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**Local Government Energy Program
Energy audit report**

For

***Holland Road Pump House
Holmdel, NJ 07733***

Project Number: LGEA03



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INTRODUCTION

On May 13th Steven Winter Associates, Inc. (SWA) performed an energy audit and assessment of the Holmdel Township buildings located in Holmdel, NJ. Current conditions and energy-related information was collected in order to analyze and facilitate the implementation of energy conservation measures for the building.

Energy data collected in the field was imported into the eQUEST energy conservation software to generate a baseline model of the building. SWA simulated the installation of energy improvement measures on the baseline model of the building. Energy saving calculations and projected economics are automated and served as the basis for our conclusions.

There are five separate buildings that were evaluated for this energy audit; Town Hall, Department of Public Works (DPW), the Senior Community Center, Swim Club, and Middle Road Pump Station. The buildings were built at different times with several additions or expansions. Each building is unique in area and also building construction.

The present report is for the Holland Road Pump Station only.

The Holland Road Pump Station is an older building made of brick that has a rough area of 200 square feet. The building houses wastewater pumps, piping and controls for the Holmdel Township. The building is only occupied during maintenance or repair of the pumps. The pumps work 24 hours per day.

The goal of this energy audit is to provide sufficient information to make decisions regarding the implementation of the most appropriate and most cost effective energy conservation measures for the building.

EXECUTIVE SUMMARY

This document contains the energy audit report for the Holmdel Township Pump Station located at Holland Road near Glen Way, Holmdel, NJ 07733. The Pump Station is a one story building that contains approximately 200 square feet. Based on the field visit performed by Steven Winter Associates (SWA) staff on May 13th, 2009 and the results of a comprehensive energy analysis, this report describes the site's current conditions and recommendations for improvements. Suggestions for measures related to energy conservation and improved comfort are provided in the scope of work. Energy and resource savings are estimated for each measure that results in a reduction of heating, cooling, and electric usage.

The energy audit performed by SWA encompasses five buildings of various ages and constructions. A report has been generated for each building in order to fully document the existing conditions and recommended Energy Conservation Measures (ECMs). Based on the field visits performed by Steven Winter Associates (SWA) staff on May 13th, 2009 and the results of a comprehensive energy analysis, this report describes the site's current conditions and recommendations for improvements. Suggestions for measures related to energy and conservation and improved comfort are provided in the scope of work. Energy and resource savings are estimated for each measure that results in a reduction of heating, cooling and electric usage.

In the most recent year (June 2008-June 2009), the Pump Station electric meter recorded approximately 18,169 kWh or \$3,585 worth of electricity. The total amount of gas recorded by the Pump Station gas meter was 75 therms or \$370 worth of natural gas. The average aggregated cost of electricity was calculated to be \$0.21/kWh and the average aggregated cost of natural gas was calculated to be \$5.18/therm. With electricity and gas combined, the building consumed 70 MMBtus of energy at a total cost of \$3,954 in the most recent year.

SWA benchmarked Holmdel Pump Station using the U.S. Environmental Protection Agency's (EPA) *Energy Star Portfolio Manager* Energy benchmarking system. The Portfolio Manager was not capable of generating a benchmark score for the building since the building is a Pump House and is not easily categorized. The benchmark rating is based on the facility's source energy use, level of business activity, and geographical location. The Portfolio Manager is also capable of generating a site energy use intensity number using 2008 as a baseline year.

In order to compare commercial buildings equitably, the *Portfolio Manager* ratings convey the consumption of each type of energy in a single common unit. The EPA uses source energy to represent the total amount of raw fuel required to operate the building. The site energy use intensity for Pump Station building is 343.0 kBtu/sq.ft/year. After energy efficiency improvements are made, future utility bills can be added to the Portfolio Manager and the site energy use intensity for a different time period can be compared to the year 2008 baseline to track the changes in energy consumption associated with the energy improvements.

SWA recommends a total of 1 Energy Conservation Measures (ECMs) for the Holmdel Holland Road Pump House. The total investment cost for these ECMs is **\$840**. SWA estimates a first year savings of **\$213** with a simple payback of **3.9 years**. SWA also estimates that Holmdel Holland Road Pump House building will be able to reduce their carbon footprint by **1,816 lbs of CO2 annually**. The Holland Road Pump House is a small building that is used specifically as a pumping station and contains no other daily activities. The motors on the pumps have currently been replaced and the drives used to control the pumps; consists of newer technology. Since the building has limited use and already contains newer technology equipment, the scope of work for the pump house is very limited.

There are various incentives that the Pump House building could apply for that could also help lower the cost of installing the ECMs. SWA recommends that the Pump House applies for the NJ SmartStart program through the New Jersey Office of Clean Energy. This incentive can help provide technical assistance for the building in the implementation phase of any energy conservation project.

When pursuing incentives through the SmartStart program, SWA encourages building managers to contact the program provider to obtain more detailed information on the program guidelines and request pre-approval for all planned upgrades. At the time of this report, there are prescriptive measure incentives that would pay the Pump House up to \$25 for lighting upgrades. In the future, if the pumps, motors or controls have to be replaced then Holmdel Township should consider using the NJ SmartStart program to help offset the costs of those measures as well.

For further information on both custom and prescriptive incentives, please visit:

<http://www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/tools-and-resources/equipment-incentives/equi>

The New Jersey Clean Energy website also provides information on incentives for renewable energy. Visit the website to download a copy of the Renewable Energy Incentive Program (REIP) Guidebook. Incentives include up to \$1.00 per watt for eligible photovoltaic projects.

Holmdel Township personnel should become familiar with New Jersey Clean Energy programs if they are considering building new facilities or doing major renovations. For further information about specific program information, please visit:

<http://www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/nj-smartstart-buildings>

The following table summarizes the proposed Energy Conservation Measures (ECM) are their economical relevance.

ECM Table without Incentives														
ECM #	ECM description	Installed Cost		1st year energy and cost savings						Simple Payback (SPP)	Life of Measure (LoM)	Lifetime Cost Savings (\$)	Return on Invest (ROI)	Annual Carbon Reduction (lbs of CO2)
		Estimated Cost (\$)	Source	Electric Savings		Fuel Savings		Cost Savings (\$)						
				Consumption	Demand	Natural Gas								
1	Upgrade existing lighting	\$ 840	RS Means	1,014 kWh	0 kW	0 Therms		\$ 213	3.9	20	\$ 3,110	13.5%	1,816	
Total Scope of Work		\$ 840	-	-	-	0.0	-	\$ 213	3.9		\$ 3,110		1,816	
Definitions:			Assumptions:											
SPP: Simple Payback (years)			Discount rate = 3.2% per DOE FEMP guidelines				Average Electric Rate = 0.21 \$/kWh							
LoM: Life of Measure (years)			Energy price escalation rate = 0% per DOE FEMP guidelines				Average Fuel Rate = 5.18 \$/Therm							
ROI: Return on Investment (%)														
			Carbon Dioxide per unit Electricity = 1.7905 lbs of CO2/kWh											
			Carbon Dioxide per unit of Fuel = 11.023 lbs of CO2/unit fuel											

1. HISTORIC ENERGY CONSUMPTION

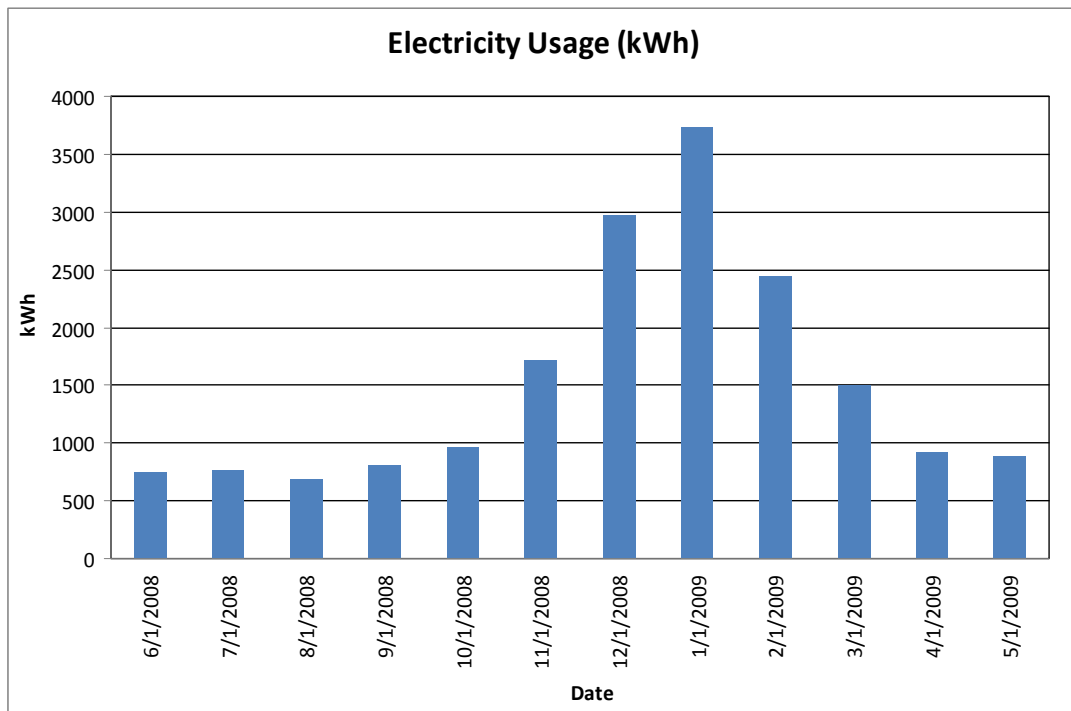
1.1. Energy usage and cost analysis

SWA analyzed utility bills from June 2008 through June 2009 that were received from Holmdel Township.

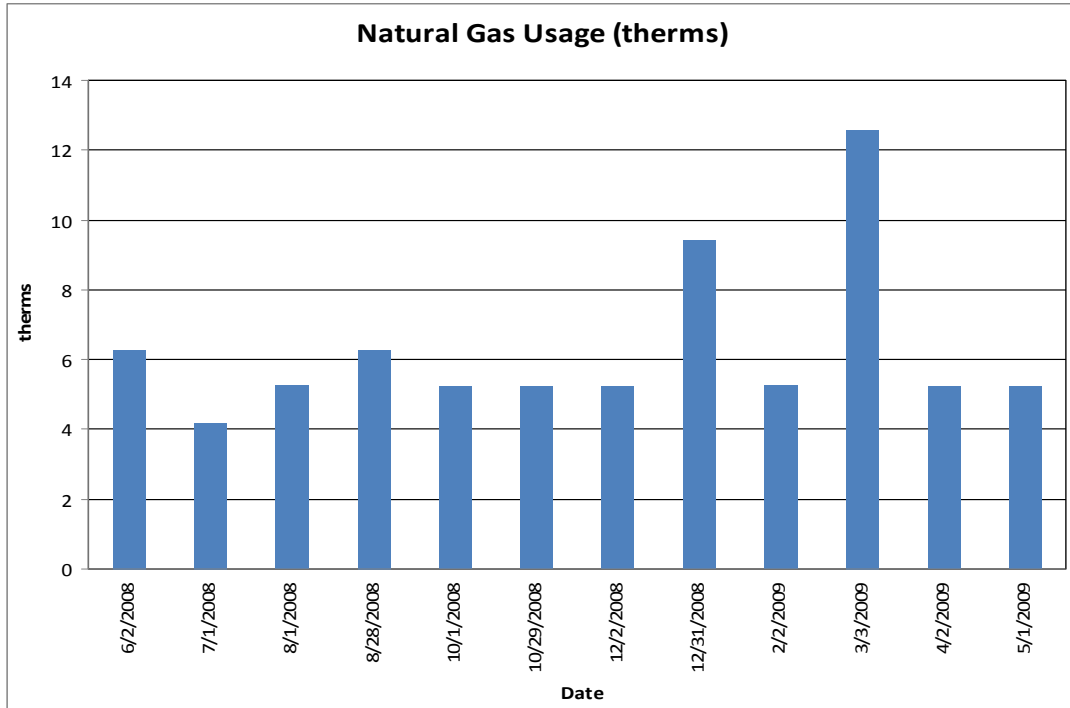
Electricity –The Pump Station electric meter currently buys electricity from JCP&L at **an average rate of \$.21/kWh** based on the previous 12 months worth of utility bills. The Pump House electric meter purchased **approximately 18,169 kWh or \$3,585 worth of electricity** in the previous year.

Natural Gas –The Pump Station gas meter currently buys natural gas from NJNG at **an average aggregated rate of \$5.18/therm** based on the previous 12 months worth of utility bills. The average gas rate is inflated since the Township must pay a minimum charge for service and delivery although there is low gas usage. The Pump Station gas meter purchased **approximately 75 therms or \$370 worth of natural gas** in the previous year. Natural gas is used to operate the generator that belongs to the pump house. The generator is fired up for 30 minutes each week and used in case of electrical power failure in the Pump Station.

The following chart shows electricity usage for the Pump Station electric meter based on utility bills for the 12 month period of June 2008 – June 2009.



The following chart shows natural gas usage for the Pump Station meter based on utility bills for the 12 month period of June 2008 – June 2009.



1.2. Utility rate

Electricity is received from the Pump Station electric meter which is purchased from JCP&L at a general service market rate for electricity usage (kWh) with a separate (kW) demand charge. The electric meter charges are currently an average rate of approximately \$0.21/kWh based on the previous 12 months of utility bills.

Natural gas is received from the Pump Station gas meter which is purchased at a general service market rate for natural gas (therms). The Pump Station currently pays an average aggregated rate of approximately of \$5.18/therm based on the previous 12 months of utility bills.

1.3. Energy benchmarking

The Pump Station information and utility data were entered into the U.S. Environmental Protection Agency's (EPA) *Energy Star Portfolio Manager* Energy benchmarking system. The building data could be documented; however, a performance score could not be generated since the building is a pump station and cannot be easily categorized. The Energy Star Portfolio Manager currently is not capable of generating a benchmark score for certain building types such as Pump Stations. SWA recommends that Holmdel Township create a Portfolio Manager account at the link below. When an account is created, SWA can share the Holmdel Township facilities and allow future data to be added and tracked using the benchmarking tool.

http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager



STATEMENT OF ENERGY PERFORMANCE Holmdel Township - Pump Station

Building ID: 1799055
For 12-month Period Ending: May 31, 2009¹
Date SEP becomes ineligible: N/A

Date SEP Generated: October 13, 2009

Facility	Facility Owner	Primary Contact for this Facility
Holmdel Township - Pump Station Holland Road Holmdel, NJ 07733	N/A	N/A

Year Built: 2009
Gross Floor Area (ft²): 200

Energy Performance Rating² (1-100) N/A

Site Energy Use Summary³

Electricity - Grid Purchase (kBtu)	61,100
Natural Gas (kBtu) ⁴	7,495
Total Energy (kBtu)	68,595

Energy Intensity⁵

Site (kBtu/ft ² /yr)	343
Source (kBtu/ft ² /yr)	1060

Emissions (based on site energy use)

Greenhouse Gas Emissions (MtCO ₂ e/year)	10
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Electric Distribution Utility

Jersey Central Power & Lt Co

National Average Comparison

National Average Site EUI	104
National Average Source EUI	213
% Difference from National Average Source EUI	398%
Building Type	Other

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards⁶ for Indoor Environmental Conditions:

Ventilation for Acceptable Indoor Air Quality	N/A
Acceptable Thermal Environmental Conditions	N/A
Adequate Illumination	N/A

Certifying Professional
N/A

Notes:

1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12 month period.
4. Natural Gas values in units of volume (e.g. cubic feet) are converted to kBtu with adjustments made for elevation based on Facility zip code.
5. Values represent energy intensity, annualized to a 12 month period.
6. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, PE facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2022), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

EPA Form 5800-16

2. FACILITY AND SYSTEMS DESCRIPTION

2.1. Building Characteristics

The single story Pump Station consists of approximately 200 square feet. The Pump Station contains wastewater pumps, piping and controls.

2.2. Building occupancy profiles

The Pump Station is not normally occupied unless the pumps are undergoing maintenance or repair. The peak occupancy is 3 persons when the pump is undergoing maintenance. Pumps run 24 hours per day.

2.3. Building envelope

2.3.1. Exterior walls

The exterior walls of the Pump Station consist of brick construction with no insulation.

2.3.2. Roof

The Pump House consists of an approximately 4/12 pitch gable roof. The medium brown colored asphalt shingle roof is framed with wood rafters. There was no insulation observed on the roof. On the day of the site visit, SWA inspected the roof and observed no major deficiencies.

2.3.3. Base

The building's base is a 4" concrete slab-on-grade. No insulation was detected. There were no reported problems with water penetration or moisture.

2.3.4. Windows

There are no windows installed in the Pump Station.

2.3.5. Exterior doors

The doors are aluminum-framed units with no insulating properties. The exterior doors of the building were observed to have the original weather-stripping, which is no longer performing as intended. SWA recommends that the weather-stripping is maintained in order to keep the weather out of the building.

2.3.6. Building air tightness

The Pump House building was observed to be a relatively tight building. There were no major observed deficiencies of air tightness within the building. Maintenance staff should always make sure that entrance door is sealed well to prevent freezing during the winter.

2.4. HVAC systems

2.4.1. Heating

The pump house contains a small, ceiling mounted electric unit heater in order to prevent freezing in the pump house. The utility bills show that this heater is used mostly from October through April for heating purposes. Due to the small size of this electric heater and the minimal amount of heating that it is required for, it would not be cost effective to upgrade at this point in time. If the unit is ever to be replaced, the most energy efficient option should always be chosen.

2.4.2. Cooling

The pump house is currently not cooled. The pump houses only contain heating in order to prevent freezing and cooling is not necessary.

2.4.3. Ventilation

The pump house contains louvered vents as well as an exhaust fan prevent fumes from building up within the structure.

2.4.4. Domestic Hot Water

There is no Domestic Hot Water for the pump house due to the use of the building.

2.5. Electrical systems

2.5.1. Lighting

The pump house is divided into two separate rooms; a left side room and a right side room. The left side currently has four 75W incandescent bulbs for general lighting and the right side has two 75W incandescent bulbs for general lighting. These lights are connected to a switch and are only operated when the pump house is accessed for maintenance. The pump house building also contains one 400W probe start metal halide fixture for exterior lighting. The exterior lighting is controlled by a timer so that it only turns on at night.

2.5.2. Pumps, Motors and other Appliances

The pump house currently contains two Smith & Loveless pumps used for water distribution. These pumps are each fitted with a 1/6th HP GAST motor. These GAST motors were installed 12/24/2008 and therefore would not be cost-effective to replace at this time.

The current controls for the pumps consist of up-to-date technology and are well maintained. The controls help prevent maintenance issues by alternating every few pumps between the two pumps. These pumps are run 24 hours per day and contain an alternator on the control valves.

Extra appliances are not used in the pump house since it is a small structure that only serves the purpose of pumping potable water.

2.5.3. Elevators

The pump house building does not contain any elevators due to its small size.

2.5.4. Other electrical systems

The building contains a generator to provide back-up power in case of a power failure. This generator is run on natural gas and automatically comes on for 30 minutes each week.

3. EQUIPMENT LIST

INVENTORY

Building System	Description	Model#	Fuel	Space served	Estimated Remaining useful life %
Pumps	Two (2) Smith & Loveless pumps	Model #SC 2544TTCW7036AAL	Electric	All areas	90%
Motors	Two (2) Gast motors, 1/6 th HP each	Model #1VAF-10-M100X	Electric	All areas	90%
Heating	One (1) ceiling mounted, electric heater	NA	Electric	All areas	70%
Generator	One (1) McGraw Edison Onan 45 emergency backup generator	Model#OEM-15R/24767M	Natural Gas	All areas	80%

Note:

The remaining useful life of a system (in %) is an estimate based on the system date of built and existing conditions derived from visual inspection.

4. ENERGY CONSERVATION MEASURES

Summary table

ECM#	Description
1	Upgrade existing lighting

ECM#1: Upgrade existing lighting

Description:

The pump house contains few lighting fixtures but could still benefit from upgrading the existing lighting. The 75W incandescent bulbs used for general interior lighting should be upgraded to CFLs to save on electricity when the pumps are being maintained. A significant savings can occur if the outside lighting fixture is upgraded from a 400W probe-start metal halide fixture to a 320W pulse-start metal-halide fixture.

Installation cost:

Estimated installed cost: \$840
 Source of cost estimate: *RS Means*

Economics:

1st year energy and cost savings						Simple Payback (SPP)	Life of Meas. (LoM)	Lifetime Cost Savings	Return on Invest (ROI)	
Electricity Savings		Fuel Savings		Cost Savings						
Consumption	Demand	Natural Gas								
1,014	kWh	0	kW	0	Therms	\$213	3.94	20	\$3,110	13.51%

Assumptions: SWA calculated the savings for this measure using measurements taken the day of the field visit and using the billing analysis.

Rebates/financial incentives:

NJ Clean Energy – SmartStart Building Program – Incentive for Metal Halide fixtures w/pulse start (\$25 per fixture)
Maximum incentive amount is \$25

Options for funding ECM:

This project may benefit from enrolling in NJ SmartStart program with Technical Assistance to offset a portion of the cost of implementation.
<http://www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/nj-smartstart-buildings>

RENEWABLE AND DISTRIBUTED ENERGY MEASURES

4.1. Existing systems

There are currently no existing renewable energy systems.

4.2. Solar Photovoltaic

Solar Photovoltaic (PV) technology would not be applicable for this building due to the size of the building and the location.

4.3. Solar Thermal Collectors

Solar thermal collectors are not applicable for this building since there is no domestic hot water usage.

4.4. Combined Heat and Power

CHP is not applicable for this building due to the small size of the building.

4.5. Geothermal

Geothermal is not applicable for this building due to the small size of the building.

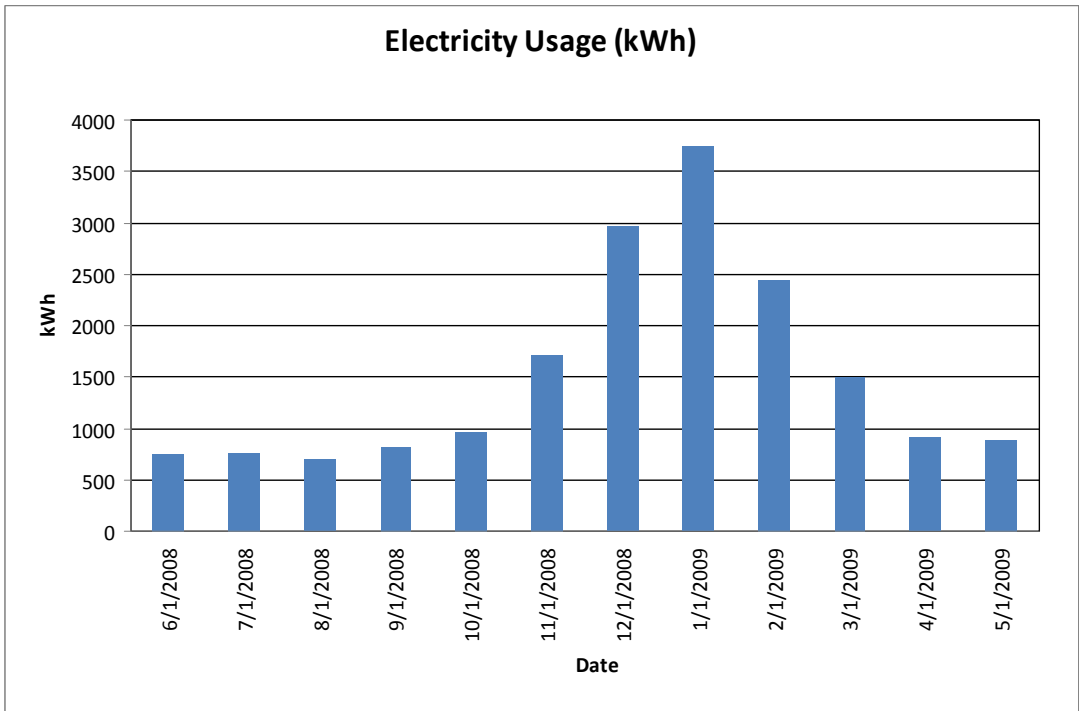
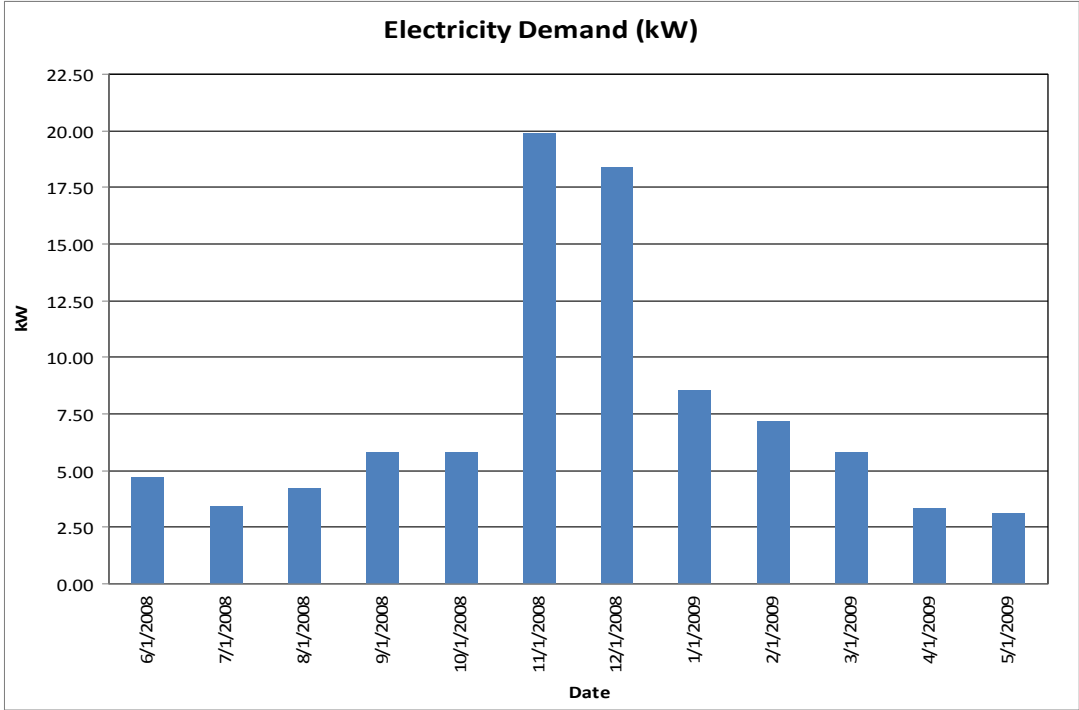
4.6. Wind

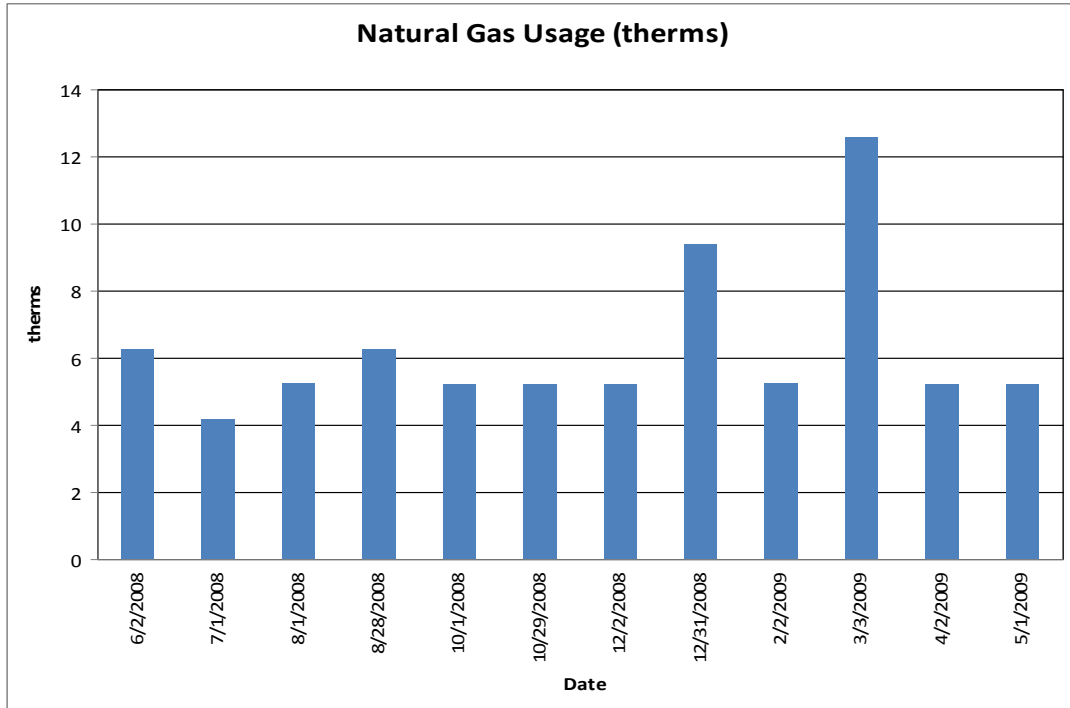
Wind power production is not appropriate for this location because required land is not available for the wind turbine, the available wind energy resource is very low and the electric load of the building is small.

5. ENERGY PURCHASING AND PROCUREMENT STRATEGIES

5.1. Load profiles

The average electrical peak demand for the previous year was 7.5 kW and the maximum peak demand was 19.9 kW. The electric and gas load profiles for this project are presented in the following charts. The first chart shows electric demand (in kW) for the previous 12 months and the other two charts show electric and gas usage (in kWh), respectively.





5.2. Tariff analysis

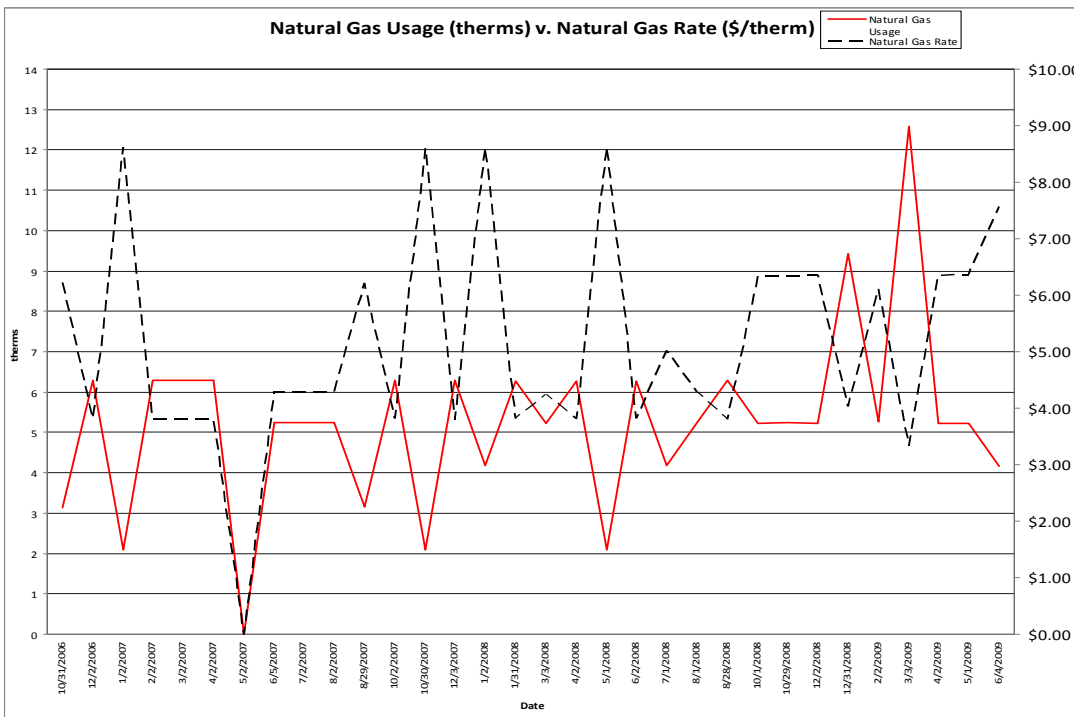
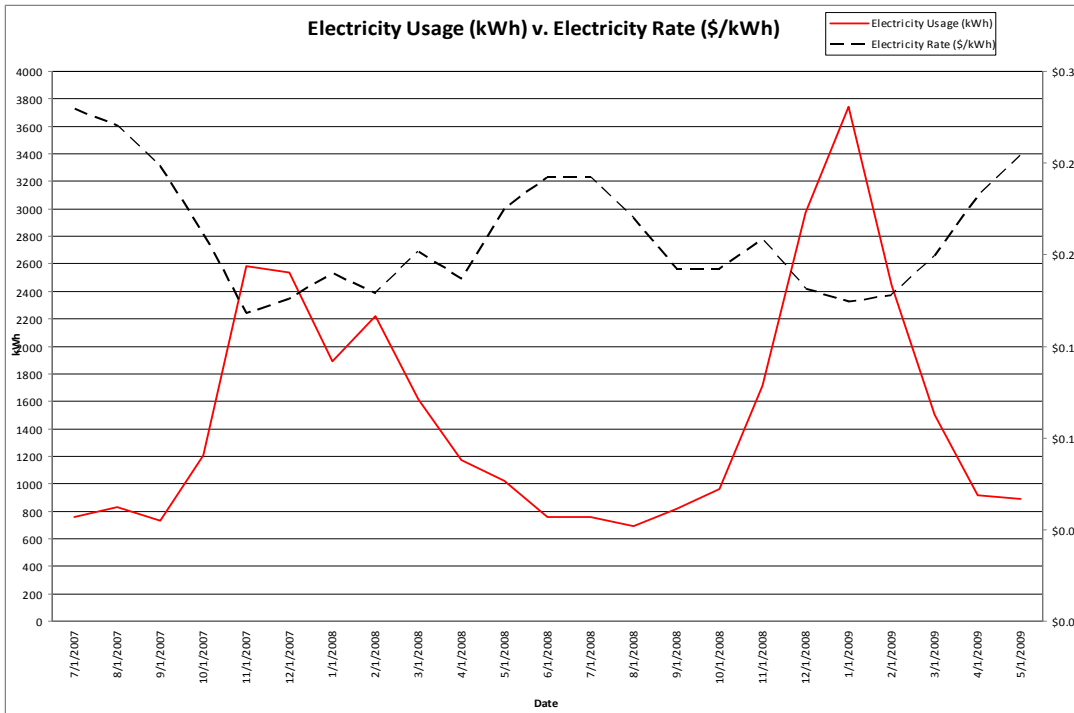
Currently, natural gas and electricity is provided to the Pump House through the Pump House gas and electric meters. Natural gas is purchased for the Pump House meter from NJNG at a general service rate. The general service rate for natural gas charges a market-rate price based on usage and the Pump House billing does not breakdown demand costs. Demand prices are reflected in the utility bills and can be verified by observing the price fluctuations throughout the year. Natural gas is used minimally for the emergency back-up generator.

Electricity is purchased for the Pump House meter from JCP&L at a general service rate. The general service rate for electricity charges a market-rate price based on usage and the Pump House billing does not breakdown demand costs. Demand prices are reflected in the utility bills and can be verified by observing the price fluctuations throughout the year. Electricity usage increases during the winter months when the pump house demands heat from the electric unit heater.

5.3. Energy Procurement strategies

The pump house building purchases natural gas via the pump house gas meter from NJNG. Electricity is received from the pump house electric meter directly from JCP&L and no ESCO is used. SWA analyzed the utility rate for electricity over the previous 12 months. Electric bill analysis shows fluctuations of over 31% over the most recent 12 month period. SWA recommends that the building explore the opportunity of purchasing electricity from an ESCO in order to reduce electric rate fluctuation and ultimately reduce the annual cost of energy for the building. Natural Gas Bill analysis shows fluctuations of over 48% over the most recent 12 month period. SWA recommends that pump house building explore the opportunity of purchasing natural gas from an ESCO in order to reduce natural gas fluctuation and ultimately reduce the

annual cost of energy for the building. Appendix B contains a complete list of third party energy suppliers for JCP&L and NJNG service.



The building would not be eligible for enrollment in a Demand Response Program because the minimum electric demand each month does not greatly exceed 50 kW, which is the typical threshold for considering this option.

6. METHOD OF ANALYSIS

6.1. Assumptions and tools

Energy modeling tool: eQUEST V3.6
Cost estimates: RS Means 2009 (Facilities Maintenance & Repair Cost Data)
RS Means 2009 (Building Construction Cost Data)
RS Means 2009 (Mechanical Cost Data)
Cost estimates also based on utility bill analysis and prior experience with similar projects

6.2. Disclaimer

This engineering audit was prepared using the most current and accurate fuel consumption data available for the site. The estimates that it projects are intended to help guide the owner toward best energy choices. The costs and savings are subject to fluctuations in weather, variations in quality of maintenance, changes in prices of fuel, materials, and labor, and other factors. Although we cannot guarantee savings or costs, we suggest that you use this report for economic analysis of the building and as a means to estimate future cash flow.

THE RECOMMENDATIONS PRESENTED IN THIS REPORT ARE BASED ON THE RESULTS OF ANALYSIS, INSPECTION, AND PERFORMANCE TESTING OF A SAMPLE OF COMPONENTS OF THE BUILDING SITE. ALTHOUGH CODE-RELATED ISSUES MAY BE NOTED, SWA STAFF HAVE NOT COMPLETED A COMPREHENSIVE EVALUATION FOR CODE-COMPLIANCE OR HEALTH AND SAFETY ISSUES. THE OWNER(S) AND MANAGER(S) OF THE BUILDING(S) CONTAINED IN THIS REPORT ARE REMINDED THAT ANY IMPROVEMENTS SUGGESTED IN THIS SCOPE OF WORK MUST BE PERFORMED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS THAT APPLY TO SAID WORK. PARTICULAR ATTENTION MUST BE PAID TO ANY WORK WHICH INVOLVES HEATING AND AIR MOVEMENT SYSTEMS, AND ANY WORK WHICH WILL INVOLVE THE DISTURBANCE OF PRODUCTS CONTAINING MOLD, ASBESTOS, OR LEAD.

Appendix A: Lighting study

Existing Lighting Conditions													
#	Building	Location in Building	Fixture Type	Ballast Type	No. of Fixtures	No. of Lamps	Type of Lamp	Watts/Lamp	Hrs/D ay	Energy Use (kWh/year)	Controls	Daylighting possible?	Total Power (W)
1	Pump House	Right Side	75W Inc. Bulb	-	2	1	Incandescent	75	2	31	Switch	No	150
1	Pump House	Left Side	75W Inc. Bulb	-	4	1	Incandescent	75	2	62	Switch	No	300
1	Pump House	Exterior Lights	400W Multi-Vapor	-	1	1	Multi-Vapor	400	24	9600	None	No	400

Proposed Lighting Conditions													
#	Building	Location in Building	Fixture Type	Ballast Type	No. of Fixtures	No. of Lamps	Type of Lamp	Watts/Lamp	Hrs/D ay	Energy Use (kWh/year)	Controls	Daylighting possible?	Total Power (W)
1	Pump House	Right Side	32W CFL	-	2	1	CFL	32	2	13	Switch	No	64
1	Pump House	Left Side	32W CFL	-	4	1	CFL	32	2	27	Switch	No	128
1	Pump House	Exterior Lights	320W Pulse-start MH	-	1	1	Pulse-start MH	320	24	7680	None	No	320

Existing Lighting Usage (kWh/year)	9,694
Proposed Lighting Usage (kWh/year)	7,720
Existing Lighting Cost (\$/year)	\$2,036
Proposed Lighting Cost (\$/year)	\$1,621
Annual savings (kWh/year)	1,974
Annual savings (\$/year)	\$414
Existing Power Lighting Density (W/sqft)	4.25
Proposed Power Lighting Density (W/sqft)	2.56

Appendix B: Third Party Energy Suppliers (ESCOs)

Third Party Electric Suppliers for JCPL Service Territory	Telephone & Web Site
Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095	(800) 437-7872 www.hess.com
BOC Energy Services, Inc. 575 Mountain Avenue Murray Hill, NJ 07974	(800) 247-2644 www.boc.com
Commerce Energy, Inc. 4400 Route 9 South, Suite 100 Freehold, NJ 07728	(800) 556-8457 www.commerceenergy.com
Constellation NewEnergy, Inc. 900A Lake Street, Suite 2 Ramsey, NJ 07446	(888) 635-0827 www.newenergy.com
Direct Energy Services, LLC 120 Wood Avenue, Suite 611 Iselin, NJ 08830	(866) 547-2722 www.directenergy.com
FirstEnergy Solutions 300 Madison Avenue Morristown, NJ 07926	(800) 977-0500 www.fes.com
Glacial Energy of New Jersey, Inc. 207 LaRoche Avenue Harrington Park, NJ 07640	(877) 569-2841 www.glacialenergy.com
Integrus Energy Services, Inc. 99 Wood Ave, South, Suite 802 Iselin, NJ 08830	(877) 763-9977 www.integrusenergy.com
Liberty Power Holdings, LLC Park 80 West Plaza II, Suite 200 Saddle Brook, NJ 07663	(800) 363-7499 www.libertypowercorp.com
Pepco Energy Services, Inc. 112 Main St. Lebanon, NJ 08833	(800) 363-7499 www.pepco-services.com
PPL EnergyPlus, LLC 811 Church Road Cherry Hill, NJ 08002	(800) 281-2000 www.pplenergyplus.com
Sempra Energy Solutions 581 Main Street, 8th Floor Woodbridge, NJ 07095	(877) 273-6772 www.semprasolutions.com
South Jersey Energy Company One South Jersey Plaza, Route 54 Folsom, NJ 08037	(800) 756-3749 www.southjerseyenergy.com
Suez Energy Resources NA, Inc. 333 Thornall Street, 6th Floor Edison, NJ 08837	(888) 644-1014 www.suezenergyresources.com

Third Party Gas Suppliers for NJNG Service Territory	Telephone & Web Site
Cooperative Industries 412-420 Washington Avenue Belleville, NJ 07109	(800) 628-9427 www.cooperativenet.com
Direct Energy Services, LLC 120 Wood Avenue, Suite 611 Iselin, NJ 08830	(866) 547-2722 www.directenergy.com
Gateway Energy Services Corp. 44 Whispering Pines Lane Lakewood, NJ 08701	(800) 805-8586 www.gesc.com
UGI Energy Services, Inc. d/b/a/ GASMARK 704 East Main Street, Suite 1 Moorestown, NJ 08057	(856) 273-9995 www.ugienergyservices.com
Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095	(800) 437-7872 www.hess.com
Intelligent Energy 2050 Center Avenue, Suite 500 Fort Lee, NJ 07024	(800) 724-1880 www.intelligentenergy.org
Metromedia Energy, Inc. 6 Industrial Way Eatontown, NJ 07724	(877) 750-7046 www.metromediaenergy.com
MxEnergy, Inc. 510 Thornall Street, Suite 270 Edison, NJ 08837	(800) 375-1277 www.mxenergy.com
NATGASCO (Mitchell Supreme) 532 Freeman Street Orange, NJ 07050	(800) 840-4427 www.natgasco.com
NJ Gas & Electric 1 Bridge Plaza, Fl. 2 Fort Lee, NJ 07024	(866) 568-0290 www.NewJerseyGasElectric.com
Pepco Energy Services, Inc. 112 Main Street Lebanon, NJ 08833	(800) 363-7499 www.pepco-services.com
PPL EnergyPlus, LLC 811 Church Road Cherry Hill, NJ 08002	(800) 281-2000 www.pplenergyplus.com
South Jersey Energy Company One South Jersey Plaza, Route 54 Folsom, NJ 08037	(800) 756-3749 www.southjerseyenergy.com
Sprague Energy Corp. 12 Ridge Road Chatham Township, NJ 07928	(800) 225-1560 www.spragueenergy.com
Woodruff Energy 73 Water Street Bridgeton, NJ 08302	(800) 557-1121 www.woodruffenergy.com