



CITY OF MILPITAS AGENDA REPORT (AR)

Item Title:	Conduct a Public Hearing and Approve of the List of Energy and Water Conservation Measures and Consider Adoption of a Resolution Authorizing the City Manager to Execute an Amendment to the Energy Services Agreement with Engie Services U.S., Inc. for the Construction of Energy and Water Conservation Measures in the Amount of \$33,983,429.
Category:	Public Hearings-Community Services and Sustainable Infrastructure
Meeting Date:	10/6/2020
Staff Contact:	Tony Ndah, Public Works Director, 408-586-2602
<u>Recommendation:</u>	<ol style="list-style-type: none"> 1. Open the public hearing, receive any comments and move to close the public hearing. 2. Approve list of Energy and Water Conservation Measures developed for the City. 3. Find that the implementation of the proposed projects is categorically exempt under California Environmental Quality Act Guideline Section 15301. 4. Adopt a resolution authorizing the City Manager to execute a contract with ENGIE Services U.S. for energy and water conservation measures identified in Bundles A, B, and C.1 in the amount of \$33,983,429, subject to the City obtaining the necessary financing and appropriation of funds. 5. Authorize the City Manager to execute one or more amendments to the Energy Service Agreement to increase the maximum compensation by an aggregate amount not to exceed \$3.3 million. 6. Direct the City Manager to return to City Council for authorization to sell approximately \$11.3 million of General Fund Lease Revenue Bonds needed to finance the implementation of Bundles B and C.1.

Executive Summary

The City paid over \$2,600,000 in electric expenses, \$629,000 in water expenses, and \$190,000 in gas utility expenses in 2018-2019, across all City facilities and infrastructure. In an effort to save money by reducing the City's energy and water usage, as well as improve energy resiliency at critical City facilities, the City contracted with Engie Services U.S., Inc. (Engie) to perform a Citywide energy and water audit to develop measures for cost-effective energy and water savings in City operations and infrastructure.

The staff recommended scope of work includes installation of automated customer water meters, automated controls at pump stations, and interior plumbing upgrades at City facilities. The recommended scope also includes retrofit of streetlights with LED fixtures; exterior and interior lighting efficiency upgrades at numerous City parks, sports fields, and facilities; and the installation of solar and battery backup systems at critical City facilities to improve the energy resiliency of these facilities during unplanned power outages.

The City entered into an agreement with Fieldman, Rolapp & Associates, Inc. to provide a review of the financial projections for the ECMs, and to develop a finance plan to fund the projects. The cost of these energy conservation measures (ECMs) is estimated to be \$33,983,429, as described below; however, there is approximately \$23 million in water bonds and other capital funds that would be used to pay for a portion of the recommended scope of work, and projects under the scope of work qualify for rebates and incentives of up to \$1.98 million, which would be paid to the City over a 7 year period. Staff is seeking Council authorization to

sell approximately \$11.3 million of General Fund Lease Revenue Bonds to finance the implementation of the remainder of the projects in the recommended scope of work.

Staff estimates that the City will realize annual energy and water savings of approximately \$1.6 million during the 20-year financing period of the measures. Total net savings over the lifetime of the measures (which range from 10-30 years depending on the measure) is estimated at almost \$31 million.

Background:

On February 4, 2020, staff presented a list of preliminary energy and water conservation measures to the City Council, for input on measures that would generate energy and water savings for the City. Council input during the meeting included implementing smart city solutions such as automated water meters and smart interior and exterior lighting, sustainable energy generation, and energy storage solutions for resiliency to ensure that there is a reliable, regular supply of energy and contingency measures in place in the event of a power failure.

On September 15, 2020 the City Council approved an Energy Services Agreement with Engie to perform facility audits and equipment surveys in order to understand the City's current infrastructure and energy/water usage and to make recommendations for improvements that would result in energy and water savings for the City. In addition to cost savings, implementation of potential projects could also result in environmental benefits, improvements in user experience, and enhancement to City facility resiliency. The City has been working with Engie to develop an energy and water savings program that involves two basic phases:

Phase 1 – Project Development: Phase 1 involved Engie identifying and analyzing potential Energy Conservation Measures (ECMs) to implement. Under the first phase of the Agreement, Engie audited and surveyed various City facilities and infrastructure to identify potential ECMs that would lower utility bills or result in other cost savings. The analysis included initial general reviews of utility usage data per facility, operations at the sites, site size, and site and equipment age. Based on the initial general reviews, Engie coordinated with City staff to determine which facilities had the potential for ECMs that could create energy and water cost savings, and the Engie team completed detailed audits and surveys of the infrastructure. Engie summarized the audit and survey results and provided recommendations for equipment upgrades in a Comprehensive Energy Audit (CEA). The purpose of the CEA is to identify and develop project "bundles" that are made up of multiple feasible ECMs. For a bundle of ECMs to be considered feasible, the estimated utility savings over the financing period of each ECM, when aggregated, must equal or exceed the estimated total capital outlay and other expenses associated with developing and implementing the ECMs (meaning there is a net cost benefit to the City).

While in aggregate, a project bundle has an overall cost savings but not every individual ECM included in a bundle must have a projected savings that exceeds the projected cost of implementing that individual ECM. For example, the replacement of a chiller unit may not create sufficient projected energy/water savings to pay for the cost of the procurement and installation of the equipment. In such situations, it might be possible to "bundle" the chiller replacement work with other ECMs to create an overall package that is feasible. In accordance with Phase 1 of the Energy Service Agreement, Engie provided staff with an CEA that identified 15 ECMs. In reviewing the CEA, staff has deemed a majority of the projects to be feasible for implementation.

Phase 2 - Implementing ECMs through an Amendment to the Energy Services Agreement: Phase 2 of the energy and water savings program would be implementation of the selected ECM bundles. In order to do that, the City would need to determine whether to implement one or more feasible bundles identified by Engie in Phase 1 and amend the Energy Services Agreement for implementation of the determined bundles. The City is not obligated to implement any feasible bundles of ECMs identified by Engie during Phase 1.

Amending the agreement to allow for implementation would require the City to develop a financing plan to fund the full project delivery costs, including the procurement and installation of the ECMs, City project management costs, and Engie overhead costs. The City would need to obtain the necessary financing and appropriate funds before proceeding with implementation of a bundle of ECMs. Grants and financial incentives from the State or other agencies (such as PG&E, Silicon Valley Clean Energy, and Valley Water) that could be leveraged to offset implementation costs have also been identified and included in the overall cost analysis for each bundle.

Through the amended Energy Services Agreement, Engie is also providing a 5-year energy savings guarantee on the City's return on investment for some of the key ECMs to minimize the risk to the City. Through an agreed upon industry-standard methodology, the City and Engie would monitor specific projects post installation and if the anticipated savings are not realized, Engie would make a payment to the City to make up the difference in the cost savings.

Analysis:

I. Energy Conservation Measures

The ECMs have been developed to meet the technical, operational, and financial goals of the City. Various system configurations and technologies have been evaluated for cost-effectiveness and technical consistency. The program used three main criteria to help guide whether an ECM should be included for final recommendation:

- a. Technical feasibility – evaluates whether a proposed measure could be safely and effectively installed without incurring significant costs or requiring infrastructure upgrades beyond what would be typically expected. In addition, this criterion looks at whether the proposed measure would be able to operate as intended for the duration of its expected lifetime.
- b. Critical needs – ECMs incorporated City staff feedback on what was identified as critical infrastructure, technology, and operational needs to help evaluate ECMs. Some ECMs are recommended for inclusion because they will help the City become more resilient, safe, comfortable, and efficient, aligning with Council and Staff priorities.
- c. Financial payback – ECMs were evaluated based on their costs and projected energy, water, and operational savings. While the team did not use a hard and fast metric for payback, the team was able to eliminate measures for recommendation where costs far exceeded savings and were not deemed a critical need.

The proposed scope of energy and water efficiency measures and renewable energy locations were identified by Engie after analyzing multiple system arrangements, system sizing alternatives, and additional savings streams. The ECMs developed consist of the following:

1. Solar Photovoltaics (ECM #1) and Electric Vehicle Charging (ECM #4) – These measures would generate clean, on-site power via solar shade structures and rooftop canopies. These measures would also reduce PG&E charges and protect against rising energy costs. Additional EV charging stations for public and staff use would be included.
2. Battery Energy Storage for Resiliency and Demand Savings (ECM #2) – This measure would help the City avoid peak demand charges and optimize energy rates. Additionally, the battery and energy storage are being considered in conjunction with generators and controls to provide emergency backup power for critical infrastructure and facilities in the event of power outages or shutoffs in the City.
3. High-Efficiency Transformers (ECM #3) – This measure replaces old transformers with newer and more efficient units. This measure also reduces losses, both when operating and in stand-by modes, and improves site electrical infrastructure reliability.
4. Interior and Exterior Facility Lighting (ECM #5) – This measure would upgrade lighting at City facilities to energy efficient LEDs to reduce energy consumption and maintenance costs. This measure also improves indoor lighting quality and safety in parking lots and exterior spaces.
5. Lighting for Streets (ECM #6), Sports Fields (ECM #7), and Parks (ECM #8) – These measures would upgrade exterior lighting to energy efficient LEDs to reduce energy usage, reduce maintenance costs, improve safety, and provide consistency in lighting quality City-wide. Energy-efficient LED lighting is

also being considered at outdoor sports fields for reduced maintenance, improved visibility, and reduced light pollution.

6. Heating, Ventilation and Air Conditioning (HVAC) Upgrades (ECM #9) – This measure is being analyzed to consider repairing, optimizing, and/or replacing ageing HVAC systems, to reduce maintenance costs, extend equipment life, provide energy savings and improve building comfort.
7. Energy Management Systems (ECM #10) – This measure provides City-wide consistency in energy management and control systems to allow easier and more efficient monitoring and adjustment of temperature in City buildings. This measure also allows City staff to have better control of heating and cooling, saving costs and staff time.
8. Irrigation Controls (ECM #11) – This measure improves efficiency and automates the City’s irrigation systems to reduce water waste, maintenance, and staff time.
9. Water Fixture Retrofits (ECM #12) – This measure fine tunes valves and fixtures to reduce leakage and water waste and includes installation of water-efficient fixtures where necessary, focusing on user satisfaction.
10. Water Meter Upgrades (ECM #13) – This measure consists of City-wide replacement of residential and commercial water meters to Automated Metering Infrastructure (AMI). Completion of this measure reduces the necessity for manual meter reading, improves accuracy of billing, and leverages grant funding from regional agencies.
11. Supervisory Control and Data Acquisition System (SCADA) (ECM # 14) –This measure would design and install a SCADA system for City-wide water, wastewater, stormwater management. Implementation of this measure reduces costs, improves cybersecurity and system reliability.

During a detailed evaluation of the ECMs, some of the sites and measures initially proposed in the preliminary CEA were not included in the final analysis. Further, the ECMs have been grouped into recommended bundles that are referred to as Bundles A, B, C.1, C.2, and D. Grouping of the ECMs in bundles allows for each of these bundles to contain related measures as follows:

Table 1: Grouping of ECMs into Bundles

Bundle A		Bundle B		Bundle C		Bundle D
Utility Modernization (ECMs with Existing CIP Funding)		Lighting Upgrade Projects		C.1. Energy Resiliency (Solar, Battery Storage, and EV Charging)	C.2. Energy Resiliency (Solar, Battery Storage, and EV Charging)	Building System Upgrades (HVAC, EMS, and Transformer Upgrades)
Upgrade Water Fixtures (#12)		Facility Lighting (#5)		Senior Center and Community Center	PD/Public Works and Sports Center	Transformer Upgrades (#3)
Water Meters (#13)		Streetlights (#6)		Solar Panels (#1)	Battery Backup (#2)	HVAC (#9)
SCADA (#14)		Field Lighting (#7)		Battery Backup (#2)	Battery Backup (#2)	Energy Management (#10)
		Park Lighting (#8)		EV Charging (#4)		

II. ECM Bundles

1. ECMs in Bundle A – Utility Modernization

Bundle A consists of a set projects that have most required funding available in CIP projects related to the projects identified below. However, to ensure full funding, staff will bring forward appropriation actions on October 20, 2020, if Council gives direction to move forward with the implementation of Bundle A. In reviewing the identified ECMs with Engie, staff accepted the project listing within Bundle A, which includes water fixture upgrades (ECM #12), water meter upgrades (ECM #13), and SCADA Pumping and Automated Disinfection (ECM #14).

a. Estimated Bundle A Implementation Costs

The estimated total implementation cost of the ECMs in Bundle A will be \$22,614,109. Projects in Bundle A also qualify for rebates and incentives from Valley Water due to the installation of automated water meters, for a total amount of \$1,091,790, which would be paid out to the City over 7 years after the City enters into a contract with Valley Water.

b. Estimated Bundle A Net Savings

In the CEA, Engie calculated anticipated energy and water cost savings resulting from implementing Bundle A by comparing the energy and water usage of existing equipment to the anticipated energy and water use of the proposed ECMs over the useful life of the ECMs. Using this approach, Engie estimates that the annual energy and water use reduction resulting from all ECMs in Bundle A will result in a \$1,403,192 annual costs savings for the City over 20 years.

Table 2A: Bundle A - Estimated Construction Cost

Cost Description	Amount
ECM Implementation Costs (Engineering, Installation, Overhead & Profit, and 5-year guarantee)	\$22,614,109

Table 2B: Bundle A - Estimated Annual Savings and O&M Cost

Cost and Cost Savings Description	Amount
Annual Average O&M Cost (20 years)	\$62,926
Estimated Average Annual Energy & Water Savings (20 years)	\$1,403,192
Annual Net Estimated Savings	\$1,340,266

Table 2C: Bundle A - Estimated Lifetime Net Savings

Estimated Cost and Costs Savings Description	Amount
Initial Investment	\$22,614,109
O&M Costs (25 years)	\$1,711,413
Total Lifetime Costs	\$24,325,522
Total Lifetime Energy, Water Savings, and Incentives (25 years)	\$38,994,670
Lifetime Project Net Savings (25 years)	\$14,669,148

2. ECMs in Bundle B – LED Lighting Upgrades

Bundle B consists of a set projects lightning projects which includes facility lighting retrofits (ECM #5), street light retrofits (ECM #6), sport lighting retrofit (ECM #7), and park lighting retrofits (ECM #8). This bundle requires financing for implementation.

a. Estimated Bundle B Implementation Costs

The estimated total implementation cost of the ECMs in Bundle B will be \$6,872,425. Bundle B Implementation Costs would be financed by the City's proposed 2020 Lease Revenue Bonds. The finance

term will be approximately 20 years and the aggregate all-in true interest cost is estimated at 2.62%. The estimated total Bundle B portion of debt service due over 20 years is estimated to be 9.4 million.

b. Estimated Bundle B Net Savings

In the CEA, Engie calculated anticipated energy cost savings resulting from implementing Bundle B by comparing the energy usage of existing lighting to the anticipated energy use of the proposed ECMs over the useful life of the ECMs. Using this approach, Engie estimates that the annual energy use reduction resulting from all ECMs in Bundle B will result in a \$614,086 annual costs savings for the City over the 25 year life of the projects in the bundle.

Table 3A: Bundle B - Estimated Construction Cost and Funding Sources

Cost Description	Amount
ECM Implementation Costs (Engineering, Installation, Overhead & Profit, and 5-year guarantee)	\$6,872,425
Estimated Financing Cost	\$2,510,088
Total Costs	\$9,208,021

Table 3B: Bundle B - Estimated Annual Savings and O&M Cost

Cost and Cost Savings Description	Amount
Estimated Annual Debt Payment	\$475,000
Annual O&M Cost*	\$44,530
Total Annual Cost	\$519,530
Estimated Average Annual Energy & Water Savings (20 years)	\$940,973
Annual Net Estimated Savings	\$421,443

* Starting in Year 11 after implementation

Table 3C: Bundle B - Estimated Lifetime Net Savings

Estimated Cost and Costs Savings Description	Amount
Initial Investment	\$6,872,425
Debt Service (20 years)	\$2,510,088
O&M Costs (25 years)	\$667,950
Total Lifetime Costs	\$10,050,463
Total Lifetime Energy, Water Savings, and Incentives (25 years)	\$27,366,872
Lifetime Project Net Savings (25 years)	\$17,316,409

3. ECMs in Bundle C.1 - City Facility Resiliency

Bundle C.1 consists of a set projects that will provide energy resiliency to the Senior Center and Community Center in the event of a power outage and are consistent with the City's climate action plan. Projects in Bundle C.1 also qualify for rebates and incentives, for a total amount of \$799,622 from SVCE and SGIP paid out to the City over 5 years and an upfront incentive of \$90,000. Although, the estimated savings do not fully pay for this project, due to its benefit to the community staff recommends implementation. In reviewing the identified ECMs with Engie, staff accepted the project listing within Bundle C.1, which includes solar photovoltaic generation systems (ECM #1), battery energy storage (ECM #2), and electric vehicle charging stations (ECM #4) at the Senior Center and Community Center.

a. Estimated Bundle C.1 Implementation Costs

The estimated implementation cost of the ECMs in Bundle C.1 will be \$4,461,895 plus \$35,000 City paid soft costs for a total implementation cost of \$4,496,895. Due to rebates and incentives in the amount of \$889,622, the implementation cost to be financed is \$3,607,273, which are recommended to be financed by the City's proposed 2020 Lease Revenue Bonds. The finance term will be approximately 20 years and the aggregate all-in true interest cost is estimated at 2.62%. The estimated total Bundle C1 portion of debt service due is estimated to be \$4,611,228.

b. Estimated Bundle C.1 Net Savings

In the CEA, Engie calculated anticipated energy cost savings resulting from implementing Bundle C by comparing the energy usage of existing equipment to the anticipated energy use of the proposed ECMs over the useful life of the ECMs. Using this approach, Engie estimates that the annual energy use reduction resulting from all ECMs in Bundle C.1 will result in a \$80,000 annual costs savings for the City over the 30 year life of the projects in the bundle.

Table 4A: Bundle C.1 - Estimated Construction Cost and Funding Sources

Cost Description	Amount
ECM Implementation Costs (Engineering, Installation, Overhead & Profit, and 5-year guarantee)	\$4,496,895
Rebates and Incentives	(889,622)
ECM Implementation Costs after Rebates and Incentives	\$3,607,273
Estimated Financing Cost	\$1,003,955
Total Costs	\$4,611,228

Table 4B: Bundle C.1 - Estimated Annual Savings and O&M Cost

Cost and Cost Savings Description	Amount
Estimated Annual Debt Payment	\$233,000
Annual O&M Cost*	\$14,404
Total Annual Cost	\$247,404
Estimated Average Annual Energy & Water Savings (20 years)	\$114,820
Annual Net Estimated Savings/(Costs)	(\$132,584)

* Starting in Year 6 after implementation

Table 4C: Bundle C.1 - Estimated Lifetime Net Savings/(Costs)

Estimated Cost and Costs Savings Description	Amount
Initial Investment	\$3,607,273
Debt Service (20 years)	\$1,003,955
O&M Costs (30 years)	\$423,547
Total Lifetime Costs	\$5,034,775
Total Lifetime Energy, Water Savings, and Incentives (30 years)	\$4,816,826
Lifetime Project Net Savings/(Costs) (30 years)	(\$217,949)

4. ECMs in Bundle C.2

Bundle C.2 consists of a set projects that would provide energy resiliency to the Milpitas Sports Center and the Police/Public Works Department building which houses the City's 911 center. In reviewing the identified ECMs with Engie, staff accepted the project listing within Bundle C.2, which includes solar photovoltaic generation systems (ECM #1) and battery energy storage (ECM #2).

a. Estimated Bundle C.2 Implementation Costs

The estimated total implementation cost of the ECMs in Bundle C will be \$6,598,430. Projects in Bundle C also qualify for incentives under California's Self-Generation Incentive Program (SGIP) due to the installation of solar and battery storage at critical City facilities.

In the CEA, Engie calculated the cost of financing Bundle C by assuming a financial term of 17 years at a 2.37% interest rate. When these financing costs are included, the total cost of implementing Bundle C, is approximately \$8.2 million.

b. Estimated Bundle C.2 Net Savings

In the CEA, Engie calculated anticipated energy cost savings resulting from implementing Bundle C by comparing the energy usage of existing equipment to the anticipated energy use of the proposed ECMs over the useful life of the ECMs. Using this approach, Engie estimates that the annual energy use reduction resulting from all ECMs in Bundle C will result in a \$230,000 annual costs savings for the City over the 30 year life of the projects in the bundle.

Table 5A: Bundle C.2 - Estimated Construction Cost and Funding Sources

Cost Description	Amount
ECM Implementation Costs (Engineering, Installation, Overhead & Profit, and 5-year guarantee)	\$6,598,430
Rebates and Incentives	(598,430)
ECM Implementation Costs after Rebates and Incentives	\$6,000,000
Estimated Financing Cost	\$1,816,963
Total Costs	\$7,816,963

Table 5B: Bundle C.2 - Estimated Annual Savings and O&M Cost

Cost and Cost Savings Description	Amount
Estimated Annual Debt Payment	\$480,317
Annual O&M Cost*	\$58,551
Total Annual Cost	\$538,868
Estimated Average Annual Energy & Water Savings (20 years)	\$296,523
Annual Net Estimated Savings/(Costs)	(\$242,345)

* Starting in Year 6 after implementation

Table 5C: Bundle C.2 - Estimated Lifetime Net Savings/(Costs)

Estimated Cost and Costs Savings Description	Amount
Initial Investment	\$6,000,000
Debt Service (20 years)	\$1,295,489
O&M Costs (30 years)	\$2,072,748
Total Lifetime Costs	\$9,368,237

Total Lifetime Energy, Water Savings, and Incentives (30 years)	\$10,718,263
Lifetime Project Net Savings/(Costs) (30 years)	\$1,350,026

5. ECMs in Bundle D

Bundle D consists of a set projects that have a simple payback greater than 10 years. In reviewing the identified ECMs with Engie, staff accepted the project listing within Bundle D, which includes transformer upgrades (ECM #3), heating, ventilation, and air conditioning upgrades (ECM #9), and energy management system upgrades (ECM #10).

a. Estimated Bundle D Implementation Costs

The estimated total implementation cost of the ECMs in Bundle D will be \$2,957,000. In the CEA, Engie calculated the cost of financing Bundle D by assuming a financial term of 17 years at a 2.37% interest rate. When these financing costs are included, the total cost of implementing Bundle D, is approximately \$3.8 million.

b. Estimated Bundle D Net Savings

In the CEA, Engie calculated anticipated energy cost savings resulting from implementing Bundle D by comparing the energy usage of existing equipment to the anticipated energy use of the proposed ECMs over the useful life of the ECMs. Using this approach, Engie estimates that the annual energy use reduction resulting from all ECMs in Bundle D will result in a \$30,000 annual costs savings for the City over the 30 year life of the projects in the bundle.

Table 6A: Bundle D - Estimated Construction Cost and Funding Sources

Cost Description	Amount
ECM Implementation Costs (Engineering, Installation, Overhead & Profit, and 5-year guarantee)	\$2,957,000
Rebates and Incentives	\$0
ECM Implementation Costs after Rebates and Incentives	\$2,957,000
Estimated Financing Cost	\$869,487
Total Costs	\$3,826,487

Table 6B: Bundle D - Estimated Annual Savings and O&M Cost

Cost and Cost Savings Description	Amount
Estimated Annual Debt Payment	\$225,087
Estimated Average Annual Energy & Water Savings (20 years)	\$46,058
Annual Net Estimated Savings/(Costs)	(\$179,029)

Table 6C: Bundle D - Estimated Lifetime Net Savings/(Costs)

Estimated Cost and Costs Savings Description	Amount
Initial Investment	\$2,957,000
Debt Service (17 years)	\$869,487
Total Lifetime Costs	\$3,826,487
Total Lifetime Energy, Water Savings, and Incentives (30 years)	\$1,620,827

III. Staff Recommended Bundles for Implementation

Staff recommends implementation of Bundles A, B, and C.1. The staff recommended Bundles for implementation consist of projects that have existing funds available in the Council approved FY 2020 – 2025 approved Capital Improvement Program, and includes projects that would provide the City with rebates and incentives to offset the cost to the City. The Bundles also have a short payback period and provide the City with energy resiliency at critical City facilities ensuring that there is a regular supply of energy and contingency measures in place in the event of a power failure.

The remaining bundles identified by Engie will be brought to Council on a later date once additional rebates and incentives become available and in accordance with Government Code Section 4217.12, public notice of tonight's proposed action was published in the newspaper two weeks in advance, on September 20, 2020.

The total cost for the installation of the staff recommended bundles is \$33,983,429 and there is \$14,762,785 available in approved CIP funding for these projects. An additional \$7,851,324 would come from reprogramming previously funded programs for water capital and other capital program funds. In addition, the staff recommended bundles qualify for overall incentives and rebates of \$1,981,412, to be paid out to the City over seven years.

Staff is also asking Council to authorize the City Manager to execute one or more amendments to the Energy Service Agreement to increase the maximum compensation by an aggregate amount not to exceed \$3.3 million; hence, the maximum compensation could be \$37,283,429.

IV. Implementation Schedule

A detailed project schedule will be developed as one of the first deliverables under the contract; however, Engie is currently estimating a project completion date of October 2022 for Bundles A, B, and C.1. Energy savings would be realized as early June 2021, with the completion of a portion of the lighting ECMs.

Fiscal Impact:

The maximum not-to-exceed compensation for the Amendment to the Energy Services Agreement with Engie to implement ECM Bundles A, B, and C.1 is \$33,983,429, which includes the cost for the construction of the projects, 5-year savings guarantee, and the cost for Engie's overhead and profit. Bundle A is funded primarily from the Water Utility funds and Bundle B and C.1 from the General Government CIP Fund. Since there are insufficient funds in the General Government CIP Fund, the cost for implementing Bundles B and C.1 would need to be financed.

As part of the 2020 – 2025 Capital Improvement Program, Council approved funding for projects in Bundle A only. Staff would utilize funds from the approved CIPs to apply to the costs for implementing the ECMs in Bundle A as follows:

CIP No.	Project Name	Amount
7121	Automated Meter Replacement Program	\$6,729,800
7127	Water Supervisory Control and Data Acquisition	\$6,533,400
6127	Sanitary Supervisory Control and Data Acquisition	\$433,400
3718	Storm Supervisory Control and Data Acquisition	\$183,410
TOTAL		\$13,880,010

Additional CIP funds for the implementation of Bundle A of approximately \$8.7 million would come from reprogramming previously funded projects, advancing planned expenditures from FY 2021-22, and use of fund balances from the water capital and storm drain fund. If Council approves to move forward with Bundle A, The recommended budget adjustments will be brought forward for Council consideration on October 20, 2020.

The cost to implement the ECMs for Bundle B and C.1 is approximately \$11.3 million which would need to be financed through the issuance of 20 year General Fund Lease Revenue Bonds. Based on current municipal bond market conditions, the annual estimated average debt service for the implementation of the ECMs in Bundles B and C.1 are estimated to be \$708,000 and the annual energy savings from these Bundles is estimated to be \$1,056,000, resulting in a net benefit to the City of \$348,000 annually. The net energy cost savings derived from implementing the ECMs would be incorporated in the FY 2022-31 Ten-Year General Fund Financial Forecast resulting in a slight reduction of the currently projected \$9 million structural General Fund deficit. Implementation of the ECMs in Bundles A, B, and C.1 would also result in operations and maintenance savings for the City. Future operations and maintenance savings will be incorporated as part of the development of the annual budget.

If Council agrees to move forward with the financing of \$11.3 million, staff intends to combine this amount with the \$9 million financing need for the Fire Station #2 Replacement project. Combining the two financing needs will result in one General Fund Lease Revenue Bond issuance in the amount of approximately \$20.3 million with lower fixed cost of debt issuance per \$1 million of debt issued. Staff intends to bring the authorization of the debt issuance for Council consideration on October 20, 2020.

Policy Alternatives:

Alternative 1: The City could utilize the details within the CEA and implement the ECMs on its own, without the project management of Engie.

Pros: By implementing the energy improvements in-house, the City will not be required to contract with Engie, thus reducing contractor overhead costs.

Cons: The City would be required to perform all project related activities, including the design, engineering, procurement, and installation of the ECMs, which would consume City staff resources. The City would still have to compensate Engie for the completion of the CEA, at a cost of \$150,000.

Reason for not recommending: This direction is not recommended as the City does not have the resources to administer such work with existing resources and would need to consider outsourcing the work to third party contractors.

California Environmental Quality Act:

The project is exempt from the California Environmental Quality Act (CEQA) per Guidelines Section 15301 as the project involves only the minor alteration of existing public facilities, i.e. installation and/or retrofit of existing streetlights, indoor and outdoor park and facility lighting, indoor plumbing fixtures and water meter equipment, and does not involve the expansion of any use.

Recommendation:

1. Open the public hearing, receive any comments and move to close the public hearing.
2. Approve list of Energy and Water Conservation Measures developed for the City.
3. Find that the implementation of the proposed projects is categorically exempt under California Environmental Quality Act Guideline Section 15301.
4. Adopt a resolution authorizing the City Manager to execute a contract with ENGIE Services U.S. for energy and water conservation measures identified in Bundles A, B, and C.1 in the amount of \$33,983,429, contingent upon the City obtaining the necessary financing and subject to the appropriation of funds.
5. Authorize the City Manager to execute one or more amendments to the Energy Service Agreement to increase the maximum compensation by an aggregate amount not to exceed \$3.3 million.
6. Direct the City Manager to return to City Council for authorization to sell approximately \$11.3 million of General Fund Lease Revenue Bonds needed to finance the implementation of Bundles B and C.1.

Attachment:

1. Resolution Regarding Construction of Energy Conservation Measures
2. Draft Amendment No. 1 to the Agreement with Engie
3. Original Contract Engie Services U.S., Inc.