VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

X	Resolution or Ordinance (Blue) Recommendations of Boards, Commissio Other Business (Pink)	
TO:	PRESIDENT AND BOARD OF TRUSTI	EES
FROM:	Tim Sexton, Acting Village Manager	
DATE:	October 8, 2013 (B of T) Date: October 17, 2013
TITLE:	ENERNOC Electrical Load Shedding Pro	gram
SUBMITTED BY:	Tom Ellis, Operations Superintendent 12	
BACKGROUND/PC Please review attached	PLICY IMPLICATIONS: ed memo.	
FISCAL IMPACT/F	UNDING SOURCE	
No financial obligation to the Village of Lombard. This program is considered a revenue generating program.		
Review (as necessary	y):	
Village Attorney X		Date
Finance Director X _		Date
Village Manager X _		Date

NOTE: Materials must be submitted to / approved by the Village Manager's Office by 12:00 pm, Wednesday, prior to the Agenda Distribution.



October 8, 2013

TO: Village President and Board of Trustees

THROUGH: Tim Sexton, Acting Village Manager

FROM: Carl Goldsmith, Director of Public Works

SUBJECT: ENERNOC ELECTRICAL LOAD SHEDDING PROGRAM

Background

The Village currently participates in an electrical load shedding program through ComEd. The ComEd program is completely voluntary and is at the discretion of the Village to participate should a load reduction request come from ComEd. Under the ComEd program, the Village is asked to reduce the amount of electricity being used at the village hall and public works facilities by turning off all non-essential lights and electronics. ComEd could send the Village a reimbursement payment equal to the reduction in electricity the Village is able to shed. In the last four years the Village has not been asked to load shed or reduce the electrical consumption.

The ENERNOC program is similar to the ComEd program in that it is also completely voluntary and the Village could receive a reimbursement payment by reducing the electrical demand. The main differences between the two programs are that ENERNOC will pay the Village just to participate in the program in addition to any load shedding the Village may achieve. Under the ENERNOC program, the Village is asked to use backup generator power for the duration of the load shed request for a minimum of 1 hour and a maximum of 6 hours per event. The maximum events per year are limited to 10. Program events are to take place between 12:00pm and 8:00pm on non-holiday, weekdays. Events may be called outside these times with no obligation or performance penalties by not participating in the event to the village. ENERNOC will install electrical meters, at no cost to the Village, to record the reduction in electricity. A payment would be made to the Village once the predetermined load shed had been achieved by the Village. If the Village does not receive a load shedding request, the Village would still receive a payment for participating in the program. ENERNOC also requires the Village to participate in an annual 2 hour proof of reduction test to verify the potential of load shedding capabilities.

The duration of the ENERNOC program is 5 years commencing on 6/1/2014 and would end 5/31/2019. Village has the potential to receive \$54,733.00 for participating in the ENERNOC program over the next 5 years. There are no financial obligations on behalf of the Village of Lombard. This program is a revenue generating opportunity for the Village of Lombard.

Recommendation

• Staff recommends that the Village Board of Trustees authorize Tim Sexton, Acting Village Manager, to enroll the Village of Lombard in the ENERNOC program.



PJM Earnings Estimate

Prepared for:

Dan Schultz

Tom Ellis

Business Development Manager

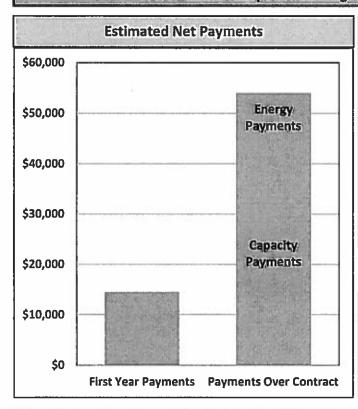
Operations, Village of Lombard

513-227-7908 dschultz@enernoc.com

Revenue Estimate

Total Demand Response Earnings Estimate: \$54,033

Total Demand Response Earnings Estimate + Expected Savings: \$54,733



Payment Detail	
Payment Period (Years)	5 years
Electricity Reduction (kW)	475 kW
Year 1 Capacity Payments	\$12,617
Year 2 Capacity Payments	\$11,953
Year 3 Capacity Payments	\$5,970
Future Years Estimated Capacity Payments	\$13,993
Total Expected Capacity Payments	\$44,533
Expected Annual Energy Payments	\$1,900
Total Expected Energy Payments*	\$9,500
Total Net Demand Response Payments	\$54,033

^{*} Based on 4 expected dispatch hours per year

Additional Considerations	的可以自由地
Capacity Secured at Maximum \$/kW?	Yes - All Years
Estimated Avoided Electricity Cost	\$700
Number of EnerNOC Site Server(s)	3

Benefits



- Real time energy meters
- Meter installation & maintenance



 Online access to your real time energy usage through the DemandSMART™ portal



Protect your operation and your community



Avoided electricity costs

Quoted earnings estimate valid for 30 days. Final payments determined by utility or grid operator and may vary based on performance.



Energy Management Agreement

This Energy Management Agreement (this "Agreement"), entered into on ______ ("Effective Date"), is made by and between EnerNOC, Inc. ("EnerNOC"), located at One Marina Park Drive, Suite 400, Boston, MA 02210, and Village of Lombard ("Customer"), located at 255 E. Wilson Ave, Lombard, IL 60148. EnerNOC and Customer are referred to herein collectively as the "Parties" and each individually as a "Party" to this Agreement.

WHEREAS, EnerNOC and Customer desire to establish this Agreement relating to the provision by EnerNOC of certain clean and intelligent energy management applications and services (the "Services") to Customer, the scope of which are described more fully in the applicable Statements of Work (each a "Statement of Work" or "SOW") attached hereto.

NOW THEREFORE, the Parties hereto agree as follows:

- 1. Services. This Agreement is a master agreement between the Parties and will contain the sole and exclusive terms and conditions that will govern the rights, responsibilities, and obligations of the Parties with respect to the Services. EnerNOC will perform the Services in accordance with this Agreement and an applicable Statement of Work, each of which is incorporated into and within the terms of this Agreement. If Customer desires to procure Services from EnerNOC, EnerNOC and Customer will execute a Statement of Work that specifies, among other things, a description of the Services to be performed, the compensation for those Services, and any other details related to this engagement. Any modification to a signed Statement of Work must be in writing and executed by an authorized representative of each Party. Any contrary, inconsistent, or additional terms contained in a mutually executed Statement of Work between EnerNOC and Customer that may be contrary to, inconsistent with, or in addition to the terms and conditions contained in this Agreement, will be governed, interpreted, and construed by the terms of this Agreement.
- 2. Term. This Agreement shall commence on the Effective Date and continue until terminated in accordance with the terms herein (the "Term").

3. Confidentiality.

- a. Nondisclosure to Third Parties. In performing the Services under this Agreement, each Party will be exposed to and will be required to use certain Confidential Information (as hereinafter defined) of the other Party. Each Party on its own behalf and on behalf of its employees and contractors (collectively, "Representatives") agrees not to, except as required by applicable law or regulation, use or disclose such Confidential Information without the prior written consent of the other Party, either during or after the term of this Agreement. To protect Confidential Information, each Party agrees to: (i) limit dissemination of Confidential Information to only those Representatives having a "need to know"; (ii) advise each Representative who receives Confidential Information of the confidential nature of such information; and (iii) have appropriate agreements, policies and/or procedures in place with such Representatives sufficient to enable compliance with the confidentiality obligations contained herein. "Confidential Information" means all information, including, without limitation, any trade secrets, which is disclosed, either orally or in written form, by either Party or its Representatives. In addition, the term "Confidential Information" shall be deemed to include: (a) any notes, analyses, compilations, studies, interpretations, memoranda or other documents prepared by either Party or its Representatives which contain, reflect or are based upon, in whole or in part, any Confidential Information fumished to a receiving Party or its Representatives pursuant hereto; and (b) the existence or status of, and any information concerning, the discussions between the Parties concerning the possible establishment of a business relationship. Neither Party shall disclose any information regarding its relationship with the other Party to any third party other than a third party to whom legal and/or tax information must be disclosed. Each Party agrees that it shall not receive any right, title or interest in, or any license or right to use, any of the other Party's Confidential Information or any patent, copyright, trade secret, trademark or other intellectual property rights therein by implication or otherwise.
- b. Trade Secret Obligations. Customer shall not alter reverse engineer, disassemble, decompile or copy the EnerNOC Site Server (the "ESS") or any other EnerNOC system components, including any software, and shall not allow any third party to use, access, or examine the ESS or any other EnerNOC system components.
- c. Use of Confidential Information. Customer acknowledges that EnerNOC may receive Confidential Information of Customer from the applicable independent system/grid operator and/or utility, through data collected by the ESS and the EnerNOC system or otherwise, which may be used by EnerNOC as solely necessary for the performance of this Agreement.
- 4. Aggregate Data Collection and Usage. Notwithstanding anything to the contrary contained in this Agreement, Customer acknowledges and agrees that EnerNOC may: (i) collect, process and aggregate any data used with, stored in, or related to the services by Customer or Customer's end users, including, without limitation end-user energy usage and demand data and create aggregate data records ("Aggregate Data") by removing any personally identifiable information ("PII") from the underlying data; (ii) use such Aggregate Data to improve its products and services, develop new products and services, understand actual energy usage and demand trends and general industry trends, develop white papers, reports, or databases summarizing the foregoing, and generally for any legitimate purpose related to EnerNOC's business; and (iii) share Aggregate Data with third parties or publish



any reports, white papers, or other summaries based on Aggregate Data. For clarity, Aggregate Data shall not include any PII nor otherwise identify Customer nor any individual end-user of Customer's services.

- 5. Limitation on Liability. EnerNOC's liability hereunder is limited to direct actual damages as the sole and exclusive remedy, and total damages shall not exceed \$100,000. In no event shall either Party, its parent corporation, officers, directors, partners, shareholders, employees or affiliates, or any contractor or subcontractor or its employees of affiliates, be liable to the other Party for special, indirect, exemplary, punitive or consequential damages of any nature whatsoever connected with or resulting from the services or from performance or non-performance of this Agreement, including without limitation, damages or claims in the nature of lost revenue, income or profits, loss of use, or cost of capital, irrespective of whether such damages are reasonably foreseeable and irrespective of whether such claims are based upon negligence, strict liability contract, operation of law or otherwise.
- 6. Choice of Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Illinois, without giving effect to choice of law rules.
- 7. Fees Offset. Customer hereby acknowledges and agrees that EnerNOC may offset any fees owed by Customer to EnerNOC as enumerated in any applicable SOWs against any demand response payments ("DR Payments") owed to Customer for each given quarter; provided that to the extent Customer's fees owed to EnerNOC exceed the amount of quarterly DR Payments payable to Customer, Customer shall remit the balance of the fees to EnerNOC within thirty (30) days of invoice date.
- 8. Miscellaneous. Customer may not assign any of its rights or delegate any of its performance obligations hereunder without the prior written consent of EnerNOC, such consent not to be unreasonably withheld, conditioned or delayed. This Agreement, including all exhibits, attachments and SOWs, constitutes the entire agreement between Customer and EnerNOC and may only be amended in writing signed by each of the Parties. If any of its provisions shall be held invalid or unenforceable, this Agreement shall be construed as if not containing those provisions and the rights and obligations of the Parties hereto shall be construed and enforced accordingly. This Agreement shall be binding upon the Parties together with their successors and assigns.
- 9. Force Majeure. The Parties shall be excused for any failure or delay in the performance of their obligations hereunder due to acts of God or any other legitimate cause beyond their reasonable control.
- 10. Termination. Either Party may terminate this Agreement (i) in the event of the other Party's material breach of this Agreement or any Statement of Work; provided that the breaching Party fails to cure the specific breach within thirty (30) days following receipt of written notice from the non-breaching Party specifying the purported breach, (ii) as otherwise specified on the applicable SOW, or (iii) provided that no SOW is in effect, for convenience by giving the other Party sixty (60) days prior written notice.
- 11. Notices. Any notices required or permitted to be given hereunder by either Party to the other shall be given in writing: (1) by personal delivery; (2) by electronic facsimile with confirmation sent by United States first class registered or certified mail, postage prepaid, return receipt requested; (3) by bonded courier or by a nationally recognized ovemight delivery company; or (4) by United States first class registered or certified mail, postage prepaid, return receipt requested, in each case, addressed to the Parties as follows (or to such other addresses as the Parties may request in writing by notice given pursuant to this Section): EnerNOC, Inc., Attn: Deputy General Counsel, One Marina Park Drive, Suite 400, Boston, MA 02210; and to the Customer at Village of Lombard, 255 E. Wilson Ave, Lombard, IL 60148; provided that insofar as notices are required in connection with the implementation or provision of the Services provided hereunder, such notices may be given by electronic mail to Customer's specified primary business and/or site contact e-mail address(es).

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

EnerNOC, Inc.	Village of Lombard	
Name:	 Name:	
Title:	Title:	
Signature:	 Signature:	

Document Control #: 00054043.0



Statement of Work DemandSMART Services

This Statement of Work (this "SOW"), entered into on	("SOW Effective Date"), is made by and between
EnerNOC, Inc. ("EnerNOC"), located at One Marina Park Drive, Suite	400, Boston, MA 02210, and Village of Lombard ("Customer"),
located at 255 E. Wilson Ave, Lombard, IL 60148. EnerNOC and Custo	omer are referred to herein collectively as the "Parties" and each
individually as a "Party" to this SOW. Unless otherwise defined here	in, capitalized terms in this SOW have the same meanings as
given them in the Energy Management Agreement by and between Er	nerNOC and Customer effective as of
(the "Agreement"), the terms and conditions of which are incorporated h	erein by reference.

- 1. Term. This SOW shall commence on the SOW Effective Date and continue until <u>5/31/2019</u>, unless earlier terminated in accordance with the terms herein (the "SOW Term").
- 2. EnerNOC Managed Services. EnerNOC agrees to manage Customer's participation in the demand response program(s) further described in <u>Attachment(s) A-1</u> attached hereto (collectively the "Programs" and each individually a "Programs"), in accordance with the rules set forth by the applicable independent system/grid operator and/or utility ("Operator"), which are subject to amendment by the Operator from time to time. EnerNOC will (i) work with Customer to develop an appropriate curtailment plan for Customer's business; (ii) complete all necessary permits and associated reporting on Customer's behalf; (iii) register Customer's Accepted Capacity (as defined in <u>Attachment(s) A-1</u>); (iv) manage Customer's curtailable electrical capacity in the Programs and, upon notification by EnerNOC and acceptance by Customer, provide real-time support to Customer during demand response events ("Demand Response Events"); and (v) reconcile all Program payments in accordance with the rules set forth by the Operator and as further described in <u>Attachment(s) A-1</u> (collectively, "EnerNOC Managed Services").
- 3. Payment Terms. The payment terms in connection with the provision of EnerNOC Managed Services are set forth in Attachment(s)
 A-1 to this SOW.

4. Customer Support Requirements.

- a. EnerNOC System. Within fourteen (14) days of execution by the Parties of this SOW, Customer shall provide EnerNOC with reasonable access to install a cellular connectivity device that allows for Internet-based power metering, data collection, near real-time data communication, and Internet-based reporting and analytics for each Customer facility address (each a "Site Address") identified on Attachment(s) A-2. Subsequent to the SOW Effective Date, Attachment(s) A-2 may be updated in writing from time to time by the Parties to reflect additional Site Addresses. If cellular connectivity is not feasible, Customer shall provide either a static or non-static, as applicable, Internet Protocol (IP) address and Local Area Network (LAN) access that allows for Internet-based communication of a Site Address' energy consumption and Demand Response Event performance where necessary.
- b. Acceptance Testing. Customer agrees to collaborate with EnerNOC in testing the installed ESS at each Site Address in a timely manner prior to registering with the Program(s).
- c. Event Performance. Customer agrees to use commercially reasonable efforts to generate and/or reduce electrical demand to achieve Accepted Capacity as defined in <u>Attachment(s) A-1</u> at each Site Address when notified by EnerNOC during Demand Response Events. Customer and EnerNOC understand that the curtailable electrical capacity identified in <u>Attachment(s) A-2</u> does not represent Accepted Capacity and is solely the Parties' best estimate of performance and that Accepted Capacity may vary.
- d. Customer and Billing Data. Customer agrees to collaborate with EnerNOC in providing data concerning each Site Address ("Customer Data"). Customer: (i) represents that it has the right to provide Customer Data to EnerNOC and will provide Customer Data to EnerNOC in compliance with applicable legal requirements; (ii) authorizes EnerNOC to use, copy, store, modify and display Customer Data for Customer's benefit; and (iii) authorizes EnerNOC to access Customer Data to provide quality assurance, perform software maintenance, and deliver customer service and technical support. During the SOW Term and for thirty (30) calendar days after expiration or termination of this SOW, EnerNOC will preserve and maintain Customer Data. Thereafter, EnerNOC will have no obligation to preserve or return any Customer Data unless required by applicable law.

5. General Terms.

- a. Service Provider Limitation. Customer agrees not to contract with any other demand response service provider during the SOW Term.
- b. Termination. Either Party may terminate this SOW upon written notice to the other Party immediately if the Program(s) is materially altered suspended or ended. Notwithstanding the foregoing, in the event that capacity is not available in the Program for a given Program Period (as defined in Attachment(s) A-1), EnerNOC may reduce Customer's Accepted Capacity to zero and/or terminate this SOW.



IN WITNESS WHEREOF, the Parties have executed this SOW as of the SOW Effective Date.

EnerNOC, Inc.		Village of Lombard	
Name:		Name:	
Title:		Title:	
Signature:		Signature:	

Document Control #: 00054043.0



Attachment A-1 Emergency Load Response Program

- 1. Program Description. PJM Interconnection's (PJM) Emergency Load Response Program (ELRP) enables program participants to receive revenue for being available to reduce electricity consumption when the reliability of the electric grid is in jeopardy and voltage reductions and rolling brownouts are imminent.
- 2. Program Rules. The terms of this Agreement will reflect ELRP program terms and conditions which may be amended from time to time by PJM, the current terms of which are summarized in the table below:

Program Availability	During the program period June 1-September 30 ("Program Period"), Customers must be able to respond during non-holiday weekdays from 12:00 p.m. to 8:00 p.m. (Eastern Prevailing Time). PJM may call events outside of the Program Period; Customer's performance during such events shall not impact Capacity Payments, but will be included in Customer's Energy Payments as defined in Section 4(a) (ii) below.
Program Enrollment	Enrollment for the Program takes place annually on June 1 ("Enrollment Period").
Event Trigger	PJM will initiate Demand Response Events in ELRP in the case of a defined system emergency.
Advanced Notification	Customers are expected to be able to respond to an ELRP Demand Response Event notice within 120 minutes of notification from EnerNOC.
Event Frequency & Duration	Maximum of ten (10) Demand Response Events in a year, with event duration ranging from a minimum of one (1) hour to a maximum of six (6) hours.
Testing Requirement	If no Demand Response Event occurs, PJM requires EnerNOC to hold a Test Event by September 30 of the Program Period.

Customer shall be considered enrolled in the Program and eligible to eam Demand Response payments ("DR Payments") upon the latter of (i) the next Enrollment Period following execution of this SOW by the Parties; or (ii) the date indicated in the Program enrollment notification email sent by EnerNOC to customer.

- 3. Pald Capacity. "Paid Capacity" will be either (i) Accepted Capacity, if a Demand Response Event or a Test Event (collectively, a "DR Event") has not been initiated during the Program Period, or (ii) Customer's average Delivered Capacity for all DR Events initiated during the Program Period.
 - a. Accepted Capacity. "Accepted Capacity" shall represent the best estimate of Customer's expected curtailment based on analysis of consumption data and pre-enrollment testing. Customer agrees that the Accepted Capacity may be adjusted by EnerNOC in the future to reflect actual performance, changes in facility operations, Program rules, regulations and/or other relevant information.
 - b. Delivered Capacity. "Delivered Capacity" will be the calculated performance with respect to the Program baselines and as measured by the ESS following each DR Event, up to 100% of Accepted Capacity. Customer's Delivered Capacity may be adjusted by EnerNOC in the future following PJM approval of performance data from DR Events.

4. Payments

- a. Payments to Customer:
 - i. Capacity Payments. EnerNOC will pay Customer 58.00% of the established PJM market clearing price obtained by EnerNOC multiplied by Paid Capacity ("Capacity Payment").
 - ii. Energy Payments. In months when one or more Demand Response Events are called, EnerNOC will pay Customer 100.00% of the Energy Payments available from PJM to EnerNOC in connection with Customer responding to a Demand Response Event when notified by EnerNOC.
 - iii. Underperformance. In no event shall Customer be penalized for underperformance by being required to return previously distributed payments to EnerNOC. If Customer underperforms, adjustments will be made to future payments so that total payments made to Customer for the Program Period will reflect Paid Capacity for such Program Period.
- b. Payment Timing. EnerNOC shall make all payments associated with Customer's participation in the ELRP to Customer on a quarterly basis, and such payments shall be made within forty-five (45) days of EnerNOC's receipt of total payment from PJM.

5. Additional Terms

a. Curtailment Service Provider. Customer hereby designates EnerNOC as its sole curtailment services provider for the limited purpose of participating in PJM's Emergency Load Response Program.



Attachment A-2

Site Name	Site Address	Estim. Capacity (kW)
Village of Lombard Central Office and Village Hall	255 East Wilson ave Lombard, IL 60148	370
Public Works Facility	245 East Wilson Avenue Lombard, IL 60148	105

Document Control #: 00054043.0

ACCOUNT INFORMATION RELEASE AUTHORIZATION FORM (Rev. 03/25/10)

This document authorizes Commonwealth Edison Company ("ComEd") to release to you or your agent, available usage data, Peak Load Contribution (PLC) values and/or Supply Group data.

The following types of data are available:

<u>Summary Data</u> – Kilowatt-hour and kilowatt summarized by account per billing period.

<u>Interval Data</u> – Half-hour demand data for non-residential accounts having recording-type meters. A \$22.00 fee per meter on the account will be charged for all interval data requests.

<u>PLC Value</u> – A customer's contribution to a zone's normalized summer peak load, as estimated by the zone's Electric Distribution Company (EDC). PLC is used to determine a Load Serving Entity's (LSE's) Obligation peak load.

<u>Supply Group</u> – Each customer has been assigned to a supply group.

1. Customer Information: (Required)			
Account Name: Village of Lombard	* Meter Number:	*Account Number: See Attachment * Meter Number: See Attachment	
Contact Name: Tom Ellis	Telephone Number	: (630) 620-5700	
Usage Data Type: Summary	Interval PLC Value	Supply Group	
Delivery Method: Email U	JS Mail – (Not available for Interval Data)		
Mailing Address:255 E. Wilson Ave	City: _Lombard State	: <u>IL</u> ZIP: <u>60148</u>	
Email Address:			
*For multiple accounts, please list all acc	count and meter numbers on a separate shee	t and attach with this form.	
Tom Ellis Customer Name	Operations Superintendent	Title	
Customer Signature		Date	
· ·		Date	
2. General Account Agents (GAA): (Requi	ired only if data is to be delivered to a GAA)		
GAA Name:			
Mailing Address:	City:	_ State: ZIP:	
Contact Name:	Telephone Number:		
Email Address:			
3. Billing Information: (Required for all inter	rval)		
Charge Customer's ComEd Account	Account Number:		
Charge Separate Invoice (Complete info	rmation below only for Separate Invoice)		
Mailing Address: 255 E. Wilson Ave C	City: Lombard State: IL ZIP: 60148		

Fax to (630) 684-3990, email datarequest@comed.com. or mail to ComEd, ESSD/Data Request Team, 1919 Swift Drive, Oak Brook, IL 60523

Document Control #: 00032029.0

ATTACHMENT A-1

Account Number:	#1605083020
Meter Number:	117741074
Service Address:	255 East Wilson ave
	Lombard, IL 60148
Account Number:	#0690306006
Meter Number:	116175971
Service Address:	141418737
	245 East Wilson Avenue
	Lombard, IL 60148
Account Number:	#0690305009
Meter Number:	117741140
Service Address:	255 East Wilson ave
	Lombard, 1L 60148

Document Control #: 00032029.0