

March 17, 2017

**HON. Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Agency Building 3
Albany, NY 12223-1350
Case No. _____**

**Thomas G. Kobus, Esq.
1594 Sheridan Drive
Buffalo, NY 14217-1212
(716)873-2021
E-mail: NYONEK@AOL.COM**

**Re: Petition for Main Electric Meter at the Riverview Heights
Apartment Building located at 2845 Niagara Street, Buffalo, New
York 14207**

Anthony P. LoRusso is the owner of the above referenced existing Rental Apartment Building. The owner submits this Petition to provide a Main Electric Meter for services for the building, which is located within the territory of National Grid.

The 3-story brick Riverview Heights Apartment Building, located at the corner of Niagara Street and Riverside Avenue near the Niagara River, was built in 1938, and it consists of 15 apartments. (See Exhibit 1) Today the property has separate electric meters for each apartment as well as the common areas.

There is one single meter for natural gas, which is provided by National Fuel. The end uses for natural gas include space heating, domestic hot water production, and cooking for each apartment's oven and range. The apartments and interior hallways are heated with a hot water system. Two hot water boilers used for space heating both have standing pilots and are located in the basement mechanical room. This building does not utilize electric resistive heat.

Domestic hot water is provided by one automatic storage water heater and a 200 gallon commercial storage tank.

Owner's Master Meter Plan

As set forth below the Owner's plan for a Master Electric Meter is in the public interest and is consistent with the provision of safe and adequate electric service to the low income tenants and the seniors residing in the building.

A. Antiquated Requirement for Submetering

The Owner is aware of the original PSC rule from the 1970s that requires tenants to manage their electric power usage through an approved submetering system. However, the Owner strongly believes that requirement is outdated because of the changes and transformation promoted by New York State to efficiently generate electric power in the 21st century that is consistent with the latest technology.

In 2015 the Owner requested National Grid, the sole service provider, to have a main electric meter for this 15-unit apartment complex. Therefore, a permit was issued by the City of Buffalo, and a certified electrical contractor was engaged by the Owner, and then National Grid installed a frame for the single main meter on the exterior of the building. (See Exhibit 2) However, two days later a National Grid representative ordered that the main meter could not be installed without the approval of the PSC. Consequently, the main meter has not been installed.

The Owner is a huge proponent of solar power. Since the Owner suffered a very serious injury, he had to wait until now to Petition the PSC to approve the installation of the Main Electric Meter.

B. Energy Audit

In 2016 the Owner contracted with Buffalo Energy of 5763 Seneca Street in Elma, NY to prepare a thorough Energy Audit for the Riverview Heights Apartments. (See Exhibit 3)

The Buffalo Energy Audit Report made various Energy Conservation Measures that the Owner is in the process of completing.

C. Install Solar System

In 2016 the Owner, a huge advocate for the benefit of solar power, contracted with Freedom Solar LLC to develop a proposal for the installation of solar photo-voltic panels to provide significant electric power for the Riverview Apartments. Freedom Solar representatives have recently informed the Owner that solar power could supply approximately 60 percent of the electric power for this building. Therefore, installing solar panels on this building will help alleviate the energy demand on National Grid and New York State, especially in the high demand summer months. (See Exhibit 4)

Furthermore, solar panels, which of course have no carbon footprint, contribute to a cleaner environment. The Huntley Electric Coal generating facility, located within two miles of this apartment building recently has closed, and that decision has already resulted in an improved environment in Western New York and nearby Canada.

The Owner looks forward to participating in the New York State and Federal government programs that make the installation of solar panels more cost effective.

D. Tenants Win, Owner Wins and the Grid Wins

The power usage by the tenants will be reduced substantially since the Owner has begun to implement the important Energy Conservation Measures recommended by the Energy Audit Report which include: lighting improvements; air sealing; window replacement; new energy efficient clothes washers; install energy efficient refrigerators; etc.

Having the Main Electric Meter will allow the Owner to purchase raw power at a reduced electric rate. In addition the Owner will save the monthly meter rentals for the 15 apartment meters. The low income tenants will benefit because there will be less pressure on the Owner to increase rent for the tenants. The tenants have told the Owner that they want their utilities to continue to be included in their monthly rent. Some tenants are mentally-challenged, and it's difficult for them to handle their monthly bills.

As indicated above National Grid wins with a reduced load on the grid. Also, National Grid will realize administrative cost savings in billing for the Master Meter rather than processing separate bills for the tenants and the one-house common area meter.

E. Owner's New Allentown Square Apartment Building

Anthony P. LoRusso, the Owner herein, is building the new 59-unit solar powered Allentown Square Apartment Building at 295 Maryland Place 14201, which is a very short distance from the Riverview Heights Apartments. I want to emphasize that the new Allentown Square will have a single Main Electric Meter.

Governor Andrew Cuomo is expected to attend the Grand Opening Ceremony for the Allentown Square Apartment building in July 2017.

The Owner's 15-unit Riverview Apartment Building will be solar powered, and the Owner is undertaking various Energy Conservation Measures that were recommended by Riverview's Energy Audit. Furthermore, the New York State Energy Research and Development Authority is providing valuable assistance and direction to this solar powered building.

F. Demonstration Program

The demands and pressure on the power grid in Upstate New York do not in any way compare to the tremendous stress on energy in New York City and its suburbs. The Owner maintains that the PSC should approve this Petition that is based on the efficient use of energy which is an important goal of New York State in the 21st century.

The Owner suggests that this proposal for obviating the need for submeters in the Riverview Heights Apartment Building in Buffalo, and approving this Petition could serve as a demonstration program to promote solar power for other similar buildings.

G. Conclusion

The energy culture and demands in 2017 are completely different from the electric power environment in the 1970s. Therefore, the Owner requests the PSC to fully embrace the fast-moving latest technology of the 21st century and override and thus supersede the antiquated submetering requirements.

Thank you for your consideration of this Petition. My client, Anthony P. LoRusso, would like to appear with his Counsel before the Public Service Commission to address this important matter.

In addition the Commission's approval of this Petition would provide a significant incentive to promote solar power.

Please contact me at (716)873-2021 or (202)262-6003 with any questions about this Petition.

I do hereby affirm that the contents of this Petition are true to the best of my knowledge.

Sincerely yours,

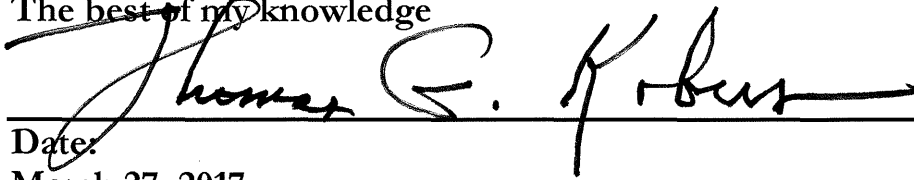
THOMAS G. KOBUS, ESQ.

I, Thomas G. Kobus, Esq.

do hereby

Affirm the contents of this document are true to

The best of my knowledge

A handwritten signature in black ink that reads "Thomas G. Kobus". The signature is written in a cursive style with a long horizontal stroke at the end. It is positioned above a solid horizontal line.

Date:

March 27, 2017

Exhibit 1

3-Story Brick Riverview Heights Apartment Building

2845 Niagara Street, Buffalo, New York 14207

Exhibit 2

Installation of the Frame for the Main Meter at the Riverview Heights Apartment Building

Exhibit 3

Energy Audit Report for the Riverview Heights Apartment Building

Exhibit 4

Freedom Solar LLC's Solar System Proposal for the Riverview Heights Apartment Building

Exhibit 1

3-Story Brick Riverview Heights Apartment Building

2845 Niagara Street, Buffalo, New York 14207

RIVERVIEW HEIGHTS APARTMENTS

2485 NIAGARA STREET, BUFFALO, NY 14207

Riverfront Location

15-Unit Apartment Building

Owners:

Contact Info: Office:



General Information:

Located at 2485 Niagara Street on the corner of Riverside Avenue in a residential neighborhood near Riverside Park. This 15-unit, 3-story all brick building consists of (6)-2Bed/1Bath & (9)-1Bed/1Bath units. Property has convenient on-street parking & two driveway spaces for tenants. Nicely landscaped yard. Overlooks Niagara River with parkland across the street. Near shopping & other amenities. Easy Thruway access. Minutes to downtown.

Building has been well maintained and has newer thermal windows in front with aluminum storms on all others. Flat torchdown roof. Clean spacious full basement with storage lockers & coin-op laundry. Stoves & refrigerators included. All apartments have hardwood floors.

Exhibit 2

**Installation by National Grid of the Frame for the Main
Meter at the Riverview Heights Apartment Building**



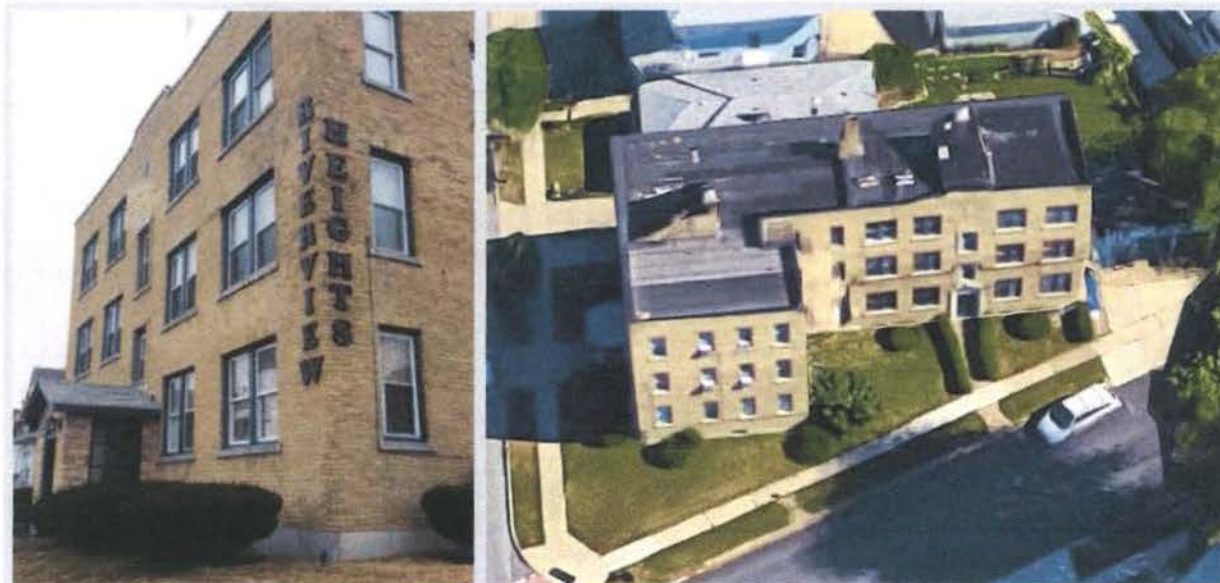
Exhibit 3

Energy Audit Report for the Riverview Heights Apartment Building

Energy Audit Report

Riverview Heights Apartments

2485 Niagara Street
Buffalo, NY



Prepared by:
Buffalo Energy
5763 Seneca Street
Elma, NY

Prepared for:
Anthony LoRusso
2485 Niagara Street
Buffalo, NY

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Executive Summary

Buffalo Energy is pleased to provide the following energy assessment report for Riverview Heights Apartments.

Riverview Heights Apartments is an urban waterfront property located at 2485 Niagara Street in Buffalo, New York which consists of a single multi-story apartment building. The building has 3 full stories above grade with 15 apartment units, and sits above a full basement.



On February 23, 2016 an audit team from Buffalo Energy visited the apartments to perform a building inspection as part of a comprehensive energy assessment. It was a sunny 30 degree day, without much of a breeze. The inspection of the facility included a walk through the building, in which were examined all major energy and water-using systems including: lighting, HVAC, water heating, motors, building envelope, refrigeration, cooking, process systems, faucets, and building controls.

All available utility bill data was collected and compared to the existing building system components and hours of operation.

The assessment goal was to identify potential Energy Conservation Measures (ECM) that would help improve energy utilization, and improve the health, safety, and comfort of residents and staff. This report provides a description of each identified measure, as well as a table presenting prioritized improvements and lifecycle cost analysis.

The *Evaluated Measures* are described in the following pages. Some of these measures have SIR's greater than 1.0. Others evaluated to less than one. The energy saving measures with low SIR's will likely not pay for themselves in energy savings alone. Other factors should be considered to justify these measures including capital improvement, increased property value, tenant retention, reduced maintenance expense and occupant health and safety.

Evaluated Measures

Energy Conservation Measures

Measure Name	Installed Cost	Quantity	Annual Energy Savings			Energy Cost Savings	Simple Payback	SIR
			Heating MMBtu	Non-Heating MMBtu	Non-Cooling kWh			
1 Laundry Lighting	\$70	2	-1	0	298	\$97	0.7	16.5
2 Pipe Insulation	\$1,850	40	57	0	0	\$466	4.0	2.3
3 Low Flow Devices	\$55	7	0	2	0	\$13	4.1	1.5
4 Pump Replacement - VFD	\$1,500	1	0	0	629	\$219	6.9	1.7
5 Airsealing	\$1,500	15	26	0	0	\$210	7.1	1.5
6 Boiler Replacement	\$15,000	1	187	0	0	\$1,517	9.9	1.8
7 Domestic Hot Water	\$4,500	1	-6	53	0	\$377	11.9	1.0
8 Window Replacement	\$33,495	77	134	0	0	\$1,086	30.8	0.7
9 Clothes Washer Replacement	\$2,200	2	0	4	0	\$33	67.5	0.2
Totals	\$60,170		398	58	927	\$4,017	15.0	

Existing Conditions

Riverview Heights Apartments consists of 15 apartments within a single J-shaped building from the early 1900's. It's located on the corner of Niagara Street and Riverside Avenue, along a wide section of the Niagara River. The building sits on an E-W axis, having main entrances on the west and south exposures. It is a free standing building, with nearby dwellings at a similar height on the east and south, and large 40 acre park just a half-block to the north.

The building includes a mix of 1 and 2 bedroom apartment units housing lower income and elderly occupants. The south-side entrance and stairwell provides access to Apartments 1–9. The remaining six apartments are accessed via the west entrance stairwell. The total heated square footage including apartments and stairwells is just over 10,000. The basement is a non-heated space which includes a mechanical room and common area laundry.

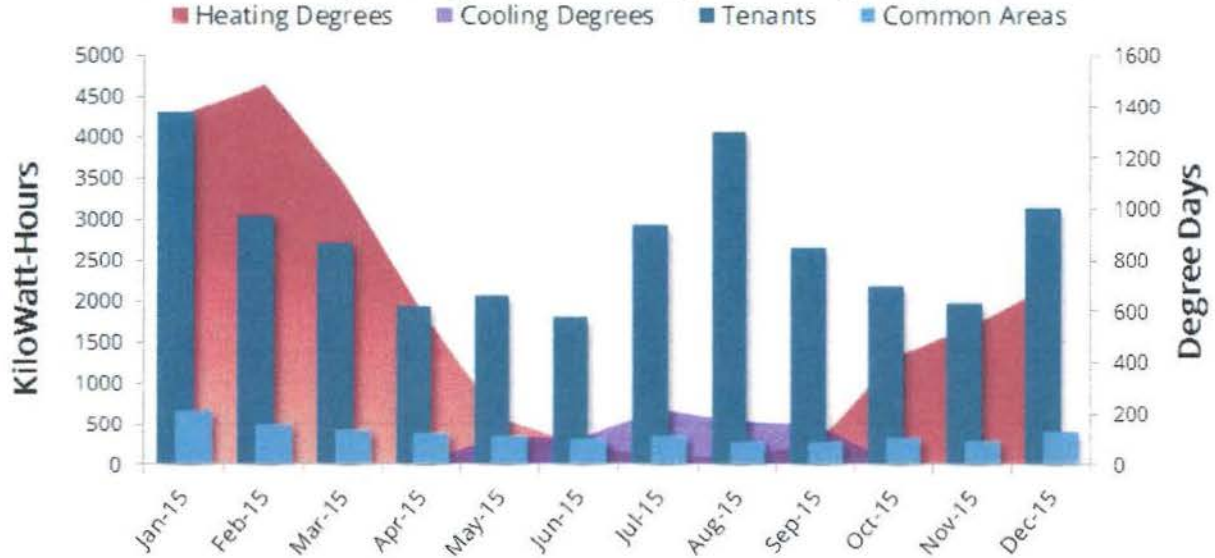


Utilities

Tenant and owner energy use were reviewed for the period starting January 2015 and ending December 2015. The property has separate electric meters for common areas and each apartment unit, and one single master meter for natural gas. End uses for natural gas include space heating, domestic hot water production, and cooking for each apartment oven and range. Natural gas is provided by National Fuel and electricity is provided by National Grid.

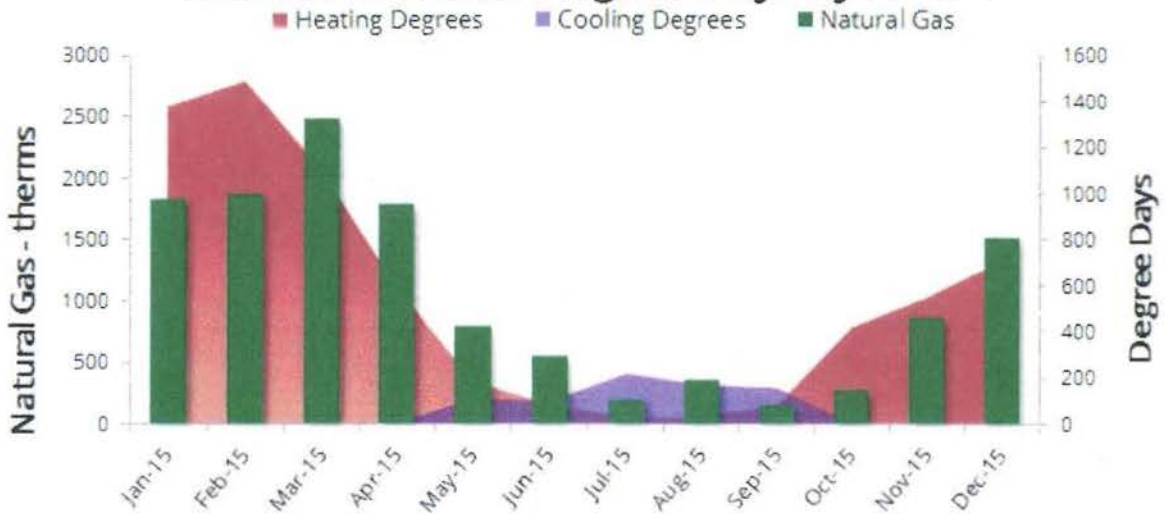


Electricity Usage and Degree Days by Month



Tenant electric use shows seasonal variation with the *cooling* season, with about 10% of the annual electric use appearing to result from cooling loads. Common area electric use also has seasonal variation with *heating* months, showing about a 20% increase over baseload, probably resulting from the circulation pump. Natural gas tracks along with heating degree days. Baseload is about 29% of the total usage, which includes domestic hot water and apartment cooking.

Natural Gas and Degree Days by Month



Building Performance Summary

Annual Energy Cost



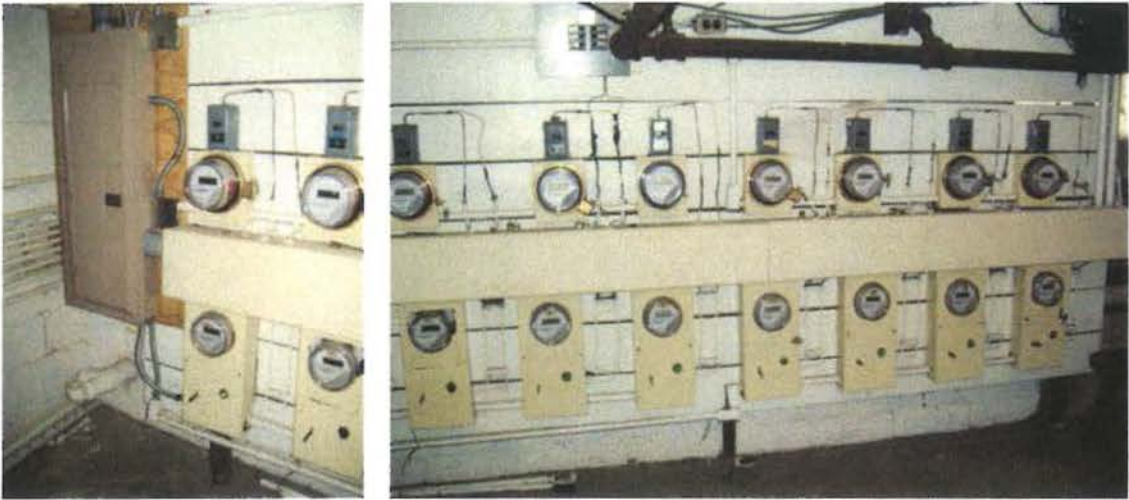
	Cost	Cost/SF
■ Tenant Electricity	\$11,428	\$0.11
■ Owner Electricity	\$1,574	\$0.02
■ Natural Gas	\$8,269	\$0.08
Total Energy Cost	\$21,271	\$0.21

During the twelve-month analysis period, the complex consumed:

month analysis period,

- 37,422 kWh of electricity costing \$13,002 at \$0.374 per kWh*
- 12,741 therms of natural gas costing \$8,269 at \$0.649 per therm

*While the blended rate of electricity is high, apartment usage is lower than average. Each apartment meter incurs \$21 monthly fee which comprises over 29% of the buildings annual electric costs.



Building Envelope

The building construction is 8" CMU with 4" face brick. Interior surfaces are plastered cement over masonry units, having no cavity insulation. Electrical outlets on exterior walls are flush-mounted with conduit chases for run wiring. The roofing membrane and flashings are in good condition, having been replaced within the past 5-10 years.



Basement is accessible via both stairwells and has a rear exit door to the east. Basement areas include mechanical room and laundry areas, as well as some storage area. Many of the windows are original to the building; others have been replaced in the past 5-7 years. Air infiltration was evaluated and was found to be moderate.

Double Hung Windows		Weatherstrip	Size		Orientation				Quantity
Framing	Glazing	Condition	Width	Height	N	E	S	W	Total
Wooden	Single Pane w/storm	Fair to Poor	30"	60"	26	18	33	0	77
Vinyl	Double Pane	Good	30"	60"	7	3	14	26	50



Lighting Systems

Generally, all building lighting is efficiently achieved. Common areas are limited to small stairwell landings and small basement areas. Some apartment lighting is incandescent due to tenant preference. But compact fluorescent are made available by the owner and installed in all fixtures upon apartment turnover. Exterior lighting is LED.



Location	Building Area	Qty	Fixture Description	Watts/ Fixture	Controls	Hours/ Day
Common Area	Mechanical Room	2	Screw-in CFL (1) 13W, Mag-STD	13	Switch	2
Common Area	Laundry Area	2	T12 Fluorescent (1) 34W 48"	34	Switch	8
Common Area	Basement Stairwell	1	LED Flush Mount Dome, (1) 18W	18	24/7	24
✗ Common Area	Meter Area	1	Incandescent, (1) 60W lamp	60	Switch	1
Common Area	Stairwell Landings	6	LED Flush Mount Dome, (1) 18W	18	24/7	24
Apartments	Wall & Ceiling Mounted	30	Screw-in CFL (1) 13W, Mag-STD	13	Switch	2.5
✗ Apartments	Wall & Ceiling Mounted	83	Incandescent, (1) 60W lamp	60	Switch	2.5
Exterior	Entrance - South	2	LED Wall Lantern, (1) 6.2W	6	24/7	24
Exterior	Entrance - West	1	LED Wall Lantern, (1) 6.2W	6	Photo	12



HVAC

The apartments and interior hallways are heated with a hot water system. Some tenants use window A/C units to provide seasonal cooling. Domestic hot water is provided by a dedicated hot water heater and indirect storage tank.

Two hot water boilers used for space heating both have standing pilots and are located in the basement mechanical room. None of the heating equipment is staged or modulating. The total heating capacity for the complex is 450,000 btu/hr. There are no outdoor temperature sensors or other control devices. No ambient CO was found anywhere in the complex. Combustion testing results for the boilers and hot water tanks are shown below.



Building operates on a single zone. A single thermostat is located in one of the apartments, within a locked plastic housing. There are no outdoor temperatures sensors in place, or warm weather shutdown controls.

✗ Some Pipe insulation is lacking in the mechanical area.

Domestic hot water is provided by one automatic storage water heater and 200 gallon commercial storage tank. There is no recirculation pump on the domestic hot water system. Water measured at the tap as high as 149° F, which is high enough to cause scalding within just a few seconds of contact.



	Boiler	DHW	Storage
<u>Quantity</u>	2	1	1
<u>Year</u>	2008	2008	2008
<u>Make</u>	Crown	American Std	AO Smith
<u>Model</u>	XBF-225SPD	75-75-AS	T-200 STD
<u>Size</u>	(2) 225k	76k	200gal
<u>Fuel</u>	Natural Gas	Natural Gas	n/a
<u>Efficiency</u>	80%	.62EF	-
<u>CO (high)</u>	18	12	-
<u>Draft (low)</u>	-8.9	-7.4	-
<u>Stack Temp.</u>	529	512	-

Appliances

The complex provides to the tenants refrigerators, and gas stoves. From the audit sample, most refrigerators are smaller, with relatively low annual energy consumption. Apartments typically have a variety of other electronics including at least one television, microwave, and coffee maker.

Make	Model	Size	Age	kWh/yr
<u>Magic Chef</u>	MCBR1010W	10	2008	381
X <u>Frigidaire</u>	FFTR1713LWE	16.5	2011	367
<u>Magic Chef</u>	MCBR1010W	10	2009	381
<u>Frigidaire</u>	FRT15HB3DWW	14.8	2004	375
X <u>Frigidaire</u>	FFTR1713LWF	16.5	2010	367



Laundry equipment is available for tenant use. Washing machines are less efficient models and dryers are powered by natural gas.

Type	Make	Model	Age	Quantity
<u>Dryer</u>	Alliance	SDGT09WF	2010	2
<u>Washer</u>	Alliance	SWNLC2AP112TW01	2010	2

Detailed Measure Descriptions

Measure #1: Laundry Lighting

Measure Description: Replace (2) existing lighting fixtures or bulbs with high efficiency LED replacement lamps. Lighting may operate continuously for safety or be configured as bi-level during periods of occupancy.

Existing Conditions: Laundry area ceiling contains (2) one-bulb T12 fluorescent tubular fixtures. The lighting appears to be in continuous operation.



Measure #2: Pipe Insulation

Measure Description: Install pipe insulation on all accessible near-boiler piping in the boiler rooms, and distribution piping for domestic hot water. Install approximately (40) square feet of readily accessible piping in mechanical rooms. Insulation will meet NYS 2010 Energy Code requirements. Insulation inside diameter shall match outside diameter of pipe.

Existing Conditions: Pipe insulation for existing space heating and domestic hot water distribution systems is largely un-insulated in the mechanical room as well as a few other basement areas. Adding pipe insulation to these areas will increase distribution efficiency's and lowers heat loss to unconditioned spaces.



Measure #3: Low Flow Devices

Measure Description: Install faucet aerators rated for 2.0 GPM on all kitchen and bathroom faucets that do not currently have flow-restricting aerators installed.

Existing Conditions: Based on the observed audit sample; low-flow showerheads and faucet aerators are installed in most apartments. A few of the bathrooms sinks and kitchen faucets were missing aerators entirely, resulting in very high flow rates.

X



Measure #4: Pump Replacement - VFD

Measure Description: Upgrade existing 3-speed pump on heating distribution system with variable speed controls. Feedback sensors will be installed in accordance with manufacturer specifications at locations that will optimize control strategy. For DHW system; Install VFD pump in an accessible location that allows for inspection and maintenance. Install circulation pump temperature controls that will turn the pump off when returning loop temperature is above 120 degrees.

Existing Conditions: Existing boiler distribution pump is a newer 3-speed pump and designed to match existing equipment. The existing domestic hot water system has no recirculation pump which results in tenants wasting water while waiting for hot water to arrive.



Measure #5: Airsealing

Measure Description: Perform in-unit air sealing by caulking window frame gaps and along baseboards, sealing around plumbing and mechanical penetrations in each apartment envelope with one-part foam, caulk or other air barrier material.

Existing Conditions: Apartments have fair amounts of air leakage from various locations including: window frames, where baseboard meets floor, and heating and plumbing pipe penetrations.



Measure #6: Boiler Replacement

Measure Description: Replace existing space heating equipment with condensing equipment, having a minimum rated combustion efficiency of 92%. To facilitate low Return Water Temperature (RWT) and efficient condensing operation; the owner will:

- Install system designed according to plans and specifications provided by a design professional using standard methods such as ACCA, manual J, or ASHRAE
- The designed boilers will have built in controls and a fully modulating burner
- Configure controls that reduce supply temperature in response to outside air temperature or control valve position, to ensure RWT of less than 120 F for condensation to occur
- Configure piping, as appropriate, between boiler and load circuits so that hydraulic separation and low RWT allows for system condensation
- Installer shall provide training to the owner or management staff in the use of the system and its applicable controls. Deliver to the owner user's manual, including measurement reports, warranties, and approved submittals
- Install pipe insulation on all near-boiler space heating piping carrying water with temperatures greater than 105 F in the boiler rooms
- Insulate piping to meet NYS 2010 Energy Code requirements. Insulation inside diameter shall match outside diameter of pipe

Existing Conditions: The apartments are currently being serviced by 2 single-staged, noncondensing boilers having a total input capacity of 450 MBH. Space heating equipment is in fair condition and consists of Crown XBF-225SPD makes, both having a nameplate efficiency of 80%.

The heating system operated on a single zone, controlled by a thermostat located in one of the apartment units. No outdoor

temperature controls are in place to limit operation during warmer weather.



Measure #7: Domestic Hot Water

Measure Description:

Remove the existing domestic storage hot water heater, and re-pipe to be powered by the space heating boilers.

Size system so that the tank heat exchanger can sufficiently accept most or all of the boiler output, to minimize DHW heating times and maximize boiler space heating during design condition (i.e. coldest weather). Design will allow for adequate heat exchanger surface area and control of return water temperature. Installation includes all necessary piping and zoning control systems. Hot water temperatures should be set to deliver water to the apartment taps within a range of 110° - 125°F.

Install pipe insulation on all exposed domestic hot water piping in the boiler rooms. Insulate to meet NYS 2010 Energy Code requirements. Insulation inside diameter shall match outside diameter of pipe.

Existing Conditions:

Currently, the service water for the building is produced by a dedicated storage hot water heater with 200 gallon storage tank. Combustion equipment is atmospherically vented and non-condensing. The hot water heater is approximately 8 years old. Water temperatures at apartment taps measured as high as 149 degrees. Some exposed distribution piping is un-insulated near mechanical equipment.

Measure #8: Window Replacement

Measure Description:

Replace approximately (77) remain single pane wooden windows with vinyl, Energy Star compliant replacement windows. Windows shall be white interior and exterior, Low E with argon glazing; half screens and no grilles. Ensure replacement window has a long-term weather tight fit, and operates properly.

Existing Conditions: Approximately 60% of the existing windows are older wooden framed single-pane windows in poor condition. Many of the windows are difficult to lock and tenants complain of air leakage through the assemblies. A few of the windows have storms sashes, not all of which are intact and functional.



Measure #9: Clothes Washer Replacement

Measure Description: Install 2 - Energy Star rated commercial clothes washing machines. New equipment shall be freestanding, front-loading and coin operated. Installed equipment must meet Energy Star requirements for Modified energy factor and Water Factor. For commercial front-loading washers: MEF \geq 2.2 and a WF of \leq 4.5.

Existing Conditions: Clothes washing needs are met by 2 older sets of laundry equipment provided for tenant use. The equipment is older and not Energy Star rated. The equipment is leased and coin-operated.

Contact Information

Please feel free to contact us using the information below:

Buffalo Energy, Inc.

5763 Seneca Street
Elma, New York 14059
T 716 677 4899

Info@buffalo-energy.com

About Buffalo Energy

Buffalo Energy, Inc. is a full-service energy consulting and building performance contractor. We perform energy assessments and install high-efficiency upgrades for residential, commercial and historic buildings throughout the northeast.

Our mission is to identify and implement cost-effective solutions to reduce building energy use while leveraging available incentive programs. To accomplish this we focus on the installation of building air barriers and high-efficiency HVAC equipment. Whether a retrofit, gut-rehab or ground-up new construction project, we help owners of residential and commercial buildings create energy efficient, comfortable and durable structures.

Buffalo Energy is accredited by the Building Performance Institute, the nation's premier building performance credentialing, quality assurance and standards setting organization.

Buffalo Energy is staffed by seasoned building performance and construction specialist. Our firm has worked in eight different efficiency programs in four states. We've performed assessments, developed reduction plans, and implemented comprehensive energy saving work scopes on hundreds of buildings.

Buffalo Energy is an award winning partner in the New York Multifamily Performance program. In 2011, NYSERDA awarded Buffalo Energy its *Partner Excellence Award for Existing Buildings* for having achieved the highest actual energy savings for three buildings of any program partner in the state. In 2012, Buffalo Energy was awarded NYSERDA's *Partner Excellence Award for New Construction* energy savings.

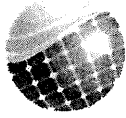
For more information visit www.begreenny.com or contact us at (716) 677-4899.



ACCREDITED
CONTRACTOR

Exhibit 4

Freedom Solar LLC's Solar System Proposal for the Riverview Heights Apartment Building



FreedomSolar LLC

3461 North Benzing Rd.
Orchard Park, NY 14127
Office: 716-650-5290
Fax: 716-632-6410
ContactUs@FreedomSolar.com
www.FreedomSolar.com

CONTRACT # _____ Date:12/31/2015

Customer	System Owner and System Location	Contractor
Name Anthony LoRusso	Owner Name See Customer	Freedom Solar LLC
Address 2485 Niagara Street	Address	3461 North Benzing Rd. Orchard Park, NY 14127
City State Zip Buffalo NY 14201	City State Zip	Office 716-650-5290
Phone Number (716) 884-3800	Phone Number	Fax 716-632-6410
Email aplpropertygrp@gmail.com	Email	Contactus@FreedomSolar.com

This document outlines contract terms and specifications for:

A 15,120 watt flat-roof mounted, grid interactive photovoltaic system at the system location listed above.

Scope of Work:

- Furnish and Install (42) LG Electronics: LG360N2W-B3 360 watt photovoltaic modules
- Furnish and Install MicroInverters Central Inverter
- Furnish and install Pre-Engineered racking with Stainless Steel Hardware
- Submit all paperwork with NYSERDA Incentive
- Submit all paperwork required for utility interconnection
- Submit all paperwork for Building permits****.
- Provide labor in accordance with any and all local and state codes.
- 10 year labor and workmanship warranty on entire system, all equipment and parts are covered by manufactures warranty. See Contract terms and conditions for more information.

Total System Costs:

System subtotal before NYSERDA incentive	\$ 43,848
Total NYSERDA Photovoltaic Incentives*	\$ 6,048
Total customer*out-of pocket cost	\$ 37,800
Possible State Tax Credit	\$ 0
Possible Federal Tax Credit***	\$ 13,154
Possible final cost if eligible for tax credits	\$ 24,646

*The NYSERDA PON 2112 Rebate Currently stands at \$0.50 per watt installed up to 25kW for residential systems. NYSERDA may lower the incentive at any time without notice to installer or Customer. Once your application is received by NYSERDA your incentive amount will not change.

**The federal and state tax credit(s) are credits only and not rebate(s), and are not guaranteed by either NYSERDA or Freedom Solar, LLC. Information about these tax credits will be provided and eligibility should be determined by your tax professional

***Taking the Federal tax credit in this way requires that you add the NYSERDA Incentive of \$6,048 to your gross adjusted income for tax the tax year of 2015. If you do not want to add the incentive amount to your income you must deduct the NYSERDA Incentive of \$6,048 from the base price BEFORE calculating the 30% Federal tax credit. This will reduce the Federal tax credit to \$11,340 and the possible final cost will be \$26,460. Your tax professional should decide which way is best for you.

****Building permits vary from municipality and this contract covers the building permits up to \$250. Some municipalities require a Structural analysis, if this is required and goes above the \$250 you may have to cover those costs. Structural modifications are not included in total contract price. If structural supports or modifications are necessary to obtain permit or meet code we will notify customer in the form of a change order. If fees are incurred supporting documentation will be available for customer upon request.

Contract Payment Terms

Deposit due: **\$5,000**

Upon receipt of signed contract and deposit payment contractor will complete System Owner application for participation in NYSERDA's PON 2112 Incentive program. Approval can take between 2 and 12 weeks from receipt of signed, completed, and submitted NYSERDA application. Application process will begin for net-metering through the necessary utility. In the event that either or both applications are denied, we will return any due monies minus documented time spent billed at \$110 per hour.

Materials Payment: **\$13,154**

Upon approval of the system into NYSERDA's PON 2112 Incentive program, and notification that your materials are ready to ship, we will invoice you for your materials payment. These funds will be used to purchase your equipment which will arrive on-site within 2 weeks.

Final Payment: **\$19,646**

Upon completion of the system customer final payment is expected. We will also arrange final grid connection with the utility.

Financing

Green Sky Financing:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Terms of Financing:	_____
EFS Financing:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Terms of Financing:	_____
Other Financing: _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Terms of Financing:	_____
Other Financing: _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Terms of Financing:	_____

Intent

It is expressly understood that, prior to its execution of this contract, the customer has reviewed all contract documents, contract drawings and specifications pertaining to the work, and understands that the project is to be constructed in accordance with the intent of the contract between Freedom Solar LLC and customer.

Contract Documents:

The contract documents for this customer shall be deemed to include the following and by this reference shall be deemed incorporated herein:

- (1) This Customer's Contract (3 pages)

Execution of Contract:

CUSTOMER: _____

_____ Customer's Signature	_____ Customer's Printed Name	_____ Date
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SYSTEM OWNER AND LOCATION: _____

_____ System owner and location Signature	_____ System owner Printed Name	_____ Date
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CONTRACTOR: Freedom Solar LLC.

_____ Contractor's Signature	_____ Contractor's Printed Name	_____ Date
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GENERAL TERMS AND CONDITIONS OF CONTRACT

Definitions: "You/Your" means the customer identified above. "Installation" means the installation services specified in the agreement. And the contractor's employees, agents and subcontractors. "Agreement" means this Home Improvement Agreement between you and Freedom Solar LLC which includes this page, the General Terms and Conditions following this page, the invoice or specifications and any other documents expressly made a part of this agreement. Please see this agreement's general terms and conditions for additional definitions. Acceptance and Authorization: By Signing below, you authorize Freedom Solar LLC to perform installation and/or (b) order and arrange for delivery of special order merchandise, including special order merchandise that may be custom made, as specified in this agreement. You understand that this agreement constitutes the entire understanding between you and Freedom Solar LLC and may only be amended by a change order signed by Freedom Solar LLC and customer. This agreement expressly supersedes all prior written or verbal agreements or representations or inducements express or implied, in any way conditioning this agreement, and you expressly disclaim their existence. Do not sign if blank or incomplete. By signing, you acknowledge that you have read and understand and accept this agreement in its entirety. You further acknowledge receiving a complete copy. Keep it to protect you rights.

Freedom Solar LLC Special Conditions:

Our agreement is to provide you with a complete, working solar photovoltaic system which complies with all NEC and local utility requirements, and also meets all New York State Energy Research and Development Authority (NYSERDA) requirements set forth in Program Opportunity Notice (PON) 2112. You understand that as per this program, you must receive all major components of your system within 90 days of the approval of application to NYSERDA. When you receive these components, we will apply for the first 75% of your approved incentive. The remaining 25% will be applied for after completion of interconnection with your utility.

In keeping with NYSERDA's program requirements, there are some simple guidelines you should be aware of.

- 1) NYSERDA is not responsible for assuring that the design, engineering, and construction of the project or installation of any PV system is proper or complies with any particular laws, codes, regulations, licensing, certification and permit requirements, or industry standards. NYSERDA does not make any representations of any kind regarding the results to be achieved by the PV system or the adequacy or safety of such measures.
2) 100% of the NYSERDA incentive will be passed on to the customer
3) Information on PON 2112 as well as many other NYSERDA programs may be found at www.powernaturally.org
4) NYSERDA will not make any payments without proof that all required permits and approvals have been obtained.
5) NYSERDA reserves the right to inspect the system with notice to the Customer.
6) If at any time the homeowner would like to prepare a press release or plan any news conference they must collaborate with NYSERDA's director of communications
7) Neither NYSERDA nor the State of New York:
1) Endorses any eligible installer
2) Guarantees, warrants, or in any way represents or assumes liability for any work proposed or carried out by an eligible installer.
8) If at any time after NYSERDA approval, Freedom Solar fails to meet the requirements set forth in PON 2112 and is denied the rebate spelled out in this agreement then customer will be responsible for paying these funds.

Freedom Solar LLC Responsibilities: Freedom Solar LLC will complete installation in a workmanlike manner. Freedom Solar LLC will not start, conduct, alter, or finish installation except in accordance with applicable law. Freedom Solar LLC will either not start, or will immediately discontinue, installation upon discovery of unforeseen physical or hazardous conditions at your address. Freedom Solar LLC will not attempt to repair such conditions. Freedom Solar LLC is not responsible for identifying property lines, easements, covenants or other legal encumbrances that your address may be subject to. Freedom Solar LLC will not make any modifications to your security system, if you have one. Freedom Solar LLC will obtain and pay for all permits necessary for the work and necessary for governmental inspections. Contractor shall provide customer, upon request, with certificates of insurance for Workman's compensation, general liability and auto insurance. The contractor shall not be liable for any delay or default caused by inclement weather, labor disputes, waiting for any work of the customer or any third parties (who are subcontractors of the contractor), failure or inability of contractor to obtain materials, fire, acts of God, governmental acts, catastrophe, or any other condition beyond the control of the contractor. Freedom Solar LLC reserves the right to substitute materials of equal or greater quality if necessary.

Customer's Responsibilities: Customer agrees to pay Freedom Solar LLC for merchandise delivery and/or installation according to the terms and conditions of this agreement. If your address is subject to any easements, covenants or other legal encumbrances that could affect installation, you agree to let Freedom Solar LLC know about them prior to installation. Contractor will facilitate the location of underground/overhead utility lines. You are responsible for identifying property lines. You agree to ensure that work areas are free of preexisting hazards, i.e. unsafe physical conditions or environmental hazards and building/zoning code violations. You agree to allow Freedom Solar LLC access to work areas during working hours and provide Freedom Solar LLC access to sanitary facilities or pay the facilities rental costs. You agree to ensure that if you have a security system, that it will not interfere with the installation. You agree to provide power to, and as applicable, climate control, in work areas. You agree to not allow unattended minors at your address while Freedom Solar LLC is present. You agree to control pets and keep them away from work areas. You agree to keep posted permits on display at all times. You agree that if you or anyone interferes with or delays installation, you may be subject to transportation/storage charges or other resulting charges. You agree not to assign or transfer this agreement. You agree any claims against Freedom Solar LLC under this agreement should be made within thirty (30) calendar days of the date you become aware of this problem. Freedom Solar LLC will attempt to resolve any claim within sixty (60) calendar days from receiving your notice. You assume the risk and the full liability and risk of assisting Freedom Solar LLC with delivery of materials or with installation.

Changes and Change orders: Freedom Solar LLC at your request may arrange to provide additional work, subject to a change order, subject to additional charges payable by you to Freedom Solar LLC. Any changes to installation, i.e. a substitution of material or expansion of the scope of the work will require you and Freedom Solar LLC to first sign a written change order that will become part of this agreement. Any change order must be clear in finish dates. Following discovery of previously undisclosed/unidentified legal encumbrances on your premises, building/zoning code violations, or hidden/unforeseen physical/hazardous conditions, such as presence of underground or overhead utility lines, rocks, roots, buried debris, mold, asbestos, lead paint, or any conditions differing from what you represented, Freedom Solar LLC may immediately ask for a change order or discontinue with installation. If you decline a change order request, you or Freedom Solar LLC may terminate this agreement as set forth below. Amendment of this contract must be only in writing and signed by both parties

Credit Card Transactions: Your separate cardholder agreement (to which Freedom Solar LLC is not a party) will determine the total cost of your purchase if by credit card, including any initial payment/deposit you may make all interest charges and fees. You will be further subject to your cardholder agreement's terms and conditions

Financed Transactions: If you are financing through Freedom Solar LLC your separate loan agreement (to which Freedom Solar LLC is not a party to) will determine: (i) the amount financed (the amount of credit provided to you); (ii) the associated finance charges (the dollar amount the loan will cost you); and (iii) the total payment (the amount you will have paid when you have made the scheduled payments). You will further be subject to your loan's agreement's terms and conditions.

Payments: Accounts not paid within terms are subject to a 1.5% monthly finance charge or \$5.00 flat fee per month charge whichever is greater. The terms are that the entire contract or invoice amount is due as outlined in contract payment terms.

Security Interests/ Liens: If you make all payments as required under this agreement, no security interest will be placed against your property by Freedom Solar LLC. If a security interest is placed on your property, it creates a lien, mortgage, or other claim against your property to secure payment and may cause a loss of your property if you fail to pay as requested. After paying on any completed phase of installation and before making any further payments, you should request from Freedom Solar LLC a signed, unconditional release from, or waiver of, any right to place any claim against your property applicable to the work then completed. You may ask an attorney about your rights to discharge security interests.

Warranty: Freedom Solar LLC warrants labor and workmanship of the installation for ten (10) years from its completion date. During the warranty period, Freedom Solar LLC will perform labor at no charge to you. Warranty does not cover labor for damage caused by abuse, misuse, neglect, lack of care/cleaning, acts of God, nuisance or excessive calls that turn out to be unfounded. Equipment and materials are covered exclusively by the manufacturer's warranty. Freedom Solar LLC will help you process any warranty claims against the manufacturer. This warranty provides you with specific rights. You may have other rights under applicable law. We do not, of course, guarantee or warranty other parts/items than those we supply or install. Any repairs needed to any parts/items that were pre-existing to installation will be billed to you the customer at present rate. All purchase agreements and warranties specified from the manufacturers will be considered to be primary, along with this agreement, and any deviation that results in a void of the manufacturers' conditions of ownership will likewise void this agreement. These "deviations" include but are not limited to; unauthorized tampering with inverter set points, alteration of the system without knowledge of Freedom Solar, LLC, or NYSERDA, or use of the system for any other than its intended use.

Cancellation: You may cancel this agreement without penalty or obligation by delivering written notice to Freedom Solar LLC by midnight of the third business day after signing. The state supplement contains a form to use if law in your state specifically prescribes one. Your payment will be returned within ten(10) business days after Freedom Solar LLC's receipt of notice of cancellation. You must make available for pickup by Freedom Solar LLC at your address all tools, equipment and other property of the contractor in substantially the same condition as when it was delivered.

Termination: if the customer fails to make any payments when due under this contract, the Contractor shall have the right to suspend the work until payments are made. In the event of a default payment by the customer, after seven (7) days written notice by the contractor and without prejudice to any other remedy contractor may have, the contractor shall have the right to terminate this contract on written notice to customer. In such event, the contractor may deduct the cost of work performed due to the date of termination from any amount on deposit and if the balance of the deposit exceeds the cost of the work, such excess shall be paid to the customer, but if the cost of work to the date of termination exceeds the amount of the deposit on hand, then the customer is fully responsible for the amount owed over the amount of the balance on hand. Customer has no termination rights after the three (3) business day rescission rights (see Notice of Cancellation)

Attorney's Fees: In any action, proceeding or arbitration arising out of this contract, the prevailing party shall be entitled to a charge of 2% per month on past due accounts, and collection and/or attorney fees of 33%

New York State Supplement Notice to Customer

- a. You have three (3) day right to cancel this agreement.
b. Freedom Solar LLC is required to deposit all progress payments received prior to completion, in an escrow account, post a bond or contract of indemnity to protect these payments.
c. Freedom Solar LLC or any subcontractor who does the work is not paid; he or she may have a claim against your property under New York lien laws.

Any contractor, subcontractor, or material man who provides home improvement goods or services pursuant to your home improvement agreement and who is not paid may have a valid legal claim against your property known as a mechanic's lien. Any mechanic's lien filed against your property may be discharged. Payment of the agreed upon price under your agreement prior to filing a mechanic's lien may invalidate such a lien. You may contact an attorney to determine your rights to discharge a mechanic's lien.

If this agreement mentions that you will make one (1) or more progress payments to Freedom Solar LLC prior to substantial completion of the work, it should include a schedule of the payments indicating the amount of each payment. The schedule should describe the state of completion of the work/services and specify what materials must be supplied before each progress payment is due. This schedule must bear a "reasonable relationship" to the work that is done, the required materials that must be purchased, and other related expenses. If the agreement work that is done, the required materials must be purchased, and other related expenses. If the agreement indicates that you will pay Freedom Solar LLC on a designated hourly or time basis for work that has been performed of Freedom Solar LLC charges you for supplies that have been provided prior to the time that payment is due, such payment will not be considered a progress payment.

Notice of Cancellation

Customer's Name _____
Address: _____
Town: _____ State: _____ Zip Code: _____
Contract # _____ Date of Contract: _____

You may cancel this transaction, without any Penalty of Obligation, within three (3) business days from the above date. If you cancel, any property traded in, any payments made by you under the contract or sale, and any negotiable instrument executed by you will be returned within ten (10) business days following receipt by the seller of your cancellation notice, and any security interest arising out of the transaction will be cancelled. If you cancel, you must make available to the seller at your residence, in substantially as good condition as when received, any goods, merchandise or materials delivered to you under this contract or sale, or you may if you wish, comply with the instructions of the seller regarding return shipment of the goods at the seller's expense and risk.

If you do make the goods, merchandise, or materials available to the seller and the seller does not pick them up with twenty (20) calendar days of the date of your Notice of Cancellation, you may retain or dispose of the goods without any further obligation. If you fail to make the goods available to the seller, or if you agree to return the goods to the seller and fail to do so, then you remain liable for performance of all obligations under the contract. To cancel this transaction, tear off this part of form and mail or deliver a signed and dated copy of this Cancellation Notice written notice to:

Freedom Solar LLC LLC 3461 N. Benzel Road, Orchard Park, NY 14127

No later than midnight of three (3) business days from the date of contract signing.

I hereby cancel this transaction:

(Buyer's Signature)

(Date)

Your Solar System Quote from Freedom Solar LLC

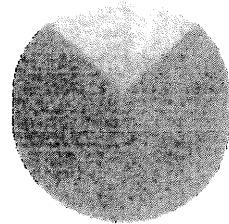
Anthony LoRusso Niagara st (716) 884-3800 aplpropertygrp@gmail.com
2485 Niagara street, Buffalo, NY 14201



Cost of Your Solar System & How Much of Your Energy Usage Will Be Solar

Total System Cost	\$	52,650
Less: NY-Sun Upstate Block 7 (non-res)	\$	6,480
Out of Pocket Cost	\$	46,170
Less: Federal Tax Grant/Credit	\$	15,795
Net Cost After First Year	\$	30,375
System Size		16.20 kW (45 panels)

76%
From Grid



24%
18,725 kWh

Your System Size & Placement on Your Property



Flat Roof
16.20kW (45 LG Electronics : LG360N2W-B3 panels)

Your Solar System Quote from Freedom Solar LLC

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 2485 Niagara street, Buffalo, NY 14201



Year	Energy Saving	Federal Tax Grant/Credit	Net Cash Flow	Cumulative Cash Flow
	\$0.078	30.00%		
0			\$ (46,170.00)	\$ (46,170.00)
1	\$ 1,491.49	\$ 15,795.00	\$ 17,286.49	\$ (28,883.52)
2	\$ 1,537.84	-	\$ 1,537.84	\$ (27,345.68)
3	\$ 1,585.63	-	\$ 1,585.63	\$ (25,760.04)
4	\$ 1,634.94	-	\$ 1,634.94	\$ (24,125.10)
5	\$ 1,685.79	-	\$ 1,685.79	\$ (22,439.31)
6	\$ 1,738.23	-	\$ 1,738.23	\$ (20,701.08)
7	\$ 1,792.34	-	\$ 1,792.34	\$ (18,908.74)
8	\$ 1,848.12	-	\$ 1,848.12	\$ (17,060.61)
9	\$ 1,905.67	-	\$ 1,905.67	\$ (15,154.94)
10	\$ 1,965.02	-	\$ 1,965.02	\$ (13,189.92)
11	\$ 2,026.25	-	\$ 2,026.25	\$ (11,163.67)
12	\$ 2,089.39	-	\$ 2,089.39	\$ (9,074.28)
13	\$ 2,154.52	-	\$ 2,154.52	\$ (6,919.76)
14	\$ 2,221.71	-	\$ 2,221.71	\$ (4,698.05)
15	\$ 2,291.00	-	\$ 2,291.00	\$ (2,407.04)
16	\$ 2,362.48	-	\$ 2,362.48	\$ (44.56)
17	\$ 2,436.22	-	\$ 2,436.22	\$ 2,391.65
18	\$ 2,512.27	-	\$ 2,512.27	\$ 4,903.92
19	\$ 2,590.71	-	\$ 2,590.71	\$ 7,494.64
20	\$ 2,671.64	-	\$ 2,671.64	\$ 10,166.28
21	\$ 2,755.12	-	\$ 2,755.12	\$ 12,921.40
22	\$ 2,841.21	-	\$ 2,841.21	\$ 15,762.60
23	\$ 2,930.04	-	\$ 2,930.04	\$ 18,692.65
24	\$ 3,021.69	-	\$ 3,021.69	\$ 21,714.34
25	\$ 3,116.19	-	\$ 3,116.19	\$ 24,830.53
	\$ 55,265.63	\$ 15,795.00	\$ 24,830.53	

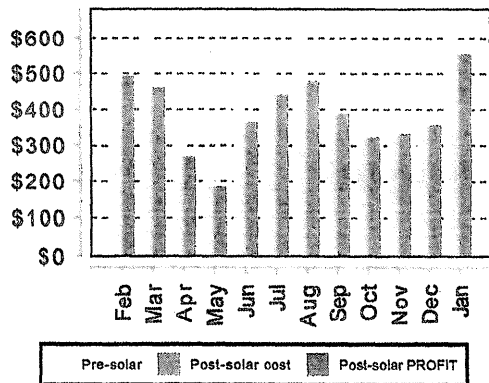
4.36%
 16.0 years

Your Solar System Quote from Freedom Solar LLC

Anthony LoRusso Niagara st (716) 884-3800 aplpropertygrp@gmail.com
 2485 Niagara street, Buffalo, NY 14201

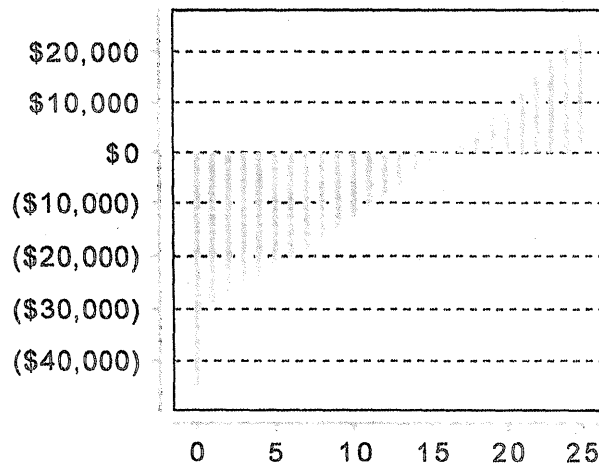


Money Spent or Made Pre- & Post-Solar



Yearly Electric Bill Pre-Solar	\$	5,930
Yearly Electric Bill Post-Solar	\$	4,439
Yearly Savings	\$	1,491
Total Savings per Year	\$	1,491

Lifetime Return on Investment



Out of Pocket Cost	\$	30,375
Break Even Point		16.0 years
ROI (Year 1)		3%
Lifetime % Return on Cash		182%
Lifetime Return on Cash	\$	24,831

The Good You'll Be Doing



Equivalent number of trees you'll be planting every year

345



Number of cars you'll replace with a hybrid

3.42



Number of cars you'll have taken off the road - lifetime

75



Number of tanker trucks of gasoline not used - lifetime

2.0



Number of rail cars of coal not used - lifetime

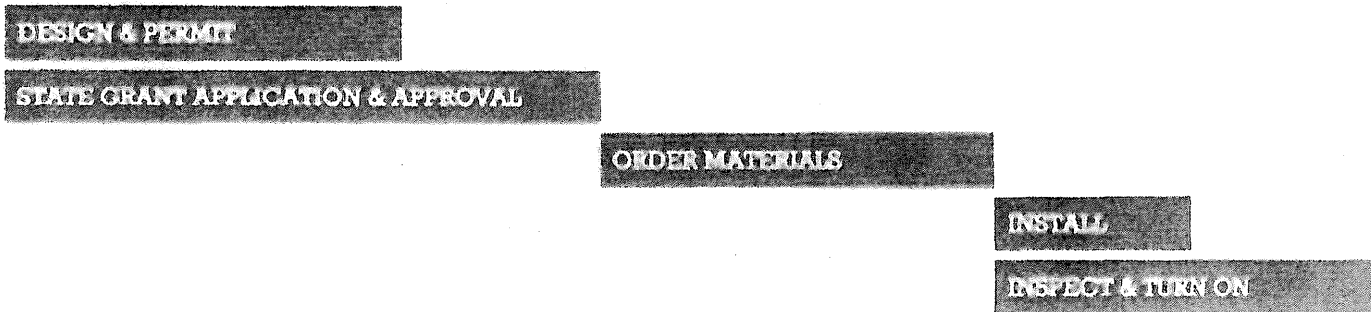
5.5

Your Solar System Quote from Freedom Solar LLC

Anthony LoRusso Niagara st (716) 884-3800 aplpropertygrp@gmail.com
2485 Niagara street, Buffalo, NY 14201



Your Solar System Installation Schedule



The Nitty-Gritty

1. *The NYSERDA PON 2112 Rebate is for systems installed up to 25kW for residential systems. NYSERDA may lower the incentive without notice to installer or Customer. Once your application is marked as received by NYSERDA your incentive amount will not change.
**The federal and state tax credit(s) are credits only and not rebate(s), and are not guaranteed by either NYSERDA or Freedom Solar, LLC. Information about these tax credits will be provided and eligibility should be determined by your tax professional
***Taking the Federal tax credit in this way requires that you add the NYSERDA Incentive to your gross adjusted income for tax the tax year. If you do not want to add the incentive amount to your income you must deduct the NYSERDA Incentive from the base price BEFORE calculating the 30% Federal tax credit. Your tax professional should decide which way is best for you.
2. This is a preliminary, estimate-only proposal for your consideration. Actual pricing will vary and will be presented upon completion of a site visit and evaluation. Cost of materials is based on standard size system, and may be different for your case.
3. Cost of permits will vary with your local municipality.
4. Federal tax credit assumes a 30% tax credit.
5. The amount of electricity your solar system will produce is after the DC to AC inversion and is standardized for your part of the country. Your actual production will vary based on system size, orientation, and efficiency of the panels eventually used.
6. The placement on your roof is an approximately and will be finalized with a site evaluation
7. Electricity bill calculations are based on current rates of 12 cents per kWh.
8. The Good You'll Be Doing representations are for information only and may not be accurate nor represent actual savings.
9. Installation schedule graph is for information only and may change due to your individual circumstances.

Chris Masterson
(716) 650-5290 (office)
masterson@freedom-solar.com

Text Text Anthony LoRusso Niagara st

