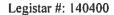
LEGISTAR: 140400 DISTRICT: ALL

VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION For Inclusion on Board Agenda

<u>X</u>	Resolution or Ordina Recommendations of Other Business (Pink	f Boards, Commissions	_Waiver of First Requested & Committees (Green)	
TO:	VILLAGE PRESIDE	ENT AND BOARD OF	TRUSTEES	
FROM:	Scott Niehaus, Village Manager			
DATE:	October 14, 2014	(<u>B of T</u>) Date	: October 16, 2014	
TITLE:	Commonwealth Edison Smart Street Lighting Agreement			
SUBMITTED BY:	Carl S. Goldsmith, Director of Public Works			
BACKGROUND/PC	OLICY IMPLICATION	ONS:		
Smart LED Streetling participate in this six	ghting. The Village month pilot study. The	has been selected as he Village will see a re	proof-of-concept" program for one of two communities to duced monthly cost for ComEd thts through the web portal.	
FISCAL IMPACT/	FUNDING SOURCE	<u>.</u>		
Review (as necessary	v):			
Village Attorney X			Date	
Finance Director X			Date	
Village Manager X_			Date	
NOTE:		e submitted to and appr 12:00 noon, Wednesda		





October 14, 2014

TO: Village Board of Trustees

THROUGH: Scott Niehaus, Village Manager

FROM: Carl Goldsmith, Director of Public Works

SUBJECT: ComEd Smart Streetlights

The Village met with representatives from ComEd on Thursday, September 25, 2014 to discuss a new "proof of concept" program that would upgrade the ComEd owned streetlights in Lombard to LED and incorporate a smart meter device on each pole. There are approximately 400 ComEd owned poles that would be upgraded. The conversion to LED fixtures would provide a significant savings to the Village for the energy cost and a decreased maintenance costs to ComEd. The addition of the smart meter would allow ComEd and the Village to be notified of an outage automatically and also allow for remote management of the lighting system.

This program is being offered to two communities as a pilot program that will last six months. The installation of the meters would begin upon execution of the Smart Led Street Lighting Agreement. Upon completion of the test period the LED lights would remain and the Village and ComEd would assess the value of the smart meter componentry. Should the Village desire to retain the features of the smart meter for the ComEd owned poles, the Village would be responsible for the monthly fee for the meter. At this time, the Illinois Commerce Commission (ICC) has not established a rate for the smart meter for ComEd streetlights. Based upon the revised rate structure, table 1 of the agreement, the Village will see an increased monthly cost per pole between 31% and 67% based upon the wattage of the existing fixture. This cost is based upon a stipulated rate by the ICC. ComEd officials have indicated that they believe that this rate will be reduced over time as actual maintenance and operation data is available.

The Village pays for the energy cost for the ComEd owned poles. The Village currently has a cost per kilowatt hour of \$.03515 for approximately ½ the streetlights and \$.03723 for the other 50% of the lights. In order to understand the cost savings for the LED upgrade, staff used a conservative approach and used the more expensive rate structure of \$.03723 per kWh. The attached spreadsheet articulates the overall cost of the LED upgrade, which includes the fixture cost and the energy cost. Based upon 375 poles, the Village will save 20% or \$4,502.02 per year.

ComEd representatives will be at the Public Works Committee meeting on October 14, 2014 to provide an overview of the system. In order to move forward with the LED change-out and pilot program for the smart streetlights, the Village Board will need to enter into an agreement with ComEd for the replacement program. The agreement has been reviewed and approved by the Village Attorney. Staff recommends that the Village Board of Trustees authorize the Village President and Village Clerk to execute a certain agreement with ComEd for the Smart LED Street Lighting Project. Should you have any questions, please feel free to contact me.

Existing fixture 2014 costs versus proposed 2015 costs

		Exis	ting fixtu	Existing fixtures, 2014					LED Fixt	LED Fixtures, 2015	D.	
			2014	Monthly					2015	Monthly	Monthly	
	Billing		Fixture	Energy	Monthly Cost	Monthly Cost			Fixture	Energy	Cost per	Monthly Cost
	Count	Wattage	cost	Cost	per Fixture	by Type		Wattage	cost	Cost	Fixture	by Type
100W MV	0	122	\$1.96	\$1.55	\$3.51	\$0.00	LED-53	53	\$3.28	\$0.67	\$3.95	\$0.00
175W MV	290	217	\$1.99	\$2.76	\$4.75	\$1,378.37	LED-53	53	\$3.28	\$0.67	\$3.95	\$1,146.90
250W MV	15	281	\$2.10	\$3.58	\$5.68	\$85.17	CED-75	22	\$3.28	\$0.95	\$4.23	\$63.52
400W MV	39	440	\$2.40	\$5.60	\$8.00	\$312.09	LED-145	145	\$3.28	\$1.85	\$5.13	\$199.92
70 W HPS		82	\$2.18	\$1.04	\$3.22	\$0.00	LED-53	23	\$3.28	\$0.67	\$3.95	\$0.00
100 W HPS	-	121	\$2.24	\$1.54	\$3.78	\$3.78	LED-53	23	\$3.28	\$0.67	\$3.95	\$3.95
150 W HPS	27	175		\$2.23	\$4.48	\$120.91	CED-75	22	\$3.28	\$0.95	\$4.23	\$114.34
250 W HPS	က	297	\$2.51	\$3.78	\$6.29	\$18.87	LED-145	145	\$3.28	\$1.85	\$5.13	\$15.38

Energy Cost \$ 0.0372300

2014 Monthly Cost total \$1,919.19

\$1,544.03

2015 LED Monthly Cost total

Monthly Cost Savings \$375.17
Percent Savings 20%

Operating hours per month =342

Fixture inclured rate	Monthly Cost
2014 Total Monthly Cost, Existing Fixtures	\$1,919.19
2015 Total Monthly Cost, Existing Fixtures	\$2,237.91
LED Total Monthly Cost	\$1,544.03

Options	% Savings versus Annual 2015	Annual 2015
	2014 costs	Savings versus
Do nothing Option	-17%	\$ (3,824.56)
Replace with LED fixtures	20%	\$ 4,502.02

RESOLUTION R____-14

RESOLUTION AUTHORIZING THE SIGNATURE OF THE VILLAGE PRESIDENT ON A PROGRAM PARTICIPATION AGREMEENT BETWEEN THE VILLAGE OF LOMBARD AND COMMONWEALTH EDISON

WHEREAS, it is the best interest of the Village of Lombard, DuPage County, Illinois to enter into a Program Participation Agreement (hereinafter the "Agreement") with Commonwealth Edison regarding the for Smart LED Street Lighting Program; and,

WHEREAS, the Agreement has been drafted and a copy is attached hereto and incorporated herein as Exhibit "A".

NOW, THEREFORE, BE IT RESOLVED BY THE VILLAGE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, AS FOLLOWS:

<u>SECTION 1:</u> That the Agreement attached hereto as Exhibit "A" is hereby approved.

<u>SECTION 2:</u> That the Village President be and hereby is authorized and directed to sign, on behalf of the Village of Lombard, the Agreement attached hereto as Exhibit "A".

Adopted this day of	, 2014.
Ayes:	
Nayes:	
Absent:	
Approved this day of	, 2014.
	Keith T. Giagnorio, Village President
ATTEST:	
Sharon Kuderna Village Clerk	

Adomted this day of



PROGRAM PARTICIPATION AGREEMENT

The Smart LED Street Lighting Pilot Program ("the Program") replaces existing Commonwealth Edison ("ComEd") owned street light fixtures (mercury vapor and high pressure sodium). located in participating municipalities with LED fixtures and a smart node communicating on ComEd's Advanced Metering Infrastructure ("AMI") network.

This Smart LED Street Lighting Agreement ("Agreement") is entered into by and between ComEd and the Village of Lombard ("Customer"). ComEd and the Customer are sometimes referred to herein individually as a "Party", and collectively as the "Parties."

PROGRAM TERMS AND CONDITIONS

- 1. Program Effective Dates. This Agreement shall be effective upon signature by both Customer and ComEd, and shall terminate on or before May 31, 2015.
- 2. Customer Eligibility. Customer is an existing municipal customer of ComEd, that receives a fixture included street light rate. (Note: Customer may take electric energy from a company other than ComEd as long as Customer is obtaining delivery service from ComEd.) The fixture included street light rate is set forth in Table 1, attached hereto and made part hereof.
- 3. Project Timeline. ComEd will begin installation of the LED street light fixtures in November of 2014 and complete installation by the end of December 2014, at no charge to the Customer.

4. Testing Requirements.

- 4.1. Prior to the start of testing, ComEd will coordinate with its street light management web portal supplier to train a group of the Customer's personnel on the operation and features of the street light management system.
- 4.2. Both ComEd's and the Customer's personnel will receive training on the operation of the street light management web portal. Only the Customer's personnel will be able to authorize light level adjustments, and ComEd and its street light control software provider will coordinate all light level testing with the Customer. Customer's and ComEd personnel will test the street light management system, and will provide feedback to ComEd's supplier on the operation and features of the street light management system.
- 4.3. ComEd will test the internal communication and other utility side features of the street light management system such as the ability to meter actual usage, the effects on the smart grid communication network and status of street lights.



- 4.4. Additional testing will be performed by both ComEd and the Customer to assess the performance of the street light management system including features like street light status and energy usage.
- 4.5. Testing will continue through May of 2015. On or before May 31, 2015, the Customer will have the option to continue to use the street light management system of the LED street lights at a fee to be agreed upon with ComEd, or to terminate the use of the street light management system of the LED street lights.

5. Customer Obligations.

- 5.1. Customer must support ComEd in the testing of control functions such as dimming and fixture scheduling, among other potential functions.
- 5.2. Customer must not disable the smart features of the LED street light fixtures. If for any reason Customer chooses to disable the smart features, then Customer must first notify ComEd of its intentions. If the smart features are disabled, the Customer will only be responsible for charges associated with the fixture included charges and energy charges, if applicable, beginning in June 2015.

6. ComEd Obligations.

- 6.1. ComEd will replace existing ComEd owned Mercury Vapor (MV) and High Pressure Sodium (HPS) street lights, subject to the current fixture included rate agreement, with new, lower wattage LED street lights. These LED street lights will also have a communication node incorporated into the photo cell which will allow remote control of the fixture via a ComEd provided cloud based street light management web portal.
- 6.2. ComEd will provide, at no cost to the Customer, access to control, schedule and monitor the smart LED street lights through May 31 2015. Customer understands and agrees that the access tool is provided by ComEd's subcontractors, who are not employees of ComEd.
- 6.3. ComEd, through the state mandated energy efficiency programs, will provide a credit to the Customer, in an amount equal to the cost to replace the existing street light fixtures in the municipality so that said replacement is cost neutral to the Customer. The cost of the replacement of the existing street light fixtures will be documented in a separate Customer Work Agreement developed for the street light fixture replacement.

7. Limitations of Liability.

7.1. Customer shall independently evaluate any advice or direction given by ComEd related to the adjustment of LED street light illumination levels. IN NO EVENT WILL



Comed, ITS CONSULTANTS, CONTRACTORS AND/OR SUBCONTRACTORS BE LIABLE FOR THE OPERATION OF CUSTOMER'S FACILITIES, OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND IN CONNECTION WITH THIS AGREEMENT OR THE IMPLEMENTATION OF ANY FUNCTIONS OR TESTING UNDER THIS AGREEMENT.

- 7.2. Customer hereby agrees to defend, indemnify and hold harmless ComEd, its consultants, contractors and/or subcontractors, and their respective officers, employees, agents, assigns and successors-in-interest ("ComEd Parties") from and against any third party claims, damages, losses, liability, costs (including attorney's fees and expenses) for bodily injury to any person (including death resulting therefrom) and property damage arising out of or in connection with the Agreement, except to the extent such claims, damages, losses, liability and costs are caused by the negligence or willful misconduct of the ComEd Parties.
- 7.3 ComEd shall indemnify, defend and save harmless the Customer and, its officers, agents, employees, representatives and assigns, from lawsuits, actions, costs (including attorneys' fees), claims or liabilities of any character, including, as allowed by law, liabilities incurred due to joint negligence of the Village and the contractor, brought because of any injuries or damages received or sustained by any person, persons, or property on account of any act or omission, neglect or misconduct of ComEd, its officers, agents and/or employees arising out of, or in performance of any of the provisions of this Agreement, including any claims or amounts recovered for any infringements of patent, trademark or copyright; or from any claims or amounts arising or recovered under the "Worker's Compensation Act" or any other law, ordinance, order or decree. In connection with any such claims, lawsuits, actions or liabilities, the Customer and, its officers, agents, employees, representatives and their assigns shall have the right to defense counsel of their choice. ComEd shall be solely liable for all costs of such defense and for all expenses, fees, judgments, settlements and all other costs arising out of such claims, lawsuits, actions or liabilities.
- 8. Disclaimer: ComEd does not guarantee that certain energy savings will be achieved and does not make any warranties associated with the measures implemented under the Program. ComEd has no obligations regarding, and does not endorse or guarantee, any claims, promises, representations, or work made or performed, or equipment furnished or installed by any contractors, subcontractors, or vendors pursuant to the Program. The Customer shall be entitled to the energy cost savings realized by the Customer that result from the installation of LED street light fixtures within the Customer's corporate limits. In consideration of the services provided by ComEd as part of the Program, the Customer agrees that ComEd is entitled to 100% of the rights and benefits associated with the measures, including without limitation PJM products and all other attributes, credits or



products associated therewith under any regional initiative or federal, state or local law, program or regulation, and customer waives, and agrees not to seek, any right to the same.

- 9. Attorneys' Fees. If litigation is commenced by either Party to enforce or interpret any of the provisions of this Agreement, the prevailing Party shall be entitled to recover reasonable costs and attorneys' fees at the trial, on appeal, and on any petition for review.
- 10. Entire Agreement/Modification. This Agreement contains the entire agreement between the Parties with respect to the subject matter hereof, and unless otherwise provided in this Agreement, no modification or waiver of any of the provisions, or any future representation, promise, or addition, shall be binding upon the parties unless made in writing and signed by both Parties. To the extent any of the terms of this Agreement are deemed to conflict with the terms of the Franchise Agreement (Ordinance No. 3620) between ComEd and Customer, dated November 5, 1992, the terms of the Franchise Agreement shall control while both Agreements remain in effect.
- 11. Disputes/Governing Law. This Agreement shall be exclusively governed by and interpreted in accordance with the laws of the State of Illinois. Any litigation between the Parties shall be prosecuted only in the state or federal courts of the State of Illinois.

BY SIGNING BELOW:

The Customer has read and accepts the terms and conditions of this Smart LED Street Lighting Agreement, and agrees to participate in the Smart LED Street Lighting Pilot Program.

Customer	ComEd	
Ву:	Ву <u>:</u>	
Name:	Name:	Apt mile year day
Date:	Date:	***
Title:	Title:	



Table 1

Existing Public Street Lighting Fixtures (Cobra head)	Current Fixture Charge (Sheet No 30 of ComEd Rate Book) 2014 Monthly \$/fixture	New LED Fixture	LED Fixture Charge 2015 Monthly \$/fixture
100 Watt MV	\$1.96 X IDUFa	40 - 60 Watt LED	\$3.28 X IDUFa(1)
175 Watt MV	\$1.99 X IDUFa	40 - 60 Watt LED	\$3.28 X IDUFa(1)
_250 Watt MV	\$2.10 X IDUFa	61 - 80 Watt LED	\$3.28 X IDUFa (1)
400 Watt MV	\$2.40 X IDUFa	120 - 160 Watt LED	\$3.28 X IDUFa (1)
70 Watt HPS	\$2.18 X IDUFa	40 - 60 Watt LED	\$3.28 X IDUFa(1)
100 Watt HPS	\$2.24 X IDUFa	40 - 60 Watt LED	\$3.28 X IDUFa(1)
150 Watt HPS	\$2.25 X IDUFa	61 - 80 Watt LED	\$3.28 X IDUFa (1)
250 Watt HPS	\$2.51 X IDUFa	120 - 160 Watt LED	\$3.28 X IDUFa (1)

⁽¹⁾ Note there will be only one LED fixture rate for 2015, the fixture included rate for 40 - 60 Watt LED. This rate will be applied to the 61 - 80 Watt LED and 120 - 160 Watt LED fixtures for 2015. The rate of \$3.28/fixture is a projected rate for 2015 and has yet to be approved by the Illinois Commerce Commission.

These charges include only the costs of the fixture. Energy charges are calculated separately based on fixture types energy consumption.