embargoes, terrorist acts, insurrections or other civil disturbances, or other similar events to those described above, but in each case the delay or failure to perform must be beyond the control and without any fault or negligence of the party delayed or failing to perform (these events are referred to in this provision as "Force Majeure Events").

Notwithstanding the foregoing, a delay or failure to perform by a Subcontractor of Contractor shall not constitute a Force Majeure Event, unless the delay or failure arises out of causes beyond the control of both Contractor and Subcontractor, and without any fault or negligence of either of them. In such case, Contractor shall not be liable for the delay or failure to perform, unless the goods or services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit Contractor to perform timely. As used in this Contract, the term "Subcontractor" means a subcontractor at any tier.

In the event Contractor's delay or failure to perform arises out of a Force Majeure Event, Contractor agrees to use commercially reasonable best efforts to obtain the goods or services from other sources, and to otherwise mitigate the damages and reduce the delay caused by the Force Majeure Event.

1-7.13. NOTICES.

MODIFY THIS SUB-ARTICLE TO READ AS FOLLOWS:

1-7.13.2. Contractor Notice Address.

Notices required to be given to the Contractor shall be addressed as follows:

Exelon Business Services Company
10 S. Dearborn, 49th Floor
Chicago, IL 60603
Attn: Associate General Counsel, Exelon Generation
Phone: 610-595-4234
Fax: 610-595-8922

In addition, copies of all notices to proceed and suspension, termination and default notices shall be delivered as follows (or as may otherwise be specified in writing from time to time by the Contractor:

Constellation NewEnergy, Inc.
1310 Point St, 13th Floor
Baltimore, MD 21231
Attn: Assistant General Counsel
Phone: 410-470-6000
Fax: 410-468-3828

Notwithstanding the foregoing, the Contractor shall maintain within Los Angeles County a duly authorized agent to accept service of legal process on its behalf, and shall keep the City advised of such agent's name and address during the duration of the Contract and for three years after the Final Payment, or as long as the Contractor has warranty obligations under this Contract, whichever period terminates later. In the event that no such duly authorized agent is on file with the City, the Contractor agrees that the Secretary of State of the State of California shall be the Contractor's agent for service of legal process.

MODIFY THIS SUB-ARTICLE TO READ AS FOLLOWS:

1-7.13.3. City Notice Address.

Notices required to be given to the City shall be addressed as follows:

City of Los Angeles, LA Sanitation and Environment
Hyperion Water Reclamation Plant,
3rd Floor, TSF Building
12000 Vista del Mar
Playa del Rey, California 90293
Attn: Shahrouzeh Saneie
Telephone No: (310) 648-5239

Email: shahrouzeh.saneie@lacity.org

In addition, copies of all notices regarding nonpayment, suspension, disputes, termination and default shall be delivered to the City Attorney at the following address (or to such other address as may from time to time be specified in writing by the City):

Name: Adena M. Hopenstand
Address: 700 City Hall East
200 North Main Street
Los Angeles, CA 90012-4110
Telephone No.: (213) 978-8156
Email: adena.hopenstand@lacity.org

The Contractor shall provide to the City, immediately after receipt, copies of any notice of default, breach or non-compliance received by the Contractor under or in connection with any Governmental Approval, Subcontract or Contract Security.

EXHIBIT 2
O&M TERMS

ARTICLE 2-1. OPERATIONS AND MANAGEMENT

MODIFY THIS ARTICLE TO READ AS FOLLOWS:

2-1.7. UTILITIES AND CHEMICALS.

The City shall supply electricity for the uses other than cogeneration purposes, potable water, service water, natural gas, and nitrogen gas produced by the City for purging, as specified in Appendix 45. If City fails to supply sufficient nitrogen gas for operations, meeting specified quality standards, Contractor shall procure the required nitrogen gas and charge the cost to the City as a Pass Through Cost. The Contractor shall arrange for the supply of all other utilities and chemicals to the System, and shall make payments directly to the supplier.

Notwithstanding the deletion of Appendix 47, and upon execution of this Amendment 1 by each party, Contractor shall terminate its interim procurement of natural gas to the City by Contractor's giving written notice of termination to Contractor's gas supplier not less than 30 days prior to the 1st of the month following execution of this Amendment 1 by each party. Contractor shall notify City of the date that its procurement of natural gas and/or its interim natural gas supply shall terminate (the "Gas Supply Termination Date"). City acknowledges that the Gas Supply Termination Date will occur between 30 and 60 days after the execution of this Amendment 1.

The City acknowledges that, following the Gas Supply Termination Date, the City assumes all risks and obligations associated with its procurement of natural gas.

ARTICLE 2-3. MAINTENANCE, REPAIR AND REPLACEMENT

2-3.1. MAINTENANCE, REPAIR AND REPLACEMENT GENERALLY.

ADD THE FOLLOWING SUB-ARTICLES TO READ AS FOLLOWS:

2-3.1.1. Maintenance, Repair, and Replacement of CO Catalysts and SCR System.

(a) Each CO catalyst shall be maintained regularly and replaced upon the expiration of its useful life or earlier upon any CO Catalyst Failure. For purposes of this subsection, the useful life of each CO catalyst shall be deemed to be 8,760 operating hours from first gas-in (for the avoidance of doubt, 8,760 operating hours is the useful life specified in performance guarantees provided by CO catalyst vendors supporting the System). If the parties agree that a CO catalyst is still performing adequately after 8,760 operating hours, the parties may, by mutual written agreement, agree to extend the date upon which the CO Catalyst must be replaced. Contractor shall conduct annual core testing of each CO catalyst to determine the annual degradation and remaining performance capacity of each CO catalyst. The City shall be solely responsible for all costs of repair, replacement, testing (including core testing), and maintenance of each CO catalyst and any related component, including but not limited to structural framing and instrumentation installed to support the operation of each CO catalyst or as a direct result of any air permit requirement.

(b) Each SCR system shall be maintained regularly and replaced upon the expiration of its useful life or earlier upon Premature SCR Catalyst Failure. For purposes of this subsection, the useful life of each SCR system shall be deemed to be 8,760 operating hours from first gas-in (for the avoidance of doubt, 8,760 operating hours is the useful life specified in performance guarantees provided by SCR system vendors supporting the System). If the parties agree that a SCR system is still performing adequately after 8,760 operating hours, the parties may, by mutual written agreement, agree to extend the date upon which the SCR system must be replaced. Contractor shall conduct annual core testing of each SCR system to determine the annual degradation and remaining performance capacity of each SCR system. The City shall be responsible for all costs of repair, replacement, testing (including core testing), and maintenance of any SCR system in excess of Fifty-Four Thousand Dollars (\$54,000) per year beginning Year 0-1 after COD and increasing three percent (3%) annually thereafter until the expiration of this O&M Contract, provided Contractor operates the Project's siloxane removal system in accordance with Good Industry Practice and applicable siloxane removal system manufacturer specifications.

(c) At all times during the Contract Term of this O&M Contract, Contractor shall have available two (2) replacement CO catalysts and two (2) replacement SCR catalysts for immediate installation upon the expiration of the useful life of a CO Catalyst or SCR system, or upon a Relief Event requiring the replacement of a CO catalyst or SCR catalyst, whichever occurs first. In accordance with applicable manufacturer recommendations, Contractor shall be responsible for the procurement, acquisition, storage, and maintenance of each replacement CO catalyst and SCR catalyst. Owner shall reimburse and indemnify Contractor for all costs to procure, acquire, store, and maintain any replacement CO catalyst

and SCR catalyst required under this provision.

(d) Notwithstanding any provision to the contrary, to the extent CO Catalyst Failure, Premature SCR Catalyst Failure, Excessive Backpressure, or any Air Permit Change Event requires the replacement or repair of any CO catalysts, SCR system, major system listed and described in Appendix 3-A, Section 1.4(F), or Contractor incurs other damages in connection with said Relief Events, Contractor shall be entitled to compensation for all costs necessary to address these Relief Events in accordance with Sections 2-4.3, 2-4.4, and 2-5.3.2 of the O&M Contract. Contractor shall be entitled to compensation for all costs, including but not limited to reasonable attorney fees necessary to assist the City in any proceedings before the South Coast Air Quality Management District where those proceedings are related to or caused by said Relief Events.

2-3.1.2. Maintenance, Repair, and Replacement of Exhaust Collector and Exhaust Bellows

Contractor shall be responsible for the regular maintenance of any Exhaust Collector and Exhaust Bellows integrated into a CTG. The City shall be solely responsible for all costs of repair or replacement of any exhaust collector caused by Excessive Backpressure.

ADD THE FOLLOWING ARTICLE TO READ AS FOLLOWS:

2-3.6. SILOXANE TESTING.

Contractor shall conduct monthly sampling of siloxane levels of the Project's Digester Gas, at locations Contractor deems appropriate subject to City approval (which approval shall not be unreasonably withheld), and submit such samples to a third party laboratory for testing and analysis in accordance with Good Industry Practice. Monthly sampling of siloxane shall also comply with any siloxane testing requirements in the air permit. The City reserves the right to direct Contractor to conduct additional siloxane sampling at the City's sole cost if the City deems such sampling is reasonably necessary. Contractor shall conduct Sorbent Tube tests or, upon mutual agreement, any testing methodology with a siloxane detection limit more sensitive than Sorbent Tube testing. Contractor shall reach an agreement with any one of the following laboratories, ranked in order of preference, for testing and analysis of monthly siloxane samples: (1) Analytical Solution, Inc., (2) ALS Environmental, and (3) any other laboratory mutually acceptable to the City and Contractor. The City shall be responsible for all costs of sampling, testing, and analysis of siloxane in excess of Sixteen Thousand Dollars (\$16,000) per year beginning Year 0-1 after COD and increasing three percent (3%) annually thereafter until the expiration of this O&M Contract.

ARTICLE 2-5. SERVICE FEE AND OTHER PAYMENTS
ADD THE FOLLOWING ARTICLE TO READ AS FOLLOWS:

2-5.5. LIABILITY.

2-5.5.1. CO Catalyst Failure.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by a CO Catalyst Failure, nor shall a CO Catalyst Failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.5.2. Selective Catalytic Reduction System.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Premature SCR Catalyst Failure, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.5.3. Excessive Backpressure.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Excessive Backpressure, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

2-5.5.4 Air Permit Change Events.

Notwithstanding any provision in the Contract Documents, Contractor shall have no liability of any kind for any damages, delays, fines, injuries, judgments, awards, assessments, fines, penalties, losses, claims, expenses or other charges directly or indirectly caused by Air Permit Change Events, nor shall such failure result in any duty by Contractor to indemnify, defend and hold harmless the City and the City Indemnitees.

MODIFY THIS ARTICLE TO READ AS FOLLOWS:

2-5.6. PASS THROUGH COSTS

Contractor will directly procure all utilities and chemicals other than those specified to be provided by City in Section 2-1.7. Contractor shall invoice City for the cost of such utilities and chemicals as a pass through of expenses, up to the maximum amounts set forth in Appendix 45, or as otherwise agreed to by the Parties.

MODIFY THIS ARTICLE TO READ AS FOLLOWS:

2-5.7. MONTHLY PAYMENT AND ANNUAL RECONCILIATION OF THE SERVICE FEE AND INVOICING AND PAYMENT OF ADDITIONAL SERVICES.

The Contractor shall provide monthly invoices for the Service Fee, to be reconciled at the end of each Contract Year as specified below and, when applicable, invoices for costs incurred by Contractor to perform Additional Services. Each invoice submitted by the Contractor shall be in a form acceptable to the City, with supporting documentation as reasonably required by the City, and shall include (a) a certification that the Contractor has made all payments owing to Subcontractors and employees through the date of the invoice and is otherwise in compliance with all Contract requirements, (b) a statement indicating any outstanding amounts that Contractor believes it is owed as of the date of such invoice pertaining to prior invoice periods, and/or that all previously invoiced amounts are paid current as of the date of such invoice and Contractor is not aware of any facts or circumstances giving rise to a claim for any additional compensation as of the date of such invoice, and (c) an itemization of all Pass Through Costs and Additional Services for the prior Billing Period, together with documentary evidence of the same. The invoice shall set forth the monthly portion of the Service Fee for the prior month and shall show the annual Service Fee and each component as calculated for the then current Contract Year, together with the accumulated payments for each component to the date of such invoice and such other documentation or information as the City may reasonably require to determine the accuracy and appropriateness of the invoice. If the invoice is accurate and includes all required backup documentation and information, the City shall pay the portion of the invoice attributable to the Fixed O&M Charge Component, approved Pass Through Costs, and Additional Services promptly after receipt. With respect to invoices for the first four months of the Contract Term, the City shall be deemed to have paid the invoice promptly if payments are made within 90 days of receipt of a complete invoice, and with respect to subsequent invoices the City shall be deemed to have paid the invoice promptly if payments are made within 60 days of receipt of a complete invoice. If the invoice is deemed to be inaccurate, the City shall work with the Contractor to resolve such inaccuracy as quickly as possible, and shall pay the invoice promptly after the parties agree that the invoice is accurate. At the end of each Contract Year, Contractor shall submit to the City a reconciliation of the Service Fee itemizing all liquidated damages accrued against the Variable O&M Charge Component for such Contract Year. The City shall approve reconciliation or advise the Contractor of any disputed amounts within 30 days of submittal. The City shall pay the approved outstanding amount, if any, of the Variable O&M Charge Component for such Contract Year within 60 days of approval of such reconciliation.

ADD THE FOLLOWING ARTICLE TO READ AS FOLLOWS:

2-5.10. ADDITIONAL SERVICES

The City may, at any time, by written notice referencing this Section 2-5.10, direct

Contractor to perform Additional Services. Said notice may include a written request to the Contractor to prepare and submit a cost estimate, seeking non-binding rough order of magnitude (ROM) pricing for the Additional Services. Contractor may also request that the City direct Contractor to perform Additional Services to maintain, repair, and replace CO catalysts, SCR systems, Exhaust Collectors, and Exhaust Bellows in accordance with Sections 2-3.1.1 and 2-3.1.2, to perform siloxane testing in accordance with Section 2-3.6, or for any reason Contractor deems reasonably necessary. The following shall be conditions precedent to the performance of any Additional Service: (1) Contractor's acceptance of a request to perform the Additional Service, which acceptance shall not be unreasonably withheld, (2) the mutual acceptance and execution of a document in writing establishing the time, scope of work, and any additional terms and conditions that the parties deem reasonably necessary for the performance of the Additional Service, and (3) in the event the City requests that Contractor sell California GHG allowances or offset credits to the City for its compliance with the Cap and Trade Regulations, the execution of a mutually agreeable sales agreement establishing terms and conditions addressing the same. At any time following the satisfaction of the conditions precedent to the performance of any Additional Service, within ten (10) business days of a Contractor request, the City shall provide written assurances that the City has appropriated sufficient funds to pay for such service; and should the City fail to do so, Contractor may immediately cease all work and the City shall be liable for all unpaid work. The cost of any Additional Service shall be calculated in a manner consistent with Section 1-7.4.4 and accompanied by a Cost Substantiation Certificate as provided in Section 1-7.4.2 and set forth in Appendix 46. The performance of Additional Services hereunder shall not supersede or waive the rights and remedies of either Party in connection with a Relief Event or Capital Modification.

APPENDICES TO O&M CONTRACT

MODIFY THIS TABLE TO READ AS FOLLOWS:

APPENDIX	TITLE	STATUS
41	Performance Guarantees	Revised draft attached, remains subject to further review
42	Form of Performance and Payment Bonds	Drafts attached
43	Contractor's Safety Rules and Regulations	CD provided by Constellation
44	Not Used	N/A
45	Service Fee	Revised draft attached
46	Cost Substantiation Certificate	Attached

**APPENDIX 41
PERFORMANCE GUARANTEES**

2. Subsystem Performance Guarantees

MODIFY THE FOLLOWING TABLE TO READ AS FOLLOWS:

Table 2.1 Subsystem Performance Guarantees¹

Table 2.1 Subsystem Performance ³ Guarantee	Units	Expected Value at Year 0 ⁴	Final Value at Year 0 ⁵	Expected Degradation ^{***}
1. CTG-1 Electrical Output	kW	10,539	97.5% of Expected Value	-3.5% first year, -1.0% per year thereafter
2. CTG-2 Electrical Output	kW	10,539	97.5% of Expected Value	-3.5% first year, -1.0% per year thereafter
3. STG-1 Electrical Output	kW	7,630	100% of Expected Value	-1.0% per year
4. HRSG-1/2 Steam Output-unfired	lb/hr	40,380	100% of Expected Value	-1.0% per year
5. HRSG-1/2 Steam Output-fired	lb/hr	74,330	100% of Expected Value	-1.0% per year
6. CTG-1 Heat Rate	Btu/kW-hr (LHV*) **	11,120	102.5% of Expected Value	+3.5% first year, +1.0% per year thereafter
7. CTG-2 Heat Rate	Btu/kW-hr (LHV*) **	11,120	102.5% of Expected Value	+3.5% first year, +1.0% per year thereafter
8. STG-1 Full Condensing Steam Rate	lb/kW-hr	11.20	100% of Expected Value	+1.0% per year

* LHV means lower heating value of fuel gas (digester or natural).

**For degradation, one year assumes 8,000 operating hours.

***All final values and degradation rates for each Subsystem Performance Guarantee shall be subject to adjustment annually following the commencement of operations with allowance for changes caused by any Relief Event.

³ Lines 1, 2 and 3 in this table reflect the capabilities of each train as demonstrated by Performance Testing. The total of lines 1, 2 and 3 will add up to the peak capability of the System as demonstrated by Performance Testing.

⁴ The column illustrates the expected values for electrical output and heat rate that Contractor expects to attain and shall be considered preliminary.

⁵ This column illustrates the values for electrical output and heat rate that shall meet the performance guarantees for Year 0.

**APPENDIX 47
NATURAL GAS PROCUREMENT**

THIS APPENDIX IS HEREBY DELETED.