


TO: FINANCE AND AUDIT COMMITTEE  
REVIEWED: MARIO IGLESIAS  
GENERAL MANAGER   
DATE: APRIL 6, 2018

**AGENDA ITEM**  
**2**  
**APRIL 9, 2018**

**REVIEW ENGIE (FORMERLY OPTERRA)  
ENERGY SAVINGS PROPOSAL**

**ITEM**

Review Engie Energy Company proposal for financial integrity and viability. [RECOMMEND EVALUATE AND DISCUSS THE MERITS OF THE FINANCIAL ESTIMATION METHODOLOGY TO DEVELOP A RECOMMENDATION FOR THE BOARD OF DIRECTORS]

**BACKGROUND**

At your Honorable Board's March 28, 2018 Board Meeting, Engie presented its Development Program Report ("Report"). Engie was authorized by the Nipomo Community Services District ("District") to complete the Report at your Board's October 25, 2017 Board Meeting.

The Report as presented generated a host of questions from the Board of Directors. Not all questions could be addressed at the Board Meeting so the Board President directed the Finance and Audit Committee to hold a public meeting in order to better understand the financial claims being presented.

Information was forwarded to the District's rate consultant, Tuckfield & Associates, for review and confirmation.

**FISCAL IMPACT**

The program is funded by savings it generates. There should be little impact on the cash flow. There will be a lease payment that will show on the District's budget as an expenditure.

**STRATEGIC GOAL**

Goal 6. GOVERNANCE AND ADMINISTRATION. Conduct District activities in an efficient, equitable and cost-effective manner.

- 6.2 Utilize technology to maximize productivity and communications.
- 6.3 Provide excellent customer service.

**RECOMMENDATION**

Staff recommends your committee view and discuss details of Engie's Development Program Report and prepare a recommendation for the District's Board of Directors on the financial viability of the proposed project.

**ATTACHMENTS**

- A. Development Program Report

APRIL 9, 2018

ITEM 2

ATTACHMENT A

# Nipomo Community Services District

March 28, 2018

Ashu Jain, P.E.

Senior Manager

Jeff Wolthuis, P.E.

Lead Project Manager

Adam Davis

Project Manager

Ryan Rodriguez, CEM

Lead Project Engineer

The ENGIE logo features the word "ENGIE" in a bold, white, sans-serif font. To the right of the text is a stylized globe icon, showing a portion of the Earth with blue oceans and green continents.

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# Agenda

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- Introduction to ENGIE Services U.S.
- Program Scope
- Financial Overview
- Program Benefits
- Roadmap



# ENGIE Services U.S. (formerly Opterra Energy Services)

ENGIE is the largest independent electricity producer in the world, and the third largest retail electricity supplier in the United States. With more than 150,000 employees worldwide, ENGIE generates over \$80 billion in annual revenue.

**40+ years**

Experience as an Accredited  
Energy Service Provider

**\$300MM**

Sales in 2017

**\$2.5B**

Completed Projects

**250MW+**

Solar Projects for CA Public Entities

**350+**

Employees

# 2017 ENGIE Services U.S. Highlights



**303,809**

Metric Tons of GHG Reduced

**~40MW**

Solar Installed

**7.8MW**

of Cogen Built

**~210,000**

Interior/Exterior LEDs  
Retrofitted

**52,000+**

Students Engaged



## Activities Since Board Approval of Agreement

- Performed Investment Grade Audit level surveys for energy efficiency and renewable energy opportunities
- Completed detailed guaranteed savings calculations for all energy measures
- Developed preliminary Solar PV design drawings
- Performed study to evaluate glare due to the solar panels from the freeway
- Submitted two (2) Solar PV interconnection applications to PG&E to secure Time-of-Use period grandfathering
- Had PG&E complete a Supplemental Review for Solar PV interconnections to determine utility-side upgrades and associated costs
- Walked subcontractors to secure guaranteed maximum pricing
- Surveyed 10% of all water meters to determine challenges during replacement
- Assessed equipment options to include in the scope of work
- Regularly interacted with staff to finalize all technical details
- Worked with staff on documenting AMI system benefits and cost
- Bid project financing to 15 companies and received 4 proposals
- Presented draft proposal to staff first to seek input

# Program Scope

## Nipomo Community Services District

Building Name	Address	Square Feet	Annual Electric Usage (KWh)	Annual Electric Billing	Average Electric Cost \$/KWh	Solar Projects	HVAC Replacement	Interior LED Lighting	Exterior LED Lighting	Web-Enabled Thermostats
Wastewater Treatment Facility	515 Southland St.	1,560	709,088	\$ 117,281	\$0.17	X		X	X	X
Southland Wastewater Shop	509 Southland St.	7,630	39,513	\$ 8,828	\$0.22	X		X		X
Sundale Well*	1604 Carrino Caballo		305,893	\$ 75,859	\$0.25			X	X	
Via Concha Well (150HP Pump)*	796 Via Concha Rd.		338,218	\$ 72,392	\$0.21			X	X	
Blacklake Wastewater Facility*	1526 N Willow Rd.		226,012	\$ 34,481	\$0.15			X	X	
Blacklake Well #4 (75HP Pump)*	1598 Willow Rd.		223,177	\$ 47,901	\$0.21			X	X	
Knollwood Well (50HP Pump)*	891 Sundale Way		174,499	\$ 38,306	\$0.22			X	X	
District Office*	148 S Wilson St.	4,170	29,293	\$ 6,559	\$0.22		X	X	X	X
Eureka Well	795 Guadalupe Rd.		3,661	\$ 3,532	\$0.96			X	X	
Total			2,049,354	\$ 405,139	\$0.20	2	1	9	8	3

\*Site is a RES-BCT Solar Benefiting Account. Southland Wastewater Shop is the Generating Account.

Project scope includes Advanced Metering Infrastructure (AMI) for 4,392 water meters



## Facility Interior & Exterior Lighting Retrofit

- Retrofit the interior and/or exterior lighting at the following sites:
  - District Office
  - Southland Wastewater Treatment Shop
  - Southland Wastewater Treatment Facility
  - Blacklake Wastewater Treatment Facility
  - Blacklake Well
  - Sundale Well
  - Eureka Well
  - Knollwood Well
  - Via Concha Well

## Upgrade Interior Lighting and Controls

- Retrofit linear fluorescent T-8 fixtures with LED retrofit kits where possible. Install LED lamps and drivers in others
- Retrofit incandescent and CFL screw-in lamps with LEDs
- Replace CFL plug-in lamps with LED plug-in lamps
- Where not currently in place but where appropriate, install wireless vacancy sensors with option to shut off interior lighting when rooms are unoccupied
- LED lamps have a rated life of 75,000 to 100,000 hours leading to substantial savings and maintenance in addition to energy savings
- Benefits Include
  - Better quality lighting
  - Replaces old lamps and ballasts
  - Savings in energy cost
  - Longer life of system
  - Substantial reduction in maintenance cost
  - LEDs do not contain mercury



## Upgrade Exterior Lighting and Controls

- Replace CFL and HID wall packs at exterior areas with new LED wall packs
- Replace HID pole light heads with new LED area lights
- Replace screw-in CFLs with new screw-in LEDs
- Where applicable, new LED fixtures will come equipped with occupancy sensors
- LED lamps have a rated life of 75,000 to 100,000 hours leading to substantial savings in maintenance in addition to energy savings
- Benefits Include:
  - Improved safety
  - Replaces old lamps and ballasts
  - Savings in energy cost
  - Longer life of system
  - Substantial reduction in maintenance cost
  - LEDs do not contain mercury



## HVAC Equipment Upgrades – District Office

- Replace two (2) of the three (3) HVAC, split DX systems at the District Office with new, energy efficient units of similar size and type
- One (1) 2-ton and one (1) 4-ton unit and associated fan-coil units will be replaced for maximum product efficiency featuring new R410A refrigerant
- Benefits Include:
  - Increased energy savings
  - Improved comfort
  - Reduced maintenance
  - Planned vs. emergency replacement



## Install Web-Enabled Thermostats

- Install Pelican Wireless web-enabled thermostats at the following sites:
  - District Office – Three (3)
  - Wastewater Treatment Shop - One (1)
    - Three (3) existing thermostats will be controlled by one (1) new thermostat
  - Wastewater Treatment Lab – one (1)
  - Wastewater Treatment Facility – one (1)
- Benefits Include:
  - Remote access from any web-enabled device
  - Multi-User access
  - Remote scheduling
  - Alerts and alarms
  - Analysis and reporting



# Southland WWTF - Ground Mount Solar Structures (NEM) 345 kW & (RES-BCT) 648 kW



PV SYSTEM "A" (RES-BCT)  
WWTF - 18 PANELS/STRING

ARRAY	PANELS	STRINGS	KWDC
A1	270	15	108.0
A2	270	15	108.0
A3	270	15	108.0
A4	270	15	108.0
A5	270	15	108.0
A6	270	15	108.0
<b>TOTAL</b>	<b>1620</b>	<b>90</b>	<b>648.0</b>

PV SYSTEM "B" (NEM)  
WWTF - 18 PANELS/STRING

ARRAY	PANELS	STRINGS	KWDC
B1	162	9	64.8
B2	162	9	64.8
B3	180	10	72.0
B4	180	10	72.0
B5	180	10	72.0
<b>TOTAL</b>	<b>864</b>	<b>48</b>	<b>345.6</b>



## Water Meter Changeout with Advanced Metering Infrastructure (AMI) System

- Supply and install 4,392 water meters with transducers of the following sizes:

<u>Size</u>	<u>Quantity</u>
– 5/8"	2,362
– 3/4"	833
– 1"	1,128
– 1.5"	39
– 2"	19
– 3"	6
– 4"	5
- Set-up, program, and commission AMI system
- Assist District with setting up database and linking the data to billing system
- Benefits:
  - Monthly customer billing
  - Eliminates meter reading cost
  - Increases revenue due to accurate meters
  - Enables leak detection
  - More accurate billing
  - Eliminates hard to read meter problems
  - Eliminates non-scheduled readings for tenant turnover
  - Minimizes inconvenience to residents to regularly access their property
  - Customer portal allows City to engage, educate, inform, and protect customers
  - Create GIS mapping of meters

## Justification for Water Revenue Increase

- In the recent past, the District has been seeing an 8% water loss
- The District tested a small sample of meters and they showed a 12% water loss
- Here are the revenue increases that our past customers were comfortable with:
  - City of Greenfield assumed a 9% revenue increase because their water loss was 13%
  - Paradise Irrigation District went with a 10% revenue increase because their unaccounted water was 17.5%
  - In 2007, City of Delano went with a \$75,000 increase in revenue for approx. the same number of meters as Nipomo CSD
- We have assumed an extremely conservative 4% increase in water revenue due to the meter replacement





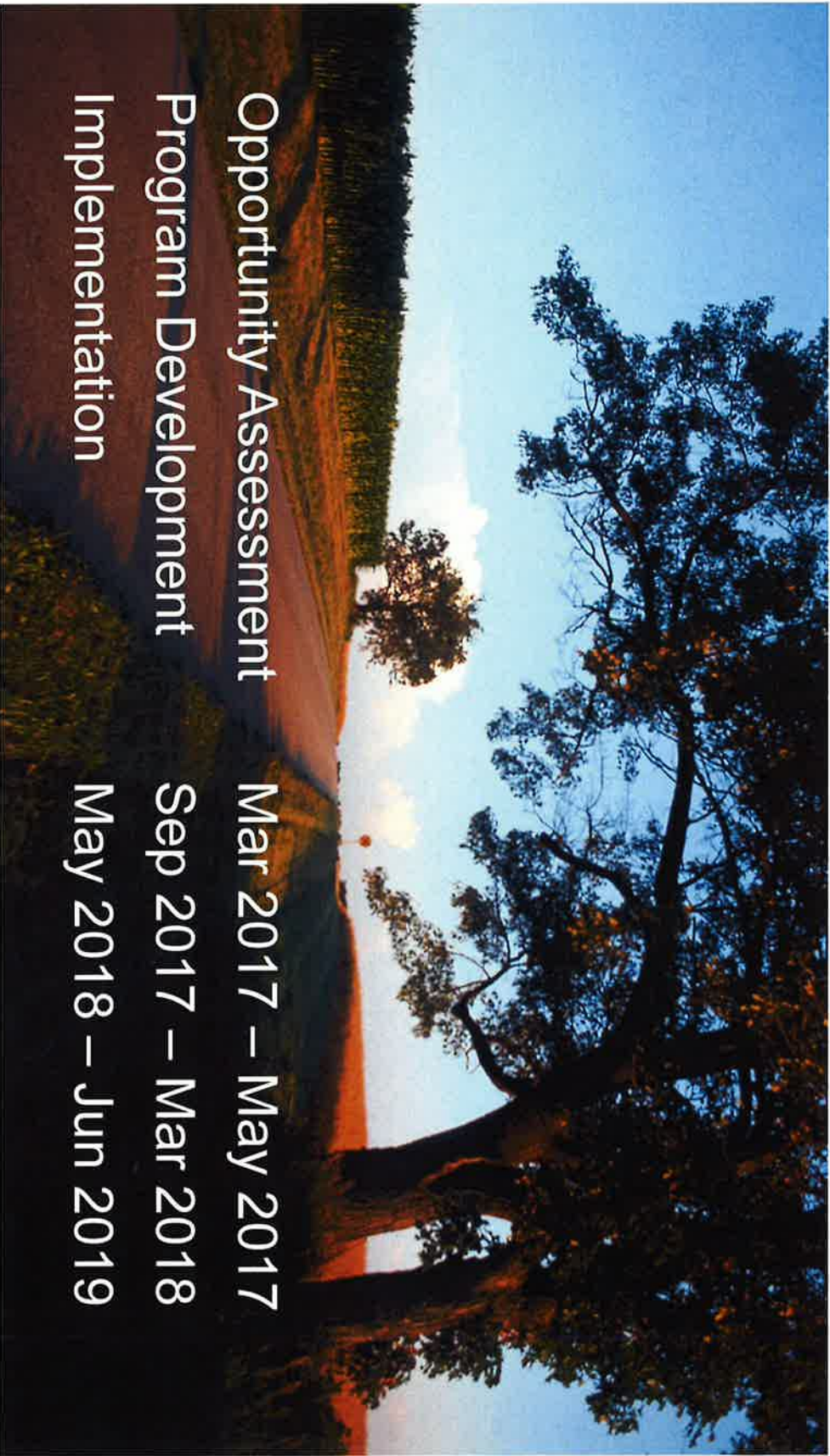





## Program Benefits

- Hedge against rising energy costs and create significant savings
  - Over **\$100,000** in annual net savings
  - **\$5.5 million** over project life after paying for all costs
  - Cut down District electricity spend by nearly 50%
- Utilize savings to replace old mechanical equipment
- Save maintenance staff's time with long-life LED lighting, changing out old water meters, replacement of old mechanical equipment using savings
- Increase revenue, eliminate meter reading cost, and conserve water with new AMI water meters
- Stimulate local economy and provide local jobs
- Establish District as a regional technology leader
- Substantial environmental benefits equivalent to removing 267 cars from the road annually
- **ENGIE guarantees 95% of energy savings**

# Roadmap



TO: FINANCE AND AUDIT COMMITTEE  
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**AGENDA ITEM**  
**3**  
**APRIL 9, 2018**

## **FINANCIAL ADVISORS REVIEW OF ENGIE ENERGY COMPANY PROPOSAL**

### **ITEM**

Review by District's Financial Advisors of Engie Energy Company's proposal for resource energy savings project. [RECOMMEND RECEIVE REPORT]

### **BACKGROUND**

At your Board's March 28, 2018 Board Meeting, President Eby assigned the task of evaluating the financial claims and possible impacts of Engie Energy Company ("Engie") proposal on the District's financial position. Staff sent the proposal to its Municipal Financial Advisor ("MFA"), C.M.de Crinis & Co., Inc. ("C.M.") for evaluation and requested a written analysis of the financing options [Attachment A]. C.M. will be available to address any questions and engage in the discussion via conference call.

Staff also sent Engie's proposal to Tuckfield and Associates ("Tuckfield"), the District's rate consultant. Tuckfield evaluated Engie's revenue recovery spreadsheet that was included in the Development Program Report ("Report") and rearranged the spreadsheet to provide a different perspective of the data [Attachment B]. Tuckfield will be available to address any questions and engage in the discussion via conference call.

### **FISCAL IMPACT**

There was a Task Order issued to C.M. for \$5,000 to provide a financial review of the proposal. There is an hourly cost for Tuckfield that is not expected to exceed \$2,500 for services. Staff has spent time organizing the meeting, responding to questions, and writing the staff report. Staff time is in the budget.

### **STRATEGIC GOAL**

Goal 6. GOVERNANCE AND ADMINISTRATION. Conduct District activities in an efficient, equitable and cost-effective manner.

- 6.2 Utilize technology to maximize productivity and communications.
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### **RECOMMENDATION**

Staff recommends your committee receive and discuss MFA Report and rate consultants information to assist in developing an understanding of the financial impacts and viability of the Engie proposal and preparing a recommendation for the District's Board.

### **ATTACHMENTS**

- A. C.M.de Crinis & Co. Analysis
- B. Tuckfield and Associates Spreadsheet

APRIL 9, 2018

ITEM 3

ATTACHMENT A

(TO BE DISTRIBUTED AT COMMITTEE MEETING)

APRIL 9, 2018


ITEM 3

ATTACHMENT B



Project Cost	\$2,913,806
Term	20
Interest Rate	4.180%

Water Meter Rate Increase	Year	Water Meter Revenue Increase	Meter Reading Cost Savings	Meter Replacement Budget	Recycling Credit	Rebates Incentives	Grant Funds	Total Program Savings	Meter Replacement Cost	Costs			Annual Net Cash Flow	NPV	
										Annual AMI Software Hosting, Analytics, and O&M	Sensus Customer Portal System Subscription	Annual P&I			
9.2%	1	\$ 126,320	\$ 40,000	\$ 35,000	\$ 50,000	\$ -	\$ -	\$ 251,320	\$ -	\$ (22,058)	\$ (6,475)	\$ (225,458)	\$ (253,991)	\$ (2,671)	\$ (2,671)
9.2%	2	\$ 137,941	\$ 41,200	\$ 36,050				\$ 215,191	\$ -	\$ (22,720)	\$ (6,669)	\$ (225,458)	\$ (254,847)	\$ (39,656)	\$ (37,768)
9.2%	3	\$ 150,632	\$ 42,436	\$ 37,132				\$ 230,200	\$ -	\$ (23,401)	\$ (6,869)	\$ (225,458)	\$ (255,729)	\$ (25,529)	\$ (23,156)
14.7%	4	\$ 172,775	\$ 43,709	\$ 38,245				\$ 254,729	\$ -	\$ (24,103)	\$ (7,075)	\$ (225,458)	\$ (256,637)	\$ (1,908)	\$ (1,648)
4.5%	5	\$ 180,550	\$ 45,020	\$ 39,393				\$ 264,963	\$ -	\$ (24,826)	\$ (7,288)	\$ (225,458)	\$ (257,573)	\$ 7,390	\$ 6,080
4.5%	6	\$ 188,675	\$ 46,371	\$ 40,575				\$ 275,620	\$ -	\$ (25,571)	\$ (7,506)	\$ (225,458)	\$ (258,536)	\$ 17,084	\$ 13,386
4.5%	7	\$ 197,165	\$ 47,762	\$ 41,792				\$ 286,719	\$ -	\$ (26,338)	\$ (7,731)	\$ (225,458)	\$ (259,528)	\$ 27,191	\$ 20,290
4.5%	8	\$ 206,037	\$ 49,195	\$ 43,046				\$ 298,278	\$ -	\$ (27,129)	\$ (7,963)	\$ (225,458)	\$ (260,550)	\$ 37,728	\$ 26,812
4.5%	9	\$ 215,309	\$ 50,671	\$ 44,337				\$ 310,317	\$ -	\$ (27,942)	\$ (8,202)	\$ (225,458)	\$ (261,603)	\$ 48,714	\$ 32,971
4.5%	10	\$ 224,998	\$ 52,191	\$ 45,667				\$ 322,856	\$ -	\$ (28,781)	\$ (8,448)	\$ (225,458)	\$ (262,687)	\$ 60,168	\$ 38,785
4.5%	11	\$ 235,123	\$ 53,757	\$ 47,037				\$ 335,917	\$ (19,641)	\$ (29,644)	\$ (8,702)	\$ (225,458)	\$ (283,445)	\$ 52,471	\$ 32,213
4.5%	12	\$ 245,703	\$ 55,369	\$ 48,448				\$ 349,521	\$ (20,230)	\$ (30,533)	\$ (8,963)	\$ (225,458)	\$ (285,185)	\$ 64,336	\$ 37,616
4.5%	13	\$ 256,760	\$ 57,030	\$ 49,902				\$ 363,692	\$ (20,837)	\$ (31,449)	\$ (9,232)	\$ (225,458)	\$ (286,977)	\$ 76,715	\$ 42,718
4.5%	14	\$ 268,314	\$ 58,741	\$ 51,399				\$ 378,454	\$ (21,462)	\$ (32,393)	\$ (9,509)	\$ (225,458)	\$ (288,822)	\$ 89,632	\$ 47,534
4.5%	15	\$ 280,388	\$ 60,504	\$ 52,941				\$ 393,833	\$ (22,106)	\$ (33,365)	\$ (9,794)	\$ (225,458)	\$ (290,723)	\$ 103,109	\$ 52,077
4.5%	16	\$ 293,006	\$ 62,319	\$ 54,529				\$ 409,853	\$ (22,769)	\$ (34,366)	\$ (10,088)	\$ (225,458)	\$ (292,681)	\$ 117,172	\$ 56,362
4.5%	17	\$ 306,191	\$ 64,188	\$ 56,165				\$ 426,544	\$ (23,452)	\$ (35,397)	\$ (10,390)	\$ (225,458)	\$ (294,698)	\$ 131,846	\$ 60,400
4.5%	18	\$ 319,970	\$ 66,114	\$ 57,850				\$ 443,933	\$ (24,156)	\$ (36,459)	\$ (10,702)	\$ (225,458)	\$ (296,775)	\$ 147,158	\$ 64,205
4.5%	19	\$ 334,368	\$ 68,097	\$ 59,585				\$ 462,051	\$ (24,881)	\$ (37,552)	\$ (11,023)	\$ (225,458)	\$ (298,915)	\$ 163,136	\$ 67,787
4.5%	20							\$ -				\$ (225,458)	\$ (225,458)	\$ (225,458)	\$ (89,222)
	Total	\$ 4,340,226	\$ 1,004,675	\$ 879,090	\$ 50,000	\$ -	\$ -	\$ 6,273,991	\$ (199,535)	\$ (554,028)	\$ (162,632)	\$ (4,509,167)	\$ (5,425,362)	\$ 848,629	\$ 444,772

TO: FINANCE AND AUDIT COMMITTEE  
REVIEWED: MARIO IGLESIAS  
GENERAL MANAGER   
DATE: APRIL 6, 2018

**AGENDA ITEM**  
**4**  
**APRIL 9, 2018**

**LEGAL COUNSEL REVIEW OF  
ENGIE ENERGY COMPANY CONTRACT**

**ITEM**

Receive report from District's Legal Counsel on their review of Engie Energy Company's contract for services for the proposed resource energy savings project. [RECOMMEND RECEIVE REPORT]

**BACKGROUND**

At your Board's March 28, 2018 Board Meeting, President Eby assigned the task of evaluating the financial claims and possible impacts of Engie Energy Company ("Engie") proposal on the District's financial position.

Legal Counsel has reviewed the Engie contract and will provide the Board with their report.

**FISCAL IMPACT**

Review of contracts by legal counsel is budgeted in the District's annual budget.

**STRATEGIC GOAL**

Goal 6. GOVERNANCE AND ADMINISTRATION. Conduct District activities in an efficient, equitable and cost-effective manner.

- 6.2 Utilize technology to maximize productivity and communications.
- 6.3 Provide excellent customer service.

**RECOMMENDATION**

Staff recommends your committee receive and discuss Legal Counsel's report to assist in preparing a recommendation for the District's Board.