



## City Council Staff Report

Date: June 19, 2013

PUBLIC HEARING

Subject: CITYWIDE ENERGY PROJECT

From: David H. Ready, City Manager

Initiated by: Public Works and Engineering Department

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### SUMMARY

This item is a public hearing to take comment and consider adopting a resolution making certain findings and approving an Energy Services Contract with **Chevron Energy Solutions Co. (CES)** which implements a Council approved list of **Energy Conservation Measures (ECM's)** paid for by energy cost savings. This is the final step in the process which will lead to Chevron beginning implementation and construction of the ECM's city wide.

### RECOMMENDATION:

- 1) Conduct Public Hearing to receive public comment regarding entering into the Energy Services Contract with Chevron Energy Solutions Co.
- 2) Adopt Resolution No \_\_\_\_\_ "A RESOLUTION OF THE CITY OF PALM SPRINGS CALIFORNIA MAKING CERTAIN FINDINGS AND APPROVING AN ENERGY SERVICES CONTRACT WITH CHEVRON ENERGY SOLUTIONS CO."
- 3) Authorize the City Manager to execute all necessary documents.

### STAFF ANALYSIS:

On March 20, 2013, Council concurred in the third party peer review of the ECM cost estimates and energy savings. The list of ECMs was the end result of an audit of all City facilities and an analysis of various measures that could be implemented to achieve the most comprehensive energy savings. The main focus of the analysis was the City's two co-gen plants but it also included lighting, irrigation and controls. Before you here is the next step in the process, presenting Council with the final Energy Services Contract for approval (associated financing documents are presented under Public Hearing - Agenda Item 1E).

ITEM NO. 10

The Comprehensive Energy Analysis (CEA) prepared by Chevron and approved by Council analyzed the ECM's ultimately selected but also analyzed additional program options as follows.

1. No Action, Maintain status quo
2. Abandon Cogeneration and purchase all electricity from Southern California Edison

The analysis showed "maintaining the status quo" resulted in the following

Pros

- No capital Cost
- No Debt Service

Cons

- Aged equipment needs replacement (25+years)
- High maintenance
- High emissions
- Does not meet sustainability goals
- Increasing down time
- Current operation relies on several older inefficient systems
- Building heating/cooling is inefficient as it is not run from a central control point
- No Renewable Energy Credits

Construction of the ECM's is estimated to save \$1 million in utility costs in the first year of operation, escalating to \$2 million in savings in year 21 when compared to the "No Action" alternative (based upon a 4% average annual increase in utility rates).

The conversion to SCE was also not recommended primarily due to the higher energy cost (12¢/kwh vs. 8¢/kwh) and the significant modification costs to remove the City facilities from Cogen (Plant modifications, SCE power brought to site, on site electric backbone modifications, on site equipment modification costs - see table below). The 4¢/kwh difference translates to about \$½ million annually when compared to the City's current annual SCE bill of approximately \$2 ½ million.

**Overview Muni Plant Analysis**  
**Savings as compared to today's Municipal Plant Cogen operation**

<u>New Cogen Plant</u>		<u>Abandon Cogen 100% SCE Service</u>	
Annual Utility Savings	\$ 329,430	Annual Utility Savings	\$(198,903)
Annual O&M Savings	\$ 132,796	Annual O&M Savings	\$ 257,438
Total Savings	\$ 462,226	Total Savings	\$ 58,534
20 Year Savings	\$13.04MM	20 Year Savings	\$ 0.33MM
Capital Cost	\$ -8.10MM	Capital Costs	\$ -4.9MM
Net Benefit	\$ 4.44MM	Net Benefit	\$ -4.57MM
Edison Upgrade	\$0	Edison Upgrade	\$ -4MM
		(Additional Cost)	

Determining which alternative is best for the City requires an understanding of how the co-gen plants operate and provide electricity and heating/cooling to the various buildings they serve. Co-generation is the sequential production of two energy forms, usually steam and electricity, from a single fuel source. In our case, natural gas is used as fuel to run reciprocating engines that turn generators to create electricity. Waste heat (heat created by a running engine) that would normally escape into the air, is recovered from the engines and passed through an absorption chiller to provide cold water for air conditioning. Alternatively, in the winter, waste heat is used to heat water for space heating.

Co-generation was originally selected as the most appropriate alternative energy solution for Palm Springs due to the City's tremendous cooling requirements in the summer. Therefore, a co-gen plant can be a very valuable asset, in that it provides not only electricity for the City's facilities, but through its internal mechanical process, provides thermal energy (heating and cooling).

The 2009/2010 Fiscal Year was chosen for the analysis as the representative base line year, because it provided the best representation of the City's historical operations with plants operating more consistently and with less down time than the more recent years.

Analysis of the Municipal Plant determined that maintaining operation of the co-gen plant is the most economical alternative to providing electricity and heating/cooling to the facilities it serves. The direct cost to generate power through co-generation is less expensive than purchasing electricity from SCE directly (\$0.12 per kilowatt hour vs. \$0.08 per kilowatt hour). During the last 3 fiscal years, the total power load on the Municipal Plant averaged 10.9 Million kilowatt hours. Given that the direct cost to generate power through co-generation is 67% of the cost to purchase electricity from SCE, it was recommended that the City make certain upgrades to the Municipal Plant to take advantage of the lower direct generation cost and to make the plant significantly more efficient that it is today.

At the Sunrise Plant at Sunrise Park, the co-gen plant distributes power and provides heating/cooling to all of the facilities except the Boys and Girls Club and the Senior Center.

However, the analysis of the Sunrise Plant determined that maintaining operation of the co-gen plant is not the most economical alternative at Sunrise Park. The overall electrical load on the Sunrise Plant is much lower than the load on the Municipal Plant, and since its construction, the Sunrise Plant has produced more power than necessary for the facilities it serves. The balance of electricity produced is sold as excess electricity to SCE at a loss. Therefore, the analysis determined that retiring the Sunrise Plant and purchasing electricity from SCE directly is the most economical alternative for Sunrise Park.

Ultimately, the ECM's recommended by the Sustainability Commission in 2011 and subsequently approved by Council included:

- **Municipal Co-Generation Plant:** replace two existing 650 kilowatt rich burn engines with one 1,135 kilowatt lean-burn engine, replace existing chillers and cooling towers with new efficient equipment and add a new boiler.
- **Sunrise Co-Generation Plant:** modify the co-generation operation and replace with a new gas and electric cooling and heating hot water plant
- **Install a new Energy Management System for City facilities connected to the Municipal and Sunrise Plants**
- **City-wide lighting retrofit and upgrade (approx. 11,000 interior and exterior fixtures)**
- **Install remote lighting control and monitoring program for Palm Canyon Drive palm tree and decorative lights**
- **Install a new automated utility metering and monitoring system at the Municipal Plant**
- **Install centralized irrigation control system with weather stations for Parks and other landscape area.**
- **Provide a CES Energy Resource Manager to manage and monitor the Municipal Plant operation, and monitor implementation of all energy conservation measures to ensure guaranteed energy savings are achieved for a period of 5 years**

The direction from Council was to maximize use of ECM's such that capital costs are paid for by energy savings. There is an estimated overall General Fund savings of approximately \$300,000 at the end of year 21, with the key being 71 million kwh saved in this period.

Specifically, the work is to consist of:

- **Lighting upgrades inside and outside city facilities, in city parking lots, of existing decorative pedestrian lights and of palm tree lighting to provide for more energy efficient lighting (LED, fluorescent, etc.)**
- **Provide central controller to operate remote park lighting and downtown light controls**

- Replace Muni Central Plant Cogen with one new 1.1 MW engine, new absorption chiller cooling tower and boilers.
- Remove and dispose of all old equipment
- Remove Sunrise Cogen and switch to SCE operation, provide new chiller, boilers and cooling tower.
- Provide energy management system to remotely operate Sunrise and Muni systems
- Provide revenue grade department billings and data acquisition system to accurately monitor all energy consumption
- Install a centralized irrigation control system which can be remotely monitored in conjunction with two weather stations
- Install approximately 60 irrigation controllers in parks and medians
- Provide personnel to train and assist city staff and aid in monitoring all ECM's for the first 5 years of operation.

At the time City Council approved the CEA, they also directed staff to move forward with a Third Party peer review of the ECM's, cost estimates and energy savings, Staff hired Newcomb Anderson McCormick (NAM) who completed their report in summer 2012. The report concluded that the cost estimates were reasonable and the energy savings were also reasonable and in some cases conservative. They also independently justified the recommendation to decommission the Sunrise Plant. Further, the study recommended that the final agreement include validation of the savings in the form of short term billing analysis for select meters.

The overall benefits of the program as presented and verified by Newcomb, Anderson & McCormick (NAM) are as follows:

- \$17.5 million in needed capital renewal without using general funds to implement
- Capital cost of improvements will be paid by program savings
- Energy savings for the first 5 years guaranteed by Chevron Energy Solutions
- Reduction in on-going operation and maintenance costs
- Significant improvement in City's environmental stewardship
- Lowers overall electric costs and incorporates advanced technologies
- Decreases water consumption
- Achieves several of the City's adopted Sustainability Goals

Public Works staff and the City Attorney's office have extensively reviewed the proposed Energy Services Contract and recommend its approval by Council. The document includes recommendations of NAM (the third party reviewer consultant) and details the performance of all work to achieve implementation of EMC's. The projects will generally follow normal city public works project procedures.

The Contract provides that:

- Chevron will schedule and ensure all work remains consistent with their schedule through use of standard City means such as liquidated damages provisions

- Chevron will retain subcontractors for various portions of the work subject to applicable requirements of the Municipal Code
- All work will be regularly reported to City as it progresses through regular status meetings
- All construction drawings will be reviewed and subject to City approval
- Chevron will manage and coordinate all construction work and keep City notified of progress through regular status reports and meetings.
- Inspection shall be the responsibility of Chevron
- The City Manager and his/her designee will act on the City's behalf during construction.
- Normal city procedures for project close outs and completion are required to be followed
- A proposed progress payment schedule up to the total amount of \$17,507,842, however design and construction work will be paid for based on verified actual progress. A total of 720 days is estimated as the time frame
- The 1<sup>st</sup> five years of project operation is warranted by Chevron to achieve the dollar savings agreed to by the City and Chevron and outlined in attachment H of the agreement. If there is any shortfall in the guaranteed savings, Chevron will pay to the City the amount of that shortfall or, at the discretion of the City, agree to such retrofits or adjustments which will be of a value equal to said payment
- Energy use factors and baselines are to be approved by City and established for purposes of determining energy savings. These were based upon current general use parameters of the City facilities such as temperature, day and time of use etc.
- Chevron will submit to City an annual Energy Savings report showing a verifiable, precise calculation of all energy savings

#### FISCAL IMPACT:

As noted above the total estimated cost of all ECM's is \$17,507,842. The net savings to the General Fund is estimated at \$2,643,552 (based on an annual 4% average increase in utility rates charged to the City).

Currently, the 2014 budget includes \$3.4 million for utility costs. When all ECM's are installed and operating that budgeted amount will be reduced by the estimated savings of \$1,051,000 to cover that year's debt service of \$1,018,000. By year 21, based upon average utility rate increases, the budget reduction amount of approximately \$1,950,000 will cover the \$1,912,000 debt service payment in that year.

SUBMITTED:

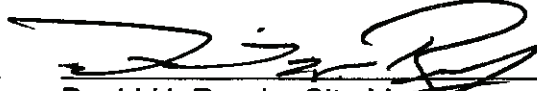
Prepared by:



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David J. Barakian  
Director of Public Works/City Engineer

Approved by:



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David H. Ready, City Manager

ATTACHMENTS:

1. Energy Services Contract
2. Resolution

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALM SPRINGS CALIFORNIA, MAKING CERTAIN FINDINGS AND APPROVING AN ENERGY SERVICES CONTRACT WITH CHEVRON ENERGY SOLUTIONS CO. FOR THE IMPEMENTATION OF CERTAIN ENERGY RELATED IMPROVEMENTS

WHEREAS, California Government Code Sections 4217.10 through 4217.18, authorize the City Council to enter into an energy services contract for the implementation of energy related improvements if the City Council finds that it is in the best interest of the City to enter into such energy services contract and that the anticipated cost to City for thermal or electrical energy or conservation services provided by the energy conservation facility under the contract will be less than the anticipated marginal cost to the City of thermal, electrical, or other energy that would have been consumed by the City in the absence of those purchases; and

WHEREAS, The cost to the City for the energy services contract by and between the City and Chevron Energy Solutions Company for the implementation of certain energy measures for thermal or electrical energy or conservation services will be less than the anticipated marginal cost to the City of thermal, electrical, or other energy that would have been consumed by the City in the absence of the implementation of the improvements under the energy services contract.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Palm Springs, California, as follows:

Section 1. That (1) it is in the best interest of the City of Palm Springs, California to enter into an energy services contract with Chevron Energy Solutions Company for the implementation of certain energy related improvements to City facilities, and (2) the anticipated cost to City for thermal or electrical energy or conservation services provided by the energy conservation facility under the contract will be less than the anticipated marginal cost to the City of thermal, electrical, or other energy that would have been consumed by the City in the absence of those purchases.

Section 2. The City Council hereby authorizes the City to execute the energy services contract by and between the City and Chevron Energy Solutions Company for the implementation of certain energy related improvements to City facilities in accordance with these findings and California Government Code Sections 4217.10 through 4217.18.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Palm Springs, California held on June 19, 2013.



CITY OF PALM SPRINGS

\_\_\_\_\_  
David H. Ready  
City Manager

ATTEST:

\_\_\_\_\_  
James Thompson  
City Clerk

CERTIFICATION

STATE OF CALIFORNIA )  
COUNTY OF RIVERSIDE ) ss.  
CITY OF PALM SPRINGS )

I, JAMES THOMPSON, City Clerk of the City of Palm Springs, hereby certify that Resolution No. \_\_\_\_\_ is a full, true and correct copy, and was duly adopted at a regular meeting of the City Council of the City of Palm Springs on May 15, 2013, by the following vote:

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

\_\_\_\_\_  
James Thompson, City Clerk  
City of Palm Springs, California

**CITY OF PALM SPRINGS  
PUBLIC NOTIFICATION**



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Date: June 19, 2013


Subject: Energy Service Contract with Chevron Energy Solutions  
for Certain Energy Related Improvements

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**AFFIDAVIT OF POSTING**

I, Kathie Hart, Chief Deputy City Clerk, of the City of Palm Springs, California, do hereby certify that a copy of the attached Notice of Public Hearing was posted at City Hall, 3200 E. Tahquitz Canyon Drive, on the exterior legal notice posting board, and in the Office of the City Clerk and at 5:32 p.m. on June 4, 2013.

I declare under penalty of perjury that the foregoing is true and correct.

  
\_\_\_\_\_  
Kathie Hart, CMC  
Chief Deputy City Clerk

NOTICE OF PUBLIC HEARING  
CITY COUNCIL  
RESOLUTION ADOPTING CERTAIN FINDINGS AND APPROVING AN ENERGY  
SERVICE CONTRACT WITH CHEVRON ENERGY SOLUTIONS COMPANY  
FOR ENERGY RELATED IMPROVEMENTS TO CITY FACILITIES

**NOTICE IS HEREBY GIVEN** that the City Council of the City of Palm Springs, California, will hold a public hearing at its meeting of June 19, 2013. The City Council meeting begins at 6:00 p.m., in the Council Chamber at City Hall, 3200 E. Tahquitz Canyon Way, Palm Springs.

The purpose of this hearing is to take public comment and consider adopting a resolution making certain findings and approving an energy service contract with Chevron Energy Solutions Company for the implementation of certain energy related improvements to City facilities in accordance with California Government Code Sections 4217.10 through 4217.18.

The City Council will consider adopting findings that require the cost to implement the energy related improvements pursuant to the proposed contract; will be less than the anticipated marginal cost to the City of thermal, electrical, or other energy that would have been consumed by the City in the absence of purchasing the energy improvements.

**REVIEW OF INFORMATION:** The staff report and other supporting documents regarding this matter are available for public review on or after, Thursday, June 13, 2013, at City Hall between the hours of 8:00 a.m. to 6:00 p.m. Monday through Thursday. Please contact the City Clerk's Department at (760) 323-8204 if you would like to schedule an appointment to review these documents.

**COMMENTS:** Response to this notice can be made verbally at the Public Hearing and/or in writing before the hearing. Written comments can be made to the City Council by letter (for mail or hand delivery) to:

James Thompson, City Clerk  
3200 E. Tahquitz Canyon Way  
Palm Springs, CA 92262

Any challenge of the proposed project in court may be limited to raising only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the City Clerk at, or prior, to the public hearing. (Government Code Section 65009(b)(2)).

An opportunity will be given at said hearing for all interested persons to be heard. Questions regarding this case may be directed to Dave Barakian, Director of Public Works and City Engineer, at (760) 323-8253 x8732.


Si necesita ayuda con esta carta, porfavor llame a la Ciudad de Palm Springs y puede hablar con Nadine Fieger telefono (760) 323-8245.

  
James Thompson, City Clerk

OFFICE OF THE CITY ATTORNEY

CITY OF PALM SPRINGS

**MEMORANDUM**

TO: Mayor Pougnet and Members of the City Council  
FROM: Douglas Holland, City Attorney   
DATE: June 13, 2013  
RE: Energy Services Contract / Chevron ES

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Attached for your information and review is the most current draft of the Energy Services Agreement between Chevron ES and the City. This draft shows the latest revised proposal of Chevron. Most of the significant issues have been resolved; however, several aspects require further negotiation and refinement. Once a final contract has been completed, I will forward to you a "marked-up" draft that will show the changes from the attached draft to the final contract.

If you have any questions, please call me.



**ENERGY SERVICES CONTRACT**

**DRAFT DATED 11 June 2013**

This **ENERGY SERVICES CONTRACT** is made and entered into as of \_\_\_\_ June 2013, by and between **Chevron Energy Solutions Company, a Division of Chevron U.S.A. Inc.**, a Pennsylvania corporation, and **the City of Palm Springs**, a California charter city. Capitalized terms used herein have the meanings given them in Article 1.

**CONTRACT RECITALS**

- A. City owns and/or operates certain Facilities and City wishes to reduce the Facilities' energy consumption and costs and improve the Facilities' energy quality and reliability; and
- B. Chevron ES is a full-service energy services company with the technical capabilities to provide services to City including, but not limited to, identifying ECMs, engineering, procurement, construction management, installation, construction and training; and
- C. City executed a Professional Services Agreement with Chevron ES to perform an comprehensive energy analysis and present City with a Report; and
- D. In the Report, Chevron ES identified potential energy and operational savings opportunities at City's Facilities and estimated program costs to implement the recommended ECMs and presented an overall potential energy cost and consumption savings plan for implementing the ECM recommendations; and
- E. On July 20, 2011, Chevron ES delivered the Report, on an arms' length basis, to personnel of City with requisite technical training and experience, for those personnel to make judgments and determinations as to the desired scope of work; and
- F. City's staff accepted the recommended ECMs and has determined that the anticipated cost to City to implement the recommended ECMs will be less than the anticipated cost to City for thermal, electrical, and other energy, together with anticipated operational, maintenance and other costs, that would have been consumed by City in the absence of the recommended ECMs in compliance with California Government Code §§4217.10 through 4217.18; and
- G. Pursuant to California Government Code §4217.12 the Palm Springs City Council held a regularly scheduled public hearing on June 19, 2013, of which two weeks advance public notice was given regarding this Contract and its subject matter, and
- H. Based upon the foregoing findings and public hearing, the Palm Springs City Council has determined that entering into an energy services contract to implement the ECM recommendations is in the best interests of City and that California Government Code §4217.10 *et seq.* allows City to enter into this Contract with Chevron ES to implement the ECMs and other measures recommended in the Report; and
- I. The Palm Springs City Council, by adoption of Resolution No. \_\_\_\_\_ at its meeting of June 19, 2013, approved this Contract and authorized the City Manager to execute this Contract on behalf of City.

NOW, THEREFORE, City and Chevron ES hereby agree as follows:

**ARTICLE 1. DEFINITIONS**

For purposes of this Contract and its Attachments, the defined terms herein shall have the meaning set forth as follows:

"AAA" is defined in Section 23.01.

**"Abnormally Severe Weather Conditions"** means typhoons, hurricanes, tornadoes, lightning storms and other climatic and weather conditions that are abnormally severe for the period of time when, and the area where, such storms or conditions occur, in each case occurring at a property, the access roads to a property, or any other location where Work is then being performed. For the avoidance of doubt, the term "Abnormally Severe Weather Conditions" specifically includes rain, snow or sleet in excess of one hundred fifty percent (150%) of the median level over the preceding ten (10) year period for the local geographic area and time of year in which such rain, snow or sleet accumulates.

**"Accumulated Savings"** means, as of any date of determination, the cumulative total of Excess Savings.

**"Act"** is defined in ARTICLE 16.

**"Actual Energy Rate"** means, for any Measurement Period, utility rates calculated by Chevron ES using actual utility billing information supplied by City for that Measurement Period.

**"Affiliate"** means any Person that directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with the Person specified. For purposes of this definition, control of a Person means the power, direct or indirect, to direct or cause the direction of the management and policies of such Person whether by contract or otherwise, and ownership of fifty percent (50%) or more of the voting securities of another Person shall create a rebuttable presumption that such Person controls such other Person..

**"Annual M&V Fee"** means a fee payable annually in advance by City to Chevron ES in consideration of the provision of up to five (5) years (with optional extensions up to ten (10) years) of the Savings Guarantee, the Energy Savings Reports and the related measurement and verification services. The Annual M&V Fee for the first Measurement Period shall be one hundred thirty-four thousand seven hundred dollars (\$134,700). The Annual M&V Fee shall be increased annually thereafter as shown in Attachment E, each increase to be effective on the first day of the corresponding Measurement Period.

**"Applicable Law"** means any statute, law, treaty, building codes, rule, regulation, ordinance, code, enactment, injunction, writ, order, decision, authorization, judgment, decree, protocol, procedure or other legal or regulatory determination or restriction by a court or Governmental Authority or competent jurisdiction, as may be applicable and in effect at the time the Work is undertaken.

**"Applicable Permits"** means all permits, waivers, authorizations, or licenses issued or required to be issued by any Governmental Authority with jurisdiction and authority in connection with the Work.

**"ARRA"** is defined in ARTICLE 15.

**"Assessment Work"** means work required to assess the effect on EC Savings for any significant changes to the Facilities (including, but not limited to, building additions, new buildings, and new or changed HVAC equipment).

**"Attachment"** means the following attachments to this Contract, each of which is an "Attachment:"

Attachment A	Form of Performance Bond
Attachment B	Form of Payment Bond
Attachment C	City's Facilities & Existing Equipment
Attachment D	Scope of Work
Attachment E	Allocation of Contract Amount
Attachment F	Standards of Occupancy and Control
Attachment G	Energy Savings Measurement & Verification Plan
Attachment H	List of Incentives
Attachment I	Monitoring Installation Scope of Work
Attachment J	Lighting Survey

**"Average Energy Unit Savings"** means, with respect to any number of consecutive Measurement Periods, the arithmetic mean of the Energy Unit Savings determined in the manner set forth in Attachment G, for such number of Measurement Periods.

**"Base Energy Rate"** means the dollars per energy unit for each building and/or each ECM, set forth in the Savings Measurement and Verification Plan and used by Chevron ES to calculate the EC Savings.

**"Baseline"** means the energy use established from time to time by Chevron ES (and accepted by the City Manager, which acceptance shall not unreasonably be withheld) for each building in the Facilities, taking into consideration Energy Use Factors for such buildings.

**"Beneficial Use"** means when major new equipment and systems included in the Scope of Work are properly installed, inspected, operational, and are being used for their intended purpose. Criteria for Beneficial Use of equipment / systems shall be established as defined in Attachment D.

**"Business Day"** means any calendar day other than a Friday, a Saturday, a Sunday or a calendar day on which banking institutions in San Francisco, California, are authorized or obligated by law or executive order to be closed.

**"CEQA"** means the California Environmental Quality Act, codified at California Public Resource Code § 21000 *et seq.*, and the applicable state and local guidelines promulgated thereunder.

**"Certificate of Beneficial Use"** means the certificate, issued by Chevron ES to City and subcontractor(s), which identifies when City took Beneficial Use of the Work or any portion thereof. A Certificate of Beneficial Use may be executed for an individual subcontract, a specific building, a portion of the Work, or the entire Work.

**"Certificate of Final Completion"** means the certificate issued by Chevron ES to City, in accordance with Section 6.03. A Certificate of Final Completion may be executed for an individual subcontract, a specific building, a portion of the Work, or the entire Work.

**"Certificate of Substantial Completion"** means the certificate issued by Chevron ES to City, in accordance with Section 6.02. A Certificate of Substantial Completion may be executed for an individual subcontract, a specific building, a portion of the Work, or the entire Work.

**"Change"** means any addition to, deletion from, suspension of, or other modification to the quality, function, or intent of the Work, including without limitation any such addition, deletion, suspension, or other modification that effects a change in the Scope of Work.

**"Change in Law"** means any of the following events or circumstances occurring after the Contract Effective Date: (i) an amendment, modification, interpretation, construction, enforcement standard, supplement or other change in or repeal of an existing Applicable Law; or (ii) an enactment or making of a new Applicable Law (excluding a change in any income or franchise tax law, worker's compensation, payroll or withholding tax law).

**"Change Order"** means a written document, signed by both Chevron ES and City, authorizing Chevron ES to perform a Change. The Change Order shall modify the Scope of Work and shall identify: (i) the applicable Change; (ii) any additional compensation to be paid to Chevron ES to perform such Change; and (iii) any extensions of time to the Project Schedule.

**"Chevron ES"** means Chevron Energy Solutions Company, a Division of Chevron U.S.A. Inc., a Pennsylvania corporation.

**"Chevron ES Warranty"** is defined in ARTICLE 9.

**"City"** means the City of Palm Springs, a California charter city.

**"City Manager"** means the Manager of the City, or the Manager's designee. For this Contract, the initial designee of the City Manager is \_\_\_\_\_.

**"Claims"** means any and all actions, claims, losses, damages, expenses, or liabilities of either Party arising from or as a result of this Contract, any addenda to this Contract, and/or Change Orders.

**"Commissioning"** means the process by which equipment or a Generating Facility that has been installed or is nearing Substantial Completion is tested to verify that it functions according to its design specifications or contractually stipulated performance criteria.

**"Construction"** means any Work to be performed that involves any and all construction, alteration, repair, installation or removal of equipment, addition to, subtraction from, improving, moving, wrecking or demolishing any building, parking facility, excavation, or other structure or improvement, or any part thereof.

**"Construction Documents"** means the final designs, drawings, and specifications that are used for Construction, and any Change Orders affecting those documents, that describe the technical requirements for the installation of all the materials and equipment pursuant to this Contract and its Attachments.

**"Construction Period"** means the period beginning with the first day of the month in which equipment is first installed at the Facilities and continuing until the M&V Commencement Date.

“**Contract**” means this Energy Services Contract, and includes all Attachments hereto (all of which are incorporated herein), as well as all amendments, restatements, supplements and other modifications hereto.

“**Contract Amount**” means seventeen million five hundred seven thousand eight hundred forty two dollars (\$17,507,842), exclusive of the Annual M&V Fee.

“**Contract Bonds**” is defined in Section 11.04.

“**Contract Effective Date**” means the date this Contract is fully executed and is in full force and effect.

“**Delay**” means any circumstances involving delay, disruption, hindrance or interference affecting the time of performance of the Work.

“**Dispute**” is defined in Section 23.01.

“**EC Savings**” means the savings in units of dollars (\$) calculated in the manner set forth in the Savings Measurement and Verification Plan, achieved through the reduction in consumption or demand through implementation of the Work.

“**ECM**” means a supply-side or demand side energy conservation measure.

“**EMS**” means an energy management system.

“**Energy Delivery Point**” means, for each Generating Facility, the point at which Utility meter energy is being delivered, as designated in the Interconnection Agreement.

“**Energy Rate Factors**” means factors identified by Chevron ES (and accepted by the City Manager, which acceptance shall not unreasonably be withheld) which may affect utility rates from the local utility companies.

“**Energy Savings Report**” is defined in Section 22.04.

“**Energy Savings Term**” means the period beginning on the first day of the Construction Period and ending on the earlier of: (i) the day immediately preceding the fifth (5th) anniversary of the M&V Commencement Date (unless extended pursuant to Section 22.01(a)); (ii) the termination of this Contract; (iii) the termination by City of the Savings Guarantee in accordance with Section 22.07; or (iv) the failure by City to pay the Annual M&V Fee in accordance with Section 22.08(a).

“**Energy Unit Savings**” means the savings in units of energy, power, water, etc., calculated by Chevron ES in the manner set forth in the Savings Measurement and Verification Plan, achieved through the reduction in consumption or demand through implementation of the Work.

“**Energy Usage Data**” is defined in Section 2.05.

“**Energy Use Factors**” means factors identified by Chevron ES (and accepted by the City Manager, which acceptance shall not unreasonably be withheld) which may affect the Baselines or energy use for the Facilities, including but not limited to: hours and levels of occupancy; adjustments in labor force; building use and operational procedures; temperature, humidification, and ventilation levels; installed lighting and scheduled use; building construction and size; general level of repair and efficiency of heating and air conditioning equipment and other energy-using equipment; and amount of heating and air conditioning and other energy-using equipment.

“**Energy Use Savings**” means, for any Measurement Period, those savings, having units of dollars (\$), achieved for such Measurement Period through reductions in energy use, energy demand, water use, and the use of other commodities.

“**Event of Default**” is defined in ARTICLE 12.

“**Excess Savings**” means the excess of EC Savings over Guaranteed Savings, calculated in the manner set forth in Section 22.09(d).

“**Excusable Delay**” means (i) any act or failure to act of, or other Delay caused by, or negligence of, City or its agents, employees subcontractors or other Persons for whom City is responsible (expressly excluding, however, Chevron ES when acting as agent or subcontractor under this Contract, whether in its individual capacity or as contractor); (ii) the failure to obtain, or delay in obtaining, any Interconnection Agreement, Applicable Permit, or approval of a Governmental Authority (including due to failure to make timely inspection), or Delays caused by Changes and/or modifications to the Scope of Work required by any Governmental Authority, other than a failure caused by the action or inaction of Chevron ES; (iii) changes in the design, scope or schedule of the Work required by any Governmental Authority or City; (iv) suspension of Work in whole or in part by City; (v) unforeseen site conditions, including discovery or existence of Hazardous Substances; (vi) the occurrence of an event of Force Majeure; (vii) the failure to obtain, or delay in obtaining, Governmental Authority approval for



design and installation of any portion of the Work, including any further or subsequent approval required with respect to any Change, other than a failure caused by the action or inaction of Chevron ES or its subcontractors or agents; (viii) any breach of this Contract by City or any breach of any Interconnection Agreement; (ix) damage to any equipment or other item of Work caused by the act or omission of City, any of its agents or employees, or any other Person for whom City is responsible; (x) information provided to Chevron ES by City or Utility is later found to be inaccurate or incomplete; (xi) any Change in Law; (xii) Delay caused by pending arbitration; or (xiii) any other cause outside Chevron ES's control.

**"Facilities"** means the public facilities described in Attachment C.

**"Final Completion"** means when 100% of the engineering and construction Work as identified in the Scope of Work has been completed by Chevron ES and accepted by the City Manager, including completion of all required training, and delivery to City of the final documentation (as-built drawings, O&M Manuals and warranty documentation).

**"Force Majeure"** means acts or events that are beyond the reasonable control of the affected Party and not caused by the negligence or fault of the Party affecting, including but not limited to any of the following: (i) acts of God; (ii) acts of the public enemy or terrorist acts; (iii) relocation or construction of transmission facilities or the shutdown of such facilities for the purpose of necessary repairs; (iv) work by local Utility; (v) flood, earthquake, tornado, storm, fire, explosions, lightning, landslide or similar cataclysmic occurrence; (vi) sabotage, vandalism, riots or civil disobedience; (vii) labor disputes or strikes; (viii) labor or material shortages, delay in manufacturing and deliveries of equipment (if such delay is caused by an event that would otherwise constitute Force Majeure); (ix) restraint by court order or Governmental Authority (whether valid or invalid); (x) inability to obtain or keep in force any Applicable Permit; (xi) Abnormally Severe Weather Conditions; (xii) requirement by Utility that any Generating Facility discontinue operation for any reason; (xiii) appropriation or diversion of electricity by sale or order of any Governmental Authority; (xiv) any other action by any Governmental Authority which prevents or inhibits the Parties from carrying out their respective obligations under this Contract (including an unstayed order of a court or administrative agency having the effect of subjecting the sales of energy output to federal or state regulation of prices and/or services); or (xv) any Utility power outage at any Facility.

**"Generating Facility"** means the cogeneration facility located at Municipal Plant, and includes all associated equipment that may be necessary to connect such facility to the applicable Energy Delivery Point.

**"Governmental Authority"** means any federal, state, regional, town, county, city, municipal or local government agency, department or regulatory body having jurisdiction over the matter in question.

**"Guarantee Payment"** means, for any Measurement Period, either: (i) a cash payment by Chevron ES to City in an amount equal to the Guarantee Shortfall for that Measurement Period pursuant to Section 22.01(b); or (ii) additional energy services or energy saving retrofits requested by City with an agreed value equal to the Guarantee Shortfall for that Measurement Period pursuant to Section 22.01(c).

**"Guarantee Shortfall"** means an amount calculated in accordance with Section 22.09(e).

**"Guaranteed Savings"** means, for any Measurement Period, the dollar amount set forth below for such Measurement Period, as the same may be adjusted from time to time by Chevron ES (and accepted by the City Manager, which acceptance shall not unreasonably be withheld) for changes in Energy Rate Factors, Energy Use Factors and consequential revisions to the relevant Baseline:

Measurement Period	Guaranteed Savings
1	\$782,718
2	\$814,027
3	\$846,588
4	\$880,452
5	\$915,670
6 (if extension option exercised)	\$952,296
7 (if extension option exercised)	\$990,388
8 (if extension option exercised)	\$1,030,004
9 (if extension option exercised)	\$1,071,204
10 (if extension option exercised)	\$1,114,052

**"Hazardous Substances"** means (i) any hazardous, toxic, or dangerous wastes, substances, chemicals, constituents, contaminants, pollutants, and materials and any other carcinogenic, liquids, corrosive, ignitable, radioactive, reactive, toxic, or otherwise hazardous substances or mixtures (whether solids, liquids, gases) now or at any time subject to regulation, control, remediation, or otherwise addressed under Applicable Laws; (ii) any "hazardous substance" as defined by the Resource, Conservation and Recovery Act of 1976 (42 U.S.C. §6901 *et seq.*), as amended, and regulations promulgated thereunder; (iii) any "hazardous, toxic or dangerous waste, substance or material" specifically defined as such in 42 U.S.C. §9601 *et seq.*), as amended and regulations promulgated thereunder; and (iv) any hazardous, toxic or dangerous waste, substance, or material as defined in any so-called "superfund" or "superlien" law.

**"Incentive Funds"** is defined in Section 8.07.

**"Installation"** means the setting up, construction, and placement of any equipment or materials in the manner it will be operated, in accordance with the Scope of Work and in accordance with all Applicable Laws.

**"Interconnection Agreement"** means the Interconnection Agreement to be entered into between City and the Utility with respect to the Generating Facilities.

**"Interconnection Facilities"** is defined in Section 21.02.

**"Interest"** means interest calculated at the lesser of (i) the prime rate plus two percent (2%) or (ii) the maximum rate permitted by Applicable Law. The "prime rate" shall be "Prime Rate" of interest per annum for domestic banks as published in The Wall Street Journal in the "Money Rates" section, or if such rate ceases to be published in The Wall Street Journal or The Wall Street Journal ceases publication, such other rate as agreed by the Parties.

**"IPMVP"** means the International Performance Measurement and Verification Protocol prepared by Efficiency Valuation Organization.

**"Losses"** is defined in Section 11.01.

**"M&V Commencement Date"** means the first day of the month immediately following the later of (i) Chevron ES's receipt of the fully signed Certificate of Final Completion, and (ii) Chevron ES's receipt of the full Contract Amount.

**"Material Changed Condition"** means any of the following conditions that impact the Project Schedule and/or the Contract Amount: (i) delays in the Project Schedule caused by parties outside the control of Chevron ES; (ii) the discovery of differing and unexpected site conditions not previously disclosed by City that could not have been readily discoverable by Chevron ES prior to the start of Work; (iii) the discovery of Hazardous Substances not previously disclosed by City that could not have been readily discoverable by Chevron ES prior to the start of Work; (iv) Abnormally Severe Weather Conditions; and (v) delay in equipment and material deliveries outside Chevron ES's control.

**"Measurement Period"** means each one-year period following the M&V Commencement Date.

**"NEC"** means the National Electric Code.

**"Notice to Proceed"** is defined in Section 2.04.

**"Party"** means either Chevron ES or City, and **"Parties"** means both Chevron ES and City.

**"Person"** means any natural person, corporation, general partnership, limited partnership, limited liability company, proprietorship, other business organization, trust, union, association or Governmental Authority.

**"Project"** means the entirety of Work to be performed by Chevron ES pursuant to the Scope of Work, and any Change Orders.

**"Project Location"** means that area or areas where the Project materials and equipment and any other energy related equipment as described in the Scope of Work shall be performed and/or installed.

**"Project Schedule"** is defined in Section 2.04(a).

**"Projected Energy Savings"** means those Energy Unit Savings which the Parties anticipate will be realized from the installation and continued operation of the Work, as set forth in the Savings Measurement and Verification Plan.

**"Report"** means the report summarizing Chevron ES's comprehensive energy analysis and recommended energy plan to implement certain ECMS, presented to the City on 20 July 2011.

**"Request for Payment"** means a monthly progress payment as described in Section 8.01 or an invoice for materials stored off-site as described in Section 8.02.

"Retainage" is defined in Section 8.03.

"Retained Items" is defined in Section 10.01(d).

"Savings Guarantee" is defined in Section 22.01(a).

"Savings Measurement and Verification Plan" means the methodologies and calculations set forth in Attachment G, which provides for the quantification of Energy Unit Savings.

"Scope of Work" means the Work set forth in Attachment D, as modified by any Change Order.

"Stipulated Non-Energy Savings" means, for any Measurement Period, those savings, having units of dollars (\$), achieved for such Measurement Period through reductions in non-energy costs due to the implementation of the Work. Stipulated Non-Energy Savings shall be stipulated by the Parties and set forth in the Savings Measurement and Verification Plan.

"Substantial Completion" means the stage in the progress of the Work or portion of the Work, where the Work or portion of the Work is sufficiently complete in accordance with this Contract so that City can utilize and take beneficial use of the Work for its intended use or purpose.

"Surety" means the surety supplying the Contract Bonds, which shall be an "admitted surety insurer," as defined by California Code of Civil Procedure §995.120, authorized to do business in the State of California, and reasonably satisfactory to City.

"Time" means the time period within which Chevron ES shall complete the Work in accordance with the Project Schedule.

"Utility" is defined in Section 21.02.

"Work" means the Work to be done by Chevron ES pursuant to the Scope of Work, subject to any Change Orders, and includes all Design and Engineering Work and Construction Work set forth in Attachment D.

## ARTICLE 2. TERM; PERFORMANCE OF THE WORK

Section 2.01 Contract Term. The term of this Contract shall commence on the date hereof and end on the last day of the Energy Savings Term, unless terminated early as provided in this Contract.

Section 2.02 Performance of Work. All the Work to be performed hereunder will be provided in accordance with the terms of this Contract and the applicable standard of care. Chevron ES shall perform its obligations under this Contract (i) using the degree of skill and care that is required by current, good and sound professional procedures and practices, and (ii) in conformance with (x) generally accepted professional standards prevailing at the time the Work is performed, (y) the covenants, terms and conditions of this Contract, and (z) applicable laws, codes, rules and regulations, including, without limitation, the applicable provisions of the California Building Code. Chevron ES represents and warrants that it is fully experienced in projects of the nature and scope of the Work, and that it is properly qualified, licensed and equipped to supply and perform the Work.

Section 2.03 Scope of Work. The Scope of Work shall not exceed that set forth in Attachment D except pursuant to a Change Order.

Section 2.04 Project Schedule / Notice to Proceed.

- (a) After the Contract Effective Date, Chevron ES will develop, in consultation with and approval of City Manager, a preliminary master project schedule (the "Project Schedule") using Microsoft Project®. Chevron ES will establish a weekly construction meeting at which time the Work of the previous week will be reviewed and a two-week look ahead will be coordinated.
- (b) Within eight (8) Business Days after City has closed the financing referenced in Section 2.07, City Manager will issue to Chevron ES a written Notice to Proceed ("Notice to Proceed"). Chevron ES will begin Work within sixteen (16) Business Days after Chevron ES's receipt of the Notice to Proceed. If City Manager fails to issue the Notice to Proceed within eight (8) Business Days after the financing has closed, Chevron ES will be entitled to an appropriate extension of time and/or an appropriate adjustment in the Contract Amount as a result of such delay.
- (c) Subject to adjustments of Time as set forth herein, Chevron ES will achieve Substantial Completion of the Work by no later than the date that is thirty (30) months after the date on which it receives the Notice to Proceed.

Section 2.05 City's Energy and Operational Records and Data. Within eight (8) Business Days after the date hereof, City shall provide Chevron ES with its Energy Usage Data (as defined below) for the twelve (12) months preceding the date hereof, and shall make commercially reasonable efforts to provide the Energy Usage Data

for the thirty-six (36) months preceding the date hereof. Energy Usage Data means all of City's records and complete data requested by Chevron ES concerning, without limitation, energy usage, energy-related maintenance, and other related costs for the Facilities, and including without limitation utility records; occupancy information; descriptions of any changes in the building structure or its heating, cooling, lighting or other systems or energy requirements; descriptions of all energy consuming or saving equipment used in the Facilities; applicable building drawings, specifications, existing AutoCAD files, O&M manuals, and as-builts; bills and records relating to operation and maintenance of systems and equipment within the Facilities, and a description of operation and management procedures presently utilized. City agrees that Chevron ES may rely on the foregoing data as being accurate in all respects. If requested, City shall also provide any prior energy audits of the Facilities, and copies of City's financial statements and records related to energy usage and operational costs for said time period at the Facilities, and shall authorize its agents and employees to provide and freely discuss such records and to make themselves available for consultations and discussions with authorized representatives, employees, subcontractors, and agents of Chevron ES.

Section 2.06 Additional Work. City shall reasonably cooperate in obtaining any necessary approvals in accordance with California Government Code §§4217.10 through 4217.18. If Chevron ES determines that a Change Order is subject to the requirements of California Government Code §4217.10 *et seq.*, City shall reasonably cooperate in obtaining any necessary approvals in accordance with California Government Code §§4217.10 through 4217.18.

Section 2.07 Finance Contingency. It is acknowledged and agreed by the Parties that the continued existence of this Contract is expressly contingent upon City closing financing that will allow it to make the payments to Chevron ES envisioned by this Contract. Upon execution of this Contract, City will have forty-five (45) calendar days to close such financing. If the financing is not closed within this time, for any reason, Chevron ES may by written notice to City declare this Contract to be null and void; and the Contract will be null and void as of City's receipt of this notice. It is acknowledged and agreed that Chevron ES will not commence performance of the Work unless and until the financing has been closed.

### **ARTICLE 3. PROJECT IMPLEMENTATION - GENERAL**

Section 3.01 Permits and Approvals. City will cooperate fully with and assist Chevron ES in obtaining all Applicable Permits required under this Contract. Chevron ES is responsible for obtaining (but not paying for) permits and approvals required for the building, installation, and start-up of the Work hereunder which are required as of the Contract Effective Date. City shall be responsible for obtaining and paying for any other permits or approvals that may be required, including annual operating permits and any approvals or exemptions required by CEQA, as applicable. City is also responsible for all fees associated with plan checks, permits, inspections and utility interconnection(s), including any additional Scope of Work that may be required by the Utilities as part of the Interconnection Agreement(s).

Section 3.02 Coordination During Installation. City and Chevron ES shall make commercially reasonable efforts to coordinate the activities of Chevron ES and Chevron ES's subcontractors and suppliers with those of City, its employees, and agents.

Section 3.03 Project Meetings/Status Updates. During the Design and Construction Phases of the Project, Chevron ES will meet with City to review equipment, scope of work, and installation plans that relate to the design and construction of the Project. Also during the course of the Work, Chevron ES will periodically provide reports to City of the general status and progress of the Work.

Section 3.04 Project Location Access. City hereby grants to Chevron ES, without cost to Chevron ES, all rights of ingress and egress at the Project Location identified in the Scope of Work, necessary for Chevron ES to perform all Work and provide all services contemplated by this Contract and the Scope of Work. Chevron ES shall provide twenty-four-hour advance notice to City for access to any City Facilities.

Section 3.05 Project Schedule. During the course of the Work, both City and Chevron ES shall perform their respective obligations in an expeditious manner that is consistent with reasonable skill and care for the type of Project described in the Scope of Work and in keeping with the orderly progress of the Work pursuant to the Scope of Work. The Project Schedule will be finalized during the completion of the construction documents, provided that such final Project Schedule will be subject to amendment and revision to take into account any Excusable Delays. Subject to any such Excusable Delays, Chevron ES and its subcontractors shall work diligently to implement the Project in accordance with the Project Schedule and Chevron ES shall notify City regarding any and all revisions to the Project Schedule necessitated by such Delay.

Section 3.06 Consents; Cooperation. Whenever a Party's consent, approval, satisfaction, or determination shall be required or permitted under this Contract, and this Contract does not expressly state that the Party may act in its sole discretion, such consent, approval, satisfaction, or determination shall not be unreasonably

withheld, qualified, conditioned, or delayed, whether or not such a "reasonableness" standard is expressly stated in this Contract. Whenever a Party's cooperation is required for the other Party to carry out its obligations hereunder, each Party agrees that it shall act in good faith and reasonably in so cooperating with the other Party or its designated representatives or assignees or subcontractors. Each Party shall furnish decisions, information, and approvals required by this Contract in a timely manner so as not to delay the other Party's performance under this Contract.

Section 3.07 Independent Contractor. The Parties hereto agree that Chevron ES, and any agents and employees of Chevron ES, its subcontractors and/or consultants, in the performance of this Contract, is acting in an independent capacity and not as a public official, officer, employee, consultant, or agent of City for purposes of conflict of interest laws or any other Applicable Law.

#### **ARTICLE 4. FINAL DESIGN PHASE – CONSTRUCTION DOCUMENTS / EQUIPMENT PROCUREMENT**

##### Section 4.01 General Provisions.

- (a) As soon as possible after the Contract Effective Date, Chevron ES will proceed with the preparation of any necessary designs, drawings, and specifications related to the Scope of Work.
- (b) Upon the issuance of the Notice to Proceed and upon completion of the design phase, Chevron ES shall order the equipment identified in the Scope of Work, and any other necessary materials and supplies in order to meet the Project Schedule.
- (c) The City Manager is the single-point representative with whom Chevron ES shall consult on a reasonable, regular basis and who is authorized to act on City's behalf with respect to the Project design. City Manager shall render decisions in a timely manner with regard to any documents submitted by Chevron ES and to other requests made by Chevron ES in order to avoid unreasonable delay in the orderly and sequential progress of Chevron ES's design services.
- (d) Within eight (8) Business Days of Chevron ES's request, City shall:
  - (i) furnish all surveys or other information in City's possession that describe the physical characteristics, legal limitations, and utility locations in and around the Project Location;
  - (ii) disclose any prior environmental review documentation and all known information in its possession concerning subsurface conditions, including without limitation the existence of any known Hazardous Substances, in or around the general area of the Project Location where the Work will be performed pursuant to the Scope of Work;
  - (iii) supply Chevron ES with all relevant information in City's possession, including any as-built drawings and photographs, of prior construction undertaken in the general area where the Work will be performed pursuant to the Scope of Work; and
  - (iv) obtain any and all easements, zoning variances, planning approvals, including any resolution of any environmental impact issues, and any other legal authorization regarding utilization of the Project Location site essential to the execution of the Work.
- (e) All information furnished pursuant to this Section 4.01 shall be supplied at City's expense, and Chevron ES is entitled to rely upon the accuracy and completeness of all information provided. City acknowledges that any failure to provide the information specified in Section 4.01(d) to Chevron ES may result in an Excusable Delay as defined herein.
- (f) In the event that any information is disclosed under this Section 4.01 that constitutes a Change to the Work and/or is a Material Changed Condition, Chevron ES will provide notice to City within eight (8) Business Days after receipt of this information, and the Parties will meet and confer with respect to those Changes. If City authorizes a Change Order, Chevron ES shall be compensated, and receive an extension of Time for performance, if necessary, to perform the additional Work. If the Parties are unable to agree on whether City's disclosed information constitutes a Change to the Work or a Material Changed Condition, those disputes shall be resolved in accordance with ARTICLE 23.
- (g) Chevron ES contemplates that it will not encounter any Hazardous Substances at the Project Location, except as has been disclosed as a Pre-Existing Condition by City prior to the execution of this Contract. However, any disclosure of Hazardous Substances that will affect the performance of the Work after the execution of this Contract shall constitute a valid basis for a Change Order.

##### Section 4.02 Review of Construction Documents.

- (a) Chevron ES will prepare and submit fifty percent (50%) complete Construction Documents, including designs, drawings, and specifications, to City for review. City shall review the documents and provide any comments in writing to Chevron ES within eight (8) Business Days after receipt of documents. Chevron ES will incorporate appropriate City comments into the fifty percent (50%) complete designs, drawings, and specifications, as applicable. If during the design phase City requests changes and/or modifications to the Work identified in the Scope of Work and/or there are Material Changed Conditions, City shall be responsible for payment of the extra costs caused by such modifications and/or changes.
- (b) Chevron ES will prepare and submit final Construction Documents to City for review. City shall review the final designs, drawings, and specifications and provide any comments in writing to Chevron ES within eight (8) Business Days after receipt of final Construction Documents. Chevron ES will incorporate appropriate City comments into the final Construction Documents, including all designs, drawings, and specifications, as applicable. The terms and conditions of any permit approvals required for the Project will be provided. If, after completion of the Construction Documents, City requests changes and/or modifications to the Work identified in the Scope of Work and/or there are Material Changed Conditions, City shall be responsible for payment of the extra costs caused by such modifications and/or changes.
- (c) Valid bases for additional compensation and/or Time extension include, but are not limited to: (i) City requests changes and/or modifications to the Project Scope of Work during or after the Project design phase; (ii) City caused delays during or after Chevron ES's design work; (iii) the discovery of subsurface or other site conditions that were not disclosed by City and could not have been readily discoverable by Chevron ES prior to the Contract Effective Date; (iv) the discovery of Hazardous Substances at or impacting the Project Location; (v) changes to the Scope of Work required to obtain certain permits; (vi) damage to any equipment or other Work installed by Chevron ES caused by the act or omission of City, its agents or employees; (vii) material changes and/or modifications to Scope of Work ordered by any Governmental Authority; and (viii) any other condition that would not reasonably have been anticipated by Chevron ES, as an experienced and expert provider of the Work contemplated by this Contract, that modifies and/or changes the Scope of Work, that increases the Contract Amount, or increases the Time needed to complete the Work in accordance with the Project Schedule.
- (d) Chevron ES reserves the right to issue the designs, drawings and specifications in phases to allow the construction to be performed in phases.
- (e) If City fails to provide written comments within the periods identified herein, City shall be deemed to have no comments regarding the documents for each such period.

Section 4.03 Permits and Approvals. The respective obligations of the Parties in obtaining permits and approvals are as specified in Section 3.01. City shall agree to any nonmaterial changes to the designs, drawings, and specifications required by any Governmental Authority. The Contract Amount provided for in the Scope of Work shall be increased by any additional cost incurred by Chevron ES due to a change required by a Governmental Authority and the time required to complete the Work pursuant to the Project Schedule will be increased by the number of additional days required to complete the Work because of a change in the Project imposed by a Governmental Authority.

**ARTICLE 5. CONSTRUCTION PHASE**

Section 5.01 General Provisions.

- (a) Upon securing necessary permits, pursuant to Section 3.01, and completion of final Construction Documents, Chevron ES will commence the construction of the Project in accordance with the final Construction Documents. The construction will be performed by Chevron ES and/or one or more licensed subcontractors qualified to perform the Work. The construction will be performed in accordance with all Applicable Laws and Applicable Permits.
- (b) Chevron ES has examined the Project Location and accepts all measurements, specifications, and readily observable conditions set forth in this Contract for the Work to be performed at the Project Location. Chevron ES agrees that its preliminary examination(s) of the Project Location are sufficient for its determinations as to the condition of the Project Location, and accessibility for materials, workers and utilities. Notwithstanding the aforementioned, should Chevron ES discover any latent or unknown conditions, which will materially affect the performance of the Work hereunder, Chevron ES shall immediately inform City of such fact in writing. Other than taking actions necessary to minimize consequential interruptions to City's operations at the affected work site, and while securing the safety of the work site, Chevron ES shall not proceed until written instructions are received from City.

Section 5.02 Chevron ES's Responsibilities During Construction Phase.

- (a) As an independent contractor to City, Chevron ES will be responsible for providing, or causing to be provided by Chevron ES's subcontractor(s), all labor, materials, equipment, tools, transportation, and other facilities and services necessary for the proper execution, construction, and completion of the Work as defined in the Scope of Work, the final Construction Documents and any Change Orders. Chevron ES is hereby required to purchase in advance all necessary materials and supplies for the construction of the Project in order to assure the prompt and timely delivery of the completed Work pursuant to the Project Schedule. Chevron ES will also be responsible for all means, methods, techniques, sequences, and procedures employed for the construction required by the final Construction Documents. Chevron ES will also coordinate the Work as necessary with its subcontractors.
- (b) Chevron ES will make commercially reasonable efforts to coordinate construction activities and perform the Work to minimize disruption to City's operations at the Project Location. Chevron ES will provide at least thirty (30) calendar days written notice to City of any planned power outages that will be necessary for the construction. Chevron ES will cooperate with City in scheduling such outages, and City agrees to provide its reasonable approval of any scheduled outage.
- (c) Chevron ES will be responsible for initiating and maintaining safety precautions and programs in connection with its construction of the Project. Chevron ES will take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to: (1) employees of Chevron ES and subcontractors performing Work under this Contract; (2) Chevron ES's property and other materials to be included in the Project, under the care, custody, and control of Chevron ES or its subcontractors; and (3) other property at or adjacent to the Project Location not designated for removal, relocation, or replacement during the course of construction. Chevron ES will be responsible for repairing, at no cost to City, any and all damage caused by Chevron ES or its subcontractors, at the Project Location. Chevron ES will not be responsible for City's employees' safety unless Chevron ES's negligence in the performance of its Work is the proximate cause of the employee's injury.
- (d) Based on the final Construction Documents, Chevron ES will obtain required building permits for Project Construction. City will cooperate with Chevron ES in securing such permits.
- (e) Chevron ES will maintain in good order at the Project Location copies of the Scope of Work, all Change Orders, this Contract (with all Attachments), one record copy of all drawings, specifications, product data, samples, manufacturer's operation & maintenance manuals, and other pertinent construction-related documents.
- (f) Chevron ES shall provide at least forty-eight (48) hours' notice to City of any scheduled test(s) of installed equipment, and City and/or its designees shall have the right to be present at any or all such tests conducted by Chevron ES, any subcontractor, and/or manufacturers of the equipment. Chevron ES shall be responsible for correcting and/or adjusting all deficiencies in systems and equipment operations that Chevron ES provided and installed that may be observed during equipment Commissioning procedures.
- (g) The following duties shall be performed by Chevron ES:
  - (i) Organize and conduct a pre-construction meeting with City and each subcontractor.
  - (ii) Organize and conduct regularly scheduled progress meetings throughout the installation period.
  - (iii) Schedule and manage all subcontractors and related work.
  - (iv) Provide City a single point of contact and responsibility for all Work related to the Project.
  - (v) Investigate and resolve design, construction, and field issues as they arise during the Project
  - (vi) Coordinate on-site Work, and schedule accordingly with City.
  - (vii) Provide City with final Project Schedule for all Work and update the Project Schedule at each progress meeting.
  - (viii) Perform progress inspections throughout the installation period. Provide City and subcontractor with results of findings.
  - (ix) Identify any existing City equipment that is found during implementation of the Work not to be functioning properly, and notify in writing to City.
  - (x) Provide regular status reports to City.

- (xi) When appropriate, initiate a thorough inspection of the Work with City and subcontractor to obtain Substantial Completion.
  - (xii) Check, test, and start-up each item of equipment.
  - (xiii) With City, perform final inspection of the Work.
  - (xiv) Perform a point-by-point hardware Commissioning of the Chevron ES installed energy management system. Identify any EMS items that are not functioning properly, and include on the punch list.
  - (xv) Identify any existing City equipment that is found during EMS Commissioning not to be functioning properly, and notify in writing to City.
  - (xvi) Perform a complete software/programming Commissioning of the energy management system. Identify any EMS items that are not programmed per specification, and include on the punch list.
  - (xvii) With City and subcontractor, perform final inspection of the Work.
  - (xviii) Review subcontractor invoices and authorize payment as appropriate.
  - (xix) Keep the areas of the Project Location where Chevron ES is performing Work substantially clean and free of all debris resulting from the Work.
  - (xx) Obtain/prepare final as-built documentation for the Project, and deliver to City. Documentation shall include O&M manuals as appropriate, warranty information, and as-built drawings and related information.
- (h) Chevron ES shall, at its sole cost and expense, inspect its Work to determine conformance to the requirements of the final Construction Documents. (This obligation of Chevron ES is in addition to Chevron ES's obligations to make repairs or to remedy deficient or unacceptable work as may be required under this Contract.) If Chevron ES determines that some of the Work performed on the Project does not comply with the requirements of the final Construction Documents or this Contract, Chevron ES shall repair or replace such defective work at its sole cost and expense. Chevron ES shall gain no protection or right of reliance on City's inspection of the work. If it is determined that City inspected work and failed to call defects or non-conforming items to the attention of Chevron ES, City shall not be deemed to have waived the requirements of the final Construction Documents or this Contract or accepted the Work.

**Section 5.03 City's Responsibilities During Construction Phase.**

- (a) The City Manager is the single-point representative authorized to act on City's behalf with respect to Project construction and/or equipment installation. City may from time to time change the City Manager's designee and shall provide at least forty-eight (48) hours' notice to Chevron ES of each such change. Any independent review of the construction shall be undertaken at City's sole expense, and it shall be performed in a timely manner so as to not unreasonably delay the orderly progress of Chevron ES's Work. Any independent review of the construction by City shall not relieve Chevron ES of any of its obligations or responsibilities hereunder.
- (b) City shall provide a temporary staging area for Chevron ES, or its subcontractors, to use during the construction phase to store and assemble equipment for completion of the Work, if needed. City will provide sufficient space at the Facilities for the performance of the Work and the installation, storage, and operation of any equipment and materials and will take reasonable steps to protect any such equipment and materials from harm, theft and misuse. City shall provide access to the Facilities, including parking permits and identification tags, for Chevron ES and subcontractors to perform the Work hereunder during regular business hours, or such other reasonable hours as may be requested by Chevron ES and acceptable to City. City shall also either provide a set or sets of keys to Chevron ES and its subcontractors (signed out per City policy) or provide a readily available security escort to unlock and lock doors. City shall not unreasonably restrict Chevron ES's access to Facilities to make emergency repairs or corrections as it may determine are needed.
- (c) City shall remain responsible for the maintenance of the portion of the Project Location that is not directly affected by Chevron ES's Work. City shall keep the designated Project Location and staging area for the Project free of obstructions, waste, and materials within the control of City.
- (d) When required by Applicable Law, City shall obtain, at its sole cost and expense, any required environmental clearance from and any special permits required by any federal, state, and local jurisdictions, including but not limited to any clearances required under CEQA, prior to scheduled construction start date.



- (e) City shall be responsible for the preparation of the designated Project Location site for construction, including, but not limited to, clearance of all above and below ground obstructions, such as vegetation, buildings, appurtenances, and utilities. Subsurface conditions and obstacles (buried pipe, utilities, etc.) that are not otherwise previously and accurately documented by City and such documentation made available to Chevron ES are the responsibility of City. If Chevron ES encounters such unforeseen conditions in the performance of the Work, Chevron ES will be entitled to a Change Order providing for additional compensation, an extension of Time and a revision of the Project Schedule.
- (f) City shall be solely responsible for the removal of any Hazardous Substances either known to City prior to the commencement of the Work or encountered by Chevron ES during the construction of the Project, if necessary in order for the Work to progress safely, that was not knowingly released or brought to the site by Chevron ES. Chevron ES will respond to the discovery of Hazardous Substances at or around the Project Location during the course of Chevron ES's construction in accordance with Section 5.06.
- (g) City shall coordinate the Work to be performed by Chevron ES with its own operations and with any other construction project that is ongoing at or around the Project Location, with the exception that Chevron ES will coordinate the Interconnection Facilities work, if any, which will be performed by the local utility.
- (h) City shall allow Chevron ES and its subcontractors access to and reasonable use of necessary quantities of City's water and other utilities, including electrical power, as needed for the construction of the Work, at no extra cost to Chevron ES.
- (i) City will provide Chevron ES and/or its subcontractors with reasonable access to the Project Location to perform the Work, including without limitation and at no extra cost to Chevron ES, access to perform Work on Fridays, Saturdays, Sundays, legal holidays, and non-regular working hours.
- (j) City shall also do the following:
  - (i) Cause an authorized representative to attend the regularly scheduled progress meetings. Participate as needed regarding scheduling of the Work.
  - (ii) When appropriate, participate in the job inspection walk-through with Chevron ES and the subcontractor to determine Substantial Completion or beneficial use of major equipment. Sign the Certificate of Substantial Completion, as appropriate.
  - (iii) Perform a final walk-through of the Project. Upon receipt of the O&M Manuals and as-built drawings, sign the Certificate of Final Completion for the related Work.
  - (iv) City is encouraged to provide a staff member(s) (HVAC technician, etc.) to accompany Chevron ES during the EMS Commissioning. This is an excellent opportunity to learn in-depth the operation and installation of the EMS.
  - (v) Provide knowledgeable staff to participate in the training programs, which will be scheduled in advance for proper coordination.
  - (vi) Upon the completion of the entire Scope of Work listed in Attachment D, including training, and submission of close-out documents, sign a Certificate of Final Completion for the entire Project.

**Section 5.04 Changes During Construction.**

- (a) Change Orders Generally. Changes and/or modifications to the Scope of Work shall be authorized by a written Change Order signed by both City Manager and Chevron ES. The Change Order shall state the change and/or modification to the Scope of Work, any additional compensation to be paid, or extension of Time, if needed, to Chevron ES to perform such change and/or modification. Chevron ES may, at its election, suspend performance of that portion of the Work affected by any proposed Change Order until an agreement has been reached with City regarding the Change Order. Chevron ES will use its reasonable efforts to continue other portions of the Work not affected or impacted by such proposed Change Order until such time as the Change Order is resolved. In addition, if City requests a proposal from Chevron ES for a change to the Scope of Work and City subsequently elects to not proceed with such change, City agrees that a Change Order shall be issued to reimburse Chevron ES for any costs reasonably incurred for estimating services, design services, and/or preparation of the proposal requested by City.
- (b) Change Orders Requiring Additional Compensation. If during construction City requests changes and/or modifications to the Work identified in the Scope of Work, there are Excusable Delays, and/or there are Material Changed Conditions, City shall be responsible for payment of the extra costs caused by such modifications and/or changes and Chevron ES shall be entitled to additional compensation for the following reasons, that include, but are not limited to: (1) City requests changes and/or modifications to the Scope of

Work during the construction phase of the Project; (2) City caused delays during Chevron ES's construction work; (3) discovery of subsurface or other site conditions that were not reasonably anticipated or disclosed prior to the commencement of the Work; (4) discovery of Hazardous Substances at or impacting the Project Location; (5) changes and/or modifications to the Scope of Work required to obtain required permits and approvals as required by any Governmental Authority; (6) damage to any equipment or other Work installed by Chevron ES caused by the act or omission of City, its agents or employees; and (7) changes and/or modifications to Scope of Work ordered by any Governmental Authority.

- (c) Change Orders Requiring Additional Time / Excusable Delays. If during construction City requests changes and/or modifications to the Work identified in the Scope of Work and/or there are Material Changed Conditions, the Parties agree that a reasonable extension of Time to the Project Schedule may be necessary to perform such modifications and/or changes. In addition, if Chevron ES is delayed at any time in the progress of the Work for any reason beyond its control, including, but not limited to, any Excusable Delay, then the targeted dates set forth in the Project Schedule shall be reasonably extended by a Change Order. Prior to the extension of such dates, Chevron ES will use reasonable efforts to make up such delays, including authorizing overtime payments; *provided* that City has issued a Change Order authorizing any such overtime payment and has specifically agreed to pay all costs, including administrative charges and expenses, associated therewith.
- (d) Material Changed Conditions/ Conditions Beyond Chevron ES's Control. Chevron ES will provide written notice to City of any Material Changed Condition and or any event of Force Majeure, within eight (8) Business Days of Chevron ES's first discovery of such Material Changed Condition or event of Force Majeure. In the event that Chevron ES's notice concerns unanticipated subsurface conditions, including soil conditions, or Hazardous Substances, Chevron ES will not disturb the condition until said notice has been given to City, and City has had a reasonable opportunity to investigate the condition. If there is a disagreement between City and Chevron ES as to whether a Change Order should be issued and executed because of the Material Changed Condition and/or condition beyond Chevron ES's control, those disputes shall be resolved in accordance with the provisions of ARTICLE 23. Pending the resolution of any dispute between Chevron ES and City concerning a Material Changed Condition and/or change beyond Chevron ES's control, Chevron ES reserves the right to suspend Work pending the resolution of the dispute.
- (e) Change Order – Savings Effect. Chevron ES shall calculate the energy impact of any City change orders. As applicable, the energy impact may change the projected savings level and the Guaranteed Energy Savings amount.

Section 5.05 Minor Changes to Scope of Work. Chevron ES shall have authority to make minor changes that do not change the total Contract Amount and are consistent with the intent of the final Construction Documents, as amended by Change Order, without prior notice to City. Chevron ES will either promptly inform City, in writing, of any minor changes made during the implementation of the Project, or make available to City at the site a set of as-built drawings that will be kept current to show those minor changes.

Section 5.06 Hazardous Substances.

- (a) Chevron ES will promptly provide written notice to City if Chevron ES observes any Hazardous Substance, as defined herein, at or around the Facilities during the course of construction or installation of any equipment which have not been addressed as part of the Scope of Work. Chevron ES shall have no obligation to investigate the Facilities for the presence of Hazardous Substances prior to commencement of the Work unless otherwise specified in the Scope of Work. City shall be solely responsible for investigating Hazardous Substances and determining the appropriate removal and remediation measures with respect to the Hazardous Substances. City shall be responsible for complying with all Applicable Laws with respect to the identification, removal and proper disposal of any Hazardous Substances known or discovered at or around the Facilities, and in such connection shall execute all generator manifests with respect thereto. Chevron ES shall comply with all Applicable Laws in connection with the use, handling, and disposal of any Hazardous Substances in the performance of its Work. In connection with the foregoing, City's Public Works Director shall provide Chevron ES, within eight (8) Business Days of the execution of this Contract, a written statement that represents and warrants (i) whether or not, to City's knowledge, there are Hazardous Substances either on or within the walls, ceiling or other structural components, or otherwise located in the Work area, including, but not limited to, asbestos-containing materials; (ii) whether or not, to City's knowledge, conditions or situations exist at the Facilities which are subject to special precautions or equipment required by federal, state, or local health or safety regulations; and (iii) whether or not, to City's knowledge, there are unsafe working conditions at the Facilities.
- (b) City shall indemnify, defend, and hold Chevron ES harmless from and against any and all Losses that in any way result from or arise under from such City owned or generated Hazardous Substances, except for liabilities due to the negligence or willful misconduct of Chevron ES, or its subcontractors, agents or

representatives, in the handling, disturbance or release of Hazardous Substances. This indemnification shall survive any termination of this Contract.

**Section 5.07 Pre-Existing Conditions.** Certain pre-existing conditions may be present within City's facilities that (i) are non-compliant with applicable codes, (ii) may become non-compliant with applicable codes upon completion of Chevron ES's Work, (iii) may cause Chevron ES's completed Work to be non-compliant with applicable codes, (iv) may prevent City from realizing the full benefits of Chevron ES's Work, (v) may present a safety or equipment hazard, or (vi) are otherwise outside the scope of Chevron ES's Work. Regardless of whether or not such conditions may have been readily identifiable prior to the commencement of Work, Chevron ES shall not be responsible for repairing such pre-existing conditions unless such is expressly provided for in the Scope of Work or an approved change thereto. Chevron ES, in its sole discretion, may determine whether it will bring said pre-existing conditions into compliance by agreeing to execute a change order with City for additional compensation and, if appropriate, an extension of time. Examples of pre-existing conditions include, but are not limited to, the following:

- (a) With respect to lighting equipment maintenance and/or lamp and ballast retrofitting, City shall be responsible for properly grounding lighting fixtures before Chevron ES commences Work in compliance with applicable codes.
- (b) With respect to installation of new lighting fixture installations, prior to commencement of the lighting fixture installation, City shall be responsible for providing an existing or new grounding conductor or solidly grounded raceway with listed fittings at the lighting fixture junction box that is properly connected to the facility grounding electrode system in compliance with the latest NEC. Chevron ES's Scope of Work shall include properly terminating the lighting fixtures to the existing grounding conductor or to the existing solidly grounded raceway with listed fittings at the lighting fixture junction box.
- (c) Where Chevron ES's Scope of Work includes pulling new wiring for lighting fixtures from an existing lighting panel, a grounding conductor shall be included in the lighting circuits. City is responsible for providing an existing or new grounding conductor terminal bar at the lighting panel that is properly connected to the facility grounding electrode system in compliance with the latest NEC.
- (d) With respect to Chevron ES Projects with new equipment connecting to the facility's existing electrical distribution system, Chevron ES shall not be responsible for the electrical integrity of the existing electrical system, e.g., the condition and proper termination of current-carrying, grounded, and grounding conductors, bus taps, protective elements, the proper protection of existing wire through knockouts, or missing components. City is responsible for providing and maintaining the facility's electrical distribution system that meets the latest NEC and guidelines.
- (e) Chevron ES is not responsible for repairing or replacing existing damaged, blocked, or leaky ductwork, or cleaning dirt or mildew.
- (f) Chevron ES shall not be responsible for existing damaged pipes, valves, and related parts and components due to a lack of water treatment.
- (g) Existing pneumatic control systems that remain in place shall be properly maintained (use of air dryer, clean filter, etc.) by City such that oil or moisture does not reach the control and operating devices.
- (h) Unless specifically included in the Scope of Work, existing valves, dampers, linkages, and piping specialties to which new controls/building automation system are being connected are to be in proper functioning condition. If existing device is found to be improperly functioning, City may repair or compensate Chevron ES for repair / replacement of the device.

## **ARTICLE 6. PROJECT COMPLETION**

**Section 6.01 Occupancy or Use of Work.** City may take occupancy or use of any completed or partially completed portion of the Work at any stage, whether or not such portion is Substantially Complete, *provided* that such occupancy or use is authorized by Governmental Authority and, *provided further*, that City assumes responsibility for the security of, insurance coverage for, maintenance, utilities for, and damage to or destruction of such portion of the Work. If Substantial Completion of a portion of the Construction Work is not yet achieved, occupancy or use of such portion of the Work will not commence until City's insurance company has consented to such occupancy or use. When occupancy or use of a portion of the Work occurs before Substantial Completion of such portion, City and Chevron ES will accept in writing the responsibilities assigned to each of them for title to materials and equipment, payments and retainage with respect to such portion.

**Section 6.02 Substantial Completion / Reduction of Retainage.** At the time the Work, or any portion thereof, is Substantially Complete in conformance with the Scope of Work and Construction Documents, Chevron ES will supply to City a written Certificate of Substantial Completion with respect to such portion of the Work. City will within eight (8) Business Days of receipt of the Certificate of Substantial Completion, review such portion of the Work

for the sole purpose of determining that it is substantially complete and in substantial conformance with the Scope of Work, final Construction Documents and any Change Orders, and sign and return the Certificate of Substantial Completion to Chevron ES acknowledging and agreeing: (i) that such portion of the Work is substantially complete in accordance with the Scope of Work so City can occupy or utilize such portion for its intended use; (ii) the date of such Substantial Completion; (iii) that from the date of Substantial Completion City will assume responsibility for the security of, insurance coverage for, maintenance, utilities for, and damage to or destruction of such portion of the Work. When the entirety of the Work is Substantially Complete, Retainage withheld by City will be reduced in accordance with Section 8.03, and the value of the Contract Bonds will be reduced to the amount of Retainage in accordance with Section 11.04. City agrees that approval of a Certificate of Substantial Completion will not be unreasonably withheld, delayed or conditioned.

**Section 6.03 Final Completion.** When Chevron ES considers the entirety of the Work to be fully complete in accordance with the Scope of Work, Chevron ES will notify City that the Work is fully complete and ready for final inspection. City will inspect the Work to verify the status of Final Completion within eight (8) Business Days after its receipt of Chevron ES's certification that the Work is complete. If City does not verify the Final Completion of the Work within this period, the Work will be deemed fully completed. If City determines that any Work is incomplete and/or defective, City will promptly notify Chevron ES in writing of such incomplete and/or defective Work, itemizing and describing such remaining items with reasonable particularity. Chevron ES will, in a reasonable amount of time, complete any incomplete items or remedy defective items after which Chevron ES will provide written notice to City that the Work is fully complete. City will re-inspect all Work completed or remedied by Chevron ES within eight (8) Business Days of Chevron ES's notice that the Work is complete. If City does not re-inspect the Work within the eight (8) Business Day period, the Work will be deemed fully complete. When City agrees that the Work is fully completed in accordance with the Scope of Work, City will give Chevron ES written notice of acceptance of the Work and Final Completion and will promptly (i) issue a Certificate of Final Completion to Chevron ES and (ii) record a notice of completion or notice of acceptance in the office of the county recorder in accordance with California Civil Code §9204. At that time, City will pay Chevron ES any remaining Contract Amount due and any outstanding Retainage being withheld by City, in accordance with Section 8.04. City agrees that issuance of the Certificate of Final Completion will not be unreasonably withheld, delayed or conditioned.

**Section 6.04 Transfer of Title; Risk of Loss.** Title to all or a portion of the Project equipment, supplies and other components of the Construction Work will pass to City upon the earlier of (i) the date payment for such Project equipment, supplies or components is made by City and (ii) the date any such items are incorporated into the Project Location. Chevron ES will retain care, custody and control and risk of loss of such Project equipment, supplies and components until the earlier of Beneficial Use or Substantial Completion. Transfer of title to City will in no way affect City's and Chevron ES's rights and obligations as set forth in other provisions of this Contract. Except as provided in this Section 6.04, after the date of Substantial Completion, Chevron ES will have no further obligations or liabilities to City arising out of or relating to this Contract, except for the obligation to complete any Punch List items, the obligation to perform any warranty service under ARTICLE 9, and obligations which, pursuant to their terms, survive the termination of this Contract.

## **ARTICLE 7. SUBCONTRACTORS**

**Section 7.01 Authority to Subcontract.** Chevron ES may delegate its duties and performance under this Contract, and shall have the right to enter into agreements with any subcontractors and other service or material providers as Chevron ES shall select, with the approval of the City Manager, to perform the Work hereunder. Any subcontract between Chevron ES and a subcontractor must be consistent with the provisions of this Contract. Chevron ES shall not be required to enter into any subcontracts with parties whom Chevron ES has not selected or subcontractors whom Chevron ES has objection to using.

**Section 7.02 Prompt Payment of Subcontractors.** Chevron ES shall promptly pay, when due, all amounts payable for labor and materials furnished in the performance of this Contract so as to prevent any lien or other claim under any provision of the law from arising against any City property, against Chevron ES's rights to payments hereunder, or against City.

**Section 7.03 Responsibility.** Chevron ES shall, at all times, be responsible for the negligent acts, errors and/or omissions of its subcontractors and agents. Nothing in this Contract shall constitute any contractual relationship between any others and City or any obligation on the part of City to pay, or to be responsible for the payment of, any sums to any Chevron ES subcontractors. Chevron ES acknowledges and agrees that any change order it may enter with any of its subcontractors who perform Work on the Project is an agreement solely between Chevron ES and its subcontractor. City will not have any liability whatsoever under any change order Chevron ES enters into with any of its subcontractors who perform Work on the Project.

**ARTICLE 8. PAYMENTS**

As compensation for the performance of the Work and all of Chevron ES's obligations hereunder, City shall pay the Contract Amount to Chevron ES.

Section 8.01 Monthly Progress Payments. Upon execution of this Contract, Chevron ES shall invoice City for a design and engineering fee, as detailed on Attachment E. Monthly thereafter, Chevron ES shall submit to the City Manager for approval its request, in a form reasonably acceptable to the City Manager, for a monthly progress payment. City, or its designee, shall approve and pay each Request for Payment, less any Retainage described in Section 8.03, within thirty (30) calendar days after its receipt thereof; *provided* that there shall be no Retainage with respect to the design and engineering fee or the fee related to the Report. A failure to timely approve and pay a Request for Payment hereunder shall be a material default by City under this Contract.

Section 8.02 Pre-Paid Equipment. In addition to the progress payments specified in Section 8.01, Chevron ES will separately invoice City for the two overseas-manufactured pieces of specialty equipment (absorption chiller and engine generator) to be used for ECM M1-A. City shall pre-pay fifty percent (50%) of the cost of such equipment upon receipt of the invoice, and one hundred percent (100%) of Chevron ES's invoice for the equipment when delivered to the Project Location, less Retainage as indicated in Section 8.03.

Section 8.03 Retainage. City may withhold a retainage amount ("Retainage") of five percent (5%) of each monthly progress payment in accordance with California Public Contract Code §7201. City may make progress payments in full without Retainage at any time after fifty percent (50%) of the Work has been completed, as permitted pursuant to California Public Contract Code §9203. Upon Substantial Completion, the Retainage shall be reduced to two percent (2%) of the total Contract Amount, and Chevron ES shall invoice and City shall pay this amount. City shall pay Chevron ES the remaining two percent (2%) Retainage within thirty-five (35) calendar days after recordation of the notice of completion or notice of acceptance contemplated by Section 6.03.

Section 8.04 Final Payment. The final Request for Payment may be made after Final Completion. City, or its designee, shall approve and pay the final Request for Payment, without Retainage, within forty-five (45) calendar days after its receipt thereof. The Final Payment amount shall also include payment to Chevron ES for any remaining Retainage withheld by City.

Section 8.05 Disputed Invoices/Late Payments. City may in good faith dispute any Request for Payment, or part thereof, within thirty (30) calendar days after the date the Request for Payment was rendered. In the event that City disputes all or a portion of any Request for Payment, City shall pay the undisputed portion when due and provide Chevron ES a written notice and explanation of the basis for the dispute and the amount of the Request for Payment being withheld related to the dispute. City shall be deemed to have waived and released any dispute known to it with respect to a bill if such notice and written explanation is not provided within thirty (30) calendar days after the date the Request for Payment was rendered. If any amount disputed by City is finally determined to be due to Chevron ES, either by agreement between the Parties or as a result of dispute resolution pursuant to ARTICLE 23 below, it shall be paid to Chevron ES within eight (8) Business Days after such final determination, plus Interest from the date billed or claimed until such amount is paid.

Section 8.06 Waiver of Liens. Upon request from City, Chevron ES shall provide City with progress payment waivers and releases for Work for which City has paid up to that date. Upon receipt by Chevron ES of final payment for the Work (including payment of all Retainage), Chevron ES will provide City with a final, unconditional waiver and release.

Section 8.07 Rebate Programs. To the extent included in the Scope of Work, Chevron ES shall assist City in the preparation and submission to the applicable agencies of all applications and documentation necessary for the energy efficiency rebate, incentive, and/or loan program(s) ("Incentive Funds") shown on Attachment H. Chevron ES cannot guarantee that City will receive the Incentive Funds or any portion thereof; Chevron ES expressly disclaims any liability for City's failure to receive any portion of the Incentive Funds, and City acknowledges and agrees that Chevron ES shall have no liability for any failure to receive all or any portion of the Incentive Funds. Procurement, or lack thereof, of the Incentive Funds will not alter the Contract Amount of this Contract or the payment timeline associated with payment of the Contract Amount.

**ARTICLE 9. WARRANTY/LIMITATION OF LIABILITY**

Section 9.01 Chevron ES warrants to City that material and equipment furnished under this Contract will be of good quality and new, unless otherwise specifically required or permitted by this Contract. Chevron ES further warrants that its workmanship provided hereunder, including its subcontractors' workmanship, will be free of material defects for a period of one (1) year from the date of Substantial Completion as indicated on the executed Certificate of Substantial Completion, or the date of Beneficial Use as indicated on the executed Certificate of Beneficial Use, whichever occurs first ("Chevron ES Warranty").

Section 9.02 Unless otherwise specified, all warranties hereunder, including without limitation those for defects, whether latent or patent, in design, engineering, or construction, will terminate one (1) year from the date of Substantial Completion or Beneficial Use; and thereafter, Chevron ES will have no liability for breach of any warranty or for any latent or patent defect of any kind pursuant to California Code of Civil Procedure §§337.15 and 338.

Section 9.03 Equipment and material warranties that exceed the one (1) year Chevron ES Warranty period will be provided directly by the equipment and/or material manufacturers and such warranties will be assigned directly to City, after the one (1) year period. During the one (1) year Chevron ES Warranty period, Chevron ES will be City's agent in working with the equipment and material manufacturers in resolving any equipment or material warranty issues. Other than for lamps and ballasts, any material defects that are discovered within the one (1) year Chevron ES Warranty period, Chevron ES, or Chevron ES's subcontractors, will correct its defects, and/or Chevron ES will work with the equipment or material manufacturer as City's agent to facilitate the manufacturer's correction of the equipment or material defect. For typical industry standard lamp and ballast failures during the one (1) year Chevron ES Warranty period, City will replace such failed lamps/ballasts with replacement stock provided by Chevron ES, *provided, however*, that City will return the failed lamps/ballasts to the manufacturer in order to ensure that sufficient quantities of replacement stock are available during the one year warranty period. Such warranty services will be performed in a timely manner and at the reasonable convenience of City. If a warranty issue arises on any equipment or material installed after the one (1) year Chevron ES Warranty period, and the equipment or material has a warranty period that exceeds one (1) year, City will contact the manufacturer directly to resolve such warranty issues and City acknowledges that the manufacturer will have sole responsibility for such issues.

Section 9.04 The warranties in this ARTICLE 9 expressly exclude any remedy for damage or defect caused by improper or inadequate maintenance of the installed equipment by service providers other than Chevron ES or its subcontractors, corrosion, erosion, deterioration, abuse, modifications or repairs not performed by an authorized Chevron ES subcontractor, improper use or operation, or normal wear and tear under normal usage.

EXCEPT FOR THE WARRANTIES PROVIDED IN THIS ARTICLE 9, CHEVRON ES MAKES NO OTHER WARRANTIES IN CONNECTION WITH THE WORK PROVIDED UNDER THIS CONTRACT, WHETHER EXPRESS OR IMPLIED IN LAW, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES AGAINST INTELLECTUAL PROPERTY INFRINGEMENT. CITY WILL HAVE NO REMEDIES AGAINST EITHER CHEVRON ES OR ANY CHEVRON ES SUBCONTRACTOR OR VENDOR FOR ANY DEFECTIVE WORK INSTALLED EXCEPT FOR THE REPAIR OR REPLACEMENT OF SUCH EQUIPMENT IN ACCORDANCE WITH THE WARRANTIES INDICATED ABOVE. SPECIFICALLY, NEITHER CHEVRON ES, NOR CHEVRON ES'S SUBCONTRACTORS OR VENDORS, WILL BE LIABLE TO CITY FOR LOSS OF PROFITS OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY.

**ARTICLE 10. OWNERSHIP OF CERTAIN PROPERTY AND EXISTING EQUIPMENT**

Section 10.01 Ownership of Certain Proprietary Property Rights.

- (a) Ownership: Except as expressly provided herein, City shall not, by virtue of this Contract, acquire any rights or interest in any formulas, patterns, devices, software, inventions or processes, copyrights, patents, trade secrets, other intellectual property rights, or similar items of property which are or may be used in connection with the Work. Chevron ES shall own all inventions, improvements, technical data, models, processes, methods, and information and all other work products developed or used in connection with the Work under this Contract, including all intellectual property rights therein.
- (b) License: Solely in connection with the Facilities, Chevron ES grants to City a limited, perpetual, royalty-free, non-transferrable license for any Chevron ES intellectual property rights necessary for City to operate, maintain, and repair any modifications or additions to Facilities, or equipment delivered, as a result of the Work.
- (c) Ownership and Use of Instruments of Service. All Work, data, reports, proposals, plans, specifications, flow sheets, drawings, and products of the Work (the "Instruments of Service") furnished directly or indirectly, in writing or otherwise, to City by Chevron ES under this Contract will remain Chevron ES' property and will be used only in connection with Work performed by Chevron ES. Chevron ES will be deemed the author and owner of such Instruments of Service and will retain all common law, statutory and other reserved rights, including copyrights. The Instruments of Service may not be used by City or any City Person for future additions or alterations to the Project or for other projects, without the prior written agreement of Chevron ES. Any unauthorized use of the Instruments of Service will be at City's sole risk and without liability to Chevron ES. If City uses the Instruments of Service for implementation purposes, including additions to or completion of the Project, without the written permission of Chevron ES, City agrees to waive and release,

and indemnify and hold harmless, Chevron ES, its subcontractors, and their directors, employees, subcontractors, and agents from any and all Losses associated with or resulting from such use.

- (d) **Confidentiality.** City may not duplicate or disclose to third parties any of the deliverables described in Section 10.01(c), unless such third parties have entered into an appropriate agreement with Chevron ES, or with Chevron ES's written permission.

**Section 10.02 Ownership of any Existing Equipment.** Ownership of any equipment and materials presently existing at the Facilities at the time of execution of this Contract shall remain the property of City even if it is replaced or its operation made unnecessary by work performed by Chevron ES pursuant to this Contract. If applicable, Chevron ES shall advise City in writing of all equipment and materials that will be replaced at the Facilities and City shall, within four (4) Business Days of Chevron ES's notice, designate in writing to Chevron ES which replaced equipment and materials should not be disposed of off-site by Chevron ES (the "Retained Items"). City shall be responsible for and designate the location and storage for the Retained Items. Chevron ES shall be responsible for the disposal of replaced equipment and materials, except for the Retained Items. Chevron ES shall use commercially reasonable efforts to remove the Retained Items in such a manner as to avoid damage thereto, or if it is unreasonable to avoid damage altogether, to minimize the damage done. Chevron ES shall not be responsible for the removal and/or disposal of any Hazardous Substances except as required by the Scope of Work.

#### **ARTICLE 11. INDEMNIFICATION / INSURANCE / BONDS**

**Section 11.01 Indemnification.** To the full extent permitted by Applicable Laws, each Party shall indemnify, hold harmless, release and defend the other Party, its officers, employees, and agents from and against any and all actions, claims, demands, damages, disabilities, fines, penalties, losses, costs, expenses (including consultants' and attorneys' fees and other defense expenses) and liabilities of any nature ("Losses") that may be asserted by any person or entity, in whole or in part arising out of that Party's performance or activities hereunder, including the performance or activities of other persons employed or utilized by that Party in the performance of this Contract, excepting liabilities due to the negligence or willful misconduct of the indemnified Party. This indemnification obligation shall continue to bind the Parties after the termination of this Contract.

**Section 11.02 Waiver of Consequential Damages and Limitation of Liability.** The liability of a defaulting Party shall be limited to direct, actual damages only and all other damages and remedies are waived. Under no circumstances will either Party be liable to the other Party for any special, indirect, incidental, consequential or punitive damages, lost profits or business interruption damages, however caused and on any theory of liability provided that third party damages subject to indemnification under this Contract will not be limited by this Section 11.02. "Consequential damages" includes, but is not limited to, operational losses in the performance of business including lost revenues and any increase in operating expense, and any lost profits. It is expressly understood and agreed to by both Parties that each Party's liability to the other shall be limited to reimbursement of only those Losses arising solely from a Party's breach of this Contract, negligence or willful misconduct.

**Section 11.03 Chevron ES Insurance.** Chevron ES shall maintain, or cause to be maintained, for the duration of this Contract, the insurance coverage outlined in (a) through (g) below, and all such other insurance as required by Applicable Law. Evidence of coverage will be provided to City via a Self-Administered Claims Letter.

- (a) Workers' Compensation/Employers Liability for states in which Chevron ES is not a qualified self-insured. Limits as follows:

*	Workers' Compensation:	Statutory
*	Employers Liability:	Bodily Injury by accident \$1,000,000 each accident Bodily Injury by disease \$1,000,000 each employee Bodily Injury by disease \$1,000,000 policy limit

- (b) Commercial General Liability insurance with limits of:

*	\$1,000,000 each occurrence for Bodily Injury and Property Damage
*	\$1,000,000 General Aggregate - other than Products/Completed Operations
*	\$1,000,000 Products/Completed Operations Aggregate
*	\$1,000,000 Personal & Advertising Injury
*	\$ 100,000 Damage to premises rented to Chevron ES

Coverage to be written on a claims-made form. Coverage to be at least as broad as ISO form CG 0002 (12/07), without endorsements that limit the policy terms with respect to: (1) provisions for severability of interest or (2) explosion, collapse, underground hazard.

- (c) Auto Liability insurance for owned, hired and non-owned vehicles with limits of \$1,000,000 per accident. Coverage to be written on an occurrence form.

(d) Professional Liability insurance with limits of:

- \* \$1,000,000 per occurrence
- \* \$1,000,000 aggregate

Coverage to be written on a claims-made form.

(e) Excess Liability insurance. Limits as follows:

- \* \$1,000,000 each occurrence
- \* \$1,000,000 aggregate

Coverage terms and limits to apply excess of the per occurrence and/or aggregate limits provided for Commercial General Liability and Professional Liability written on a claims made form.

Coverage terms and limits also to apply in excess of those required for Employers Liability and Auto Liability written on an occurrence form.

(f) Policy Endorsements.

- \* The insurance provided for Workers' Compensation and Employers' Liability above shall contain waivers of subrogation rights against City, but only to the extent of the indemnity obligations contained in this Contract.
- \* The insurance provided for Commercial General Liability and Auto Liability above shall:
  - (i) include City as an additional insured with respect to Work performed under this Contract, but only to the extent of the indemnity obligations contained in this Contract, and
  - (ii) provide that the insurance is primary coverage with respect to all insureds, but only to the extent of the indemnity obligations contained in this Contract.

(g) In lieu of any insurances required in this Section 11.03, Chevron ES may self-insure hereunder and use a Self-Administered Claims Program for this purpose. Chevron ES will notify City in writing thirty (30) days prior to cancellation of the Self-Administered Claims Program.

Section 11.04 Performance and Payment Bonds. Prior to commencing Work under this Contract, Chevron ES shall furnish a performance bond in the form of Attachment A in an amount equal to one hundred percent (100%) of the Contract Amount, and a payment bond in the form of Attachment B to guarantee payment of all claims for labor and materials furnished, in an amount equal to one hundred percent (100%) of the Contract Amount (collectively, the "Contract Bonds"). The Contract Bonds shall be maintained in full force and effect until Final Completion; *provided that* upon the achievement of Substantial Completion, the value of the Contract Bonds shall be reduced to the value of the Retainage then being withheld by City. The Contract Bonds are not being furnished to cover the performance of any energy guaranty or guaranteed savings under this Contract. City agrees that (i) within thirty-five (35) calendar days after recordation of the notice of completion or notice of acceptance contemplated by Section 6.03, the performance bond will be released and all obligations arising thereunder shall be terminated, and (ii) within one (1) year after recordation of the notice of completion or notice of acceptance contemplated by Section 6.03, the payment bond will be released and all obligations arising thereunder shall be terminated.

## **ARTICLE 12. CONFLICTS OF INTEREST**

Conflicts of interest relating to this Contract are strictly prohibited. Except as otherwise expressly provided herein, neither Party nor any director, employee or agent of any Party shall give to or receive from any director, employee or agent of any other Party any gift, entertainment or other favor of significant value, or any commission, fee or rebate in connection with this Contract. Likewise, neither Party nor any director, employee or agent of any Party, shall without prior notification thereof to all Parties enter into any business relationship with any director, employee or agent of another Party or of any Affiliate of another Party, unless such person is acting for and on behalf of the other Party or any such Affiliate. A Party shall promptly notify the other Parties of any violation of this ARTICLE 12 and any consideration received as a result of such violation shall be paid over or credited to the Party against whom it was charged. Any representative of any Party, authorized by that Party, may audit the records of the other Parties related to this Contract, including the expense records of the Party's employees involved in this Contract, upon reasonable notice and during regular business hours, for the sole purpose of determining whether there has been compliance with this ARTICLE 12.

## **ARTICLE 13. CREDIT**

If, at any time, City's credit rating falls below investment grade as defined by Moody's Investors Services (or other nationally-recognized independent rating agency), City agrees to provide Chevron ES with current information regarding its creditworthiness upon the request of Chevron ES. At its sole option, Chevron ES may then require City either to (i) provide security satisfactory to Chevron ES, and the Work may be withheld until such security is received, or



(ii) deposit the Contract Amount into a third-party escrow account with an escrow agent and subject to an escrow agreement, in each case acceptable to Chevron ES.

**ARTICLE 14. CREDITS; TAX BENEFITS**

As authorized by §1331 of the Energy Policy Act of 2005 (Pub. L. No. 109-58) City agrees that for the Work, Chevron ES will be the “designer” as that term is identified in Internal Revenue Bulletin 2008-14, Notice 2008-40, and Chevron ES will have the exclusive right to report to any federal, state, or local agency, authority or other party any tax benefit associated with the Work. Upon Final Completion, City agrees to execute a written allocation including a declaration related to Internal Revenue Code §179D. Chevron ES will prepare the declaration and all accompanying documentation. Chevron ES will be designated the §179D beneficiary.

**ARTICLE 15. AMERICAN RECOVERY AND REINVESTMENT ACT**

In the event City is using American Recovery and Reinvestment Act (“ARRA”) funding, in whole or in part, to pay for the Scope of Work set forth in this Contract, City acknowledges and agrees that the supplies and services hereunder are being procured and purchased under state or local procurement laws and Chevron ES is a “vendor” or “contractor” hereunder. As such, City agrees that Chevron ES is not a recipient, grantee, awardee, subrecipient, subgrantee or subawardee of ARRA funds hereunder. In the event that after Contract execution the awarding agency or a court of proper jurisdiction determines that Chevron ES is a recipient, grantee, awardee, subrecipient, subgrantee or subawardee under the ARRA funded grant rather than a “vendor” or “contractor”, Chevron ES reserves the right to terminate this Contract at its discretion pursuant to the termination for convenience provision set forth in this Contract. City agrees to release, defend, indemnify, and hold Chevron ES harmless from and against any claims, costs, or damages arising out of or related to such a determination notwithstanding any other provisions in this Contract.

**ARTICLE 16. TRADE SECRETS**

Chevron ES shall identify any materials or information provided by Chevron ES to City under this Contract which are designated by Chevron ES as a “trade secret” or otherwise designated by Chevron ES as exempt from disclosure under the Public Records Act (California Government Code §6250 *et seq.*, the “Act”). In the event a third party makes a request for disclosure of the materials under the Act for any materials or information so designated by Chevron ES, as soon as practical (but not later than five (5) calendar days) after receipt of such request, City shall notify Chevron ES of such request and advise Chevron ES whether City believes that there is a reasonable possibility that the materials may not be exempt from disclosure. Within ten (10) calendar days of a third party’s request for disclosure of materials under the Act and consistent with City’s statutory obligations under the Act, Chevron ES shall (i) concur with City’s determination to release the documents or information sought; or (ii) if Chevron ES reasonably believes that the information is exempt from disclosure, it shall immediately request City not to release the materials. Failure to provide City with notice of which of the above two options Chevron ES desires to pursue shall be deemed as concurrence with the release of the materials sought. Chevron ES agrees to defend and indemnify, including the cost to defend, City, its elected officials, officers, agents, and employees for any and all claims, demands, costs, damages, or liability, including any attorneys’ fees that may be awarded against City, that results from Chevron ES’s requesting City not to release materials or information. Chevron ES’s obligation to defend and indemnify City shall survive any termination of this Contract. Notwithstanding the foregoing, in no event shall City be required by this Contract to fail to satisfy its obligation to provide non-exempt public records to requestors within the time frames provided for in the Act.

**ARTICLE 17. DATA PRIVACY**

Chevron ES and City agree that it is not anticipated that any personal data will be processed by City on behalf of Chevron ES under or as a result of this Contract (other than as contained within the terms of the Contract). If City begins to process personal data on behalf of Chevron ES, City will immediately notify Chevron ES and the Parties will incorporate appropriate data protection provisions into this Contract.

**ARTICLE 18. EXPORT CONTROL; PROHIBITED PARTIES**

Section 18.01 The Parties understand and acknowledge that confidential information exchanged under this Contract may be subject to compliance with any and all applicable United States laws, regulations, or orders, including those that may relate to the export of technical data. The Parties agree to comply with all such laws, regulations, and orders, including, if applicable, all requirements of the International Traffic in Arms regulations and/or the Export Administration Act, as may be amended. Each Party further agrees to comply with any export license requirements that govern the export, re-export, transfer, or release of confidential information provided hereunder. Each Party agrees to provide an Export Classification Number (ECCN) or USML Classification Number to the receiving Party in writing for all confidential information that is classified with an Export Control Classification Number (ECCN) other than EAR99 or is classified on the USML. The ECCN and USML Classification, if required shall be

provided at the time the confidential information is provided to the receiving Party. If a disclosing Party provides confidential information subject to the terms of an export license or other export authorization, the disclosing Party shall notify the receiving Party in writing of any restrictions on the use, transfer, distribution, or re-export of the confidential information contained in said export license or authorization. Chevron ES and its Affiliates shall not be obligated to perform any obligations hereunder if and to the extent that any such performance is prohibited by or contrary to any applicable U.S. laws or regulations, including U.S. export regulations. An entity is deemed to "control" another if it owns directly or indirectly at least fifty percent of either of the shares entitled to vote at a general election of directors of such other entity or the voting interest in such other entity if such entity does not have either shares or directors.

Section 18.02 Chevron ES is a United States company with a policy requiring it to comply with all applicable laws, including economic sanctions and trade restrictions imposed by the United States government. Chevron ES has undertaken to provide its parent organization with any information relevant to its potential involvement with any party that may be the target of such sanctions and restrictions. Accordingly, City shall provide Chevron ES with ninety (90) days advance notice of the names and addresses of any member of City's organization which may be any of the following:

- (a) The target of, or owned or subject to control by any country, institution, organization, entity or person that is the target of, economic sanctions and trade restrictions imposed by the United States government.
- (b) Debarred or otherwise excluded or declared ineligible to participate in United States government contracts or contracts, grants or other programs financed in whole or in part by the United States government.
- (c) Listed by the United States Departments of Commerce or State as an entity with which United States persons may not engage in export or re-export related transactions.

**ARTICLE 19. EVENTS OF DEFAULT**

Section 19.01 Events of Default by City. Each of the following events or conditions shall constitute an "Event of Default" by City:

- (i) any failure by City to perform or comply with this Contract, including breach of any covenant contained herein, and such failure continues for thirty (30) calendar days after notice to City demanding that such failure to perform be cured; *provided* that (y) such failure to perform shall not be deemed a default hereunder if it is due to an event of Force Majeure pursuant to ARTICLE 21; and (z) if such cure cannot be effected in thirty (30) calendar days, City shall be deemed to have cured the default upon the commencement of a cure within thirty (30) calendar days and diligent subsequent completion thereof; or
- (ii) any representation or warranty furnished by City in this Contract which was false or misleading in any material respect when made; or
- (iii) any failure by City to pay any amount to Chevron ES which is not paid within ten (10) calendar days after written notice from Chevron ES that the amount is past due.

Section 19.02 Events of Default by Chevron ES. Each of the following events or conditions shall constitute an "Event of Default" by Chevron ES:

- (i) any failure by Chevron ES to perform or comply with this Contract, including breach of any covenant contained herein, and such failure continues for thirty (30) calendar days after notice to Chevron ES demanding that such failure to perform be cured; *provided* that (i) such failure to perform shall not be deemed a default hereunder if it is due to an event of Force Majeure pursuant to ARTICLE 21, and (ii) if such cure cannot be effected in thirty (30) calendar days, Chevron ES shall be deemed to have cured the default upon the commencement of a cure within thirty (30) calendar days and diligent subsequent completion thereof; or
- (ii) any representation or warranty furnished by Chevron ES in this Contract which was false or misleading in any material respect when made.

**ARTICLE 20. REMEDIES UPON DEFAULT**

Section 20.01 Remedies upon Default by City. If an Event of Default by City occurs, Chevron ES will be entitled to obtain any available legal or equitable remedies through arbitration proceedings instituted pursuant to ARTICLE 23 including, without limitation, terminating this Contract or recovering amounts due and unpaid by City, and/or damages which shall include Chevron ES's reasonable, actual, direct out-of-pocket losses incurred by reason of such Event of Default and any cost of funding; and any payment or delivery required to have been on or before the

date of the Event of Default and not made, including Interest on any sums due, and losses and costs incurred as a result of terminating this Contract and all costs and expenses reasonably incurred in exercising the foregoing remedies.

Section 20.02 Remedies Upon Default by Chevron ES. If an Event of Default by Chevron ES occurs, City shall be entitled to obtain any available legal or equitable remedies through arbitration proceedings instituted pursuant to ARTICLE 23, including, without limitation, terminating this Contract, or recovering amounts due and unpaid by Chevron ES and/or damages, which shall include City's reasonable, actual, direct out-of-pocket losses incurred by reason of such Event of Default and any cost of funding; and any payment or delivery required to have been paid on or before the date of the Event of Default and not made, including interest on any sums due, and losses and costs incurred as a result of terminating this Contract and all costs and expenses reasonably incurred in exercising the foregoing remedies.

## **ARTICLE 21. CONDITIONS BEYOND CONTROL OF THE PARTIES**

Section 21.01 Force Majeure Events. In the event that any Party is delayed in, or prevented from, performing or carrying out its obligations under this Contract by reason of any event of Force Majeure, such circumstance shall not constitute an Event of Default, and such Party shall be excused from performance hereunder and shall not be liable to any other Party for or on account of any loss, damage, injury or expense resulting from, or arising out of, such delay or prevention. Notwithstanding the foregoing, no Party shall be excused from any payment obligations under this Contract as a result of an event of Force Majeure.

Section 21.02 Utility Work. City expressly understands and agrees that the definition "Force Majeure" above also includes any Interconnection Facilities work that may need to be performed by the local Utility ("Utility") in order for Chevron ES to fully implement the Project. "Interconnection Facilities" means any distribution or transmission lines and other facilities that may be required to connect equipment supplied under this Contract to an electrical distribution/transmission system owned and maintained by the Utility. Any Interconnection Facilities work that may be required will be performed by the Utility under the Interconnection Agreement.

## **ARTICLE 22. ENERGY SAVINGS**

Section 22.01 Guaranteed Savings.

- (a) Savings Guarantee. In consideration of the payment of the Annual M&V Fee, and upon the terms and subject to the conditions set forth herein, Chevron ES warrants that City will realize total EC Savings during the Energy Savings Term of not less than the total Guaranteed Savings (the "Savings Guarantee"), as the same may be adjusted from time to time for changes in Energy Rate Factors, Energy Use Factors and consequential revisions to the relevant Baseline. If a Guarantee Payment is made to City at any time during the first five (5) years of the Energy Savings Term, City shall have the option to extend the Energy Savings Term for an additional five (5) years (or lesser periods of one year each, up to five (5) years), provided that City can only exercise this option by delivering a written notice to Chevron ES not less than six (6) months prior to the end of the Energy Savings Term.
- (b) Guarantee Payment. For any Measurement Period in which there is a Guarantee Shortfall, Chevron ES shall pay to City, within thirty (30) calendar days after the acceptance by City of the Energy Savings Report for such Measurement Period, the Guarantee Payment for that Measurement Period.
- (c) Services or Retrofits in Lieu of Guarantee Payment. If in the judgment of City, City would benefit from additional energy services or energy saving retrofits, City and Chevron ES may mutually agree that Chevron ES will provide such services or retrofits in lieu of the Guarantee Payment for such Measurement Period. For the purposes of this Contract, such services or retrofits will have a deemed value equal to the Guarantee Shortfall for that Measurement Period.
- (d) Excess Savings Claw-Back. For any Measurement Period in which there are Excess Savings, City shall repay to Chevron ES, to the extent of such Excess Savings, any Guarantee Payments previously paid by Chevron ES to City and not previously repaid to Chevron ES by City, and the Excess Savings for such Measurement Period shall be reduced by the amount of such repayment. If Chevron ES has provided services or retrofits in lieu of the Guarantee Payment for a prior Measurement Period, such that the Guarantee Payment for such Measurement Period cannot be repaid by City, then in lieu of such repayment Excess Savings shall be increased by the deemed value of such services or retrofits.
- (e) Force Majeure. In the event that Chevron ES is delayed in, or prevented from, accurately calculating the actual EC Savings for any day of any Measurement Period by reason of any event of Force Majeure, such circumstance shall not constitute a default, and Chevron ES shall be excused from performance under this ARTICLE 22 while such event of Force Majeure is continuing. During such Force Majeure event, Projected Energy Savings for the month(s) in which such Force Majeure is continuing shall be used in lieu of actual

data; *provided* that if three (3) or more years of data are available for such month(s), the historical average of such data for such month(s) shall be used in lieu of Projected Energy Savings.

**Section 22.02 Changes in Energy Use Factors.**

- (a) **Adjustments to Baselines.** City shall notify Chevron ES in writing within eight (8) Business days of any change in any Energy Use Factor. In addition, data collected by Chevron ES during or before the Energy Savings Term may indicate a change in the energy use pattern at the Facilities or any portion thereof and require a change to one or more Baselines. Chevron ES will determine the effect that any such change will have on EC Savings and present to City a written analysis of the effects of such changes. Chevron ES will also make corresponding revisions to the Baselines and/or EC Savings that it deems appropriate in its reasonable discretion.
- (b) **Adjustments to Guaranteed Savings.** If a change in any Energy Rate Factor or Energy Use Factor results in a reduction of EC Savings, then the Guaranteed Savings for the corresponding Measurement Period(s) will be decreased by the same amount. Chevron ES shall notify City, in writing, of all such changes.
- (c) **Changes to Facilities.** City or Chevron ES may from time to time propose to make changes to the Facilities for the express purpose of increasing EC Savings or addressing Force Majeure events. It is agreed that these changes will only be made with the written consent of both Parties, which will not be unreasonably withheld. The Baseline will not be adjusted to reflect any changes agreed to under this **Section 22.02(c).**
- (d) **Baseline Adjustment.** If Chevron ES proposes changes to the Facilities that would not unreasonably interfere with the conduct of City's business or cause City to incur additional costs, City may in its sole discretion consent to the changes, and Chevron ES will adjust the Baselines upward by the amount of savings projected from the changes.
- (e) **Projected Energy Savings.** During the Energy Savings Term, when the ultimate effect of the Work on EC Savings cannot be accurately determined due to pending construction or changes to the Scope of Work, Projected Energy Savings for the Facilities will be used until the effect of the changes can be determined by Chevron ES.
- (f) **Assessment Work.** Chevron ES has the right to charge City for Assessment Work, which will be billed at current Chevron ES engineering rates and shall be paid by City within thirty (30) calendar days after receiving Chevron ES's invoice. Before initiating Assessment Work, Chevron ES will notify City in writing of the intent and estimated cost associated with the Assessment Work. City will, within forty-five (45) calendar days, give Chevron ES written permission to proceed or, alternatively at no charge to Chevron ES, to stipulate that the Projected Energy Savings for the portion of the Facility in question be used for the purpose of meeting the Savings Guarantee for such Measurement Period and thereafter. If Chevron ES does not receive written notice within forty-five (45) calendar days, the Projected Energy Savings for the portion of the Facility in question will be used until such time as City approves the Assessment Work.
- (g) **Changes in Energy Use Factors.** If City fails to notify Chevron ES of changes in Energy Use Factors or fails to supply Chevron ES in a timely manner with information that is requested by Chevron ES for the calculation of EC Savings, the Energy Unit Savings for the relevant Measurement Period will be deemed equal to the corresponding Projected Energy Savings for such period. If information for the relevant Measurement Period is supplied at a later date, the Energy Unit Savings will be modified only if and to the extent that the calculated savings for such period exceed the Projected Energy Savings for such period.
- (h) **Changes in Savings Calculations.** Any changes made by Chevron ES to the savings calculations shall be presented to City in advance. City shall have thirty (30) calendar days to challenge or question the changes in writing.
- (i) **Inspection of Facilities.** City agrees that Chevron ES shall have the right, with or without prior notice, to inspect the Facilities to determine if City has consistently complied with its obligations as set forth above. In the event that any inspection discloses that City has failed, on or prior to the date of such inspection, to be in compliance with any of its obligations, then the Guaranteed Savings shall be assumed to have been achieved for the portion of the Energy Savings Term during which such failure shall have existed.

**Section 22.03 City Maintenance.**

- (a) Beginning at Beneficial Use or Substantial Completion for any portion of the Work, City will maintain (or cause to be maintained) such portion of the Work, and upon Final Completion will maintain (or cause to be maintained) the Project, in accordance with the maintenance schedules and procedures recommended by Chevron ES and/or by the manufacturers of the relevant equipment. City will diligently effect repairs when unplanned maintenance of the Work is required.

- (b) With respect to the cogeneration and chiller plants being constructed by Chevron ES, City covenants that upon Final Completion of such portion of the Work it will enter into a contract with a qualified service provider, with sufficient training and resources to provide the required preventive and corrective maintenance procedures and inspections for the remainder of the Energy Savings Term. Chevron ES will send the manufacturer's recommended maintenance schedule for major components of the cogeneration and chiller plants to City in accordance with Section 5.02(g)(xx). Chevron ES shall have no obligation to perform any such maintenance or repair services.

Section 22.04 Energy Savings Report. Annually during the Energy Savings Term, Chevron ES shall submit to City an energy savings report containing a precise calculation of the EC Savings during the applicable Measurement Period (an "Energy Savings Report"). Chevron ES will use its best efforts to submit such Energy Savings Report within ninety (90) calendar days after receipt of all needed information for a Measurement Period, unless additional information is needed to accurately calculate the EC Savings, in which case City shall be notified of such a situation within the ninety (90) calendar-day period.

Section 22.05 On-Site Measurements. City irrevocably grants to Chevron ES the right, during the Energy Savings Term, to monitor EC Savings and energy management performance by conducting on-site measurements, including, but not limited to, reading meters and installing and observing on-site monitoring equipment. Chevron ES shall not exercise such right in a manner that unreasonably interferes with the business of City as conducted at the Facilities as of the date hereof. City shall cooperate fully with the exercise of such right by Chevron ES pursuant to this Section 22.05. City shall further cooperate with Chevron ES's performance of the Savings Measurement and Verification Plan by providing utility information, changes in Energy Use Factors, and/or additional information as reasonably requested by Chevron ES.

Section 22.06 Internet Communication Path. At Chevron ES's request, to facilitate Chevron ES's monitoring of the Work, City shall open an internet communication path between City's energy management system(s) and Chevron ES's office in Overland Park, Kansas. City shall provide, at City's expense, all networking, telecommunication, encryption, and security hardware and/or software Chevron ES deems necessary to achieve such communication path, as well as any similar hardware, software, or encryption devices necessary for use at Chevron ES's office. Chevron ES will provide City with the precise locations for network communication ports within City's Facilities. City agrees not to charge Chevron ES to install or maintain such communication paths.

Section 22.07 Termination of Guaranteed Savings. If (i) City notifies Chevron ES in writing of its intent to terminate the Savings Guarantee, (ii) this Contract is terminated by Chevron ES for default by City or by City for any reason permitted by this Contract or (iii) City fails to maintain the Project in accordance with Section 22.03 or is in default of any of its other obligations under this ARTICLE 22 or (iv) the first five Measurement Periods have been reconciled without a Guarantee Payment being paid to City, the obligation of Chevron ES to prepare and deliver the Energy Savings Report and to make a Guarantee Payment shall also be terminated. If such termination occurs on a date other than the last day of a Measurement Period, Chevron ES shall have no obligation to make a Guarantee Payment or prepare and deliver an Energy Savings Report for such Measurement Period.

Section 22.08 Annual M&V Fee.

- (a) Invoicing and Payment. The Annual M&V Fee for the first Measurement Period shall be invoiced by Chevron ES to City in a lump sum on the M&V Commencement Date. All subsequent Annual M&V Fees will be invoiced by Chevron ES on the first day of the corresponding Measurement Period. City, or its designee, shall pay Chevron ES such Annual M&V Fee, without any retention amount withheld, within thirty (30) calendar days after its receipt of the corresponding invoice. Unless City gives Chevron ES prior written notice of its intent to terminate the Savings Guarantee, any failure to timely pay the Annual M&V Fee in accordance with this Section 22.08(a) shall be a material default by City under this Contract, and Chevron ES, in addition to any other legal, contractual and equitable remedies available to it, shall have no obligation thereafter to make Guarantee Payments.

- (b) Any amount not paid when due shall, from and after the due date, bear interest. Accrued and unpaid interest on past due amounts (including interest on past due interest) shall be due and payable upon demand.

- (c) Not Refundable. The Annual M&V Fee is not refundable for any reason.

Section 22.09 Calculations.

- (a) Calculation of Accumulated Savings. Accumulated Savings shall be increased, for any Measurement Period, by the amount of Excess Savings during such Measurement Period, and shall be decreased, for any Measurement Period, by the *difference*, to the extent positive, between (i) the Guaranteed Savings for such Measurement Period *minus* (ii) the EC Savings for such Measurement Period. For the avoidance of doubt, Accumulated Savings will not be reduced below zero.

- (b) Calculation of EC Savings. EC Savings for any Measurement Period will be equal to the *sum*, for such Measurement Period, of (i) the Energy Use Savings, *plus* (ii) the Stipulated Non-Energy Savings, in each case as adjusted for changes in Energy Use Factors during such Measurement Period. EC Savings achieved during the Construction Period shall be included in the EC Savings for the first Measurement Period.
- (c) Calculation of Energy Use Savings. Energy Use Savings shall be calculated by Chevron ES as the *product* of (i) the Energy Unit Savings *multiplied by* (ii) the greater of (a) the applicable Base Energy Rate or (b) the applicable Actual Energy Rate.
- (d) Calculation of Excess Savings. From and after the M&V Commencement Date, Excess Savings shall be calculated by Chevron ES as the *difference*, to the extent positive, between (i) the EC Savings for the relevant Measurement Period *minus* (ii) the Guaranteed Savings for such Measurement Period. During the Construction Period, Excess Savings will be calculated by Chevron ES in the manner set forth in the Savings Measurement and Verification Plan. For the avoidance of doubt, Excess Savings will not be reduced below zero.
- (e) Calculation of Guarantee Shortfall. The Guarantee Shortfall, for any Measurement Period, shall be calculated by Chevron ES as the *difference*, to the extent positive, between (i) the Guaranteed Savings for such Measurement Period *minus* (ii) the sum of (a) EC Savings for such Measurement Period plus (b) Accumulated Savings then outstanding.

**ARTICLE 23. DISPUTE RESOLUTION**

Section 23.01 Dispute Resolution. In the event of a dispute, claim, or controversy (“Dispute”) arising out of or in connection with this Contract, the Parties will confer and attempt to resolve the matter informally and amicably in the ordinary course of business between the Parties’ representatives. If City’s and Chevron ES’s representatives are unable to resolve the Dispute in the ordinary course of business, then the Dispute shall be referred to both City’s and Chevron ES’s senior management for resolution. If the Parties’ senior management cannot resolve the Dispute within thirty (30) days of a Party’s notice to the other Party that such Dispute should be taken to the Parties’ senior management, then either Party may submit the Dispute to mediation governed by the Construction Industry Mediation Rules of the American Arbitration Association (“AAA”) within sixty (60) days of a Party’s notice to the other Party that such Dispute should be taken to the Parties’ senior management. The request for mediation, if any, shall be submitted in writing to the AAA and the other Party. Each Party shall participate in the mediation process in good faith. The mediation shall be heard by one mediator, who shall have experience in the general subject matter to which the Dispute relates. The mediation shall take place at the AAA office geographically closest to the site where the Work has been performed. The mediation process shall be concluded within sixty (60) days of filing of the request for mediation. The date of termination of mediation shall be determined by application of the mediation rules referenced above. If, at the conclusion of the mediation referenced in this Section 23.01, the Dispute is not resolved, or if neither Party submits the Dispute to mediation within sixty (60) days of a Party’s notice to the other Party that such Dispute should be taken to the Parties’ senior management, then either Party may submit the Dispute to arbitration administered by the AAA under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. The arbitration shall be heard by one arbitrator, who shall have experience in the general subject matter to which the Dispute relates. The arbitration shall take place at the AAA office geographically closest to the site where the Work has been performed.

Section 23.02 Attorneys’ Fees. In any mediation, arbitration or other proceeding brought to enforce the terms of this Contract or arising out of this Contract (including actions to enforce an arbitration award), each Party shall be responsible for its own costs and attorneys’ fees expended in connection with such an action or proceeding.

**ARTICLE 24. REPRESENTATIONS AND WARRANTIES**

Each Party warrants and represents to the other that:

- (i) it has all requisite power and authority to enter into this Contract, to perform its obligations hereunder and to consummate the transactions contemplated hereby;
- (ii) the execution, delivery, and performance of this Contract have been duly authorized by its governing body, or are in accordance with its organizational documents, and this Contract has been duly executed and delivered for it by the signatories so authorized, and constitutes its legal, valid, and binding obligation;
- (iii) the execution, delivery, and performance of this Contract will not breach or violate, or constitute a default under, its organizational documents or any contract, lease or instrument to which it is a party or by which it or its properties may be bound or affected; and

- (iv) it has not received any notice, nor to the best of its knowledge is there pending or threatened any notice, of any violation of any Applicable Laws, ordinances, regulations, rules, decrees, awards, permits or orders which would materially and adversely affect its ability to perform hereunder.

**ARTICLE 25. ASSIGNMENT**

Section 25.01 Except as provided in this ARTICLE 25, this Contract may not be assigned by either Party in whole or in part without the prior written consent of the other Party, which consent may not be unreasonably withheld or delayed. This Contract will be binding on, enforceable by, and inure to the benefit of, the Parties and their respective successors and permitted assigns. Any assignment made in contravention of this clause shall be void and unenforceable.

Section 25.02 Assignment by Chevron ES. Chevron ES may assign this Contract and all related contracts without the consent of City (i) to an Affiliate; (ii) to an entity that is controlled by, controls, or is under common control with Chevron ES; or (iii) pursuant to a merger, consolidation, transfer of substantially all its assets, or by operation of law. Chevron ES may also assign its rights, but not its obligations, under this Contract and all related contracts without the consent of City to (x) a lender providing financing to Chevron ES, or (y) a special purpose entity that is an Affiliate of or is controlled by such lender.

**ARTICLE 26. TERMINATION**

Section 26.01 Termination for Cause. If there is an Event of Default by either Party under this Contract, pursuant to the provisions of ARTICLE 19 unless such Event of Default has been cured within the applicable time periods for a cure set forth in such ARTICLE 19 in addition to the remedies provided for in ARTICLE 20 the non-defaulting Party may terminate this Contract by providing three (3) Business Days' notice to the defaulting Party in the case of a monetary default and eight (8) Business Days' notice to the defaulting Party in the case of a non-monetary default. Upon termination of this Contract, each Party shall promptly return to the other all papers, materials, and property of the other held by such Party in connection herewith. Each Party shall also assist the other in the orderly termination of this Contract and the transfer of all aspects hereof, tangible and intangible, as may be necessary for the orderly, non-disrupted business continuation of each Party. If this Contract is so terminated, Chevron ES shall be entitled to payment for Work satisfactorily performed, earned profit and overhead, and costs incurred in accordance with this Contract up to the date of termination.

Section 26.02 Termination for Convenience. Both Chevron ES and City have the right to terminate this Contract upon mutual written agreement by both Parties hereto. If this Contract is so terminated by mutual agreement, Chevron ES shall be entitled to payment for all Work performed, earned profit and overhead, and costs incurred in accordance with this Contract up to the date of termination.

**ARTICLE 27. NOTICE**

Any notice required or permitted hereunder shall be deemed sufficient if given in writing and delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, or delivered to a nationally recognized express mail service, charges prepaid, receipt obtained, to the address shown below or to such other persons or addresses as are specified by similar notice.

TO CHEVRON ES: Chevron Energy Solutions Company  
150 East Colorado Boulevard, Suite 360  
Pasadena, CA 91105  
Tel: 626-304-4700  
Fax: 626-304-4701  
Attention: Barry Kirschenbaum, Project Manager

With a COPY TO: Legal Department  
Chevron Energy Solutions Company  
345 California Street, 18th Floor  
San Francisco, CA 94104-2624  
Tel: 415-733-4500  
Fax: 415-733-4957  
Attention: Contract Administrator

TO CITY:                   City of Palm Springs  
3200 E. Tahquitz Canyon Way  
Palm Springs, CA 92263-2743  
Tel:       760-323-8350  
Fax:       760-323-8207  
Attention: City Manager

With a COPY TO:       Office of the City Attorney  
City of Palm Springs  
3200 E. Tahquitz Canyon Way  
Palm Springs, CA 92263-2743  
Tel:       760-323-8211  
Fax:       760-323-8207  
Attention: City Attorney

**ARTICLE 28.    CONSTRUCTION OF CONTRACT**

This Contract is the result of arms-length negotiations between two sophisticated parties and ambiguities or uncertainties in it shall not be construed for or against either Party, but shall be construed in a manner that most accurately reflects the intent of the Parties when such Contract was executed. All documents disclosed to the public prior to execution of the Contract and prepared by the Parties or their respective staffs may be used to ascertain the intent of one or both of the Parties. Each of the Parties acknowledges and agrees that neither Party has provided the other with any legal, accounting, regulatory, financial or tax advice with respect to any of the transactions contemplated hereby, and each Party has consulted its own legal, accounting, regulatory, financial and tax advisors to the extent it has deemed appropriate.

**ARTICLE 29.    BINDING EFFECT**

Except as otherwise provided herein, the terms and provisions of this Contract shall apply to, be binding upon, and inure to the benefit of the Parties hereto and their respective heirs, legal representatives, successors, and permitted assigns.

**ARTICLE 30.    NO WAIVER**

The failure of Chevron ES or City to insist upon the strict performance of this Contract shall not constitute or be construed as a waiver or relinquishment of either Party's right to thereafter enforce the same in accordance with this Contract in the event of a continuing or subsequent default on the part of Chevron ES or City.

**ARTICLE 31.    SEVERABILITY**

In the event that any clause or provision of this Contract or any part thereof becomes or shall be declared by a court of competent jurisdiction invalid, illegal, void, or unenforceable, this Contract shall continue in full force and effect without said provisions; *provided* that no such severability shall be effective if it materially changes the benefits or obligations of either Party hereunder.

**ARTICLE 32.    APPLICABLE LAW**

This Contract and the construction and enforceability thereof shall be interpreted under the laws of the State of California. The Parties consent to personal jurisdiction and venue of the State Courts within the County of Riverside, California and, by execution and delivery of this Contract, each of the Parties hereby (i) accepts the jurisdiction of the foregoing courts for purposes of enforcement of any arbitral award and (ii) irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of venues of any suit, action or proceedings with respect thereto brought in any such court, and further irrevocably waives to the fullest extent permitted by law any claim that any such suit, action or proceedings brought in any such court has been brought in an inconvenient forum.

**ARTICLE 33.    HEADINGS**

Headings and subtitles used throughout this Contract are for the purpose of convenience only, and no heading or subtitle shall modify or be used to interpret the text of any section.



**ARTICLE 34. COUNTERPARTS; INTEGRATION**

This Contract may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Contract constitutes the entire contract among the Parties relating to the subject matter hereof and supersedes any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Delivery of an executed counterpart of a signature page of this Contract by email or fax shall be effective as delivery of a manually executed counterpart of this Contract.

**Energy Services Contract  
City of Palm Springs and Chevron Energy Solutions Company**

IN WITNESS WHEREOF, and intending to be legally bound, the Parties hereto subscribe their names to this Contract by their duly authorized officers on the date first above written.

**CHEVRON ES:**  
Chevron Energy Solutions Company,  
a Division of Chevron U.S.A. Inc.

**CITY:**  
The City of Palm Springs

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

ATTACHMENT A  
FORM OF PERFORMANCE BOND

**PERFORMANCE BOND**

Bond No.:

KNOW ALL MEN BY THESE PRESENTS: that  
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and  
(Here insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto  
(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called Owner, in the amount of Dollars (\$ ),

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated , entered into a contract with Owner for  
(Here insert full name, address and description of project)

in accordance with Drawings and Specifications prepared by  
(Here insert full name, address and legal title to Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

## PERFORMANCE BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect; subject, however, to the following conditions:

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

1) Complete the Contract in accordance with its terms and conditions, or

2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or

contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, means the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any claim or suit under this bond must be instituted before the issuance of the Certificate of Substantial Completion as defined in the Contract.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

Signed and sealed this day of , 20 .

_____	}	(Principal)	_____
(Witness)		(Title)	
_____	}	(Surety)	(Seal)
(Witness)		(Title)	

ATTACHMENT B  
FORM OF PAYMENT BOND

**LABOR AND MATERIAL PAYMENT BOND**

---

Bond No.:

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

---

KNOW ALL MEN BY THESE PRESENTS: that  
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called Principal, and,  
(Here insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto  
(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of \_\_\_\_\_ Dollars (\$) \_\_\_\_\_  
(Here insert a sum equal to at least one-half of the contract price)

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated \_\_\_\_\_ 20\_\_\_\_, entered into a contract with Owner for (here insert full name, address and description of project)

in accordance with Drawings and Specifications prepared by \_\_\_\_\_, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

## LABOR AND MATERIAL PAYMENT BOND

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as any person named in California Civil Code section 3181.
2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant, as herein defined, who has not been paid in full, may, within the time period set forth in California Civil Code section 3249, sue on this bond, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
  - a. Unless claimant shall have given written notice in accordance with California Civil Code sections 3227 and 3252.
  - b. After the time period set forth in California Civil Code section 3249. It is understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
  - c. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of any stop notices or mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such stop notice or lien be presented under and against this bond.

Signed and sealed this      day of      20 .

_____	}	(Principal)	_____
(Witness)		(Title)	
_____	}	(Surety)	(Seal)
(Witness)		(Title)	

**ATTACHMENT C  
CITY'S FACILITIES & EXISTING EQUIPMENT**

(a) The following City Facilities are included under the Scope of Work as listed below:

Location	Area Sq Ft	ECML1, A, B, L2: Lighting	ECM M1-A, M2-A: Municipal Plant Cogen & EMS	ECM M1-B, M2-B: Sunrise Plant & EMS	ECM W1: Irrigation
<b>Municipal Plant</b>	<b>402,085</b>	x			
Airport - All facilities	236,098	x	x		x
Airport Fire Station #2	19,609	x	x		
City Hall	31,963	x	x		x
City Yard	43,780	x	x		x
Police Dept & Training Center	53,680	x	x		x
<b>Sunrise Plant</b>	<b>87,883</b>	x			
Leisure Center	15,155	x		x	
Main Library	33,920	x		x	x
Pavilion	20,200	x		x	
Pool	39,248	x		x	
Stadium	16,906	x		x	x
<b>All Other City Facilities</b>	<b>517,535</b>				
Baristo Park	n/a				x
Convention Center	264,479	x			x
Desert Arts Center	5,073	x			
Desert Highland Park	n/a				x
Desert Wellness Park	n/a				x
Demuth Park	4,774	x			x
Downtown Parking Structure	124,251	x			
Downtown/ Palm Canyon Dr	n/a	x			
Francis Stevens Park	n/a				x
Fire Station #1	5,364	x			
Fire Station #3	5,807	x			
Fire Station #4	4,608	x			
Jaycee Frey (Shelter)	3,617	x			
J.O.J Unity Center	11,903	x			x
Palm Springs Boxing Club	2,095	x			
Palm Canyon Theater	15,100	x			
Ruth Hardy Park	n/a				x
Sunrise Park	n/a				x
Tahquitz Creek Golf Course	26,210	x			
Taxi Holding Building	1,990	x			
Train Station	1,483	x			
Victoria Park	684				x
Village Green	13,199	x			
Wastewater Treat Plant Admin.	5,467	x			
YMCA	21,431	x			
Misc. Medians and Roads	n/a	x			x

- (b) The existing equipment is that which is listed in the Report dated June 30, 2011 plus miscellaneous equipment tally which will be presented to City during construction.



**ATTACHMENT D  
SCOPE OF WORK**

Energy Conservation Measures to Be Implemented

ECM #	Description
L1	Lighting Upgrades - Interior and Exterior Citywide
L1-A	Lighting Upgrades - Interior and Exterior Municipal
L1-B	Lighting Upgrades - Interior and Exterior Sunrise
L2	Palm Canyon Lighting Control & Remote Monitoring
M1-A	Central Plant Cogeneration Upgrade - Muni
M1-B	Central Plant All Electric Upgrade - Sunrise
M2-A	Energy Management Control System - Muni
M2-B	Energy Management Control System - Sunrise
U1	Utility Metering & Monitoring System
W1	Irrigation / Water Management

**General Conditions Scope to be provided by Chevron ES for all Work:**

Chevron ES shall provide all labor, materials, equipment, tools, transportation, facilities and services necessary for the proper execution, construction, and completion of the Work. Work shall include the following and all other services as set forth elsewhere in this Contract:

- All design and engineering including mechanical, plumbing, electrical, structural and controls. Project specifications will be located on final construction plans or provided as necessary. The acceptable level of detail for design drawings and specifications will be the level of detail Chevron ES determines is required in order to permit and construct.
- Design and construction project management
- Construction management and supervision. A Chevron ES construction manager will be assigned to this project and will be responsible for managing, monitoring and coordinating the on-site construction on a daily basis
- Provide an onsite construction trailer.
- Provide onsite storage containers for project materials and equipment, as needed
- Provide trash dumpsters as needed as well as cleanup and disposal of all refuse generated by project
- Provide temporary fencing as required for access control in the areas of and for the duration of our own Work
- Provide all cranes, lifts and rigging necessary for our own Work
- Provide startup, acceptance testing and training on all systems provided under this Contract
- All manufacturers' warranty will be transferred to City
- As-built documentation and O&M manuals (two copies)

**ECM: L1, L1-A, L1-B- Lighting Upgrades - Interior and Exterior Citywide, Municipal and Sunrise**

Existing light fixtures will be retrofitted/installed with energy efficient lamps, and electronic ballasts as specified in the following Attachment J – Lighting Survey.

**Chevron ES shall perform the following Work:**

- Provide equipment and materials as specified in the lighting survey spreadsheets.
- Clean all existing fixtures defined in the lighting survey.
- Install all lighting equipment; lamps, ballasts, reflectors, etc. as specified in the lighting survey.
- Install occupancy sensors in offices, conference rooms, storage rooms, restrooms, locker rooms, etc. as specified in the lighting survey
- Provide all electrical connections necessary for the above Scope.
- Broken and compromised lamp holders will be replaced as part of this Scope of Work. Replacing yellowed, broken or otherwise compromised lenses is not included.
- Disposal of old lamps and ballasts per EPA regulations is included.

**Group Re-Lamp and Ballast Replacement:**

- Chevron ES shall retrofit all existing fluorescent fixtures specified in the lighting survey (that contain a combination of magnetic ballasts with T12 lamps and latest generation T8 lighting systems), with 28 Watt "super T8" lamps and electronic ballasts.
- Areas where luminaires have been installed end-to-end may be tandem ballasted.

**De-lamp and Install Reflectors:**

- Chevron ES shall retrofit all existing "troffer" light fixtures specified in the lighting survey (that contain three or four fluorescent lamps with electronic ballasts), with two 28 Watt "super T8" lamps and electronic ballasts, and aluminum specular reflectors.
- In areas that contain U-Tube fluorescent fixtures, Chevron ES shall replace the two U-Tube lamps with two 17 Watt low mercury content T8 lamps electronic ballasts, and aluminum specular reflectors.
- Rooms or areas with luminaires installed end-to-end may be tandem ballasted

***Incandescent to Compact Fluorescent:***

- Chevron ES shall replace all existing incandescent lamps specified in the lighting survey, with screw-in compact fluorescent lamps into the existing luminaire.

***Replace High Intensity Discharge fixtures with new High Intensity Fluorescent fixtures:***

- Chevron ES shall replace all existing metal halide (MH) fixtures specified in the lighting survey, with new high intensity fluorescent fixtures.

***Exterior Lighting Retrofits:***

- Chevron ES shall retrofit all existing high intensity discharge (HID) light fixtures specified in the lighting survey (These exterior fixtures consist mainly of High Pressure Sodium (HPS), but some standard Metal Halide (MH) fixtures and Mercury Vapor (MV) fixtures are also used.), with pulse-start MH kits or new light emitting diode (LED) kits.

***Replace Exit Signs:***

- Chevron ES shall replace all existing incandescent and compact fluorescent exit signs specified in the lighting survey, with new light emitting diode (LED) exit fixtures and battery backups.

***Incandescent Palm Tree Spot Lights to LED:***

- Chevron ES shall replace the existing 65 watt PAR 38 halogen fixtures specified in the lighting survey with new light emitting diode (LED) spot lights including new mounting hardware.

***Park Lighting Controls:***

- Chevron ES will provide lighting relay bypasses at the following locations, that will be connected to a central controller for remote schedule:
  - o Demuth Park – Installation of 8 switches to control the lighting at the Tennis courts, Baseball and Soccer Field(s).
  - o Baristo Park – Installation of 1 switch to control the park lighting
  - o Frances Stevens Park – Installation of 2 switches to control the park lighting. Additionally, Chevron ES will provide a high wind shut-off control for the water fountain
  - o Ruth Hardy/Wellness Park – Installation of 4 switches to control the two tennis courts, the restroom at Ruth Hardy and the Wellness Park lighting.
  - o Sunrise Park – Installation of 5 switches to control the lighting at the Skate Park, lighting near the Leisure Center, the area outside the Library near the pool and the Baseball Stadium field lighting.
  - o Cerritos Park - 1 switch to control the Baseball field lighting
  - o Victoria Park – 1 switch to control the restroom lighting
- Park lighting controls includes trenching (replace in kind) as required to install low voltage wiring

**ECM: L2 - Palm Canyon Lighting Control & Remote Monitoring**

- Chevron ES will remove 48 mechanical time clocks located in electrical panels that control the Palm Canyon decorative spot lighting and install the necessary hardware, relays and communication devices to control the lighting centrally and remotely.
- Chevron ES will provide and install watt node power transducers for City to monitor power drawn by each lighting controller listed above
- Chevron ES will program the new lighting schedule as coordinated by City staff.

**ECM: M1-A - Central Plant Cogeneration Upgrade - Municipal**

**Basis of Design:**

This ECM will replace the existing Municipal Central Plant cogeneration system with a new 1.1MW cogeneration plant. Chevron ES shall provide all required components to meet the 2013 AQMD requirements for the air quality management district regulating this site. The design will incorporate and utilize the existing chilled water Thermal Energy Storage (TES) system, tank, piping and components. The basis of design of the Municipal Cogeneration Plant is for a total of 1.1MW of generation, 450 tons of absorption cooling and 4MMBh (input) of boiler heating. Some of the existing equipment and materials, not otherwise listed, will be considered for re-use.

**Chevron ES will furnish and install the following:**

*Mechanical Equipment*

- Engine Generator: Furnish and install one (1) 1,137 kW GE Jenbacher (or equivalent) reciprocating cogeneration gen-set and other furnished accessories. The engine generator will be a reciprocating, turbocharged, lean burn type using pipe line natural gas.
- Absorption Chiller: Furnish and install one (1) 450 ton Thermax absorption chiller (or equivalent). The chiller will be natural gas fired, double effect, two stage evaporation design
- Cooling Tower: Furnish and install one (1) induced draft cooling tower
- Pumps: Furnish and install two (2) primary hot water pumps, two (2) primary chilled water pumps, three (3) condenser water pumps and, two (2) process hot water pumps serving the jacket water circuit and the low-temperature circuit.
- Heat Exchangers: Furnish and install one (1) liquid plate and frame heat exchanger servicing the process hot water high temperature system and one (1) liquid plate and frame heat exchanger servicing the process hot water low temperature system
- Boilers: Furnish and install two (2) 1,999Mbh input Lo Nox Boilers
- Centrifugal Separator: Furnish and install one (1) centrifugal separator
- SCR/Oxidation catalyst: Furnish and install one (1) SCR/Oxidation catalyst

- Urea Tank: Furnish and install one (1) Poly processing urea tank
- Continuous Emissions Monitoring System (CEMS): Furnish and install one (1) CEMS for engine generator

*Electrical Equipment*

- Switchgear: Furnish and Install one (1) Generator switchboard, 2500A, one (1) Generator Motor Control Center, 225A, one (1) Motor Control Center, 1200A
- Automatic Transfer Switch: Furnish and Install one (1) Automatic Transfer Switch, 200A
- Battery Charger Cabinets: Furnish and Install one (1) 12kV Switchgear and one (1) Generator Switchboard battery charger cabinets
- Variable Frequency Drives (VFDs) Furnish and Install two (2) VFDs for cooling tower fans (1ea), three (3) VFDs for chilled water site pumps, two (2) VFDs for hot water site pumps.

**General Construction and Demolition Scope to be provided by Chevron ES:**

- Remove and dispose of the old chiller, engine generators, cooling tower and ancillary equipment including pumps, water treatment, air compressors, batteries, piping and valves.
- Demo and removal of existing cooling tower support piers, including clean and prep site for new cooling tower support structure.
- Demo and removal of existing equipment pads as necessary to support new equipment installation. Re-use existing pads and pedestals where feasible (i.e., pumps).
- Construct new concrete housekeeping pads for the following equipment
  - o (2) Heat exchangers
  - o (2) Boilers
  - o (1) Chiller Pad – Extend existing pad by 6" to accommodate new chiller
  - o Electrical Switchgear
- Construct a new floating pad to support new engine generator
- Construct a structural slab for urea tank with enclosure and gate access gate and UT-1, paint to match building.
- Installation of new cooling tower support structure.
- Provision of cranes, lifts, and rigging to install all new heating and cooling equipment listed above.
- Extend existing louvers to accommodate airflow requirements of new cooling tower.
- Seal all new pipe penetrations through walls and roofs.
- Landscape repair and patching (replace in kind) resulting in Work or damage from Chevron ES Work.

**Mechanical Construction Scope to be provided by Chevron ES:**

- Install all new mechanical equipment listed above.
- Furnish and install new gas line and meter for absorption chiller. Chevron ES assumes the Utility can make the POC at the existing gas riser.
- Furnish and install new piping as required for chilled water and hot water systems listed above, insulate as required.
- Furnish and install piping for condenser water systems listed above, paint as required.
- Furnish and install piping specialties at chiller, boilers, cooling towers and generators listed above.
- All existing piping specialties at pumps to be reused.
- Replace/reconnect generator waste oil line to existing sump (existing waste oil tank to remain)
- Existing evaporative coolers to remain and be reused
- Existing exhaust fans to remain and be reused
- Existing hot water expansion tank to remain and be reused
- Furnish and install new makeup water piping to expansion tanks, air separator and cooling tower.
- Furnish and install new chemical treatment equipment for hot water and chilled water system.
- Relocate existing floor drains to accommodate new equipment.
- Provide test and balance of hydronic systems and equipment within the Central plant.
- Pressure test, flush, clean and treat all new piping systems installed by Chevron ES.

**Electrical Construction Scope to be provided by Chevron ES:**

- Install all new electrical equipment listed above.
- Furnish and install all conduit, wire, disconnects, starters, boxes, circuit breakers, conductors and miscellaneous electrical components, as required to power all components listed above in Central Plant.
- Reconnect all existing convenience outlets
- Install and connect all VFDs listed above
- Furnish and install grounding system as required by code for new equipment only.
- Furnish and install protective relay(s) for new generator.
- Provide SCE required load analysis and short circuit studies for trip settings and calibration testing of new protective relays at the switchgear. Existing distribution switchgear and all associated protective relays will remain and will not be recalibrated.
- Furnish and install new lighting system inside Central Plant. (See Lighting Survey from ECM L1-A)
- Final Utility interconnection and testing will be performed during off-peak hours or as required by SCE.

**Energy Management and Data Acquisition System Scope to be provided by Chevron ES:**

- The Central Plant sequence of operation (SOO) will be defined by Chevron ES.
- Provide and install software, firmware, licenses, and web based access to the EMS with provisions for 3 concurrent user access.
- Furnish and install one (1) new desktop server computer with monitor, keyboard, and mouse.

- Graphical representations and user interface shall be customized to fully represent the equipment interfaced at the Central Plant
- Furnish and install new control valves for isolation and control of equipment as required by the SOO.
- Furnish and install all necessary programming and hardware to control the new valves.
- Provide, via the operator interface, full access to controller level operations access, program/sequence modification, set point adjustment.
- Provide a revenue-grade billing, data acquisition system (DAS) with new utility grade sub-meters for the metering and monitoring of the Central Plant electric consumption, chilled water and heating hot water flow as described in ECM: U1 Utility Metering & Monitoring System.
- Supply and install hardware specific to the DAS system
- Supply, install, terminate, label, and test all Data Point of Connections (DPOCs) communication cabling from each DAS node to the predetermined and respective DPOCs; in coordination with City's IT staff.
- Test and verify City facility network connectivity. (TCP/IP internal addressing & verification)
- Connect the data portion of digital net energy meters (NEMs) to their respective DPOCs.
- Supply, install, and configure a Modbus based digital Net Generation Output Meter (for generator).
- Perform the physical installation, labeling, testing and certification testing of each data circuit(s) from the digital NEM(s) to their respective DPOC(s).
- Chevron ES will provide City/Facility staff with 16 hours of training providing an overview of installation and operation of the Municipal Central Plant System.

**ECM: M1B - Central Plant All Electric Upgrade – Sunrise**

**Basis of Design:**

This ECM will replace the existing Sunrise Central Plant cogeneration plant with a cooling/heating only Central Plant. The existing cogeneration and all associated equipment will be removed and replaced with a centrifugal chiller and hot water boilers. The design will incorporate and utilize the existing chilled water Thermal Energy Storage (TES) system, tank, piping, and components. The basis of design of the Sunrise Central Plant is for a total of 250 tons of chiller cooling and 4MMBh (input) of boiler heating. Some of the existing equipment and materials, not otherwise listed, will be considered for re-use.

**Chevron ES will provide the following new major equipment:**

*Mechanical Equipment*

- Centrifugal Chiller: Furnish and install one (1) 250 Ton chiller
- Pumps: Furnish and install two (2) primary hot water pumps, (2) site hot water pumps, and two (2) chilled water pumps
- Boilers: Furnish and install two (2) 1,999 MBH Lo Nox Boilers
- Cooling Tower: Furnish and install one (1) Cooling Tower
- Centrifugal Separator: Furnish and install one (1) centrifugal separator
- Refrigerant Monitoring System: Furnish and install one (1) refrigerant monitoring system
- Expansion Tank: Furnish and install one (1) HHW expansion tank
- Air Separator: Furnish and install one (1) CHW air separator

*Electrical Equipment*

- Switchgear: Furnish and Install one (1) Motor Control Center, 1200A
- Variable Frequency Drives (VFDs) Furnish and Install one (1) VFD for cooling tower fans, two (2) VFDs for condenser water pumps and two (2) VFDs for chilled water pumps

**General Construction and Demolition Scope to be provided by Chevron ES:**

- Remove and dispose of the old chiller, engine generator, cooling tower and ancillary equipment including pumps, water treatment, air compressors, batteries, piping and valves.
- Demo and removal of existing cooling tower support piers, including clean and prep site for new cooling tower support structure.
- Demo and removal of existing equipment pads as necessary to support new equipment installation. Re-use existing pads and pedestals where feasible (i.e., pumps).
- Construct new concrete pads to support the installation of the following items
  - o (2) Boilers
  - o (1) Chiller Pad – Extend existing pad by 6" to accommodate new chiller
  - o Electrical Switchgear
- Construct new boiler room with one (1) hour fire rated walls and ceiling per code.
- Installation of new cooling tower support structure.
- Provision of cranes, lifts, and rigging to install all new heating and cooling equipment listed above.
- Extend existing louvers to accommodate airflow requirements of new cooling tower.
- Landscape repair and patching (replace in kind) resulting in Work or damage from Chevron ES Work.

**Mechanical Construction Scope to be provided by Chevron ES:**

- Install all new mechanical equipment listed above.
- Utilize existing gas line and meter (for old engine generators) for new boilers.
- Furnish and install new piping as required for chilled water and hot water systems listed above, insulate as required.
- Furnish and install piping for condenser water systems listed above, paint as required.

- Furnish and install piping specialties at chiller, boilers and cooling towers listed above.
- All existing piping specialties at pumps to be reused.
- Existing evaporative coolers to remain and be reused
- Existing exhaust fans to remain and be reused
- Existing hot water expansion tank to remain and be reused
- Furnish and install new makeup water piping to expansion tanks, air separator and cooling tower.
- Furnish and install new chemical treatment equipment for hot water and chilled water system.
- Relocate existing floor drains to accommodate new equipment.
- Provide test and balance of hydronic systems and equipment within the Central plant.
- Pressure test, flush, clean and treat all new piping systems installed by Chevron ES.

**Electrical Construction Scope to be provided by Chevron ES:**

- Install all new electrical equipment listed above.
- Furnish and install all conduit, wire, disconnects, starters, boxes, circuit breakers, conductors and miscellaneous electrical components, as required to power all components listed above in Central Plant.
- Reconnect all existing convenience outlets
- Install and connect all VFDs
- Furnish and install grounding system as required by code for new equipment only
- Existing distribution switchgear and all associated protective relays will remain and will not be recalibrated.
- Furnish and install new lighting system inside Central Plant. (See Lighting Survey from ECM L1-B)

**Energy Management System Scope to be provided by Chevron ES:**

- The Central Plant chilled water and hot water systems will be modified to an optimized sequence of operations (SOO) defined by Chevron ES.
- Provide and install hardware necessary to integrate the Sunrise plant to the central EMS system installed for Municipal Plant per the SOO.
- Provide web access to the system with provisions for 3 concurrent user access.
- Graphical representations and user interface shall be customized to function, as necessary, to fully represent the equipment interfaced at the Sunrise Plant
- Furnish and install new line size control valves for isolation and control of equipment as required by the SOO.
- Furnish and install all necessary programming and hardware to control the new valves.
- Furnish and install all temperature, BTU (with local indication), flow monitoring controls and integrate into graphical user interface.
- Coordination of all data monitoring and control as made available by each of the vendors' equipment listed above.
- Provide, via the operator interface, full access to controller level operations access, program/sequence modification, set point adjustment.
- Chevron ES will provide City/Facility staff with 8 hours of training providing an overview of installation and operation of the Sunrise Central Plant System.

**ECM: M2-A, M2-B – Energy Management System – Municipal and Sunrise**

Chevron ES will expand the new centralized energy management system (EMS) to incorporate the buildings connected to the Central Plants that are not currently controlled by an existing EMS.

Chevron ES shall perform the following Work:

- Furnish and install new CHW and HHW coil 2-way control valves with associated piping at building air handling (AH) and multi-zone (MZ) units
- Furnish and install new 2-position 3-way control valve with associated piping at building chillers.
- Furnish and install new chiller minimum flow control valve with associated piping for building chillers
- Furnish and install new VAV controllers to individual VAV boxes for existing VAV systems only.
- Scope of Work above includes only the following buildings:

Building Name	MZ and/or AHU per Bldg (Qty)	CHW 2-Way Control Valves (Qty)	HHW 2-Way Control Valves (Qty)	Chiller 3-Way Control Valves (Qty)	Chiller Min. Flow Control Valve (Qty)	VAV Controllers (Qty)
City Hall	3	3	3	2	1	n/a
City Hall Expansion	1	1	1	2	1	23
Airport Fire Station	2	2	2	2	1	n/a
Police Department	4	4	n/a	4	1	53
Police Department Training	1	1	n/a	2	1	n/a
Pavilion Center	1	1	1	2	1	n/a
Leisure Center	1	1	1	2	1	n/a
Library	2	2	2	2	1	n/a
Sunrise Pool	n/a	1	1	n/a	n/a	n/a

- Furnish and install network interface controller for each building listed above
- Furnish and install main controllers with LCD display and push pad for local control at each MZ and AH unit listed above

- Provide and install new supply and return air temp sensors and new zone space temp sensors at each MZ and AH unit listed above
- Furnish and install new return air/outside air damper actuator and enable economizer control, where applicable at each MZ and AH unit listed above.
- Provide insulation where necessary for Work listed above.
- Provide all electrical connections necessary for the above Scope.
- Provide programming and operator graphics of the above Scope to the central EMS.
- Furnish and install six (6) sets of AIC wireless radio frequency (RF) Ethernet IP transceivers to communicate wirelessly between the buildings listed above.
  - o one set will communicate wireless IP from City Hall to the Municipal Central Plant
  - o one set will communicate wireless IP from the Municipal Central Plant to the Airport Fire Station
  - o one set will communicate wireless IP from City Hall to the Police Dept.
  - o one set will communicate wireless IP from the Main Library to the Sunrise Central Plant.
  - o one set will communicate wireless IP from the Sunrise Central Plant to the Leisure Building.
  - o one set will communicate wireless IP from the Pavilion Building to the Sunrise Pool area.
- Chevron ES will furnish and install six (6) sets of antennas to wire back to the (6) AIC wireless (RF) Ethernet IP transceivers listed above.
- Chevron ES will setup and configure the AIC wireless (RF) Ethernet IP transceivers listed above.
- Develop and install all necessary programming for Scope of Work listed above.
- Provide the labor to create customized graphic pages, programming start-up and testing the controls.
- Chevron ES will provide City/Facility staff with 16 hours of training providing an overview of installation and operation of the Energy Management System.

**ECM: U1 – Utility Metering & Monitoring System**

Chevron ES will provide a revenue-grade billing, data acquisition system (DAS). This will be accomplished by the installation of new revenue grade utility sub-meters for the metering and monitoring of the electric consumption, chilled water and heating hot water flows for each of the individual buildings connected to Municipal and Sunrise plants. The new meters will feed automatically into the EMS program so they can be viewed anytime online. The following buildings will receive new sub meters.

Chevron ES shall perform the following Work:

- Furnish and install BTU and electric meters along with all necessary communication and programmable controllers for monitoring the following buildings:

Building Name	Chilled Water BTU Meter (Qty)	Hot Water BTU Meter (Qty)	Electric Power Meter (Qty)
Municipal Plant	2	2	1 (12kV)
City Hall	1	1	1
City Hall Expansion	1	1	1
Airport Fire Station	1	1	1
Airport	1	1	3 (12kV)
Police Department	1	1	1
Police Department Training	1	n/a	n/a
City Yard	n/a	n/a	1
County Admin Bldg	n/a	n/a	1
Sunrise Plant	2	2	1 (5kV)
Pavilion Center	1	1	1
Library	1	1	1
Leisure Center	1	1	1
Swimming Pool	1	1	1
1. Power meters for Municipal Plant and connected building will be 480/277V unless otherwise noted.			
2. Power Meters for Sunrise Plant and connected buildings will be 120/208V unless otherwise noted.			

- Supply and install hardware specific to the DAS system
- Supply, install, terminate, label, and test all Data Point of Connections (DPOCs) communication cabling from each DAS node to the predetermined and respective DPOCs; in coordination with City's IT staff.
- Test and verify City facility network connectivity. (TCP/IP internal addressing & verification)
- Connect the data portion of all furnished meters to their respective DPOCs.
- Perform the physical installation, labeling, testing and certification testing of each new data circuit(s) from the digital meters to their respective DPOC(s).

**ECM: W1 – Irrigation / Water Management**

Chevron ES will install a centralized irrigation control system inclusive of two centrally located weather stations. The system will measure rain, solar radiation, wind, humidity and temperature. The collected data is used for the system to automatically adjust watering times and amounts

- Chevron ES will furnish and install irrigation controllers at the following locations:

Location	(#) Controller / Stations
Desert Highland Park	(1) 48-station
Ruth Hardy Park	(1) 30-station, (1) 48-station
Desert Wellness Park	(2) 24-station
Demuth Park (Inside Storage)	(1) 42-station and (1) 18-station
Demuth Park (Outside Storage)	(1) 12 station
Demuth Park (Ball Fields 7&8)	(1) 18 station
Demuth Park (Soccer fields)	(1) 18-station
Demuth Park (Ball Fields 5&6)	(1) 12 station
Demuth Park (Picnic Area)	(1) 24 station, (1) 30 station
Sunrise Park	(1) 30-station, (1) 12-station, (1) 42-station
Sunrise Park (Mizell Senior Center)	(1) 12-station
Sunrise Park (Stadium)	(1) 12-station
Sunrise Park (Cerritos)	(1) 12-station
Sunrise Park (Boys and Girls Club)	(1) 12-station, (1) 24 station
Sunrise (Racquet Club)	(1) 12-station
Baristo Park	(1) 12-station
Victoria Park	(1) 24-station
Francis Stevens Park	(1) 24-station, (1) 12 station
City Hall	(1) 6-station, (1) 18 station
Dog Park	(1) 18-station
Riverside Dr. N.	(1) 12-station
Convention Center	(1) 18 station, (1) 24 station, (1) 12 station
City Yard	(1) 18 station
Mid. Valley Pky - Mesquite	(1) 24-station, (1) 12 station
Tahquitz Canyon Median	(8) 6-station
Civic Drive / Tahquitz Canyon	(1) 12-station
Palm Canyon & Baristo	(1) 24-station
Palm Canyon Dr. East	(1) 12-station
E. Palm Canyon & Farrell	(1) 24-station
Tristar, Grass, San Rafael	(1) 18-station
Twin Star (Dead End)	(1) 12-station
Civic Dr S / Police Station	(1) 12-station
Mountain Gate	(1) 6 station
4046 Alterra Rd	(1) 12station
San Martin / El Cielo	(1) 24-station
Alejo / East Sunrise	(1) 24-station
Juanita	(1) 24-station
San Rafael, Mtn Shadow	(1) 12-station
Airport A	(1) 24-station
Airport B	(1) 18-station
Airport C	(1) 42-station
Airport D&F	(1) 48-station
Airport E	(1) 18-station
Airport G	(1) 42-station
Airport H	(1) 42-station
Airport I	(1) 42-station
Airport J & K	(1) 30-station
Airport L	(1) 12-station
Airport M	(1) 36-station
Airport N	(1) 42-station
Vista Chino & Farrell	(1) Solar 12-stations
Near Gate 39	(1) 6-station
Tahquitz & El Cielo	(1) 12-station
AP Terminal	(1) 6-station, (1) 18 station, (1) 24 station

- Chevron ES will install four (4) battery operated timers at Vista Chino & Parkview
- Chevron ES will repair the existing 6-station solar controller at Gene Autry St Median
- Chevron ES will furnish and install master valves and flow sensors in the following locations:
  - o two (2) - Victoria Park
  - o four (4) - Ruth Hard Park
  - o two (2) - Demuth Park

- Furnish and install two weather stations (for north and south Palm Springs) with a rain gauge, flow meters and wind sensors. These sensors monitor site conditions and report to the central computer
- Furnish and install a central computer control system that will allow actions to be carried out from a central location, such as automatically adjusting watering or stopping irrigation in the event of rain.
  - All new devices will have wireless communication via a 450 MHZ radio/transmitter system with each controller reporting back to a centralized computer
- Furnish and install new Hunter irrigation heads (or equivalent) throughout City as needed (with a maximum of 750 heads). Adjust all nozzles connected to new controllers as necessary for proper coverage and trajectory.
- Furnish and install new controls for the water fountain at Francis Stevens Park to be able to control fountain via central control to shut-off during high winds.
- Develop and install all necessary programming for new equipment
- Chevron ES will provide City/Facility staff with 8 hours of training providing an overview of installation and operation of the irrigation water management system.

**General City's Responsibilities**

- Chevron ES has assumed clear access will be provided to all of the Work, including the clearing of desk, tools, misc storage items from Municipal and Sunrise Central Plants. Assuring clear access will require coordination by/with City facilities personnel.
- Chevron ES assumes assistance will be provided by City Public Works related to isolation, drain, refill, and bleeding of the various systems, which will be modified in accordance with project Scope of Work.
- Chevron ES assumes sufficient parking will be provided to support our project managers, superintendents and foremen at no cost to Chevron ES.
- Chevron ES will require the use of a crane and other material handling equipment to hoist equipment and material in to place.
- Chevron ES cannot be responsible if the existing contractors or operators do not comply with energy or water conservation programs.
- We have assumed access adjacent to the structure(s) will be provided to support cranes and other rigging equipment. Chevron ES may require the cooperation of City to evacuate and secure areas required for staging and hoisting as necessary to accomplish the goals of the project.
- Chevron ES assumes accessible and adequate locations can be provided for job site office, storage space, Work areas and/or securable lay-down areas for materials.

**City's IT Responsibilities for Energy Management System and Data Acquisition System:**

- City to provide all required external static TCP/IP network connection and address for the new EMS and Data Acquisition System (DAS) required for Municipal Plant, Sunrise Plant and all connected buildings.
- City to provide reasonable access to IT rooms as necessary for installation of Work.
- Provide Chevron ES reasonable notification (4 business days) of any IP addressing scheme changes or changes made to restrict network access to ensure maximum uptime is maintained.
- Chevron ES is assuming wireless communication will be sufficient to communicate between all the buildings. If wireless communication is not feasible due to distance and obstructions of the wireless antennas line-of-sight City will need to provide DSL modems for internet capabilities.

**General Project Exclusions and Clarifications:**

- Chevron ES will provide temporary services for construction trailer (phones, copying, etc.) City will provide temporary utilities for these trailer(s) during the Project at no additional cost to Chevron ES.
- City Plan check fees, if any, are City's responsibility
- City Inspector costs are City's responsibility
- Chevron ES has assumed project construction will be allowed to proceed smoothly and in a continuous flow. No allowance has been made to demobilize and remobilize resources due to schedule interruptions.
- Equipment capacity listed above are rated or nameplate capacity values.
- Chevron ES has assumed there are no hazardous materials, building code, fire life safety, ADA, or seismic code issues that may affect construction of this project.
- Removal and disposal of hazardous materials, including asbestos containing materials, to be by City. If Chevron ES encounters material suspected to be hazardous, Chevron ES will notify City representative and stop further Work in this area until the material is removed.
- Chevron ES will install the Work performed in accordance with the applicable and approved 2013 building codes, which have been adopted by the authorities having code jurisdiction for these facilities. Chevron ES has assumed that all included buildings are code compliant and has excluded any upgrade to any building structural or seismic, fire alarm or fire life safety, mechanical, electrical or other discipline code upgrades except those which have been specifically included in the Scope of Work.
- Scope of Work excludes replacing any main conductors, conduit, and grounding system. Existing emergency and egress lighting will not be altered, relocated or removed except as documented in the lighting survey.
- Chevron ES has assumed that all existing equipment, electrical systems, controls, and other facility systems are in proper working condition and do not require repair/replacement or rehabilitation. No allowance has been made to repair or replace damaged or inoperable existing equipment that is not specifically being replaced under the Scope of Work. When such items are discovered, Chevron ES will immediately notify City representative.
- Chevron ES has done due diligence on the existing electrical distribution infrastructure. It is our understanding that the existing electrical switchgear for the Municipal and Sunrise plant interconnection is adequate without any major infrastructure upgrades. Any upgrade and/or replacement of the existing switchgear for interconnection, if required by the utility, is unknown/not anticipated and therefore not included in the Scope of Work
- Repair or replacement of any existing underground electrical, water, storm, sewer, fiber, fire and low-voltage systems is excluded.



**Energy Services Contract  
City of Palm Springs and Chevron Energy Solutions Company**

- Scope of Work excludes any roofing repair or replacement unless specifically noted above.
- No allowance has been made for visual screens of new or existing equipment, unless specifically noted above.
- No temporary electric, heating or cooling services have been included. Chevron ES will coordinate with City staff for City to use the building cooling and heating equipment to avoid interruptions of service while the Central Plants are in construction.
- Excludes all building maintenance contracts, services, parts, materials, chemicals or similar obligations, unless specifically identified in the Scope of Work.
- Premium time except for main electrical tie ins for; Municipal and Sunrise plant is excluded. Chevron ES pricing based on the Work being performed during normal business hours
- All Scope of Work not shown on final approved drawings and not required to achieve the project design criteria is excluded.
- Fiber optic cable or labor to install any fiber optics, unless specifically identified in the Scope of Work, is excluded.
- Chevron ES assumes adjacent points of connections for all utilities (i.e. less than 50') such as natural gas, water and sewer.
- Painting, unless incidental to Work and to fully incorporate the Work, is excluded.
- Chevron ES standard construction Means & Methods will be used.

**Warranty:**

- Chevron ES warrants that material and equipment furnished under the Contract will be of good quality and new, unless otherwise specifically required or permitted by the Contract, and that its workmanship, including its subcontractors' workmanship, shall be free of material defects for a period of one (1) year from the date of Substantial Completion or the date of Beneficial Use.

**Extended Warranties (Transferred to City):**

- Chevron ES transfers to City any extended 5 year manufacturer's warranty on the irrigation controller parts.
- Chevron ES transfers to City a lighting manufacturer's warranty for 3 years on lamps and 5 years on ballasts

**Criteria for Achieving Beneficial Use:**

- LIGHTING SYSTEM – Uninterrupted operation for a duration, as necessary, with a maximum of 2 weeks, to determine proper operation. Uninterrupted operation is defined as: no involuntary shutdowns due to lighting difficulties, including occupancy sensors and controls.
- CENTRAL PLANT SYSTEM(S) - Two weeks of uninterrupted supply of chilled and hot water with an average supply within 10% of design values at a supply temperature of 45°F or lower for chilled water and 180°F for hot water and uninterrupted supply of power from engine generator up to 1100kW. Uninterrupted operation is defined as: no involuntary shutdowns due to mechanical difficulties. Central plants will be Commissioned and flows shall be established by a test and balance report. Central Plant Systems include all new equipment (i.e. chillers, boilers, engine generators, emissions systems, cooling towers, pumps, etc.) within the respective Central Plant buildings.
- IRRIGATION SYSTEMS – Uninterrupted operation for a duration, as necessary, with a maximum of 2 weeks, to determine proper operation. Uninterrupted operation is defined as: no involuntary shutdowns due to mechanical difficulties.
- ENERGY MANAGEMENT SYSTEM - Two weeks of uninterrupted operation of controlled equipment. Uninterrupted operation is defined as: no involuntary shutdowns due to control problems Proper control of the equipment is defined as: equipment turning on/off per schedules, valves opening and closing per sequence of operation, design supply water temps delivered to buildings.

**ATTACHMENT E  
ALLOCATION OF CONTRACT AMOUNT**

Comprehensive Energy Analysis Fee (no Retainage)	\$250,000
Design & Engineering Fee (no Retainage)	\$3,251,568
Remaining Implementation Cost	\$14,006,274
=====	
<b>Contract Amount</b>	<b>\$17,507,842</b>

The initial payment, which includes the Comprehensive Energy Analysis Fee, Design, Engineering, Bonding, Insurance & Procurement, will be invoiced to City upon both parties signing the Energy Services Contract and will be due and payable as provided in the Contract.

<b>ESTIMATED PAYMENT SCHEDULE</b>			
Project Name: Path to Sustainability Renewable Program Option A			
Total Project Amount:		\$ 17,507,842	
<b>Draw Schedule</b>			
Days after	Amount Advanced	Amount	Notes
Contract signed			
0	\$3,501,568	20.00%	CEA, Design & Eng, Bond, Ins, Procurement
30	\$87,539	0.50%	Design & Engineering
60	\$87,539	0.50%	Construction Started
90	\$175,078	1.00%	Progress Payment
120	\$525,235	3.00%	Progress Payment
150	\$525,235	3.00%	Progress Payment
180	\$525,235	3.00%	Progress Payment
210	\$525,235	3.00%	Progress Payment
240	\$525,235	3.00%	Progress Payment
270	\$525,235	3.00%	Progress Payment
300	\$525,235	3.00%	Progress Payment
330	\$525,235	3.00%	Progress Payment
360	\$525,235	3.00%	Progress Payment
390	\$525,235	3.00%	Progress Payment
420	\$875,392	5.00%	Progress Payment
450	\$1,050,471	6.00%	Progress Payment
480	\$875,392	5.00%	Progress Payment
510	\$875,392	5.00%	Progress Payment
540	\$875,392	5.00%	Progress Payment
570	\$875,392	5.00%	Progress Payment
600	\$525,235	3.00%	Progress Payment
630	\$525,235	3.00%	Progress Payment
660	\$525,235	3.00%	Commissioning / Progress Payment
690	\$525,235	3.00%	Commissioning / Progress Payment
720	\$875,392	5.00%	Final Completion
	<b>\$17,507,842.00</b>	<b>100.00%</b>	

Note: Actual invoice will be based on progress for % of actual work completed. Except for initial invoice, amounts may differ +/- from the values listed herein.

A Schedule of Values (SOV) will be provided to City after Contract execution. Invoices shall be in the AIA form and contain the information requested by City and shall be subject to approval by City prior to payment.

**On-Going Annual M&V Fee Schedule**

Year	Year	Annual M&V Fee
1	1	\$134,700
2	2	\$138,900
3	3	\$143,200
4	4	\$147,600
5	5	\$152,100
6	6 (if extension option exercised)	\$156,800
7	7 (if extension option exercised)	\$161,700
8	8 (if extension option exercised)	\$166,700
9	9 (if extension option exercised)	\$171,900
10	10 (if extension option exercised)	\$177,200

**ATTACHMENT F  
STANDARDS OF OCCUPANCY & CONTROL**

The following standards are a guideline used to evaluate the energy conservation measures in this program. It is understood that existing and installed equipment may not allow for exact times and temperatures to be met, but every effort will be made to meet the below standards as closely as the equipment allows.

Building / Area Served	Existing			Proposed		
	Occupied HVAC Schedule	Heating Occupied/ Unoccupied Temperature	Cooling Occupied / Unoccupied Temperature	Occupied HVAC Schedule	Heating Occupied/ Unoccupied Temperatures	Cooling Occupied/ Unoccupied Temperatures
Airport	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	72°	74°	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	72°	74°
Airport Fire Station (MZ-1)	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 07:00 - 18:00 Sat-Sun: Off	68°/55°	74°/85°
Airport Fire Station (MZ-2)	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°
City Hall	Mon-Fri: 07:00 - 19:00 Sat/Sun: Off	68°	74°	Mon-Fri: 07:00 - 19:00 Sat/Sun: Off	68°/55°	74°/85°
City Hall (MZ-2)	Wed: 17:00 - 24:00 All other times: Off	68°	74°	Wed: 17:00 - 24:00 All other times: Off	68°/55°	74°/90°
Leisure Center	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 06:00 - 22:00 Sat/Sun: 08:00 - 20:00	68°/55°	74°/90°
Library	Mon-Sat: 07:00 - 22:00 Sun: Off	68°	74°	Mon-Sat: 07:00 - 22:00 Sun: Off	68°/55°	74°/85°
Pavilion	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 06:00 - 22:00 Sat/Sun: 08:00 - 20:00	68°/55°	74°/90°
Police Department (AH-1 & AH-4)	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 07:00 - 19:00 Sat/Sun: Off	68°/55°	74°/85°
Police Department (AH-2 & AH-3)	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°
Police Training	Mon-Fri: 24 hrs/day Sat-Sun: 24 hrs/day	68°	74°	Mon-Fri: 07:00 - 18:00 Sat/Sun: Off	68°/55°	74°/85°

**General Notes:**

1. Airport Fire Station MZ-2 Serves front reception area and surrounding offices
2. City Hall MZ-2 serves Council Chambers
3. Police Department AH-1 & AH-4 serve basement, storage, conference room, and large lobby area on North/East portion of building.
4. City will cooperate with Chevron ES to further trim space conditioning times in order to increase Energy Unit Savings.

**Municipal Plant Assumptions on Operation & Control:**

- ❑ Municipal Cogeneration Plant will generate electricity via natural gas engine generator, chilled water via double effect absorption chiller via reclaimed heat from the engine generator and with supplemental firing of a natural gas burner section and heating hot water through the absorption chiller via heat reclaimed from the engine generator with supplemental firing of a natural gas burner section.
- ❑ Engine Generator will be operated continuously 24 hours per day 7 days per week. Annual maintenance will occur during the month of February and will not exceed one month.
- ❑ Chevron ES will update the detailed economic model for the cogeneration plant which will be based on measured equipment performance. This model will be used to evaluate the economic feasibility of operating the cogeneration plant on a month by month basis using current input data. In the event that the model demonstrates that it has become uneconomic to operate the cogeneration plant; Chevron ES will recommend that the cogeneration plant be idled or throttled to minimize a negative economic impact to City. Such situations will be considered a Change in Energy Use Factor as described in Section 22.
- ❑ Post retrofit, for the buildings connected to the heating and cooling loops (except County Admin Building) from the Municipal Cogeneration Plant, all of the building heating and cooling requirements will be supplied by the Municipal Central Plant with the absorber being the lead equipment for both heating and cooling. Should the heating load requirements exceed the output of the absorber then the Municipal Plant boilers will operate. Should the cooling load exceed the output of the absorber in combination with the thermal energy storage system, then the Airport chiller(s) will be enabled to assist in meeting cooling loads on the loop.
- ❑ Engine generator has a turndown Ratio of 50% and will operate to follow the electrical load.
- ❑ Absorber:
  - The absorber has a max capacity of 450tons however only up to 290tons may be reclaimed from the engine exhaust heat the rest is supplemented by natural gas.
  - If cooling load is less than 90 tons, the absorption chiller will be operated in heating mode only, no cooling. (Cooling load includes supplementing the TES charge capacity)
  - If the cooling load is greater than 90 tons the absorber will operate to satisfy the cooling first and any additional capacity will go towards offsetting heating load.
  - If the cooling load exceeds the total reclaim capacity (291 tons) then the chiller shall operate with supplemental firing using natural gas.
  - The thermal energy system (TES) shall call for charge upon drop in stored capacity below 1850 tons-hours or upon rise of the TES chilled water supply temperature above 41 degF (+/- 2 deg as dependent to satisfy site load).

**ATTACHMENT G**  
**SAVINGS MEASUREMENT & VERIFICATION PLAN**

The following details the methodologies and calculations to be used in determining the Energy Unit Savings under this Contract.

**Table H-1 ECM M&V Option Matrix**

ECM	Facility	M&V Method	Annual Electric Savings (kWh)	Electric Rate (\$)	Annual Gas Savings (therms)	Gas Rate (\$)	Annual Water Savings (ccf)	Water Rate (\$)
L1: Lighting Upgrades - Interior & Exterior	City-Wide	Option A	805,302	0.1500	-	-	-	-
L1-A: Lighting Upgrades - Interior & Exterior	Municipal	Option C	1,251,068	0.1129	-	-	-	-
L1-B: Lighting Upgrades - Interior & Exterior	Sunrise	Option A	254,972	0.0897	-	-	-	-
M1-A: Central Plant Cogeneration Upgrade	Municipal - Import	Option C	2,950,323	0.1129	-(86,337)	0.5802	-	-
	Municipal - Export	Option C	-(140,642)	0.0403	n/a	n/a	-	-
M2-A: Energy Management Control System	Municipal	Option C	475,968	0.1129	-	-	-	-
M1-B: Central Plant Upgrade	Sunrise	Stipulated	-(2,128,856)	0.0897	344,081	0.6552	-	-
M2-B: Energy Management Control System	Sunrise	Stipulated	168,951	0.0897	-	-	-	-
W1: Irrigation / Water Management	City-Wide	Stipulated	-	-	-	-	144,604	0.8383

1. M&V Option A: This option allows for the energy savings to be predicted, measured, and agreed upon between City and Chevron ES. One time measurements and stipulated parameters are used to quantify savings that are stipulated for the term of the Contract.

a. Chevron ES will supply a one-time report to City detailing the measurements and calculation of savings. If the calculated savings fall short of those expected, Chevron ES will have the opportunity to remedy the short fall and re-measure and calculate the results. Such work will be done at Chevron ES's expense and shall not be unreasonably denied by City, as long as such work does not interfere with City's use of the Facilities. These calculated savings will be defined as Energy Unit Savings and will be agreed to occur each Measurement Period. During the Construction Period, the Energy Unit Savings will be calculated by adding the savings measured for the whole months between Substantial Completion or Beneficial Use of the ECM and the M&V Commencement Date.

b. Scope of Work

The Energy Savings generated from the installation of the lighting ECMs shall be measured and verified using IPMVP Option A. These savings shall be measured and calculated by the following method:

1. The reduction in units of electric demand (kW) from the installation of the lighting ECMs is to be measured directly using a calibrated true-RMS watt meter or stipulated based on the following parameters. Existing and to-be-installed fixture types shall be grouped project-wide, based on the type of fixture (i.e. type of lamp, number of lamps and ballast type) and the assumed wattage. All

lamps without ballasts (incandescent), along with exit signs, shall be stipulated at their manufacturer's rated wattage. Groups of fixtures with ballasts shall be measured in the following manner.

- a. For groups with 1000 or more fixtures, eight (8) or more instantaneous measurements of single fixtures or circuits containing only one type of fixture shall be taken. The average wattage per fixture shall be calculated and be the measured wattage for that fixture type.
- b. For groups with 500 or more fixtures but fewer than 1000, six (6) or more instantaneous measurements of single fixtures or circuits containing only one type of fixture shall be taken. The average wattage per fixture shall be calculated and be the measured wattage for that fixture type.
- c. For groups with 100 or more fixtures but fewer than 500, four (4) or more instantaneous measurements of single fixtures or circuits containing only one type of fixture shall be taken. The average wattage per fixture shall be calculated and be the measured wattage for that fixture type.
- d. For groups with 99 or fewer fixtures or where measurements are not physically possible, the measured wattage shall be stipulated for that group to equal the wattage defined in *Tables H-2 and H-3*, showing the existing fixture codes, quantities, and manufacturer's rated wattage for these type fixtures.

**Table H-2 Existing Interior/Exterior Lighting Fixture  
Quantities (Pre M&V)**

Type	Watts	Qty	# to M&V
1L 6W EXIT	6	3	0
2L 7W CFL EXIT	14	2	0
1L 23W CFL-S EXIT	23	6	0
1L 23W Incand.	23	28	0
1L 25W Incand.	25	1	0
1L 26W Incand.	26	1	0
1L 4' 32W T8	29	16	0
1L 30W Incand.	31	3	0
1L 32W T8	31	3	0
1L 4' 34W T12	32	7	0
1L 40W Incand.	40	27	0
2L 20W Incand. EXIT	40	5	0
1L 34W T12	43	175	4
1L 45W Incand.	45	100	0
1L 3' 30W T12	46	14	0
1L 50W Incand.	50	442	0
2L 2' 20W T12	50	2	0
1L 56W Incand.	56	1	0
2L 4' 32W T8	58	545	6
1L 60W Incand.	60	124	0
1L 65W Incand.	65	914	0
1L 50W MH	72	5	0
2L 2' 34W T12 U	72	188	4
2L 4' 34W T12	72	908	8
1L 75W Incand.	75	167	0
3L 2' 31W T8 U	87	8	0
3L 4' 32W T8	87	116	4
1L 90W Incand.	90	2	0
1L 70W HPS	95	16	0
1L 100W HPS	100	6	0
1L 100W Incand.	100	48	0
2L 6' 55W T12	108	2	0
3L 4' 34W T12	108	35	0
3L 4' 40W T12	108	8	0
4L 4' 32W T8	112	115	4
4L 4' 32W T8	116	50	0
2L 60W Incand.	120	10	0
2L 60W Incand.	123	22	0
2L 8' 75W T12	123	15	0

**Table H-2 Existing Interior/Exterior Lighting Fixture  
Quantities (Pre M&V)**

Type	Watts	Qty	# to M&V
1L 100W HPS	128	60	0
2L 65W Incand.	130	141	0
2L 60W Incand.	138	8	0
4L 4' 34W T12	144	436	6
1L 150W HPS	150	123	4
1L 150W Incand.	150	8	0
2L 75W Incand.	150	8	0
4L 40W Incand.	172	4	0
6L 4' 32W T8	174	3	0
3L 60W Incand.	180	6	0
1L 150W MH	190	129	4
2L 70W HPS	190	8	0
1L 175W MH	215	66	0
6L 34W T12	216	16	0
4L 60W Incand.	240	5	0
4L 8' 60W T12	246	16	0
7L 40W Incand.	280	4	0
1L 250W HPS	295	58	0
1L 300W Incand.	300	18	0
2L 150W Incand.	300	6	0
4L 75W Incand.	300	2	0
8L 42W CFL	336	4	0
2L 175W MH	430	17	0
1L 400W MH	458	416	6
<b>Fixtures not scheduled for a retrofit.</b>			
NR - Skylight/Solar Tube	0	3	0
NR - Self-Luminous EXIT	0	38	0
NR - 1L 3W LED EXIT	3	186	0
NR - 1L 13W CFL	13	16	0
NR - 1L 15W CFL	15	18	0
NR - 1L 16W CFL	16	10	0
NR - 1L 2' 17W T8	16	3	0
NR - 1L 18W CFL	18	99	0
NR - 1L 18W Incand	18	30	0
NR - 2L 10W CFL	20	6	0
NR - 1L 23W CFL-S	23	65	0
NR - 1L 3' 25W T8	25	47	0
NR - 1L 26W CFL	26	130	0
NR - 2L 13W CFL	26	5	0
NR - 1L 2' 24W T5	27	6	0
NR - 2L 15W CFL	30	5	0
NR - 2L 17W T8	32	4	0
NR - 2L 18W CFL	36	37	0
NR - 1L 40W CFL	40	3	0
NR - 1L 42W CFL-S	48	3	0
NR - 1L 50W Incand.	50	70	0
NR - 1L 50W LED	50	3	0
NR - 1L 55W CFL	55	95	0
NR - 1L 65W Incand.	65	65	0
NR - 2L 42W CFL	84	210	0
NR - 1L 90W Incand.	90	1	0
NR - 4L 23W CFL-S	92	1	0
NR - 1L 70W MH	95	24	0
NR - 1L 70W MV	95	9	0
NR - 1L 100W HPS	100	3	0
NR - 6L 15W CFL	102	11	0
NR - 2L 4' 54W T5	117	12	0



**Table H-2 Existing Interior/Exterior Lighting Fixture  
Quantities (Pre M&V)**

Type	Watts	Qty	# to M&V
NR - 2L 60W Incand.	120	2	0
NR - 1L 100W HPS	128	26	0
NR - 1L 150W HPS	150	7	0
NR - 2L 70W HPS	190	156	0
NR - 1L 150W HPS	190	6	0
NR - 8L 26W CFL	208	4	0
NR - 4L 4' 54W T5	234	8	0
NR - 1L 250W HPS	295	69	0
NR - 8L 42W CFL	336	166	0
NR - 2L 200W Incand.	400	1	0
NR - 1L 400W HPS	465	17	0
NR - 1L 500W Incand.	500	13	0
NR - 1L 500W Incand.	500	4	0
NR - 2L 400W HPS	930	2	0
NR - 2L 500W Incand.	1000	1	0
	<b>Total Qty</b>	<b>7402</b>	<b>50</b>
	<b>Total Qty to Retrofit</b>	<b>5976</b>	
	<b>Total Qty to M&amp;V</b>	<b>3151</b>	

NR = No Retrofit

**Table H-3 Proposed Interior/Exterior Lighting Fixture  
Quantities (Post M&V)**

Type	Watts	Qty	# to M&V
1L 3W LED	3	560	0
1L 3W LED EXIT	3	14	0
1L 5W LED	5	134	0
1L 6W LED	6	2	0
1L 9W CFL-S	9	603	0
1L 13W CFL-S	13	83	0
1L 14W CFL-S	14	22	0
1L 16W CFL-S	16	338	0
1L 18W CFL-S	18	122	0
1L 19W CFL-S	19	82	0
1L 4' 28W T8 Low	22	176	4
1L 23W CFL-S	23	58	0
1L 3' 25W T8	23	20	0
2L 13W CFL-S	26	10	0
2L 16W CFL-S	32	5	0
2L 2' 17W T8	32	220	4
2L 18W CFL-S	36	1	0
4L 9W CFL-S	36	4	0
1L 37W LED	37	30	0
2L 19W CFL-S	38	8	0
3L 13W CFL-S	39	6	0
2L 4' 28W T8 Low	44	1568	8
2L 23W CFL-S	46	6	0
1L 47W LED	47	60	0
2L 4' 28W T8	48	441	6
4L 13W CFL-S	52	1	0
4L 14W CFL-S	56	4	0
7L 9W CFL-S	63	4	0
3L 4' 28W T8 Low	66	42	0
1L 68W CFL-S	68	18	0
4L 19W CFL-S	76	2	0
1L 77W LED	77	255	0

**Table H-3 Proposed Interior/Exterior Lighting Fixture  
Quantities (Post M&V)**

Type	Watts	Qty	# to M&V
4L 4' 28W T8 Low	84	202	4
4L 4' 28W	96	43	0
1L 100W MH	128	63	0
2L 77W LED	154	17	0
1L 175W HPS	215	58	0
4L 4' 54W T5	234	4	0
6L 4' 54W T5	351	280	4
1L 320W MH	357	136	4
<b>Fixtures not scheduled for a retrofit.</b>			
NR - Skylight/Solar Tube	0	3	0
NR - Self-Luminous EXIT	0	38	0
NR - 1L 3W LED EXIT	3	186	0
NR - 1L 13W CFL	13	16	0
NR - 1L 15W CFL	15	18	0
NR - 1L 16W CFL	16	10	0
NR - 1L 2' 17W T8	16	3	0
NR - 1L 18W CFL	18	99	0
NR - 1L 18W Incand	18	30	0
NR - 2L 10W CFL	20	6	0
NR - 1L 23W CFL-S	23	65	0
NR - 1L 3' 25W T8	25	47	0
NR - 1L 26W CFL	26	130	0
NR - 2L 13W CFL	26	5	0
NR - 1L 2' 24W T5	27	6	0
NR - 2L 15W CFL	30	5	0
NR - 2L 17W T8	32	4	0
NR - 2L 18W CFL	36	37	0
NR - 1L 40W CFL	40	3	0
NR - 1L 42W CFL-S	48	3	0
NR - 1L 50W Incand.	50	70	0
NR - 1L 50W LED	50	3	0
NR - 1L 55W CFL	55	95	0
NR - 1L 65W Incand.	65	65	0
NR - 2L 42W CFL	84	210	0
NR - 1L 90W Incand.	90	1	0
NR - 4L 23W CFL-S	92	1	0
NR - 1L 70W MH	95	24	0
NR - 1L 70W MV	95	9	0
NR - 1L 100W HPS	100	3	0
NR - 6L 15W CFL	102	11	0
NR - 2L 4' 54W T5	117	12	0
NR - 2L 60W Incand.	120	2	0
NR - 1L 100W HPS	128	26	0
NR - 1L 150W HPS	150	7	0
NR - 2L 70W HPS	190	156	0
NR - 1L 150W HPS	190	6	0
NR - 8L 26W CFL	208	4	0
NR - 4L 4' 54W T5	234	8	0
NR - 1L 250W HPS	295	69	0
NR - 8L 42W CFL	336	166	0
NR - 2L 200W Incand.	400	1	0
NR - 1L 400W HPS	465	17	0
NR - 1L 500W Incand.	500	13	0
NR - 1L 500W Incand.	500	4	0
NR - 2L 400W HPS	930	2	0
NR - 2L 500W Incand.	1000	1	0
<b>Total Qty</b>		<b>7402</b>	<b>34</b>

**Table H-3 Proposed Interior/Exterior Lighting Fixture  
Quantities (Post M&V)**

Type	Watts	Qty	# to M&V
Total Qty to Retrofit		5702	
Total Qty to M&V		3023	

NR = No Retrofit

- The baseline energy consumption for each room will be the pre-retrofit measured (or stipulated) average fixture wattage multiplied by the Annual Hours for the area type. Post-retrofit energy consumption for each room will be the measured post-retrofit average fixture wattage multiplied by either the Annual Hours or the Annual Hours With Occupancy Sensor for the area type depending on whether or not an occupancy sensor was installed as part of the Scope of Work.
- The annual unit consumption savings (kWh) for each room will be calculated by subtracting the post-retrofit annual energy consumption from the baseline annual energy consumption. Annual Hours and Annual Hours with Occupancy Sensor are stipulated in *Attachment J – Lighting Survey* by Building and summarized below in Table H-4.
- The Energy Unit Savings (kWh) shall be the sum of the calculated annual unit consumption savings for each retrofit.

**Table H-4: City of Palm Springs - City-Wide Lighting  
Hours of Operation**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
AEROBICS	2,500	2,000
ALL LEVELS - PARKING	7,000	N/A
ASSEMBLY ROOM	1,500	1,200
ATRIUM	5,000	N/A
AUDITORIUM	2,500	2,000
BASEMENT - PARKING	7,000	N/A
BASEMENT - STORAGE INACTIVE	500	400
BEDROOM - MEN	1,500	1,200
BEDROOM - WMN	1,500	1,200
BETWEEN CITY HALL & ANNEX	4,000	N/A
BLDG PERIMETER	4,000	N/A
BLDG PERIMETER - SOFFIT	4,000	N/A
BOXING RING	2,000	1,600
Break Room	4,000	3,200
Break Room	2,000	1,600
CASHIER	3,500	2,800
CLASSROOM	2,250	1,800
CLASSROOM - COMPUTER LAB	3,000	2,400
COFFEE SHOP	2,500	2,000
CONCESSIONS	1,000	800
Concourse - Airport	8,760	N/A
Conference	2,500	2,000
CONFERENCE - CITY COUNCIL	1,500	1,200
CONFERENCE ROOM	2,000	1,600
COURTYARD	4,000	3,200
DINING AREA	2,500	2,000
Dining Room	2,000	1,600

**Table H-4: Continued**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
NORTH ENTRANCE	4,000	N/A
NORTH WALL	4,000	N/A
OFFICE	1,500	1,200
Office - 24/7	8,760	7,008
Office - Airport	4,500	3,600
OFFICE - COACHES	1,500	1,200
OFFICE - INACTIVE	750	600
OFFICE - INTEROGATION	1,000	800
Office - IT	3,500	2,800
OFFICE - LAB	2,500	2,000
Office - Library	2,250	1,800
OFFICE - OPEN	7,000	5,600
Office - Restaurant	7,000	5,600
OFFICE - RESTROOM	1,000	800
Office - Retail	7,000	5,600
Office - Security	2,250	1,800
OFFICE - SERVER	3,500	2,800
OFFICE - SERVER ROOM	3,500	2,800
OFFICE - STORAGE	500	400
OFFICE - TICKETS	750	600
Office - Work Room	7,000	5,600
OPEN AREA	3,500	N/A
OPEN AREA - INACTIVE	1,000	N/A
PARKING LOT	4,000	N/A
PATIO	4,000	N/A
PORCH	4,000	N/A
PRESS BOX	1,000	N/A

**Table H-4: City of Palm Springs - City-Wide Lighting Hours of Operation**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
Dorm Room	2,500	2,000
Dormitory	2,500	2,000
DRESSING ROOM	1,500	1,200
EAST WALL	4,000	N/A
ELEVATOR	8,760	N/A
ELEVATOR - NORTH	8,760	N/A
ENTRANCE	3,500	N/A
ENTRANCE CANOPY	4,000	N/A
EXHIBIT HALL	1,000	N/A
Exterior	4,000	N/A
FIRING RANGE BOOTH	1,000	800
FIRING RANGE ENTRANCE	1,500	1,200
FITNESS ROOM	7,000	5,600
GALLERY - DISPLAY ROOM	1,000	800
GALLERY - ENTRANCE	1,000	N/A
GARAGE	4,500	N/A
Garage Bay	2,500	N/A
GYM - ENTRANCE	3,500	N/A
GYMNASIUM	3,500	2,800
HALLWAY	7,000	N/A
HALLWAY - ALCOVE	7,000	N/A
HOLDING CELL	8,760	N/A
HOLDING CELL - BOOKING	8,760	N/A
Kitchen	7,000	5,600
KITCHEN	2,000	1,600
KITCHEN - INACTIVE	2,000	1,600
Library	3,000	2,400
Living Room	2,000	1,600
Loading Dock	2,000	N/A
LOBBY	7,000	N/A
Locked	N/A	N/A
Locker Room	2,000	1,600
LOCKER ROOM - MEN	1,000	800
Locker Room - Showers	2,000	1,600
LOCKER ROOM - STADIUM	500	400
LOCKER ROOM - UMPIRES	500	400
LOCKER ROOM - WMN	1,000	800
LOCKER ROOM SHOWERS - MEN	1,500	1,200
Lounge	4,000	3,200
LOUNGE - BREAKROOM	1,500	1,200

**Table H-4: Continued**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
PRO SHOP	3,500	N/A
Restaurant	7,000	N/A
Restroom	2,500	2,000
RESTROOM - BOYS	2,500	2,000
RESTROOM - GIRLS	2,500	2,000
RESTROOM - INACTIVE	750	600
Restroom - Lockers	7,000	5,600
RESTROOM - MEN	8,760	7,008
RESTROOM - MENS	4,500	3,600
Restroom - Shower	3,500	2,800
RESTROOM - SINGLE	1,500	1,200
RESTROOM - UMPIRES	500	400
RESTROOM - WMN	8,760	7,008
Retail Shop	7,000	N/A
SHELTER	3,500	N/A
Shop	2,000	N/A
SHOP - MAINTENANCE	3,500	N/A
SIGN	8,760	N/A
SOFFIT	4,000	N/A
SOUTH - TOP LEVEL	4,000	N/A
SOUTH WALL	4,000	N/A
SPOT LIGHT MOUNTED ON STREET LIGHT	3,000	N/A
STAGE	1,000	N/A
STAIRS	7,000	N/A
Stairway	8,760	N/A
STORAGE	1,500	1,200
STORAGE - ACTIVE	2,500	2,000
STORAGE - GOLF CART	3,000	2,400
STORAGE - INACTIVE	1,500	1,200
STORAGE - OPEN	2,000	1,600
STREET LIGHT WITH 2 SPOT LIGHTS	4,000	N/A
STREET LIGHT WITH 3 SPOT LIGHTS	4,000	N/A
STREET LIGHT WITH 4 SPOT LIGHTS	4,000	N/A
STREET LIGHT WITH OUT SPOT LIGHT	4,000	N/A
TREE LIGHT WITH 1 LAMP	3,000	N/A
TREE LIGHT WITH 2 LAMPS	3,000	N/A
Vestibule	8,760	N/A
Waiting Room	2,000	N/A
WALKWAY	4,000	N/A
WALKWAYS	4,000	N/A

**Table H-4: City of Palm Springs - City-Wide Lighting Hours of Operation**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
MARTIAL ARTS	1,500	1,200
MECHANICAL/ELECTRICAL	1,500	1,200
MULTI-PURPOSE	3,000	2,400
Multipurpose Room	2,500	2,000

**Table H-4: Continued**

Area Type	Annual Hours	Annual Hours with Occupancy Sensor
WEIGHT ROOM	1,500	1,200
WEST WALL	4,000	N/A
WORK ROOM	2,000	1,600
Work Shop	2,000	1,600

5. Post-retrofit measurements will be performed one time, after the retrofit is complete. Post-retrofit ECM performance is assumed to be consistent for the duration of the Energy Savings Term.
  
2. M&V Option C: Option C verification techniques calculate savings by comparing the post-retrofit overall energy use in a building or facility with pre-retrofit energy Baselines. This methodology captures all of the savings under a particular meter, and requires ongoing monitoring of the facilities.
  - a. The monthly Energy Unit Savings are calculated by subtracting the monthly post-retrofit consumption from the corresponding monthly Baseline consumption, and presented in ongoing reports. During the Construction Period, Option C Energy Unit Savings will be calculated each month.
  - b. Scope of Work Calculations

Except for where Projected Savings are to be utilized as detailed in this contract, for each Facility's Baseline, Energy Unit Savings will be calculated by subtracting the post implementation current month's usage from the Baseline usage for that month. The specific equations for calculating the Energy Unit Savings are as follows (refer to Meter Matchup Table):

$$\text{Baseline Usage} - \text{Current Usage} = \text{Energy Unit Savings}$$

Current Usage = Total units (i.e. kWh, kW, ccf, therms, gals, etc.) from the automated metering system (checked annually against utility bills).

Baseline Usage: The pre-Construction Period usage, as detailed below, revised from time-to-time as detailed in this Contract.

3. The Irrigation/Water Management stipulated savings are not fully substantiated with engineering calculations as of the date hereof. While a 30% savings estimate is reasonable given the present state and operation of the system, some validation of the savings will be provided in the form of short term billing analysis for the 12 meters with the highest estimated water savings, as those meters represent approximately 50% of the projected water savings. The stipulated savings will not be adjusted to account for the results of this validation.

Meter Matchup Table						
Baseline			Post-Retrofit			Comments
Meter Name	Units	Loads Served	Meter Name	Units	Loads Served	
Municipal Plant SCE Import Meter	kWh	All electric loads in plant, all loads in Airport, Airport Fire Station, Police Department, Police Department Training, City Hall, City Yard and County Admin <sup>1</sup> buildings.	Municipal Plant Automated Import Meter	kWh	All electric loads in plant, all loads in Airport, Airport Fire Station, Police Department, Police Department Training, City Hall, City Yard and County Admin <sup>1</sup> buildings.	
Municipal Plant SCE Export Meter	kWh	Generation in excess of consumption.	Municipal Plant Automated Export Meter	kWh	Generation in excess of consumption.	Post-retrofit export expected to be nearly zero.
Municipal Plant Main Gas Meter and Building Gas Meters	Therms	Engine and Absorber, heating equipment serving heating loads in Airport, Airport Fire Station, Police Department, City Hall, and building gas meters.	Municipal Plant Automated Cogeneration Meter	CCF	Cogeneration Unit	CCF will be converted to Therms using monthly energy content values published by gas utility.
			Municipal Plant Automated Absorber/Boiler Meter	CCF	Thermax Chiller, Hot Water Boilers.	CCF will be converted to Therms using monthly energy content values published by gas utility.
			Airport	CCF	Domestic Hot Water	CCF converted to Therms.
			Airport Fire	CCF	Domestic Hot Water	CCF converted to Therms.
			City Hall	CCF	Domestic Hot Water	CCF converted to Therms.
			Police Department	CCF	Domestic Hot Water	CCF converted to Therms.

1. In the baseline energy data the kWh and gas consumption for the County Admin Building is zero. The building was unoccupied and unconditioned during the baseline period.
2. In the baseline energy data the County Admin Building hot water and chilled water was disconnected ("valved-off") from the Municipal Central Plant. The County Admin Building has a dedicated heating and cooling system at the building; this will be used for future operation.

c. Baselines and Projected Savings:

Month	SCE Electric Import Baseline (kWh)	SCE Electric Import Projected Savings (kWh)	SCE Electric Export Baseline (kWh)	SCE Electric Export Projected Savings (kWh)	Natural Gas Usage Baseline (Therms) <sup>1</sup>	Natural Gas Usage Projected Savings (Therms)
Jan	332,256	304,103	15,672	14,227	75,709	8,112
Feb	777,048	94,177	0	0	10,304	-2,510
Mar	672,168	612,093	336	159	38,426	-25,704
Apr	821,824	753,042	0	-116	6,535	-51,369
May	885,728	813,335	0	-324	4,554	-57,004
Jun	791,144	721,557	0	0	28,680	-38,380
Jul	1,056,576	933,302	0	0	6,747	-69,510
Aug	183,072	126,818	8,048	7,391	107,809	22,877
Sep	183,200	106,761	11,296	10,374	103,999	23,545
Oct	156,720	107,857	23,032	21,153	100,184	23,301
Nov	112,280	90,904	0	-523	99,698	31,066
Dec	14,688	13,411	96,888	88,300	115,845	49,239
<b>Totals</b>	<b>5,986,704</b>	<b>4,677,359</b>	<b>155,272</b>	<b>140,642</b>	<b>698,490</b>	<b>-86,337</b>

4. Stipulated Savings: When the cost, complexity, or uncertainty of savings measurements are high as compared to the projected savings, City and Chevron ES may agree to stipulate the projected Energy Unit Savings as being achieved, without any measurements being taken.

- a. For the Stipulated Option, the Energy Unit Savings presented as stipulated in Table H-1 above will be agreed to occur each Measurement Period. During the Construction Period, the Energy Unit Savings will be calculated by adding the savings projected for the whole months between Substantial Completion or Beneficial Use of the EC Measure and the M&V Commencement Date.

5. Base Energy Rates:

The Base Energy Rates are shown in *Table H-1, ECM M&V Option Matrix*.

The Base Energy Rates listed above in *Table H-1* are to be increased each year on a cumulative basis by four percent (4%) beginning on the first anniversary of the M&V Commencement Date and continuing on the first day of each Measurement Year thereafter.

6. Energy Resource Manager

The Energy Resource Manager (ERM) will work in conjunction with Chevron ES Energy Management Group to ensure that the buildings are operating properly and that energy savings are realized. The ERM will focus on ensuring that equipment is turned off when not needed, and will work with City to investigate and resolve heating and cooling problems.

In addition, the ERM will have the time, opportunity, and in-depth knowledge of the buildings and systems that will facilitate ongoing recommendation for energy savings opportunities.

The ERM for this project will have the following duties and responsibilities:

Municipal Cogeneration and Sunrise Central Plants

- Review, implement, and adjust control strategies of the plant on a monthly basis.
- On a weekly basis, monitor and analyze the performance of the equipment including: cogeneration engines, chillers, and other balance of plant equipment for optimization of operating sequences for energy savings.
- Assist City in coordinating and managing system maintenance, storage of spare parts, and proper site safety procedures and programs.
- Troubleshoot and assess unplanned outages.
- Manage the maintenance contract at Municipal Central Plant to ensure proper and timely maintenance is being performed.

Energy Management System

- Schedule all applicable city buildings on a weekly basis; review temperatures settings, digital inputs, weekly schedules, holiday and daylight savings time changes.
- Provide response and support for alarms that are reported by the system.
- Assist City with system re-Commissioning, software patches, software version upgrades, and workstation support on an annual basis.

Water Irrigation Control System

- Spot-check, review, implement, and adjust control strategies of the irrigation control on a monthly basis.
- Notify City of any alarms or manual overrides.

Chevron ES ERM will be dedicated to City 20 hours per week. Some hours may not be physically onsite.

**ATTACHMENT H  
LIST OF INCENTIVES**

1. Southern California Edison, Energy Efficiency Incentive Express Solution & Desert Energy Partnership Program
  - a. HVAC
  - b. Lighting
2. Southern California Gas Company Energy Efficiency Calculated Incentive Program "EECIP"
  - a. If applicable for boiler
3. Self-Generation Incentive Program
  - a. If applicable for Municipal Cogeneration Plant



**ATTACHMENT I**  
**MONITORING INSTALLATION SCOPE OF WORK**

Overview of DAS Network Installation & Equipment Requirements

Chevron ES will provide a revenue-grade billing, data acquisition system (DAS). This will provide readily available access to various internal and external information collected on the Municipal Plant .

***Chevron ES DAS Monitoring Installation:***

- Supply and install hardware specific to the DAS system.
- Supply and install, terminate, label, and test all Data Point of Connection (DPOC) communication cabling from each DAS node to the predetermined and respective DPOC(s); in accordance with City's specifications.
- Test and verify City/Facility network connectivity.
  - a. TCP/IP internal addressing and verification
- Supply, install, and configure a Modbus based digital Net Energy Meter (NEM).
- Connect the data portion of digital NEM(s) to their respective DPOC(s).
- Supply, install, and configure a Modbus based digital Net Generation Output Meter (NGOM).
- Perform the physical installation, labeling, testing and certification testing of each data circuit from the digital NEM(s) to their respective DPOC(s).
- Provide basic system training to designated City/Facility maintenance staff.

***City/Facility Responsibilities:***

- Provide required external static IP addresses, subnet mask default gateway, and DNS-information to allow remote access to DAS panel(s).
- Provide network connectivity to each DAS panel location.
- Provide Chevron ES four (4) business days prior notification of any IP addressing scheme changes or changes made to restrict network access to ensure maximum uptime is maintained.

**ATTACHMENT J  
LIGHTING SURVEY**

(See Separate Document)