Colchester School Board Meeting Agenda and Packet October 17, 2017

Colchester School District Board of Education Meeting Agenda Colchester High School – Media Center October 17, 2017 7:00 PM

AGENDA

I.	Call to Order and Pledge of Allegiance	
II.	Citizen Participation*	
III.	Approval of Contract Agreement with Colchester Education Association	Action
IV.	Approval of Contract Agreement with Colchester Education Association Support Staff Union	Action
V.	Approval of Side Letter of Agreements with Handbook Employees and the Association of Colchester Administrators	Action
VI.	Food Service Financial Update	Information
VII.	Annual School Report Presentation: PPS & UMS	Information
VIII.	Potential Solar Project Discussion	Information
IX.	Quarterly Financial and Special Education Reports	Information
Х.	Budget Timeline Discussion	Information
XI.	Approval of Personnel Consent Agenda	Action
XII.	Approval of Minutes: October 3, 2017	Action
XIII.	Board/Administration Communication, Correspondence, Committee Reports	Information
XIV.	Possible Future Agenda Items	Information
XV.	Adjournment	

On The Third Tuesday of Each Month*

During the meeting, the school board will review the top questions and themes submitted to them via email to SchoolBoard@colchestersd.org. Note: All submissions must be received before noon on the third Tuesday of every month.



Colchester School District Solar Proposal

Prepared by Chris Lamonia September 27, 2017

PROPOSAL SUMMARY

Site Locations

- Colchester Middle School (herein referred to as "CMS")
- Colchester High School, (herein referred to as "CHS")

Site Addresses

- CMS: 425 Blakely Road, Colchester VT 05546
- CHS: 131 Laker Ln, Colchester, Vermont 05446

Proposed System Sizes

- CMS:142.8 kW DC, 100kW AC (size constrained by roof replacement and fire code)
- CHS: 214.2 kW DC, 150kW AC

System Types

- CMS: Ballasted roof array w/ no roof penetrations
- CHS: Solar Car Port / Canopy

Solar Array Cost to Colchester School District

\$0.00

Net Metering Agreement discount % off of Net Metering Rate (based on award of both projects)

• Guaranteed 11% FIXED discount with NO escalator

Net Metering Credit Agreement Rate (Yr 1)

\$0.1676 per kWh

Net metering Credit Rate from GMP

.1884 per kWh

Estimated Project Permitting Start Date: October 2017

Estimated Project Construction Start Date: June 2018

Estimated Commercial Operation Date: Aug 2018









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CONTACTS

Customer Contact Information

Contact: George Trieb

Address: 125 Laker Lane, Colchester, VT

Tel: (802) 264-5979

Email: George.trieb@colchesterd.org

Contact: Rick Johnson Tel: (802) 355-9558

Email: Richard.Johnson@olchesterd.org

Aegis Renewable Energy Contact Information

Chris Lamonia, EVP Project Development and Finance

Aegis Renewable Energy, Inc.

Tel: (802) 496-5155 Cell: (802) 777-7513

Email: clamonia@aegis-re.com Website: www.aegis-re.com





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BACKGROUND AND PURPOSE

Aegis Renewable Energy, Inc, a Vermont Corporation located in Waitsfield, Vermont is pleased to provide this solar proposal for the Colchester School District and its board members. We have been working in close collaboration with the town of Colchester for 2 years and have reviewed all Town owned and School District sites. We have visited numerous town sites with a focus on:

- Evaluating site size, forested vs. cleared and usage of sites
- Access to sites, existing and potential access
- Surrounding wetlands, rivers, streams, bike paths
- Identified three phase vs single phase, and total interconnection costs
- Reviewed conservation easements and zoning considerations
- Mapped on Google Earth, ANR, GMP Solar MAP

Aegis Renewable Energy Inc., is a Renewable Energy Engineering, Design, Procurement and Construction company. We do not own and operate our projects long term. We primarily work with three "Solar Funds" that own and operate our solar projects. As you will see in the Aegis Personnel summary on page 15, which describes the team members we have assigned to the development of the Colchester Middle School and High School projects, we have on staff a group of exceptionally talented professionals that know this business from every imaginable angle and have a proven track record of executing every one of our projects flawlessly. We can and will deliver on this proposal.

Aegis will provide, design, layout, electrical, permitting, materials, equipment, and labor necessary for the installation of a solar array located on the roof of the Middle School and a solar car port in the parking lot of the Colchester High School. In addition, Aegis will provide the Group Net Metering Credit Discount Agreement (also referred to as a power purchase agreement) to include an 11% discount off of the net metered rate offered by Green Mountain Power for these preferred solar sites. In addition, we will also provide a lease agreement for the Colchester School District to review and sign. Aegis will provide all of the above and the detailed scope of work below with no assistance from the District and at no cost.

The purpose of this proposal is to provide an alternative proposal to others you may have received. After you have evaluated other proposals completely we hope you will find Aegis as the clear choice to partner with on your projects.

GENERAL EQUIPMENT SPECIFICATIONS

Solar Modules

REC 340 Watt, 72 cell

Inverters

SMA

Racking and Car Port

RBI

Electric Car Charging Station

Schneider Electric

Data Acquisition System

Sunny Portal





50" Flat Screen Monitor for Lobby Kiosk

Visio

*Aegis will provide all equipment at no cost to the district.

AEGIS SCOPE OF WORK

Aegis Scope of work includes all design, layout, electrical, permitting, materials, equipment, and labor necessary for the installation of both arrays. All work delivered upon commercial operation date will meet International Building Codes (IBC), National Fire Protection Association (NFPA) 1 and 101 building code requirements with respect to snow, wind, etc.

Aegis will provide the turn-key CHS and CMS projects at no cost to the district to include:

- Asset Development Services
 - 1.1. Pro forma and cash flow proformas for your review. A summary is included in this proposal under the Economics section, however, we are available to answer any questions that may arise anytime or provide further detail.
 - 1.2. Execution of Green Mountain Powers Group Net Metering application and submittal on the School districts behalf.
 - 1.3. Provide Group Net Metering Discount Agreement template for Schools review
- 2. System Design
 - 2.1. System one-line
 - 2.2. System Layout and Plan Set
- 3. Permitting
 - 3.1. Certificate of Public Good
 - 3.2. Electrical Inspection where required
 - 3.3. Utility Interconnection
- 4. Financial Engineering and Consulting
 - 4.1. Pro forma and Cash flow
- 5. Equipment Procurement The following equipment is included with the system
 - 5.1. Photovoltaic modules
 - 5.2. Inverters
 - 5.3. PV Racking, ballasts, solar canopy and associated hardware
 - 5.4. Electrical AC distribution system up to the utility point of interconnection
 - 5.5. PV combiner boxes and all DC distribution and wiring
 - 5.6. All necessary hardware for assembly of system
 - 5.6.1. Data Acquisition System and data connection for monitoring solar array remotely either by local internet connection or cellular data transmission
 - 5.6.2. 50" flat screen, smart monitor for DAS data presentation
- 6. Managing logistics and shipping
 - 6.1. Delivery and offloading of all equipment to site
 - 6.2. Receive and inspect materials
 - 6.3. Onsite material handling and storage





7. Construction

- 7.1. Trenching, DC and AC conduit, AC Electrical to utility point of interconnection
- 7.2. Three phase utility line extension as needed from utility point of interconnection Including utility transformer and meter
 - 7.2.1. Project management and coordination with Green Mountain Power
- 7.3. All onsite earthwork including:
 - 7.3.1. Earthwork including backfilling all trenches with sod or asphalt patch over the conduit and existing fill and grading back to the original grade
 - 7.3.2. Seed and mulch all disturbed areas as needed
- 7.4. Mounting PV panels and performing DC wiring
- 7.5. Installation and wiring of Inverter / Combiners / distribution
- 7.6. Layout and assembly of the racking, panels, and DC distribution system
- 7.7. Install grounding per grounding plan
- 7.8. Installation and setup of all data acquisition equipment
- 7.9. All trash removed to Aegis provided dumpster
- QC and Commissioning the system and coordinating all final inspections
- 9. O&M

ON SITE ANALISYS

As stated above, Aegis has worked tirelessly to provide the town and the school district with options to proceed with solar. Nils Behn, Aegis Renewable Energy's CEO, conducted a site walk at CHS and CMS in early September with Rick Johnson. Together they walked the roof of the middle school and identified the areas of the roof that have been replaced and the area that will be replaced. We have laid out the array to use the roof areas that have been replaced and will stay away from the area that will be replaced in the future. While we were there we flew our aerial drone, and conducted a visual analysis of the electrical infrastructure and interconnect point. At the high school the same process was followed in addition to inspecting the parking lot and reviewing the ANR maps.

SYSTEM DESIGN AND LAYOUT

Our initial layout and analysis for the two locations is below. Your production will increase or decrease based on the weather and time of year. For validation of the energy production which translates to your savings, we use third party analysis tools. The primary tool we use for solar performance modeling (including environmental, module behavior, system electrical effects), System design (including mechanical and electrical), is called Helioscope. Our production estimates are always conservative and 95% of our projects have over delivered on the production estimates we initially represented to our customers. Below you will find Helioscope reports for both CMS and CHS.

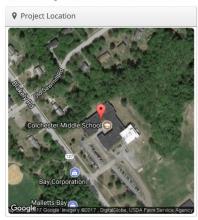


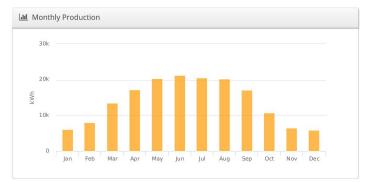


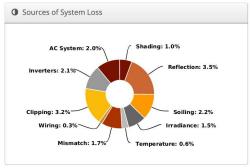
$2017-09-08\ Initial\ Design\ {\it 2017-09-08\ Colchester\ Middle\ School}, 425\ Blakely\ Rd,\ Colchester\ VT\ 05546$

Report	
Project Name	2017-09-08 Colchester Middle School
Project Address	425 Blakely Rd, Colchester VT 05546
Prepared By	Tom Flynn tflynn@aegis-re.com

lill System Metr	ics
Design	2017-09-08 Initial Design
Module DC Nameplate	142.8 kW
Inverter AC Nameplate	100.0 kW Load Ratio: 1.43
Annual Production	167.1 MWh
Performance Ratio	83.2%
kWh/kWp	1,170.2
Weather Dataset	TMY, 10km Grid (44.55,-73.25), NREL (prospector)
Simulator Version	cdde48461e-4e18c27903-5cd5701006- 878383bcd5







	Description	Output	% Delta
	Annual Global Horizontal Irradiance	1,301.2	
	POA Irradiance	1,405.7	8.0%
Irradiance	Shaded Irradiance	1,391.1	-1.0%
(kWh/m ²)	Irradiance after Reflection	1,341.9	-3.5%
	Irradiance after Soiling	1,312.6	-2.2%
	Total Collector Irradiance	1,312.6	0.0%
	Nameplate	187,494.7	
	Output at Irradiance Levels	184,596.9	-1.5%
	Output at Cell Temperature Derate	183,521.1	-0.6%
Energy (kWh)	Output After Mismatch	180,309.8	-1.7%
	Optimal DC Output	179,804.9	-0.3%
	Constrained DC Output	174,109.7	-3.2%
	Inverter Output	170,514.0	-2.1%
	Energy to Grid	167,103.0	-2.0%
Temperature	Metrics		
	Avg. Operating Ambient Temp		9.4 °C
	Avg. Operating Cell Temp		16.0 °C
Simulation Me	etrics		
		Operating Hours	4692
		Solved Hours	4692

Description	2017	-09-08	Basic	Conc	litions							
Weather Dataset	TMY	, 10km	Grid (4	14.55	,-73.2	5), NRE	L (pro	spector	')			
Solar Angle Location	Mete	eo Lat/L	ng									
Transposition Model	Perez Model											
Temperature Model	Sano	Sandia Model										
	Rac	a		b		Temperature Delta						
	Fixed Tilt			-3.56 -0.075		5	3°C					
Temperature Model Parameters	Flush Mount			-2.81		-0.0455		0°C				
	East-West			-3.56 -0.075		3°C						
	Carport			-3.	56	-0.075		3°C				
Soiling (%)	J	F	М	Α	М	J	J	Α	S	0	N	D
Solling (%)	12	12.5	1	1	0.5	0.5	0.5	0.5	1	1	7.5	8
Irradiation Variance	3.5%	i										
Cell Temperature Spread	3° C											
Module Binning Range	-1%	to 1%										
AC System Derate	2.00	96										
Module Characterizations	Mod	lule				Char	acteri	zation				
module characterizations	REC	350TP2	5 72 (1	REC)		Defa	ult Ch	aracter	izati	on, P	AN	
Component Characterizations	Dev	ice						Cha	aract	teriza	tion	
component characterizations	Sun	ny Tripo	wer (ore	/I IC /S	(444		Spec Sheet				

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⊖ Comp	onents	
Component	Name	Count
Inverters	Sunny Tripower Core1/US (SMA)	2 (100.0 kW)
Strings	10 AWG (Copper)	24 (3,410.9 ft)
Modules	REC, REC350TP2S 72 (350W)	408 (142.8 kW)

A Wiring Zone:			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	14-18	Along Racking

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Horizontal (Landscape)	10°	180°	1.5 ft	1x1	174	174	60.9 kW
Field Segment 2	Fixed Tilt	Horizontal (Landscape)	10°	180°	1.5 ft	1x1	161	161	56.4 kV
Field Segment 3	Fixed Tilt	Horizontal (Landscape)	10°	180°	1.5 ft	1x1	73	73	25.6 kV

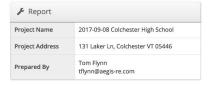






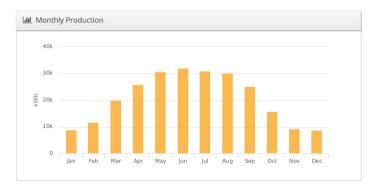


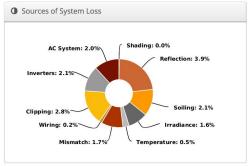
2017-09-08 Initial Design 2017-09-08 Colchester High School, 131 Laker Ln, Colchester VT 05446



Design	2017-09-08 Initial Design
Module DC Nameplate	214.2 kW
Inverter AC Nameplate	150.0 kW Load Ratio: 1.43
Annual Production	248.4 MWh
Performance Ratio	84.2%
kWh/kWp	1,159.5
Weather Dataset	TMY, 10km Grid (44.55,-73.25), NREL (prospector)
Simulator Version	7d42142704-df700c96ac-561928677d- ddba661596







4 Annual	Production		
	Description	Output	% Delta
	Annual Global Horizontal Irradiance	1,301.2	
	POA Irradiance	1,377.3	5.8%
Irradiance	Shaded Irradiance	1,376.9	0.0%
(kWh/m ²)	Irradiance after Reflection	1,322.9	-3.9%
	Irradiance after Soiling	1,294.5	-2.1%
	Total Collector Irradiance	1,294.5	0.0%
	Nameplate	277,362.9	
	Output at Irradiance Levels	272,957.7	-1.6%
	Output at Cell Temperature Derate	271,559.1	-0.5%
Energy (kWh)	Output After Mismatch	266,810.8	-1.7%
	Optimal DC Output	266,211.9	-0.2%
	Constrained DC Output	258,761.5	-2.8%
	Inverter Output	253,437.0	-2.1%
	Energy to Grid	248,369.0	-2.0%
Temperature	Metrics		
	Avg. Operating Ambient Temp		9.4 °C
	Avg. Operating Cell Temp		15.9 °C
Simulation Me	etrics		
		Operating Hours	4692
		Solved Hours	4692

Description	201	7-09-08	Basic	Cond	litions							
Weather Dataset	TMY	, 10km (Grid (4	14.55	,-73.2	5), NRE	L (pro	specto	r)			
Solar Angle Location	Met	eo Lat/L	ng									
Transposition Model	Pere	z Mode										
Temperature Model	San	Sandia Model										
	Rack Type			a		b		Temperature Delta				
Temperature Model Parameters	Fixed Tilt			-3.56		-0.075		3°C				
	Flush Mount			-2.81 -0.04		-0.045	55	0°C				
	East-West			-3.56 -0.075		5	3°C					
	Car	port		-3.	56	-0.075	5	3°C				
Soiling (%)	J	F	М	Α	М	J	J	Α	S	0	N	D
	12	12.5	1	1	0.5	0.5	0.5	0.5	1	1	7.5	8
Irradiation Variance	3.59	5										
Cell Temperature Spread	3° C											
Module Binning Range	-1%	to 1%										
AC System Derate	2.00	%										
Module Characterizations	Mo	dule	ization									
module characterizations	REC	350TP2	5 72 (1	REC)		Defa	ult Ch	aracte	rizati	on, P	AN	
Component Characterizations	Dev	rice						Ch	arac	teriza	ation	
Component Characterizations	Sun	ny Tripo	wer (ore	/I IS /9	SMA)		Sn	ec Sh	eet		

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Component	Name	Count
Inverters	Sunny Tripower Core1/US (SMA)	3 (150.0 kW)
Home Runs	4 AWG (Copper)	6 (73.5 ft)
Combiners	1 input Combiner	3
Combiners	12 input Combiner	3
Strings	10 AWG (Copper)	36 (4,491.5 ft)
Modules	REC, REC350TP2S 72 (350W)	612 (214.2 kW)

Description	Combiner Poles			String Size		Stringing Strategy			
Niring Zone 12		14-18			Along Racking				
₩ Field Segments	S								
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 2	Carport	Portrait (Vertical)	7°	181.338°	0.1 ft	1x1	285	285	99.8 kW
					0.1 ft	1x1	327	327	114.5 k





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ECONOMICS

Aegis Renewable Energy will be building the project and Wunder Capital will be holding the Group Net Metering Credit Agreement for 25 years with 5-year extensions. As stated, Wunder will provide an 11% discount on the net metering credit the school district will receive assuming both projects are awarded to Aegis. Below are the economic summaries for CHS and CMS.

25 Year Accumulated Cash Flow

Includes electric utility biennial escalation rate of 5% and solar degradation, line losses, soiling etc.

Middle School	\$ 93,080.00
High School	\$ 138,347.55
Total Accumulated Savings	\$ 231,427.55

Year 1 Colchester High School	
System Size kW DC	214.20
System Size kW AC	150.00
System Production kWh	248,369.00
System Net Metering Credit Value	0.1884
Total Net Metering Credit Savings	\$ 46,792.72
Net Metering Credit Discount	11%
Net Metering Credit Discount Agreement Rate	0.1676
Total Net Metering Credit Agreement Cost	\$ 41,626.64
Total Year 1 Savings Colchester High School	\$ 5,166.08

Year 1 Colchester Middle School	
System Size kW DC	142.80
System Size kW AC	100.00
System Production kWh	167,103.00
System Net Metering Credit Value	\$ 0.1884
Total Net Metering Credit Savings	\$ 31,482.2052
Net Metering Credit Discount	11%
Net Metering Credit Discount Agreement Rate	\$ 0.1676
Total Net Metering Credit Agreement Cost	\$ 28,006.4628
Total Year 1 Savings for Colchester Middle School	\$ 3,475.74

Economic Summary

Upon award of this project Aegis will provide a buy-out option for the supervisory Union to purchase the array starting at year 7.

Utility escalation background and history:

The residential retail rate of electricity in Green Mountain Power territory has increased 2.5% annually for the past ten years on average. Green Mountain Power is currently lobbying hard to increase this rate by 4.98% starting in January 2018. "In filings with the Public Service Board (now the public utility commission) on April 14, 2017 the state's largest utility, Green Mountain Power said rising transmission costs, regional grid capacity issues and net metering led to the need for increased rates. GMP spokeswoman Kristin Carlson said the rate increase would have been larger, but the company found savings that offset some of the increases."

~http://digital.vpr.net/post/gmpseeks-raise-consumer-rates-nearly-5-

Net Metering Credit Discount Agreement Holder, Wunder Capital

Aegis Renewable Energy emphasizes and strongly believes in collaboration with like-minded companies and organizations that share our values and ethics. With that in mind, the Colchester School District will be purchasing power through a group net metering credit discount agreement from Wunder Capital. Wunder believes in investing in community based projects that have a deeper value other than monetary financial

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percent#stream/0

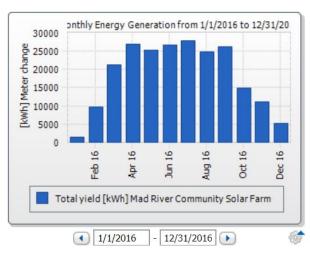
returns. Their model revolves around helping individual investors make a positive impact on the planet through investing in solar. Wonder's mission statement and values matches Aegis'. Wunder won the U.S. Department of Energy's 2014 Sunshot Challenge, as well as COSEIA's 2015 Summit Award. Wunder also participated in the Techstars technology accelerator program. They understand the hard science, the practicalities on the ground, and the risk evaluation processes, as members of both the National Renewable Energy Lab's solar financing committee, and the industry-leading solar evaluation group TruSolar®. Wunder has been featured in Bloomberg, Forbes, WSJ, Fortune and many more. On September 21st Wunder was highlighted on CNN Money in "6 ways to change the world for as little as \$20." http://money.cnn.com/gallery/investing/2017/09/21/how-tomake-an-impact-investment/4.html

To learn more about Wunder, visit their website at www.wundercapital.com

EDUCATION

Education is arguably the single most important aspect to a vibrant renewable energy future and economy. It is vital that we teach our students STEM and solar technology matches well with STEM curriculum. Therefore, for the students at both the high school and middle school we will install a 50" flat screen monitor that will cycle through real time data so students can watch, learn and discuss. As part of this effort, Aegis will also conduct a 1.5-hour solar STEM workshop for students and parents.





Specifications available upon request To learn more about the Sunny Portal DAS visit their website at https://www.sunnyportal.com/Templates/Start.aspx?ReturnUrl=%2f



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CAR CHARGING STATION

Included in this proposal is an EVlink electric car charging station with two charging cables. This will be installed at the high school car port. Aegis renewable energy will cover all costs associated with the installation. This will encourage the use of alternative fuel vehicles and serve as an additional educational platform.

Specifications available upon request

To learn more about the EVlink electric car charging stations visit their website at

http://static.schneiderelectric.us/docs/Electrical%20

Distribution/Electric%20Vehicle%20Charging/2800CT1001.pdf



OTHER CONSIDERATIONS

INTERNATIONAL TRADE CASE

The Section 201 Trade case filed by Suniva and Solar World will affect every bidder on this project. In short, the case will impose an up to \$0.40 per watt tariff on imported solar modules. As the industry prepared itself for this case, it escalated demand for solar modules. As we saw this transpiring, Aegis Renewable Energy purchased thousands of solar modules to avoid the potential doubling in the cost of modules. Therefore, for 30 days we can lock in our Net Metering Credit Agreement Discount of 11% and if Aegis is awarded this project we will allocate panels for the Colchester school district and eliminate any equipment related cost risk to the District.

To learn more about the section 201 US international Trade Case here are some helpful sites:

https://www.seia.org/news/seia-statement-anti-solar-itc-decision

http://www.utilitydive.com/news/solar-sector-steels-for-tariff-fight-after-itc-harm-ruling/505668/

https://cleantechnica.com/2017/08/29/trump-demand-tariffs-bad-news-us-solar-industry/

AMICUS COOPERATIVE

As we have articulated in this proposal, Aegis Renewable Energy emphasizes and strongly believes in collaboration with like-minded companies and organizations that share our values and ethics. With that in mind, Aegis purchases equipment through a buying cooperative called Amicus Solar Cooperative. They are a special group of quality solar PV installers, integrators, EPCs and developers who openly share and collaborate on a wide range of business topics from operational efficiencies to sales and marketing strategies. Amicus was founded in 2011 with the goal of supporting regional solar companies by leveraging national scale purchasing power and collective industry knowledge. Amicus shares our focus in regard to respect for others, transparency,



cooperation and fairness to other companies that we compete with every day, many of which are Amicus members themselves!

We have leveraged this relationship with Amicus to pre-purchase thousands of solar panels ensuring that we can deliver your project on time and on budget while eliminating any additional tariffs that will double the cost of solar panels through the pending US International Trade Case.

To learn more about Amicus Solar visit their website at: www.amicussolar.com

COMMENCEMENT AND COMPLETION SCHEDULING

- Aegis will schedule work upon receipt of an award letter from the Colchester School District for the projects.
- 2. Following that, Aegis will send over the Group Net Metering Credit Discount Agreement and Land Lease Agreement.
- 3. The dates noted in this agreement are estimates of when the project may start. The schedule may be affected by weather and factors outside of the party's control, such as permit approval, and interconnection approval. We will keep the school district informed of the status and schedule on a regular basis through the process.
- 4. Upon completion of installation, Aegis and Green Mountain Power will commission the system. Commissioning will verify that the system performance is as specified and that all components are in proper working order.
- 5. Aegis will keep the premises free from substantial accumulation of waste material and rubbish on a daily basis and at the completion of the Scope of Work remove all rubbish, implements and surplus materials.
- 6. Aegis shall not be responsible for delays caused by strikes, lock-outs or other labor troubles, floods, fires, transportation delays or other contingencies beyond our control (collectively "Force Majeure"). If Force Majeure occurs, the date for completion work shall be extended one day for each day of delay caused by such Force Majeure.

AEGIS PERSONNEL AND PARTNERS ASSIGED TO THIS PROJECT

Nils Behn, CEO

- Founder of Aegis Renewable Energy Inc
- 17 years in Renewable Energy Business
- Director of Wind Division of Alteris Renewables, focus on C&I, DG wind and wind/solar hybrid systems
- Sr Project manager Northern Power Systems, focus on C&I with a focus on military renewable energy systems
- Sr Project manager Distributed Energy Systems, focus on wind turbine engineering and manufacturing

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Tom Flynn, COO









- PE, PMP, with 35 years of experience in complex initiative project management, design and engineering
- Owned and operated numerous engineering and construction firms executing projects in 30+ countries.
- Served as engineering and project management professor for Boston University, Northeastern University and the National Technological University

Andy Tetreault, Sr Project Manager

30 years of relevant experience in Vermont construction industry as a project manager, designer and site supervisor

Mike Forbes, Construction Supervisor

- 13 years in renewable energy project management and construction management for Northern Power Systems and Aegis Renewable Energy
- 20 years manufacturing and complex manufacturing floor and facility management for Bombardier, Barre, VT with a focus on rail transportation equipment manufacturing

Chris Lamonia, EVP Project Development and Finance

- 17 years of Renewable Energy Experience with a focus on the C&I market
- Held leadership positions for various renewable energy companies including:
 - Xzeres Energy (OTC:XPWR), President of Energy Efficiency
 - Northern Power Systems (TSX:NPS), Regional Director
 - Founder of C3 Energy Capital, CalcoGreen, and the Renewable Energy Classified Exchange
 - WindWrights & Alteris Renewables, Director of Wind
 - Distributed Energy Systems (NASDAQ:DESC), Inside Sales Manager,
 - Represented and transacted over 500MW's of solar and wind transactions

Civil Engineer

 Jeremy Matosky, PE, Trudell Consulting Engineers, 478 Blair Park Rd. Williston, Vermont 05495 Jeremy Aesthetic Engineer

• Jeremy Matosky, PE, Trudell Consulting Engineers, 478 Blair Park Rd. Williston, Vermont 05495 Jeremy **Electrical Engineer**

Alan Gould, PE, Pearsons and Associates, Stowe, Vermont

Legal (in State) representation for Site Land Title work

Chip Mason, Gravel and Shea, Burlington Vermont

Project Counsel

Chip Mason, Gravel and Shea, Burlington Vermont

Financing Partner

Nick Kerwin, Wunder Capital, Boulder, Colorado





AEGIS BACKGROUND, HISTORY, AND QUALIFICATIONS

Proven, Innovative, Market Leader

- Largest single roof mounted Solar array in VT @ Vermont Creamery, 2015
- Top 500 US solar contractor~Solar Power World 2016, 2017
- Ranked #2 Commercial Solar Installer in VT~Solar Power World 2017
- Largest solar array at a school, Town of Warren, VT 2015
- Solar project of the year, Boardman Hill Solar Farm, Randolph, VT ~ VCAN 2015
- First wind, solar, battery storage project in Vermont 2010 @ Dynapower, Williston
- First wind turbine at airport in the country, 2009

Services We Provide

- Feasibility analysis
- Permitting, design, engineering
- Project management
- Financing
- Equipment procurement and logistics
- Construction management
- Service and maintenance

Attention to Detail & Quality

- We provide Standard 10 year inverter warranties
- Long term O&M and Service contracts available
- 25 year solar module production warranty

See Exhibit A for Full Qualifications Document



EXHIBIT A DETAILED QUALIFICATIONS







SERVICES AVAILABLE

FEASIBILITY ANALYSIS

Solar, Wind & AD Studies, site assessments, project financial pro forma, fatal flaw analysis... we do it all

PERMITTING

Our in house team has decades of Municipal, State, Federal, and Utility permitting experience

PROJECT MANAGEMENT

Whether your project is 50kW or 5MW our highly skilled project managers have the experience.

CONSTRUCTION

We provide turnkey financing, procurement, and installation services to meet all of our clients' needs.

SERVICE AND MAINTENENCE

Our factory trained technicians provide full service capabilities and our in house fleet monitoring manager ensures fast response.

Renewable Energy Simplified

Wind Power * Solar Power

RENEWABLE ENERGY SOLUTIONS THAT WORK FOR YOUR BUSINESS

Planning a renewable energy project is not small undertaking. The investment decision requires a partner with an experienced track record of design - value engineering, interconnection permitting, regulatory navigation, and project management competency.

For years, Aegis Renewable Energy has been partnering with clients to ensure accurate siting, streamlined permitting and cost effective Engineering (design), Procurement, and Construction (EPC). Despite the shifting sands of the permitting and regulatory environments we have never failed to secure permitting for any of our renewable EPC projects. Aegis Renewable Energy has longstanding proven relationships with equipment manufacturers, design professionals and subcontractors so you can rest assured that the entire team is aligned on industry best practices, accountability and urgency.







340 MAD RIVER PARK, STE., 6 . WAITSFIELD, VT























COMPLETED COMMUNITY SCALE RENEWABLE **ENERGY PROJECTS**

- AYERS BROOK GOAT DAIRY Largest single roof solar array in Vermont
- **BLUE SPRUCE FARM**

The perfect marriage of wind power and cow

TOWN OF WARREN. VT

Largest solar array at a school in VT

- MAD RIVER COMMUNITY SOLAR Community Solar at its best
- **NEW ENGLAND INSTITUTE OF TECHNOLOGY**

Central to their Renewable Energy Curriculum

JACKMAN ME, BORDER CROSSING

Dual turbine installation rated as a top 12 ARRA funded project

NANTUCKET HIGH SCHOOL

First commercial turbine on the island of Nantucket

TOWN OF WAITSFIELD, VT

Solar array offsetting 80% of the municipal electric load

DYNAPOWER

Key to their innovative energy storage product demonstration at their Burlington VT facility

BOARDMAN HILL SOLAR FARM

30 member true ownership and truly green community solar project. 2015 Project of the Year.

HERITAGE FLIGHT

Closest commercial turbine to a US airport

CLARKSBURG, MA

1.3MW PV project, adding more green to a revitalized golf course

TOWN OF HEMPSTEAD NY

Powering their hydrogen fueling station and water authority facility

M5 LEASING

Bringing green energy to its green energy business tenants with rooftop solar

TOOELE ARMY DEPOT

1.7 megawatt wind turbine for the United States

BREEZY VALLEY COMMUNITY

Community owned group net metered solar farm

SIMS METAL MANAGEMENT First commercial wind turbine in NY City









EXPERIENCE COUNTS

Few EPC's can claim as many firsts as Aegis. Whether it's breaking new ground by installing the only commercial scale wind turbines in the states of New York, Connecticut and North Carolina or permitting and installing the closest commercial Wind turbine to any airport in the United States, we have been there. Through careful and respectful relationship building we have earned the trust of the communities, permitting authorities, subcontractors, and of course the clients we work with. Indeed, relationships are core to the success of your project and our business. Honesty, integrity, clear communication and quality are central to the way we do business. We say what we mean and do what we say. That is our promise to you. Our first goal is always to exceed the expectations of our clients.

At Aegis we are especially proud of our team. Not only do we have some of the sharpest minds in the industry but we have a team with a depth of experience almost unrivaled in the renewable energy sector. That experience gives us and our clients the advantage of streamlining complex projects so they are delivered on time and under budget. Every project will encounter some challenges and we approach all challenges with the tools of our experience, our ingenuity, and our broad network of industry partners That experience gives us and our clients the advantage of streamlining complex projects so they are delivered on time and under budget. Every project will encounter some challenges and we approach all challenges with the tools of





NILS BEHN - CEO In Bulgaria

TEAM EXPERIENCE HIGHLIGHTS

YEARS OF CONSTRUCTION INDUSTRY EXPERIENCE

Collectively our construction management team has decades of experience in construction

YEARS OF WIND INDUSTRY EXPERIENCE

Collectively our construction management team has consists of figures who have led the industry wind energy development.

DEMONSTRATED SUCCESS IN COMMERCIAL-SCALE SOLAR

Our construction management team have been on the leading edge of commercial-scale solar development in the region and has successfully installed several commercial-scale solar arrays.

COLLECTTIVE CAREER MEGAWATTS OF RENEWABLE ENERGY SYSTEMS INSTALLED

In their careers our collective team has been directly involved in the installation of over 750 megawatts of renewable energy installations

EXPERIENCE WITH LANDFILL SOLAR AND OTHER PROJECTS WITH COMPLEX SITE-SPECIFIC CONDITIONS

The Aegis Team is always looking for solutions. If your renewable energy project involves unique engineering or regulatory challenges, let our experienced professionals help you find creative solutions to ensure that your project is a success.

OUR CONSTRUCTION MANAGEMENT TEAM

Nils Behn - CEO and Owner

Mr. Behn has over 16 years of experience in the wind and solar energy industry. He served for 9 years as a project manager for the nation's oldest wind turbine manufacturer Northern Power Systems where he gained extensive experience in wind turbine manufacturing, engineering, permitting, and deployment of wind energy conversion systems. While at Northern, Nils managed over 25 commercial and military PV solar projects both domestically and internationally. As the Director of the Alteris Renewables' Wind Division, Mr. Behn oversaw the rapid growth and success of the Wind Division to become the leading Community Wind EPC in the Eastern USA. With the merger of Alteris Renewables and RGS Energy Mr. Behn successfully spun off the Wind Division to become Aegis Wind which has been renamed Aegis Renewable Energy. Under Mr. Behn's leadership Aegis has seen a doubling of its revenue every year since 2011.

Tom Flynn, P.E., PMP - Chief Operations Officer

For 25+ years, Tom has served as a program – project executive with success in developing, executing, and controlling new complex initiatives as well as successfully recovering large and distressed initiatives with integrated execution teams. He has been successful with various types of time sensitive and complex program – project assignments in 30+ countries. Tom has served as a senior management consultant with extensive global experience in complex problem solving, and solution development – implementation and he has trained and mentored project managers and ROICs for NAVFAC, US DOD, US DOE and USACE.

A civil and structural engineer, Tom has also been a project management professional (PMP - certified by the Project Management Institute, PMI®) for 20+ years.

Andrew Tetreault - Senior Project Manager

Andrew is a Senior Project Manager with more than 30 years' experience in the construction industry. He has held various roles in commercial and residential construction including Project Manager, Designer, Estimator and Site Supervisor. His work can be seen all over the state of Vermont from Bennington to Franklin Counties and includes banks, schools, convenience stores, corporate offices, retail outlets, laboratories, public works projects, physicians' offices and numerous residential properties.

Notable clients include: VSECU, Wilkinson Harley Davidson, Washington County Mental Health, Cumberland Farms and **Keurig/Green Mountain Coffee**.

Andrew holds a degree in Architectural Engineering from Vermont Technical College.

Michel Forbes - Construction Supervisor

Mike has over 13 years in the renewable energy industry. As project site supervisor, Mike coordinates all details of the construction phase of solar and wind projects. He directs, supervises and schedules subcontractors and crews and ensures that all safety and quality standards are met in the field. In addition, Mike provides technical maintenance services for solar and wind turbine equipment installed by Aegis. Mike's previous years of experience in manufacturing enhances his troubleshooting and equipment maintenance expertise.







CLIENT REFERENCES

VERMONT CREAMERY

Websterville, VT, 05678 Position Title: Co-Owner Office: 802. 479.9371

MAD RIVER COMMUNITY SOLAR FARM

85 Carroll Road Waitsfield, VT, 05673 Contact: Dorothy Kyle

Position Title: Group Administrator Office: 802. 496.4789

TOWN OF WAITSFIELD, VT

9 Bridge Street, Waitsfield, VT 05673 Contact: Valerie Capels

Position Title: Town Manager Office: 802. 496.2218

TOWN OF HEMPSTEAD

320 Lido Blvd Point Lookout, NY 11569 Position Title: Commissioner Office: 516.870.6221

BOARDMAN HILL SOLAR FARM

1030 Boardman Hill Road West Rutland, VT 05777 Contact: Marcy Tanger
Position Title: Group Administrator Office: 802.259.2344

Green Mountain Power

Colchester, VT 05446 Contact: Don Loraine

Position: Green Mountain Power's Manager of

Office: 802.655.8531

UTILITY INTERCONNECTION EXPERIENCE

Aegis is a full service, turn-key, renewable energy integrator with extensive experience in working with local utilities for interconnection feasibility and permitting approval.

Utility

Example Project

LIPA - Long Island Power Authority Town of Hempstead

Phoenix Press United Illuminating

Green Mountain Power **Vermont Creamery**

Lyndonville Electric Department Burke Mountain Ski Resort

National Grid New England Institute of Technology

New River Light & Power Appalachian State University

Hydro Quebec **GSA Border Crossing**

INSTALLATION, O&M, AND SAFETY TRAINING

- OSHA 10
- OSHA 30
- OSHA Tower Climbing & Fall Protection Certifications
- Northern Power Installer Certificates
- Northern Power Operations and Maintenance Level 1
- Northern Power Operations and Maintenance Level 2













Colchester School District

Proposal for Solar Net Metering Agreements

September 28, 2017



New England Office PO Box 658 Waterbury, VT 05676 (802) 244-1658 GreenLanternGroup.net

September 28, 2017

To: Colchester School District

Attn: George Trieb

Business Manager 125 Laker Lane

Colchester, Vermont 05446

RE: Proposal for Solar Power Net Metering Agreements with Colchester School District

The Green Lantern Group (GLG) is pleased to submit our qualifications and a proposal for Colchester School District (CSD) to participate in Solar Net Metering Agreements, which would reduce electricity expenditures for CSD by approximately \$28,620/year for the next 20 years, for total projected savings of almost \$575,000. Green Lantern will coordinate the financing, engineering, permitting, construction, long-term ownership, operations and maintenance of the solar projects. There is no investment required by, or any cost to, CSD to participate.

The clean solar power will be generated by a 4-acre 500 kW AC array located in Colchester and by two solar arrays located on the roof of Colchester Middle School and in the parking lot of Colchester High School. GLG is ready to commence project development and permitting immediately. CSD will benefit from the solar arrays' production of net metering credits, and the Renewable Energy Certificates (RECs) will be retired here in Vermont thus contributing to Vermont's renewable energy goals. Also worth noting is that the solar electricity generated by these arrays will avoid greenhouse gas emissions over the 20-year agreement equivalent to more than 22,440 metric tons of carbon dioxide-equivalent. Table 1 below summarizes the key deal points and the projected savings for the three arrays combined.

Table 1 – Summary Table

Total Number of Net Metering Credits (NMC) Allocated to CSD Per Year	1,507,000
Estimated Annual Savings on CSD electricity expenditures	\$ 28,620
Estimated Total Savings on CSD electricity expenditures over life of Agreement	\$572,402
Estimated Annual payment by Colchester School District to Green Lantern Group	\$237,799

Data Used for this Allocation Estimate

In preparing this proposal, our point of departure was the annual CSD electricity expenditure information (provided by George Trieb) of over \$300,000 per year, with the High School, Middle School and Elementary Schools all maintaining separate customer accounts with GMP. (Please note that under the new solar net metering rules effective July 1, 2017 each customer is limited to 500 KW AC of net metering.) To be conservative, the \$300,000 figure was used, divided by the value of solar net metering credits (\$0.1684/kWh for the 500 KW off-site array and \$0.1884/kWh for the on-site arrays), to calculate

the total number of net metering credits that could be generated and used to offset CSD's electricity expenditures. This number of net metering credits (1,507,000) will offset about \$265,000 (or 89%) of CSD's annual electricity expenditures, providing a margin for potential future reductions in electricity consumption and expenditures over the next 20 years from energy efficiency measures which might be undertaken by CSD.

Scope of Work and Timeline

Green Lantern anticipates a total development and construction cycle of approximately 13 months from award by CSD to final commissioning and commencement of operations of the system. Green Lantern and our team of legal, engineering and environmental consultants (Solar Power Engineering, Krebs & Lansing Civil Engineers, Arrowwood Environmental, TJ Boyle Landscape Architects, and Facey, Goss and McPhee) will collaborate on all work associated with system impact studies, design and engineering, environmental studies, Certificate of Public Good permitting, and the interconnection agreements with GMP. Green Lantern's in-house project manager, Peter Edlund, will collaborate with E&S Electric of Colchester for final engineering, procurement and construction services related to installing the system.

The time estimate below refers to the three dedicated solar arrays for CSD.

Task	Start	Finish
Establish Site Control and agree on draft Land Lease and No-Cost	10/1/17	12/15/17
Easements to CSD rooftop and parking lot		
Net Metering Agreement Negotiation and Execution with CSD	10/15/17	1/15/18
Carry Out Civil Engineering Design (50%) for three arrays	10/1/17	12/15/17
Utility Coordination: feasibility study & interconnection cost estimates	11/15/17	1/31/18
Certificate of Public Good Permitting by Public Utility Commission	1/31/18	5/15/18
Finalize Civil Engineering (100%)	1/1/18	5/1/18
Mobilize Financing	5/15/18	5/31/18
Equipment Procurement, Racking Manufacture, Construction	6/1/18	10/15/18
Commissioning	10/15/18	10/31/18
Commercial Operations date	11/1/18	-

Next Steps and Additional Considerations

If and when your evaluation committee is satisfied with the all information we have presented, and makes an affirmative decision to engage Green Lantern Group, we will ask that the Net Metering Agreements (NMA) be reviewed by your legal counsel (a draft is provided in Appendix 1). The NMAs will be revised if needed, then signed and executed. This will allow us to proceed with development, permitting, financing and construction of these solar projects.

We hope that you will accept our proposal. Further details about our qualifications, credentials, business model, technology, financial terms and other relevant information follow below. In addition, please see our offer to establish a Sustainability Scholarship in Section VII. If you have further questions or concerns, please do not hesitate to contact either me, or Sam Carlson.

Sincerely,

Luke Shullenberger, Managing Partner

CONTACT INFORMATION:

Luke Shullenberger Green Lantern Group Direct tel. 802-244-1658

Email: lukes@greenlanterndevelopment.com

Sam Carlson, Director of Project Development Green Lantern Group Mobile tel. 802-324-6862

Email: samc@greenlanterndevelopment.com

I. Company Profile

GREEN LANTERN - CREDENTIALS & QUALIFICATIONS

The Green Lantern Group of Waterbury, Vermont is a full-service development, financing, construction, and asset management firm with expertise in community- and commercial- scale solar. Green Lantern has developed a financing solution that allows schools, local and state governments, companies, nonprofits and public institutions to participate in, and benefit from, commercial solar installations without any up-front investment.

We partner with best-in-class consultants and engineering partners to deliver a turn-key solution for development, construction, financing, ownership and operations. As of July 1, 2017, Green Lantern has more than 50 solar projects operating in Vermont, which represent nearly 24 megawatts (MW) and \$65 million in total investment. We currently have another 25 solar projects in development around Vermont, representing an additional 10 MW of solar capacity.

As a team, we understand the financial considerations that impact large electricity consumers. Electricity expenditures are a significant expense. We develop high-quality solar projects at the lowest capital cost possible, so that we may deliver maximum savings to group net metered customers over the 20-25 year life-span of the solar projects. We achieve this through strategic value engineering, and by leveraging federal and state tax credits as part of the financing structure.



Solar array in Sudbury, Vermont developed by Green Lantern Group for Green Mountain College

Green Lantern understands the challenges of development and project financing

The executive management team at Green Lantern has hands-on experience with building and managing companies. Throughout our careers as owners, principals and managers in the renewable energy, manufacturing, construction, real estate and technology sectors, Green Lantern and its team has learned many lessons. When developing complex projects and exploring multiple options for ownership and financing, the path to success is rarely a straight line. Green Lantern takes an honest and structured

approach to all engagements, and leverages great perseverance and commitment to success to make projects happen.

Smart Development & Smart Capital for a Clean Planet

Smart development and project financing is the result of great synergy. When powerful ideas, motivated stakeholders, innovative technology and flexible capital all converge, incredible things happen. Green Lantern has created a broad network of affiliates, channel partners, and strategic relationships, all of whom share a common goal to make intelligent investments that accelerate the transition to a low carbon economy.



GREEN LANTERN SOLAR FINANCING & REFERENCES

Solar array in Duxbury, Vermont developed by Green Lantern Group for Crossett Brook Middle School

Green Lantern continues to bring innovation to commercial solar with a financing program tailored to schools, municipalities and public sector customers throughout Vermont. Since 2012 Green Lantern has financed and constructed more than \$65 million in net-metered solar projects. On behalf of tax-credit investors and commercial lenders, Green Lantern develops, finances, constructs, owns and operates the projects. This financing program supports a broader mission to connect mission-driven investors with opportunities in renewable energy that feature high-impact social and environmental benefits. Table 2 below provides a list of schools, school districts and other educational institutions currently partnering with the Green Lantern Group.

Table 2
List of Vermont Schools, Districts and/or Supervisory Unions partnering with GLG

Year	Educational Partner	Project	Location	Status
2017	Cambridge Elementary School	Cambridge Landfill GLC Solar, LLC	Cambridge, VT	In permitting
2016	Derby Elementary School	Derby GLC Solar, LLC	Derby, VT	In permitting
2016	Johnson Elementary School	Johnson GLC Solar, LLC	Johnson, VT	Operating
2015	MMU High School	Westman GLC Solar, LLC	Cambridge, VT	Operating
2016	Lyndon State College	Mont Vert GLC Solar, LLC	West Burke, VT	Operating
2016	Spaulding High School	Pine Hill Solar, LLC	Montpelier, VT	Operating
2016	Barre City Schools	Broad Brook Solar, LLC	Sharon, VT	Operating
2015	Chittenden East Supervisory Union	Proctor GLC Solar, LLC	Proctor, VT	Operating
2015	Lyndon Institute	West Burke GLC Solar, LLC	West Burke, VT	Operating
2014	Green Mountain College	Sudbury Ervin GMC Solar, LLC	Sudbury, VT	Operating
2014	Thatcher Brook School	Village of Waterbury Solar I, LLC	Waterbury, VT	Operating
2014	Barre Schools	Barre Town Solar	Barre Town, VT	Operating
2014	South Royalton Schools	Royalton Solar	Royalton, VT	Operating
2014	St. Johnsbury Academy	GLC Chester Community Solar	Chester, VT	Operating
			Williamstown,	
2014	St. Johnsbury Academy	Williamstown Old Town Road Solar	VT	Operating
2013	Green Mountain College	Green Mountain College Solar	Poultney, VT	Operating
2013	Washington West Supervisory Union	WWSU Crossett Brook School	Waterbury, VT	Operating
2013	Hilltop Montessori School	Hilltop Montessori Solar	Brattleboro, VT	Operating
2012	Laraway Youth & Family Services	Laraway Solar	Johnson, VT	Operating

Selected Investors: Kendall Sustainable Infrastructure, Morgan Stanley Solar Solutions, Main Street Power, Greenbacker Capital Group, National Life Insurance Group, Green Mountain Power Corporation, Northfield Savings Bank, Mascoma Savings Bank, Vermont Economic Development Authority (VEDA), private investors.

Selected Non-Educational Partners: Cities and Towns of Rutland, Barre, Springfield, Johnson, Derby, Williston, Vergennes, Brattleboro, Randolph, Putney, Waterbury, Cold Hollow Cider Mill, Cabot Cheese, Sugarbush Ski Resort, Smugglers Ski Resort, Killington Pico Ski Resort, Mount Snow Ski Resort, Healthy Living Market and other municipalities and private customers throughout Vermont.

Selected Customer References:

Chittenden East Supervisory Union
Robert Fahey (Business Manager), (802) 434-2128, robert.fahey@cesuvt.org

CBMS/Washington West Supervisory Union
Tom Drake (Principal), (802) 244-6100, tdrake@wwsu.org

Johnson Elementary School

Deborah Clark, Business Manager, Lamoille North Supervisory Union, dclark@Insu.org

Brattleboro Memorial Hospital

Steven Gordon (CEO), (802) 257-0341, sgordon@bmhvt.org

City of Montpelier

Mike Miller (Dir. of Planning and Community Development), (802)-223-9506 mmiller@montpelier-vt.org

Sugarbush Resort

Craig Coughlin (VP of Finance), (802) 583-6385, ccoughlin@sugarbush.com

St. Johnsbury Academy

Carol Lyon (Assistant Headmaster), (802) 748-7703, clyon@stjacademy.org

Green Mountain College

Greg Manchester (Controller), (802) 287-8000, manchesterg@greenmtn.edu

Town of Chester

David Pisha (Town Manager), (802) 875-2173, dpisha@vermontel.net

Town of Springfield

Tom Yennerell (Town Manager), (802) 885-2104, tosmanager@vermontel.net

Town of Williston

Rick McGuire (Town Manager), (802) 878-0919, mcguirer@willistontown.com

Village of Waterbury

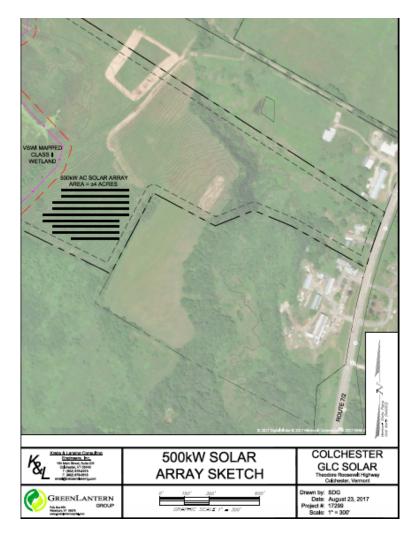
Bill Shepeluk (Town Manager), (802) 244-7033, WShepeluk@waterburyvt.com

II. Proposed Technology

Green Lantern's proposal to CSD includes three (3) solar arrays, designed to maximize the potential dollar value of electricity expenditure savings per year for CSD. Each array requires similar photovoltaic modules (solar panels), but different framing and construction methodologies. The three arrays and their initial site plans are included below.

A. 500 KW AC (4-acre) off-site solar array located near 4259 Roosevelt Highway

As can be seen in the sketch below, the solar site is very well situated, far from public roadways or private residences, screened by extensive trees and vegetation to the east and south. It is also a safe distance away from any sensitive environmental features, such as wetlands, deer wintering area or rare/threatened/endangered species. This 500 KW project would be dedicated to the school with the largest electricity bill (presumably the high school). It would generate approximately 875,000 kilowatthours per year of clean electricity, enough to produce almost \$15,000 per in year in savings for the next 20-25 years for CSD.



The 500 KW AC nameplate capacity solar facility will consist of:

- approximately 2,600 Polycrystalline 72-cell photovoltaic (PV) modules (solar panels)
- 15-20 string inverters
- All ground-mounted racking, rails and hardware
- Controls Utility disconnect switch, AC panel board, AC switchboard, mini-power zone
- Communications equipment for daily kWh/weather reporting via cell phone modem.

The Project will utilize Sunpream, SolarWorld, Hanwha, Canadian Solar, Trina, Renesola or other Tier 1 manufacturer-equivalent PV modules. Tier 1 PV modules may come from the United States, Canada, Germany or China, depending on the results of competitive procurement processes once the project is permitted. The PV module racking system will be manufactured in the US and utilize a fixed tilt angle structure of 30 degrees facing south/south-west. PV modules will be connected to multiple string inverters with a combined rating of 500 KW (AC). This is the same basic system the Green Lantern Group has used successfully for over thirty (30) 500 KW solar arrays in Vermont since 2013.

The solar arrays will be interconnected to the existing utility electrical distribution system through Green Mountain Power (GMP) pole-mounted transformers, which will be provided by GMP. A revenue grade meter will be provided to monitor the PV System energy output for the single interconnection. The meteorological station, metering and monitoring systems will be provided by the Green Lantern Group. The metering and monitoring system will be Internet-connected with cellular modem for remote access to the information, as well as for automated reporting.

In addition, the site consists of: conduit, H-Frame and all necessary equipment to interconnect to the electrical grid, installation of all equipment above; and installation of gross net metering by GMP.

Racking for PV Modules:

The fixed mount racking system will be designed and supplied by RBI Solar. It is fully warrantied for 25 years. The posts for the foundation are made from galvanized steel. The racking system is made of galvanized steel or aluminum members, with aluminum and stainless steel hardware.

The racks will be installed to follow the existing grades and topography so that grading of the array area is not expected to be required. The post embedment depth will be a minimum of 7-8'. The modules will be set at an angle of 30 degrees to horizontal. The leading edge (bottom edge) of the modules will be approximately 36 inches above grade (to allow snow to slide off). This dimension may vary since the site will not be graded and the racks and modules will follow the existing contours, although it will always be a minimum of 36 inches above grade.

System Monitoring (Date Acquisition System or DAS)

The System Monitoring will be provided by Green Lantern and will be a web-based data monitoring and support system. This system is provided with a local communications device that connects and temporarily records system data. The unit sends this data over the Internet to the monitoring service where the data is logged and can be retrieved on user-friendly screens over the Internet.

The local communications device has data back-up capability and serves as an on-site data storage device. The installation will retain data for a minimum of one week in the event of a loss of communications. In addition, the central monitoring station sends out messages in the event that a local communications device does not report as expected. The central system sends out text messages and emails to dispatch service personnel if necessary.

B. 150 KW AC Rooftop Array on Colchester Middle School

The sketch below shows the initial layout and size of the proposed array. It is our understanding that three sections of the Colchester Middle School roof have already been strengthened, with the fourth section slated for strengthening over the summer of 2018. Our proposal assumes that construction for this array would begin in September 2018, enabling the entire roof to be used for solar panels.

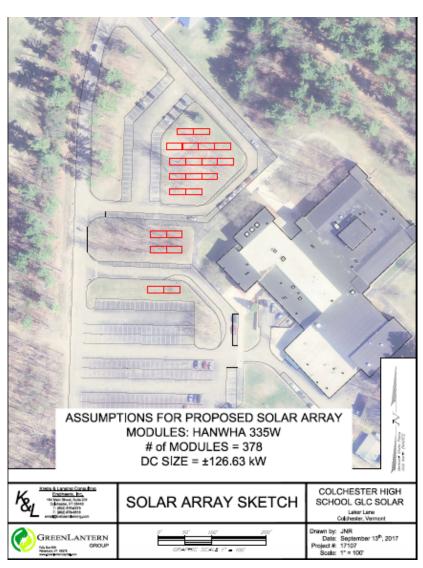


The array would be a 150 KW AC (178 KW DC) system, consisting of 584 PV modules. Given the flat roof, a ballasted steel racking design would be used to install the modules and avoid roof penetrations. Like the ground-mount array, the PV modules and racking are warrantied for 25 years by the manufacturer.

It is expected that this array would generate approximately 210,000 kWh/year of clean electricity and net metering credits, enough to result in almost \$6,000/year in net electricity expenditures for CSD.

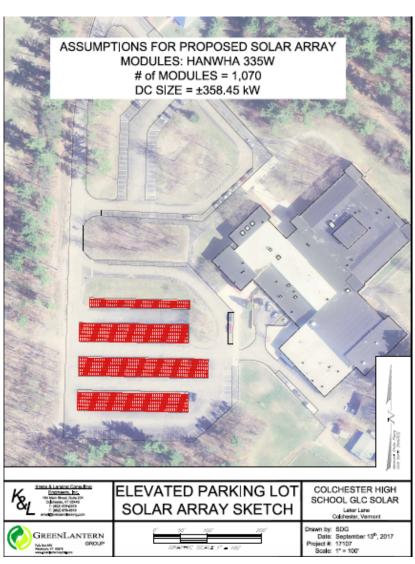
C. High School Parking Lot Solar Array

There are two options proposed for the high school parking lot array. The first uses existing green space in the parking lot area for a simple ground-mount solar array. The advantage of Option 1 is lower cost, lower risk, no tree or snow clearing issues, and maximum discount (15%) offered on the purchase price of the net metering credits. This would be a 105 KW AC (127 DC) system, which would generate about 150,000 kWh of net metering credits per year, resulting in over \$4,200/year in electricity savings.



Option 1 for High School Parking Lot

The second option for the high school parking lot is a "canopy solar" design, using existing parking spaces and maintaining green spaces in the parking lot area. The advantage of Option 2 is maximum use of disturbed areas (parking lot) for solar development and an array size almost three times larger than Option 1. This array would include approximately 1,000 PV modules, for a 300 KW AC (358 DC) system size, generating approximately 422,000 kWh/year of net metering credits. The disadvantages of the canopy solar design is increased unit costs compared to Option 1 (meaning lower savings as a percentage of the value of the net metering credit), and increased risk of damage to the array from vehicles and snow-clearing. In addition, trees to the south and west would need to be cleared to prevent shading of this array. (If trees cannot be cleared, then a smaller canopy array would be proposed for the northeastern part of the parking lot where shading will not be an issue.) Total annual electricity savings to CSD from the proposed design would be almost \$8,000 for 20-25 years, assuming a 10% discount on the purchase price of the net metering credits.



Option 2 for High School Parking Lot

Working with the Community

As a first step, Green Lantern will meet with the Colchester Select Board and Colchester Planning Commission to discuss these solar projects. New renewable energy siting rules require that the off-site 500 KW solar project be designated by both of these entities as a "preferred site" for solar development. While the final permitting process for solar net metering goes through Section 248 and State authorities, local authorities now play an important role in approving where solar projects may be located. GLG is very pleased that its chosen site for the 500 KW project is virtually invisible from all public and private viewpoints and residences, while conveniently located to existing 3-phase electricity lines. In addition, this 500 KW solar array will generate significant additional tax revenues at the local level (approximately \$4,000/year), which the Town would be sure to appreciate. It is hoped that Colchester authorities (Select Board and Planning Commission) will endorse this project, given that the intended beneficiary of the solar net metering credits is the Colchester School District and, by extension, Colchester residents.

In addition, a 500-kilowatt solar array installed on a 4-acre site has both environmental and social impacts, and Green Lantern works to minimize those. From a permitting perspective, all such arrays require the approval of Vermont's Agency of Natural Resources and proof that the array will not impact wetlands or other environmentally sensitive areas, or any endangered species (plant or animal), wildlife migration corridors, etc. Our environmental consultants ensure this is the case, before initiating the permitting process.

Beyond permitting, Green Lantern works with neighbors to minimize any negative impact on the "view shed" caused by the array. This typically involves landscaping and tree planting in strategic areas so that the view of the array is minimized. In the case of this specific project, it is sited well out of view from travelers on Roosevelt Highway, more than 1,100' from the closest private residence, and screened by extensive existing vegetation.

III. Financial Proposal

A. Solar Net Metering Agreement (NMA)

For each of the three proposed solar arrays, CSD would enter into a 20-year Net Metering Agreement (NMA) with the Green Lantern Group (separate agreements for three schools, each of which is a separate GMP customer). The NMA entitles CSD to discounted net metering credits. A draft NMA provided as Appendix 1 to this proposal conforms to the standard NMA that Green Lantern has used successfully throughout Vermont since 2013, including with over 15 schools and school districts.

Key terms and conditions specified by the NMA are:

- Scope of services
- Project size and configuration
- Location
- Service term
- Contract pricing and conditions
- System Owner obligations
- CSD's responsibilities and rights

Solar Energy Service Price

As an incentive for entering into a net-metering group, CSD will receive the solar credits generated by the solar array, as specified in the NMA. For the virtual allocation of the electricity generated by the array (which is delivered directly into the grid but recognized by the utility as having been generated by the array and allocated to CSD), CSD will pay to GLG the difference between the value of the solar net metering credits that accrue to its virtual allocation and the percentage it keeps. This difference is called the "Solar Energy Service Price." The percentage CSD keeps is called the "Solar Credit Discount". The Solar Credit Discount is calculated as a percentage of the value of the net-metering credits that accrue to CSD.

Because each of the proposed solar arrays has different cost structures, the solar credit discount varies slightly between them. For example, the 4-acre off-site array requires a significant land lease payment to the landowner, while it is assumed that the school rooftop and parking lot will be made available by CSD to GLG for solar development at no cost. In addition, canopy solar arrays are considerably more expensive to build on a per watt basis than ground mount or rooftop arrays. The Green Lantern Group proposes the following solar credit discounts for the different proposed solar arrays:

- 500 KW AC solar array 10% discount
- 150 KW rooftop array at Colchester Middle School 15% discount
- 105 KW AC ground mount array at Colchester High School 15% discount
- 300 KW AC canopy solar array at Colchester High School 10% discount

Table 3 below summarizes the size, projected output, solar credit discount and annual savings for each of the proposed arrays, in additional to a calculation of total annual savings. Please refer to Appendix 2 for detailed explanation of net metering credit costs and savings calculations.

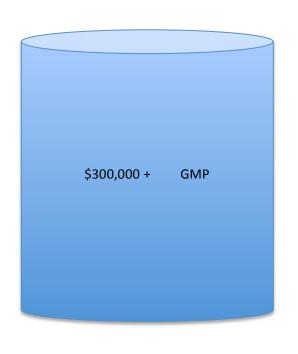
Table 3 - Financial Proposal Summary

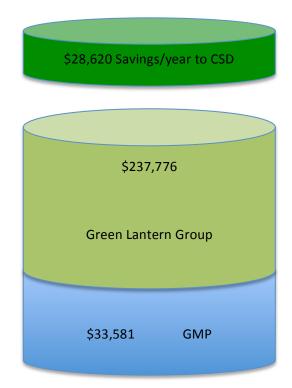
Array	Size	Size	Output	Solar Credit	Solar Energy	Estimated
	AC	DC	(kWh/year)	Discount (%)	Service Price	Annual
	(KW)	(KW)			(cents/kWh)	Savings
Off-site	500	750	875,000	10	15.16	\$14,735
Ground Mount						
Middle School	150	178	210,000	15	16.01	\$5,935
Rooftop						
Option 1 High	105	127	127,000	15	16.01	\$4,239
School Ground						
Mount						
Option 2 High	300	358	422,000	10	16.96	\$7,950
School Canopy						
Solar						
Total Savings						
With Option 1						\$24,909
High School						
With Option 2						\$28,620
High School						

The graphic below provides a visual representation of the potential annual electricity expenditure savings for CSD, compared to the existing situation of no net metering.

CSD Electricity Payments Without Net Metering

CSD Electricity Payments With Net Metering





IV. Qualifications and Resources

Green Lantern's experience and qualifications as a company are described in Section 1 (Company Profile). With respect to the experience of the individuals installing, supervising, permitting and interconnecting the solar panels, Green Lantern and its partners offer the necessary range of expertise, as described below.

Sam Carlson is Green Lantern's Director of Project Development. He will be the lead inter-face between Green Lantern and CSD, and responsible for site development, permitting and Net Metering Agreement processes. Prior to joining the Green Lantern Group he worked for over 20 years as an Economist with the World Bank. Primary responsibilities involved investment project origination, development, financing, management and economic evaluation, with project size ranging from \$10-750 million. Sam recently completed his Masters Degree in Ecological Economics at the University of Vermont, adding to his Masters of Public Administration from Princeton University's Woodrow Wilson School (1989). He holds a BA from Dartmouth College (1982).

Peter Edlund is Technical Project Manager for the Green Lantern Group. He will manage the engineering, construction and inter-connection cycle, from bidding through completion, while maintaining industry-leading Quality Assurance and safety standards. He has 20 years of experience in renewable energy, power generation and process manufacturing, with long tenures at Boeing and Northern Power. Most recently Peter was the Construction Coordinator for the FEMA Tropical Storm Irene Disaster Case Management Program. Peter has a BS from Northern Arizona University in Industrial Supervision.

Regarding Green Lantern's technical partners, the initial design of the solar arrays and site engineering will be done by Krebs and Lansing Engineering Consultants, of Colchester, VT. Ian Jewkes is the Owner and Senior Engineer, with experience on over 225 solar projects in Vermont and 28 years of engineering and surveying experience. He has an MS in Engineering and is a Licensed Land Surveyor. Final design of the array and the Inter-Connection system between GMP and Green Lantern will be done by Brian Browning of Solar Power Engineering. Brian has a degree in Electrical Engineering from UVM and has been a Licensed Professional Engineer since 1996. He has extensive experience with solar design and inter-connection from previous jobs with Northern Power Systems and groSolar.

Environmental assessment will be carried out by Dori Barton, Owner and Senior Ecologist of <u>Arrowwood Environmental</u> of Huntington, VT. Dori has worked on over 70 solar projects and has 18 years of relevant experience. She holds an MS in Watershed Science and is a Certified Sediment Control and Erosion Specialist. In addition, <u>TJ Boyle and Associates</u>, of Burlington, will handle any necessary landscaping.

The technical design and manufacture of the solar panel racking will be done by RBI Solar, one of the nation's most experienced racking manufacturers, headquartered in Cincinnati, Ohio, and operating in all 50 States. RBI Solar has designed literally thousands of solar panel racking systems. Finally, solar array construction and maintenance will be contracted out to E&S Electric of Colchester. E&S is one of the most experienced solar installers in Vermont with over 100 system installations to their credit. Their project manager has over 20 years of relevant experience, an MS in Electrical Engineering and formal training in data installations, and is a fully Licensed Electrician. E&S Electric will provide a 5-year warranty on its construction and installation work. All companies carry the necessary insurance.

V. Ongoing Operation and Maintenance

E&S Electric of Colchester will be contracted to provide ongoing operations and maintenance. This will include upkeep of the data acquisition and monitoring systems, upkeep of the power generation system and verification of all electrical connections. Depending on the sites, vegetation management will be required to keep grasses, trees and shrubs at acceptable heights; this will be sub-contracted out to local landscapers. Green Lantern will also explore contracts with local landscapers to clear the arrays in case of "snow soiling" – prolonged coverage of the PV modules by snow, which can reduce output. Green Lantern's experience suggests a cost of \$0.01/watt/year, or about \$7,100/year for O&M for a 500 KW array. This would, of course, be Green Lantern's responsibility.

VI. Risk Management

Green Lantern's primary insurance provider is the Hartford Insurance Company, with policies generated through an intermediary, Hickok and Boardman of South Burlington, VT. Each solar array will be owned by a separate Special Purpose Entity Limited Liability Company. Each entity will have its own insurance coverage, including general liability and equipment. For informational purposes, this costs between \$5,000-\$7,500 per year.

The equipment manufacturers will pass on to Green Lantern their equipment warranties. The PV modules will be guaranteed for 25 years, as will the racking. Inverters will be guaranteed for 10 or 15 years, depending on final procurement and brand selection. Green Lantern would plan to replace these inverters after 15 years, in any case. Labor and installation will be warrantied by E&S Electric for 5 years.

VII. Sustainability Scholarship for Colchester High School

At the Green Lantern Group, we believe strongly in the synergy of education and renewable energy. Today's students are tomorrow's "solution finders", to help reduce the risks of climate change, increase our use of renewable energy and improve energy efficiency. We love the idea of students seeing solar panels every day as they enter and leave their school, and making the connections between those solar panels and what they are learning in school. In addition, none of the employees of the Green Lantern Group or its partners would be doing what they are doing without having benefited from Vermont public education, and we believe in giving back to the communities in which we live and work.

Accordingly, as we have done elsewhere, if our proposal is chosen by the Colchester School District the Green Lantern Group will make a financial contribution of \$12,000 to establish an endowed Sustainability Scholarship. That scholarship will go to Colchester students who have demonstrated leadership of one form or another in the area of sustainability. Members of the Colchester school community will choose the student(s), according to criteria established by the community. Managed correctly, this endowment will generate financial returns each year that can be used to provide annual scholarships to promising students on a sustainable basis.

VIII. Conclusion

Green Lantern is proud to submit this proposal for consideration by the Colchester School District. We would like to emphasize that this type of project lies precisely within Green Lantern's areas of expertise and comparative advantage. We would venture to suggest that our initiatives to secure solar sites with minimal environmental or social concerns, and to engage utilities and towns very early in the process, reflect our pro-active nature and demonstrate our ability to provide the solar services requested by CSD, perhaps sooner than might be the case with other bidders.

In closing, we thank CSD for the opportunity to present this proposal for its consideration. We are motivated by your initiative so that some company will be chosen to provide these solar services, and that an additional clean Vermont-made solar energy will soon be feeding into the grid, reducing our dependence on fossil fuels, keeping electricity expenditures in-State, and mitigating climate change.

APPENDIX 1 – DRAFT NET METERING AGREEMENT

This Group Net Metering Agreement (this "Agreement") is made as of the ___ day of _____, 2017

(the "Effective Date")
BY AND BETWEEN
"System Owner"
Name: Colchester GLC Solar LLC, a Vermont Limited Liability Company
Address: P.O. Box 658, Waterbury, VT 05676
Attn: Luke Shullenberger
E-Mail: Lukes@greenlanterndevelopment.com
Telephone: 802-244-1658
AND
"Customer"
Name: Colchester School District
Address: 125 Laker Lane, Colchster, VT 05446
Attn: George Trieb
E-Mail: George.trieb@colchestersd.org
Telephone: 802-XXX-XXXX
Background
1. System Owner intends to construct a net metered photovoltaic electricity generating facility (the "System") with an estimated nameplate capacity of 500 kW (AC). The System is described in further detail on Exhibit "A" hereto.
Check one:X_ The System Site is not owned by Customer.
The System Site is owned by Customer, and System Owner intends to enter into a Lease.
2. System Owner will petition the Vermont Public Utility Commission for a Certificate of Public Good to construct, install and operate the System as a group net-metering system pursuant to 30 V.S.A. § 219a and § 248.
3. System Owner estimates that the System will be installed on or before April 15, 2018, (the "Estimated Commissioning Date").
4. The Customer is a customer of Green Mountain Power (the " <u>Utility</u> ") and desires to combine electric meters with System Owner to join the net metering group associated with the System to offset and

hours of electricity output generated by the System to the designated electric meters of the members of the Group (each, a "<u>Group Member</u>") pursuant to allocation instructions provided to the Utility. The Customer Meters and Utility accounts and instructions for allocating Output from the System to such

Following the installation of the System, the Utility will allocate credits for the kilowatt

reduce Customer's Utility billing and charges (the "Group").

Customer Meters and accounts are set forth on <u>Exhibit "C"</u> hereto. Each kilowatt hour of electricity from the System allocated to a designated electric meter of a Group Member will result in corresponding monetary bill credits being applied to the Utility bills. The monetary credits for each kilowatt hour of Output will reduce charges for such meter related to electricity usage, meter fees and other charges or fees for such meter during any applicable Utility billing period (such monetary credits attributable to the Output of the System, collectively, "Net Metering Credits").

6. The Customer desires to engage the services of the System Owner, become a Group Member, and receive the benefits of Net Metering Credits attributable to the Output of the System pursuant to the terms and conditions set forth in this Agreement.

NOW, THEREFORE,

In consideration of the premises and the mutual covenants and agreements herein set forth, the Parties hereby agree as follows:

Section 1. <u>Definitions</u>. Capitalized terms used herein but not otherwise defined herein shall have the following meanings:

"Administrator" means the administrator and designated person (as defined in 30 V.S.A. § 219a(g)(1)) of the Group.

"Agreement" has the meaning given to such term in the introductory paragraph of this Agreement.

"Conditional Early Termination Date" means <u>January 31, 2018</u> as further defined in Section 4 (b).

"Certificate of Public Good" means a Certificate of Public Good to construct and install the System and operate the System as a group net-metering system pursuant to 30 V.S.A. § 219a and § 248...

"Customer" means the Person listed as the "Customer" in the introductory paragraph of this Agreement.

"Customer Meters" means all of the Customer's electricity Meters with the Utility listed in Exhibit "C", as amended from time to time by the Administrator.

"Construction Preconditions" has the meaning set forth in Section 4(b).

"Dispute" has the meaning set forth in Section 27.

"Effective Date" has the meaning set forth in the introductory paragraph of this Agreement.

"Environmental Credits" means any and all mandatory or voluntary federal, state or local renewable energy certificates or emissions credits, rebates, subsidies, incentive payments or any other green tags, tax credits, grants or other benefits or incentives related to the environmental characteristics of the System, whether related to any renewable portfolio standard or other renewable energy purchase requirement or otherwise, whether existing as of the date hereof of enacted thereafter.

"Estimated Commissioning Date" has the meaning set forth in paragraph 3 of the Background Section of this Agreement.

"Estimated Year One Output" means the System Owner's estimate set forth on Exhibit "A" to this Agreement of the future Output of the System for the twelve (12) month period beginning on the Service Commencement Date.

"Expiration Date" means the twenty (20) year anniversary of the Service Commencement Date.

"Financial Closing" has the meaning set forth in Section 14(b)(i)(A)(3).

- "<u>Financing Source</u>" or "<u>Financing Sources</u>" means, either in the singular or collectively, as applicable, the persons or entities lending money, extending credit or providing debt, equity or lease financing for or secured by the System and any trustee or agent acting on any such person or entity's behalf.
- "Force Majeure Event" has the meaning set forth in Section 12(b).
- "Group" has the meaning set forth in paragraph 4 of the Background Section of this Agreement.
- "Group Member" has the meaning set forth in paragraph 5 of the Background section of this Agreement.
- "Group Net Metering Arrangement" means an agreement between one or more electric utility customers, located within the same service territory, to combine multiple electricity meters in order to share and allocate electricity generated by a qualified renewable-generation facility.
- "kWh" means a kilowatt hour of electricity.
 - "Lease" has the meaning set forth in Section 12(a)(iii)(D).
- "Meters" means each of the electric meters of the members of the Group to which credit for electricity generated by the System may be allocated from time to time, including each of the electricity meters listed in Exhibit "C" hereto.
- "Net Metering Credits" has the meaning set forth in paragraph 5 of the Background section of this Agreement.
- "Net Metering Credit Value" means, for each kWh of Output allocated to a Customer Meter: (a) the monetary value of any bill credits applied to the Utility bills for such Meter or against the charges in such Utility bill on account of such kWh of Output, <u>plus</u> (b) the monetary value of any other economic benefits realized, credited, allocated, offset or otherwise applied by the Utility to the electricity usage, Utility bills, accounts, charges or fees for such Customer Meter on account of such kWh of Output, including any credits allocated to such Customer Meter in excess of the charges or usage for such Customer Meter during any applicable billing period.
- "Non-Delivery Period" has the meaning set forth in Section 12(a)(i).
- "Notice" has the meaning set forth in Section 18.
- "Output" means electricity produced by the System, measured in kWh DC, that is delivered to the Utility and for which corresponding Net Metering Credit Value is allocated or otherwise credited or applied by the Utility to the electricity usage or charges for one or more Customer Meters.
- "Party" means System Owner or Customer, as applicable, and "Parties" means System Owner and Customer.
- "Payment Date" has the meaning set forth in Section 7(b).
- "Permits" has the meaning set forth in Section 4(a).
- "Person" means any natural person, partnership, trust, estate, association, corporation, limited liability company, nonprofit corporation, governmental authority or agency or any other individual or entity.
- "Regulatory Event" has the meaning set forth in Section 21.
- "Renewable Energy Credits" or "RECs" means the property rights to the environmental, social, and other nonpower qualities of renewable electricity generation. A REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source. The source of this definition is the US EPA.
- "Services" means any and all of the services provided by the System Owner to the Customer pursuant to this Agreement, including admitting the Customer as a Group Member, administration of the Group Net

Metering Arrangement contemplated hereby, and the allocation of Net Metering Credits to the Customer Meters.

"Service Commencement Date" means the first date on which the System actually delivers Output to the Utility, which subsequently results in Net Metering Credits for such Output being allocated by the Utility to Customer's electricity bills.

"Service Price" is defined in Exhibit "B" to this Agreement.

"System" has the meaning given to such term in paragraph 1 of the Background of this Agreement, as further described on Exhibit "A".

"System Owner" the Person listed as the "System Owner" in the introductory paragraph of this Agreement.

"Utility" has the meaning set forth in paragraph 4 of the Background Section of this Agreement.

In this Agreement, unless the context requires otherwise, the singular includes the plural and the plural the singular, words importing any gender include the other gender; references to statutes, sections or regulations are to be construed as including all statutory or regulatory provisions consolidating, amending, replacing, succeeding or supplementing the statute, section or regulation referred to; the words "including," "includes" and "include" shall be deemed to be followed by the words "without limitation" or "but not limited to" or words of similar import; references to articles, sections (or subdivisions of sections), exhibits, annexes or schedules are to those of this Agreement unless otherwise indicated; references to agreements and other contractual instruments shall be deemed to include all exhibits and appendices attached thereto and all subsequent amendments and other modifications to such instruments, and references to Persons include their respective successors and permitted assigns.

- Section 2. **Group Net Metering Agreement**. This Agreement creates an obligation by the Customer to pay System Owner for the Net Metering Credits attributable to electricity generated by the System and allocated to the Customer Meters in accordance with the Allocation Instructions.
- Section 3. <u>Administrator and Designated Person</u>. System Owner shall have the right to designate, from time to time, the Administrator for the Group.

Section 4. Permits and Approvals; Conditions.

- (a) <u>Permits and Approvals</u>. System Owner shall endeavor to obtain all permits and approvals required for the construction, installation, start-up and operation of the System, including the Certificate of Public Good (collectively, "<u>Permits</u>"), and to complete the commissioning of the System on or before the Estimated Commissioning Date. All costs and expenses of obtaining any Permits, including all costs, fees and expenses for professional services, shall be the sole responsibility of System Owner.
- (b) <u>Construction Preconditions</u>. Notwithstanding the foregoing, System Owner shall have no obligation to proceed with construction and installation of the System, unless the following conditions precedent (collectively, the "<u>Construction Preconditions</u>") have been satisfied or waived by System Owner on or prior to the Conditional Early Termination Date:
 - (i) System Owner shall have obtained all Permits that the System Owner deems necessary or desirable, each in form and substance satisfactory to the System Owner: (A) for the construction and installation of the System, (B) for the provision of Services to the Customer under this Agreement, and (C) for the Net Metering Arrangement contemplated hereby, and all such approvals, permits, licenses and authorizations shall be in force and effect

- (ii) System Owner shall have obtained any necessary easements, leases, licenses, consents and approvals and real property and other rights necessary or desirable for the construction, installation, operation and maintenance of the System.
- (iii) System Owner shall have obtained all funding and financing commitments for the System from one or more Financing Sources on terms acceptable to System Owner, in its sole discretion.
- (c) <u>Service Commencement Date</u>. System Owner shall notify Customer of the Service Commencement Date within 10 business days of its occurrence.
- Section 5. <u>Allocation Instructions</u>. On or before the Service Commencement Date, System Owner shall instruct the Utility to allocate credit for the Output of the System to the Customer Meters in accordance with the allocation instructions attached hereto as <u>Exhibit "C"</u> (the "<u>Allocation Instructions</u>"). System Owner and Customer acknowledge that adjustments to the Allocation Instructions may become necessary or desirable from time to time on account of changes in rate schedules and electricity usage as between the Customer Meters. System Owner and Customer shall cooperate in good faith to identify the optimum allocation of the Output of the System, which maximizes the net savings and benefits realized by Customer and the amount of the Service Price payable to System Owner hereunder.
- Section 6. System Output. Customer acknowledges and agrees that: (i) the Output from the System will vary from time to time; (ii) System Owner provides no warranty or guarantee of any particular level of Output of the System; (iii) during any Utility billing period during the term of this Agreement, Customer's Utility charges for the Customer Meters may exceed the Net Metering Credits attributable to Output of the System for such billing period (for example, if Customer's electricity usage exceeds the Output of the System); (iv) Customer is solely responsible for paying any and all Utility charges in excess of the Net Metering Credits allocated to Customer; and (v) System Owner is not a utility or an electricity provider and does not assume any regulatory or statutory obligations of a utility or electricity provider.

Section 7. Service Price; Billing and Payment.

- (a) <u>Service Price</u>. Customer agrees to pay System Owner the Service Price for the Net Metering Credits as set forth on Exhibit "B" hereto.
- (b) <u>Billing and Payment</u>. System Owner shall bill the Customer monthly for the Service Price. All payments under this Section 7 shall be due and payable within thirty (30) days of the Customer's receipt of an invoice from the System Owner (the "Payment Date").
- (c) <u>Late Payment Charge</u>. If the System Owner does not receive payment in full within ten (10) business days after the Payment Date, then the System Owner shall have the right to impose a late payment charge of the lesser of one percent (1%) per month, or the maximum rate allowed by law, upon the unpaid balance, including any prior unpaid late payment charges. In the event that the last day that a payment must be so made falls on a weekend or state or federal holiday, the payment shall be due on the next business day. The late payment charge shall be assessed on such unpaid balance once each month after it is initially imposed on an unpaid balance, until such balance is paid.
- Section 8. Ownership of the System. Nothing in this Agreement shall have the effect of passing to the Customer or any other Person any right, title or interest in or to the System or any electric energy, mandatory or voluntary federal, state or local renewable energy rebates, subsidies, incentive payments, tax credits, grants or other monetary benefits or incentives related to the System, all of which shall be the sole property of the System Owner and its affiliates and assigns, as applicable.
- Section 9. <u>Ownership of Renewable Energy Credits</u>. Customer understands and acknowledges that the System through its energy-producing activities may also generate Renewable Energy Credits,

a/k/a RECs, and that those RECs may be sold by the System Owner to third parties in the System Owner's discretion. Customer has at all times understood that it is not entitled to the RECs or to claim the environmental or other attributes of the RECs. Nothing in this Agreement shall have the effect of passing any right, title or interest in or to the System or any Environmental Credits or any RECs, or any portion thereof, to the Customer or any other Person. All Environmental Credits and Renewable Energy Credits shall be retired in the State of Vermont. Customer has not been induced to enter the Agreement or this Amendment on any reliance or understanding that it can claim either the RECs or their attributes, or that it is obtaining "green energy" or "renewable energy" or "solar energy" from the System or through this Agreement.

Section 10. Covenants.

- (a) Reports. If requested by System Owner, Customer shall provide System Owner with copies of all Utility bills and invoices received by the Customer from the Utility with respect to the Customer Meters and the allocation of any net Metering Credits thereto. To the extent such bills and invoices are available from the Utility via an electronic platform, Customer may satisfy its obligations under this Section 10 by giving the System Owner access to such online information. Customer shall cooperate with System Owner to obtain monthly reports from the Utility explaining how the System's electric output and Net Metering Credits were allocated among the Customer Meters, how such Net Metering Credits were valued by the Utility, and if there are excess Net Metering Credits available for use in future months.
- (b) <u>Exclusivity</u>. Without the prior written consent of the System Owner, the Customer shall not enter into a Group Net Metering Arrangement with any person or entity, other than System Owner, during the Term with respect to any Customer Meter, or connect any individual net metering system to a Customer Meter, that is subject to this Agreement.
- (c) <u>Utility</u>. Customer shall remain a customer of the Utility in good standing at all times during the Term hereof. Customer shall not take any action to cause any Customer Meter to be disconnected or removed from the Utility's service without obtaining System Owner's prior written consent, which shall not be unreasonably withheld if Customer designates one or more replacement meters on the same rate schedule and with substantially similar usage within the same Utility service territory to be added to Exhibit "C" hereto as a Customer Meter.
- (d) <u>Further Assurances</u>. Customer, from time to time, on written request of System Owner, shall perform such further acts, including execution of documents, as may be reasonably required in order to fully perform and to more effectively implement and carry out the terms of this Agreement, provided that such acts shall not be inconsistent with this Agreement or any law or regulatory approvals pertaining to the subject matter hereof.
- (e) <u>Authorization</u>. System Owner and the Administrator are hereby authorized to make any filings and submissions to the Utility and any applicable regulatory bodies, individually or on behalf of the Group or any Group Member, as may be necessary from time to time to carry out the terms of this Agreement.

Section 11. Representations and Warranties.

- (a) The Customer hereby represents and warrants to System Owner as follows:
 - (i) <u>Binding Obligation</u>. This Agreement has been duly authorized by all necessary action of Customer, and constitutes a legal, valid and binding obligation of the Customer, enforceable against Customer in accordance with the terms hereof.
 - (ii) Customer further represents and warrants to System Owner that Customer is a customer of the Utility in good standing and each of the Customer Meters is

subject to the Utility rate class indicated opposite such Customer Meter on Exhibit "C" hereto.

- (b) System Owner hereby represents and warrants to the Customer as follows:
 - (i) <u>Binding Obligation</u>. This Agreement has been duly authorized by all necessary action of System Owner, and constitutes a legal, valid and binding obligation of System Owner, enforceable against System Owner in accordance with the terms hereof.
 - (ii) The System Site is located within the service territory of the Utility.

CUSTOMER ACKNOWLEDGES AND AGREES THAT SYSTEM OWNER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES IN CONNECTION WITH THE SYSTEM OR THE SUBJECT MATTER OF THIS AGREEMENT, WEHTHER EXPRESS OR IMPLIED, IN LAW OR IN CONTRACT BETWEEN SYSTEM OWNER AND CUSTOMER, EXCEPT AS EXPRESSLY PROVIDED HEREIN. SYSTEM OWNER SPECIFICALLY DISCLAIMS ALL OTHER REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTIBILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Section 12. Events of Default.

- (a) The occurrence of any of the following events shall be an "Event of Default" with respect to the applicable Party under this Agreement:
 - (i) With respect to the System Owner, if the System fails to provide any Output during any continuous one hundred eighty (180) day period starting after the Service Commencement Date ("Non-Delivery Period"); provided, however, that non-operation of the System for the duration of a Force Majeure Event (as defined in Section 12(b) below) or for any period during which Customer is in default hereunder shall not be used in calculating the Non-Delivery Period; and provided, further, that the System Owner's failure to deliver Output following the Non-Delivery Period shall not be a default so long as the System Owner is working in good faith to restore operation.
 - (ii) With respect to the Customer, Customer fails to make any payment on the due date therefore, and such failure continues for a period of ten (10) business days after the applicable due date.
 - (iii) With respect to either Party:
 - (A) The other Party voluntarily or involuntarily files or has filed against it a bankruptcy or other similar petition (and in the event of an involuntary filing only, such involuntary bankruptcy petition continues un-dismissed for a period of sixty (60) days after the filing thereof).
 - (B) The other Party breaches or fails to perform any material covenant, agreement or obligation set forth in this Agreement or any other Agreement of the Parties appended hereto or the other Party makes any misrepresentation or breaches any material representation or warranty contained herein, and such breach, failure or misrepresentation remains uncured ninety (90) days or more after the Party claiming default provides written notice to the other Party, specifying the provision

pursuant to which the alleged default has occurred. The Party accused of default shall have ninety (90) days from the date of the notice to cure the default. In the event that the defaulting Party shall fail to cure the default within ninety (90) days, the non-defaulting Party shall be entitled to send a notice of termination of this Agreement to the defaulting Party and shall be entitled to pursue any and all remedies available at law or in equity.

- (C) System Owner ceases to hold any Permit required for the Group Net Metering Arrangement contemplated hereby or for the lawful construction or operation of the System that results in a lack of legal rights on the part of the System Owner or the System to continue to operate; provided, however, that the foregoing shall not result in an Event of Default if, (1) such Permit is no longer required at such time, or (2) System Owner, within 30 days after becoming aware of such suspension, revocation or cancellation, commences and diligently pursues efforts to obtain a replacement of such Permit.
- (D) If System Owner and the Customer are parties to a land lease agreement whereby the Customer leases the System Site to the System Owner (the "<u>Lease</u>"), the termination of the Lease or the occurrence of an Event of Default (as defined in the Lease), continuing beyond all applicable notice and cure periods, with respect to the other Party.
- Force Majeure. Neither System Owner nor Customer shall be considered to be in default (b) in the performance of its obligations under this Agreement to the extent that performance of any such obligation is prevented or delayed by a Force Majeure Event (as defined below). Notwithstanding any provision herein to the contrary, Customer shall only be obligated to make payments for the Output and Net Metering Credits actually allocated to the Customer under this Agreement for any period during which the System Owner or Customer experiences a Force Majeure Event. A "Force Majeure Event" means any circumstance not within the reasonable control, directly or indirectly, of the Party affected, but only if and to the extent that (i) such circumstance, despite the exercise of due diligence, cannot be prevented, avoided or removed by such Party, (ii) such event is not due to such Party's negligence or intentional misconduct, (iii) such event is not the result of any failure of such Party to perform any of its obligations under this Agreement, (iv) such Party has taken reasonable steps to mitigate the consequences and effects of such event, and (v) such Party has given the other Party prompt notice describing such event, the effect thereof and the actions being taken to comply with this Agreement. Subject to the foregoing conditions, Force Majeure Events may include: strikes or other labor disputes, other than strikes or labor disputes solely by employees of the Party declaring the Force Majeure Event or as a result of such Party's failure to comply with a collective bargaining agreement; adverse weather conditions and other acts of nature; earthquakes; war, acts of terrorism, riots or civil unrest; provided, that Force Majeure Events shall not include any inability to make any payments that are due hereunder or to any third party or to procure insurance required to be procured hereunder.

Section 13. <u>Financing Source Cure Rights Upon System Owner Event of Default.</u> Notwithstanding anything in this Agreement to the contrary, upon the occurrence of an Event of Default

as to System Owner, or any event that with notice the passage of time or both would constitute or be reasonably likely to result in an Event of Default:

- (a) A Financing Source, as collateral assignee, shall be entitled to exercise, in the place and stead of System Owner, any and all rights and remedies of System Owner under this Agreement in accordance with the terms of this Agreement. A Financing Source shall also be entitled to exercise all rights and remedies of secured parties generally with respect to this Agreement and the System.
- (b) A Financing Source shall have the right, but not the obligation, to pay all sums due by System Owner under this Agreement and to perform any other act, duty or obligation required of System Owner thereunder or cause to be cured any Event of Default of System Owner thereunder in the time and manner provided by the terms of this Agreement. Financing Source will not be required, but will have the option, to cure any default or Event of Default of System Owner under this Agreement or to perform any act, duty or obligation of System Owner under this Agreement.
- (c) Upon a Financing Source's exercise of remedies pursuant to any security interest in the System, including any sale of the System by such Financing Source, or any conveyance from System Owner to a Financing Source (or any assignee of such Financing Source) in lieu of such Financing Source's exercise of its remedies, the Financing Source will give notice to Customer of the transferee or assignee of this Agreement. Any such exercise of remedies or conveyance shall not constitute an Event of Default under this Agreement.
- (d) In the event of any rejection or other termination of this Agreement under the United States Bankruptcy Code, at the request of the Financing Source made within one hundred twenty (120) days of such termination or rejection, Customer will enter into a new agreement with the Financing Source or its assignee having substantially the same terms and conditions as this Agreement.
- (e) If the Financing Source or its assignee, pursuant to an exercise of remedies by the Financing Source, shall acquire title to or control of System Owner's assets related to the System and shall, within the later of the time periods described in Section 12(a) or thirty (30) days after such exercise of remedies, cure all defaults under this Agreement existing as of the date of such change in title or control in the manner required by this Agreement and which are capable of cure by a third person, then System Owner, the Financing Source or its assignee shall no longer be in default under this Agreement, and this Agreement shall continue in full force and effect.

Section 14. Term and Termination.

- (a) <u>Term</u>. This Agreement will have a term beginning on the Effective Date and ending on the Expiration Date, or until the earlier termination of this Agreement pursuant to this Section 14 (the "<u>Term</u>"). If the Parties agree, the Term may be extended by two additional five (5) year periods.
 - (b) Early Termination.
 - (i) <u>System Owner Termination Rights</u>. System Owner shall have the right, but not the obligation, to terminate this Agreement upon thirty (30) prior written notice to Customer:
 - (A) If, despite System Owner's commercially reasonable efforts, on or prior to the Conditional Early Termination Date of the System:
 - (1) The Construction Preconditions are not satisfied or waived by System Owner;

- (2) System Owner has not obtained an executable interconnection agreement from the Utility for the System on terms and conditions reasonably satisfactory to System Owner or the costs of interconnecting the System to the Utility's distribution system would make construction or operation of the System infeasible or not economically viable, as determined in System Owner's sole discretion;
- (3) System Owner is unable to reach Financial Closing for the financing of the construction or operation of the System. For purposes of this Agreement, "Financial Closing" shall mean the execution of financing documents with a lender providing for the construction financing or permanent financing of the System, on terms and conditions satisfactory to System Owner, in System Owner's sole discretion, and the fulfillment of all conditions precedent to the initial availability of funds thereunder; or
- (4) System Owner reasonably determines that the requirements of the Permits required to construct or operate the System would make construction or operation of the System infeasible or uneconomic.
- (B) If, prior to the Service Commencement Date, System Owner reasonably determines that: (i) there exist System Site conditions (including environmental conditions) or construction requirements that were not known by System Owner as of the Effective Date and that could materially increase the cost of the development or construction of the System or materially and adversely affect the electricity production from the System as designed, (ii) there has been a material adverse change in the rights of System Owner to construct or operate the System; or (iii) there are easements, covenants, conditions or restrictions or other liens or encumbrances that would materially impair or prevent the installation, operation, maintenance or removal of the System.
- (C) If the Service Commencement Date does not occur within One Hundred Eighty (180) days after the Estimated Commissioning Date.
- (ii) Customer Termination Rights. If the Service Commencement Date does not occur within One Hundred Eighty (180) days after the Estimated Commissioning Date, then the Customer shall have the option to terminate this Agreement upon thirty (30) days prior written notice to the System Owner if such condition is not satisfied, waived, or cured prior to the expiration of such 30 day notice period; provided that the Agreement shall not terminate if during such 30 day notice period the parties reach an agreement to continue the Agreement, or the System Owner provides Customer with reasonable assurance, in form and substance satisfactory to Customer, that it will achieve commercial operations for the System within a reasonable period of time and that such delay in achieving commercial operations will not materially adversely impact Customer compared to the position they would have been in had this termination right not arisen.

- (iii) Subject to the Financing Source rights set forth in Section 13 hereof, upon the occurrence and during the continuation of any Event of Default hereunder, and subject to all applicable notice and cure periods, the non-defaulting Party shall have the option, but not the obligation, to terminate this Agreement upon providing written notice of termination to the defaulting Party.
- (c) All payment obligations of Customer, and all rights and remedies of the Parties hereto, arising prior to the termination of this Agreement shall survive the termination thereof.

Section 15. <u>Assignment by Customer.</u> The Customer may not assign or transfer this Agreement to any other another person or entity without System Owner's prior written consent, and any attempted assignment or transfer without such consent shall be void.

Section 16. Assignment by System Owner and Cooperation in Financing. Upon written notice to Customer, System Owner may assign this Agreement to a wholly-owned project company without the consent of the Customer. Customer shall reasonably cooperate with System Owner's efforts to obtain financing for the System, and hereby consents to the collateral assignment of this Agreement to any Financing Source of System Owner. Customer agrees to provide such other ordinary and reasonable acknowledgments and certifications in respect of this Agreement as may be reasonably requested from it by any actual or potential Financing Source, provided, however, that System Owner shall pay or reimburse Customer for all reasonable costs incurred by Customer in connection with such cooperation, including reasonable attorney's fees; and further, provided, that in no event shall Customer be required to sign or otherwise deliver any consent or agreement that modifies or alters the terms of this Agreement or the rights and obligations of the Parties hereunder. System Owner may assign or transfer its interest, rights and obligations and collaterally assign to Financing Sources all or any part of System Owner's rights, interests or obligations under this Agreement. Customer agrees and acknowledges that any such Financing Sources shall have the right to enforce all provisions herein as an intended third-party beneficiary.

Section 17. <u>Limitation of Liability</u>. Each Party agrees to waive any claim or right against the other for indirect, incidental, consequential or punitive damages, other than as a result of, or to the extent arising out of, personal injury, death, intentional misconduct or third party claims (to the extent such damages are awarded to any such third party). Neither Party shall be liable to the other for or, as a result of, any proceeding in which rates are reviewed or established for either Party by the Vermont Public Service Board or similarly authorized entity. In no event shall any officer, member, manager, employee or owner of the System Owner be liable under this Agreement or otherwise in the event the System fails to generate electricity or output at any time, if System Owner fails to maintain any necessary license, permit or government approval, or for any error or omission in any filing or instructions submitted by or on behalf of System Owner, the Administrator or the Group Net Metering Arrangement to the Utility or any governmental entity.

NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, SYSTEM OWNER'S MAXIMUM LIABILITY UNDER AND IN CONNECTION WITH THIS AGREEMENT AND THE SUBJECT MATTER HEREOF (WHETHER IN CONTRACT, TORT, STRICT LIABILITY OR OTHER WISE) SHALL NOT EXCEED THE AGGREGATE AMOUNT OF ALL PAYMENTS ACTUALLY RECEIVED BY IT FROM CUSTOMER PURSUANT HERETO.

Section 18. <u>Notices</u>. All notices, requests, demands, claims and other communications (each, a "<u>Notice</u>") hereunder shall be in writing, addressed to the intended recipient as set forth on the first page of this Agreement, or to such other person or address as the Party entitled to such Notice shall have specified by written notice to the other Party given in accordance with the provisions of this Section 18. Any such Notice shall be deemed duly given when received or delivery refused.

- Section 19. <u>Entire Agreement</u>. This Agreement, including the exhibits, schedules and attachments hereto, supersedes all prior agreements, whether written or oral, between the Parties with respect to its subject matter, and there are no covenants, promises, agreements, conditions or understandings, written or oral, except as set forth herein.
- Section 20. <u>Amendment</u>. This Agreement may not be amended, waived or modified except by an instrument in writing executed by the Party against whom such amendment, waiver or modification is to be enforced.
- Section 21. Severability. Any provision of this Agreement that is not essential to the purpose of this Agreement, or that is capable of being modified or replaced in a manner that gives effect to the original underlying intent of the Parties and to the intended economic benefits to the Parties in all material respect, that is declared or rendered unlawful, invalid or unenforceable by any applicable court of law or regulatory agency or deemed or rendered unlawful, invalid or unenforceable because of a statutory or regulatory change, including any order of the Vermont Public Service Board or any change in the Utility's tariff (individually or collectively, such events are referred to as a "Regulatory Event") will not otherwise affect the remaining lawful obligations that arise under this Agreement, and, if appropriate, such invalid or unenforceable provision shall be modified or replaced to give effect to the original underlying intent of the Parties and to the intended economic benefits to the Parties. If a Regulatory Event occurs, the Parties shall cooperate in good faith and use their best efforts to reform the Agreement in order to give effect to the original underlying intent of the Parties and to the intended economic benefits to the Parties, to the greatest extent reasonably practical.
- Section 22. **Waiver of Rule of Construction.** The Parties waive the benefit of any rule that this Agreement is to be construed against one Party or the other.
- Section 23. **Fees and Expenses.** Each Party will bear its own fees and expenses incurred in connection with the preparation, negotiation and execution of this Agreement.
- Section 24. <u>Effect of Agreement</u>. This Agreement shall not be construed as a contract of agency, partnership, joint venture, surety or guaranty. The Parties agree that this Agreement is, and shall be construed as, a service contract under Section 7701(e) of the Internal Revenue Code of 1986, as amended, and not a lease.
- Section 25. <u>Choice of Law</u>. This Agreement shall be governed and construed in accordance with the internal laws of the State of Vermont, without giving effect to principles of conflict of laws that would require the application of any other law.
- Section 26. <u>Jurisdiction</u>. Customer and System Owner each hereby irrevocably consents to and submits to the personal jurisdiction of the state and federal courts sitting in the State of Vermont. Customer and System Owner acknowledge and agree that this Section 26 constitutes a voluntary and bargained-for agreement between the Parties. EACH OF SYSTEM OWNER AND CUSTOMER HEREBY WAIVES ITS RESPECTIVE RIGHTS TO A JURY TRIAL FOR ANY CLAIM ARISING OUT OF THIS AGREEMENT. SYSTEM OWNER AND CUSTOMER ALSO WAIVE ANY BOND OR SURETY OR SECURITY UPON SUCH BOND WHICH MIGHT, BUT FOR THIS WAIVER, BE REQUIRED.
- Section 27. <u>Mediation</u>. The Parties agree that any breach or dispute ("<u>Dispute"</u>) arising out of this Agreement shall first be submitted to mediation for resolution. Mediation shall commence no later than thirty (30) days after submission of the Dispute, and shall be conducted in accordance with the then prevailing rules of the Mediation Procedures of the American Arbitration Association. In the event that

the Dispute is not resolved in mediation within thirty (30) days of the commencement thereof, each Party may pursue any rights and remedies as each may have, whether hereunder or in law or at equity.

Section 28. Confidentiality. Both Parties agree that the terms of this Agreement and any related and confidential. Service Provider information are proprietary agrees that release Customer's confidential information could injure Customer. Customer agrees that disclosure of the terms of this Agreement or of the costs incurred under this Agreement to any third parties (other than to Customer's agents and professional advisors bound by professional or contractual obligations of confidentiality) could injure System Owner's ability to compete or place it in a position of disadvantage. Both Parties agree to keep confidential and not to disclose to any third parties (other than to each Parties' agents and professional advisors bound by professional or contractual obligations of confidentiality) the terms of this Agreement or costs incurred by either Party under this Agreement except in order to comply with any applicable laws, regulation, or any exchange, control area or independent system operator rule or in connection with any court or regulatory proceeding or as otherwise required by law without each Parties' prior written consent; provided that System Owner may provide information pertaining to this Agreement as necessary to other potential group net metering system customers to obtain full subscription for the net metering credits associated with the System. Either Party shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation, which shall not be subject to the mediation requirements of Section 27 hereof.

[**Signature Page Follows on Separate Page**]

IN	WITNESS WHEREOF the Parties, 2017.	do hereby execute this Agreement as of the day of
		CUSTOMER:
		Customer Name: COLCHESTER SCHOOL DISTRICT
Witness		By: Name of Signatory: XXXXXXXXX Title: XXXXXXXXXX
		SYSTEM OWNER:
		System Owner: COLCHESTER GLC SOLAR, LLC
		By:
Witness		Name of Signatory: Luke Shullenberger Title: Authorized Agent

Exhibit "A"

Description of System

The System shall consists of an array of photovoltaic panels with an estimated aggregate facility-rated output of 500 kW (AC). Final configuration of the System may be modified subject to special permit conditions or site conditions.

Estimated Year One Output:

For the twelve (12) month period beginning on the Service Commencement Date, System Owner estimates that the Output of the System that will be allocated to the Customer Meters will be 875,000 kWh (the "Estimated Year One Output"). The System Owner estimates that the total electricity that will be generated by the System during such period will be 875,000 kWh per year.

Exhibit "B"

Service Price

The Customer shall pay the System Owner a fee for the Net Metering Credits (the "<u>Service Price</u>") equal to NINETY percent (90%) of the Net Metering Credit Value attributable to Output from the System that is allocated to the Customer Meters.

Initial Estimated Monthly Service Price: \$11,051 provided, however that the Service Price to the Customer in the initial invoice may change to reflect the final engineering and system production estimates as determined by the engineer-of-record at the Service Commencement Date.

Annual Audit and Reconciliation: On the annual anniversary of the Service Commencement Date, System Owner shall review actual annual System Output, and actual Net Metering Credits applied to Customer's service account by the Utility. System Owner shall issue a one-time reimbursement or invoice to Customer for the difference.

Exhibit "C"

Allocation Instructions

System Owner shall instruct the Utility to allocate credits for the kilowatt hours of electricity generated by the System each month to the Meters set forth below in the following order of priority until the monthly electricity usage, charges and fees for each Meter are fully offset and satisfied:

Customer Meters:

Priority	Account Name	Account #	Allocation %		
1	COLCHESTER HIGH SCHOOL		X		
2	COLCHSTER MIDDLE SCHOOL		100-X		

Appendix 2 – Net Metering Credit Cost and Savings Calculations

500 KW AC Off-site Ground Mount Array

,	
GMP Net Metering Retail Rate per kilowatt-hour	\$0.1484
Preferring Siting Criteria plus RECs	\$0.0200
Total Credit Rate from Utility per kilowatt-hour	\$0.1684
% of Current Net Metering Credit paid to GLG	90.00%
Discounted Net Metering Rate from GLG to CSD	\$0.1516
Suggested Net Metering Allocation (annual kWh)	875,000
Monthly Solar Service Agreement Payment to GLG	\$11,051
Annual Solar Service Agreement Payment to GLG	\$132,615
Annual Savings to CSD	\$14,735

300 KW AC On-site Canopy Solar Array in High School Parking Lot

<u> </u>	
GMP Net Metering Retail Rate per kilowatt-hour	\$0.1484
Preferring Siting Criteria plus RECs	\$0.0400
Total Credit Rate from Utility per kilowatt-hour	\$0.1884
% of Current Net Metering Credit paid to GLG	90.00%
Discounted Net Metering Rate from GLG to CSD	\$0.1696
Suggested Net Metering Allocation (annual kWh)	422,000
Monthly Solar Service Agreement Payment to GLG	\$5,963
Annual Solar Service Agreement Payment to GLG	\$71,554
Annual Savings to CSD	\$7,950

150 KW AC On-Site Rooftop Solar Array at Middle School

GMP Net Metering Retail Rate per kilowatt-hour	\$0.1484
Preferring Siting Criteria plus RECs	\$0.0400
Total Credit Rate from Utility per kilowatt-hour	\$0.1884
% of Current Net Metering Credit paid to GLG	85.00%
Discounted Net Metering Rate from GLG to CSD	\$0.1601
Suggested Net Metering Allocation (annual kWh)	210,000
Monthly Solar Service Agreement Payment to GLG	\$2,802
Annual Solar Service Agreement Payment to GLG	\$33,629
Annual Savings to CSD	\$5,935

105 KW AC On-Site Ground Mount Solar Array at High School

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GMP Net Metering Retail Rate per kilowatt-hour	\$0.1484
Preferring Siting Criteria plus RECs	\$0.0400
Total Credit Rate from Utility per kilowatt-hour	\$0.1884
% of Current Net Metering Credit paid to GLG	85.00%
Discounted Net Metering Rate from GLG to CSD	\$0.1601
Suggested Net Metering Allocation (annual kWh)	150,000
Monthly Solar Service Agreement Payment to GLG	\$2,002
Annual Solar Service Agreement Payment to GLG	\$24,021
Annual Savings to CSD	\$4,239



Colchester High School & Middle School Solar Opportunities



Mike McCarthy
Solar Project Consultant
07/15/17
mike@suncommon.com

Proposal Summary

SunCommon, Vermont's largest solar installer proposes to install solar canopies and rooftop installations at Colchester High School and Colchester Middle School.

- Design and install the solar arrays at no cost to the schools
- Operate and maintain the solar canopies under a 20-year agreement with a 5-year renewal option
- Sell the electricity credits produced by the solar array to the schools at a *guaranteed 10%* discount on your utility costs

SunCommon Company History

Mission and Values

SunCommon believes that everyone has the right to a healthy environment and safer world, and clean energy is where that starts. Energy from the sun can power our lives, heat our homes and fuel our cars. Our mission is to tear down the barriers to renewable energy by making it easy and affordable for all Vermonters to go solar.



Suncommon Community Solar Advisor Mike McCarthy stands in front of some sweet solar with Maple Sugarer Harvey Bushey at Log Cabin Maples in Fairfield, VT

The SunCommon Story

Chartered as a Benefit Corporation in 2012, SunCommon is a values-led business that attends to the triple bottom line of people, planet and profits. We have helped over 2,000 Vermont households save money and repower their communities with rooftop or ground-based solar systems, making SunCommon the largest residential solar installer in Vermont. From our offices in Waterbury we employ more than 65 SunCommoners. SunCommon also supports more than 100 employees at our Vermont partners, like the union electricians at Peck Electric.

In 2014, SunCommon launched a first-in-the-nation Community Solar Program to serve even more Vermont households. We have permitted, designed and constructed more than twenty 150kW solar arrays in communities all over the state, including the one at Crossett Brook Middle School in Duxbury, VT (pictured below).



Sustainability teacher Sarah Popowicz shows off the SunCommon array at Crossett Brook Middle School in Duxbury, VT

Now more than 700 Community Solar Array members benefit from credits produced by SunCommon arrays hosted by schools, farms and neighbors with big backyards. SunCommon is already in the process of developing the first school solar canopy at Saint Albans City School.

Net-metered Solar: How Does It Work?

Vermont state law requires utilities like Green Mountain Power (GMP) to pay a premium for "net-metered" electricity that solar arrays feed into its grid. The payment from GMP is in the form of a credit against their customers' utility bill. SunCommon can make these solar credits available to schools at no up-front cost, with no equipment to purchase - making it easier than ever before to support solar.

Net-Metering Benefits to solar schools:

- 1) **Off-Set Utility Costs-** A 200kW solar array at your could offset more than \$40,000 of annual power costs with credits that appear right on the school's Green Mountain Power bills. A 700kW canopy could offset \$130,000/year of power costs.
- 2) Earn More for Solar! A solar array on a roof or canopy earns credits from GMP that are worth more than the rates that schools pay for power from the utility. That means the school will be able to reduce a big portion of its annual electric bill by 10%, guaranteed for 20 years!
- 3) Bank Credits with your Utility- Net-metering allows schools to effectively bank the high volume of solar power generated in the summer (when the students are gone and the school's energy demand is low) and then use it during the school year when demand is high. Your utility account builds a bank of solar credits in the summer, allowing you to apply those credits to offset higher power bills when school is in session.

Green Mountain Power is accepting applications for their net-metering program for 2018 commercial projects in 2017, so now is the perfect time to put together an application for a summer 2018 installation.



Paths to Solar

Third-party Financing

SunCommon offers an innovative financing model that allows schools to get the benefits of solar with no upfront cost and no wasted tax benefits. SunCommon and its finance partner will finance, install, own and operate the solar arrays, and pass on the financial benefits to the schools with a discount on the net-metering credits you receive.

With this guaranteed discount model, the school only pays for credits it receives on the utility bills.

Third-party financing is the easiest way to go solar and save money on your power costs with no upfront investment.

Colchester High School Canopy + Roof Solar Summary

Proposed System Size: 500kW(AC) 700kW(DC) (~500kW Canopy Solar + 200kW Rooftop) Estimated Annual Production: 704,000 kWh

\$130,000
10%
\$117,000
\$13,000

Lifetime savings (25 year agreement): over \$350,000

Colchester Middle School Rooftop Solar Summary

Proposed System Size: 150kW(AC) 215kW(DC)
Estimated Annual Production: 230,000 kWh

\$43,000
10%
\$38,700
\$4,300

Lifetime savings (25 year agreement): over \$125,000

Equipment and Installation

Solar Modules & Racking

Our third-party financed arrays employ high-quality photovoltaic solar modules. Built to last, these modules come with a 25-year warranty and will produce efficiently for decades.



SunCommon installers mount panels on flat roof in Downtown Burlington, VT

Ballasted mounting systems from Panel Claw allow us to install solar on membrane roofs without any need to penetrate or fasten the system in most cases. Concrete ballast sits in trays connected to the racking and the entire system sits on rubber feet.

Solar Project Timeline

Project Planning

Once the school board is ready to move forward, we would schedule a signing of a lease agreement for the use of the roof for solar and a participation agreement that would guarantee the solar credits to the school at a discount.

Permitting and Design

SunCommon would handle all of the permitting for the project. The permit, called a "Certificate of Public Good", is provided by the state Public Service Board following:

*30-45 day public comment period during which neighbors, municipal officials, state agencies and the utility will weigh in and may ask for amendments to the original application.

*4-6 months (estimate) of deliberation at the Public Service Board, with requirements that SunCommon provide engineering and environmental analysis of the project's impacts by appropriate professional consultants.

Installation

With permitting completed and final design in hand, SunCommon would begin installation. The total installation time will likely be 4 to 8 weeks.

If Colchester were to approve the solar array this in the summer of 2017, SunCommon would be able to submit an application with the Public Service Board and reserve the net-metering capacity with GMP under this year's rates. Assuming a typical review and approval period, we would be able to complete the project in the summer of 2018 while students are off of the campus.

Proposed Solar Siting - Colchester High School



The Colchester High School has parking lots that are well-oriented for solar canopies. The combination of 500-600kW of solar on canopies with an additional 100-200kW on a small section of roof would allow us to get the maximum 700kWdc of net-metered solar for the school.



Proposed Solar Siting - Colchester Middle School



The Colchester Middle School has enough roof surface on the newly re-surfaced sections to allow for a 200kWdc system. This system size maxes out the "Category II" net-metering incentive tier, and would get about 19 cents/kWh while the bigger system at the high school would get 17 cents/kWh of credits.

Project Notes and Caveats

Estimated Production- Production estimates and lifetime array savings are based on projected productions of a typical array in your location. Actual site conditions, like shade from trees, may impact production.

Utility Escalator- Lifetime electricity earnings are estimated based on a 2% annual increase in utility rates. Actual utility rate escalation may vary. Green Mountain Power has requested a 5% rate increase in 2017.

COLCHESTER SCHOOL DISTRICT



Amy Minor, Superintendent of Schools George A. Trieb, Jr., Business Manager Carrie A. Lutz, Director of Special Education Gwendolyn Carmolli, Director of Curriculum

Internet Address: www.csdvt.org

Administrative Offices, 125 Laker Lane • P.O. Box 27, Colchester, VT 05446-0027 • Phone (802) 264-5999 • Fax (802) 863-4774

MEMO

To: School Board Directors
From: George A. Trieb, Jr.
Subject: FY'19 Budget Timeline
Date: September 28, 2017

Attached is the proposed budget development timeline for FY'19. Similar to last year, it should provide us with ample time to: (1) review and discuss all expenditure and revenue items internally, (2) prepare the expenditures baseline budget, (3) thoroughly discuss the baseline budget with the school board, employees and community, (4) prepare and discuss the superintendent's budget, and, (5) finalize a budget for the school board's approval and timely warning.

All of the dates noted fall on the planned school board meeting nights.

Please review and provide me with any feedback that you might have.

Thanks.

Board Meeting Dates	Budget Topic	Specific Budget Items
10/17/17	Timeline	 Review budget timeline/process – general budget discussion
11/7/17	Expenditures/Strategy	 General budget discussion – prioritize key budget items (strategy – vision driven process) Building Operational Budgets- PPS, UMS, MBS, CMS, CHS. Enrollment history and projections Personnel Compensation - all schools & programs Class size numbers – K-8 / FTE's instructional
11/21/17	Expenditures	 Grant/Medicaid funded programs and personnel Review and discuss baseline expenditure budget Discuss new/discontinued programs – Impact
12/5/17	Expenditures	 Continue to review & discuss expenditures Finalize expenditure budget
12/19/17	Expenditures	Present Superintendent's recommended budget
1/9/18	Revenue	 Discuss all potential sources of revenue – local, state, federal and SPED
1/16/18	General	 Discuss funding formula, CLA, tax ramifications and tax sensitivity School Board approves budget and warning
2/6/18	Budget Discussions	Discuss and promote budget
2/20/18		 Discuss and promote budget
3/5/18	Town Meeting	Town Meeting/School Report Night
3/6/18	Meeting/Vote	Obtain approval for school budget

	PERSONNEL CONSENT AGENDA									
	Board Date: October 17, 2017									
	Licensed Employees (Teacher/Administrator)									
Contract Type	First Name	Last Name	Category	Position	FTE/Hours	Building	Agenda Information	Person Replacing	Budgeted	Admin Support
Teacher	Stephen	Fiske	New Hire	English Teacher, Long-Term Substitute	1.0 FTE	CHS	Request to Hire	Elizabeth Albright	N/A	Yes
Teacher	Bridget	Ryan	New Hire	English Teacher, Long-Term Substitute	1.0 FTE	CHS	Request to Hire	Hilary Carter	N/A	Yes
	Non-Licensed Employees (Support Staff), Informational									
Contract Type	First Name	Last Name	Category	Position	FTE/Hours	Building	Agenda Information	Person Replacing	Budgeted	Admin Support
Support Staff	Amanda	Riley	End of Employment	Paraeducator-Special Education	32.5 hr	UMS	Notice of End of Employment			Yes

COLCHESTER SCHOOL DISTRICT

Board of Education Meeting Colchester High School Media Center Tuesday, October 3, 2017 7:00 p.m. (General Session)

MINUTES (General Session)

The Colchester Board of Education held a regular board meeting on Tuesday, October 3, 2017, at the Colchester High School Media Center. Those in attendance were: Board Chair Mike Rogers; Directors: Lincoln White, Craig Kieny, Curt Taylor, Lindsey Cox, and Student Board Member Robert Davis; Superintendent Amy Minor; Business and Operations Manager George Trieb; Director of Special Education Carrie Lutz; Director of Curriculum & Instruction Gwen Carmolli; and Principals: Heather Baron, Michele Cote, and Julie Benay

There were several dozen Senior Seminar students in the audience as well as a reporter from the Colchester Sun.

I. Call Meeting to Order and Pledge of Allegiance

Board Chair Mike Rogers called the meeting to order at 7:00 p.m. and led in the Pledge of Allegiance.

II. Citizen Participation

None.

III. Report from Building Principals

Principal Benay shared that MBS had a huge turnout for their open house and the custodians did a great job getting the building in top shape for all the visitors. They continued the tradition of including community partners in the event for parents to get information about extracurricular activity options.

Principal Cote spoke about the CMS Cheerleading Club which is an afterschool activity in its 3rd year. There are 14 students involved and they had the opportunity to cheer at the high school football game which was exciting and a very big deal for them.

Principal Baron agreed that CMS did a great job at the football game and that she had also gotten some feedback from some parents who were extremely proud of the behavior the high school students displayed towards the younger middle school students. They encouraged them and cheered along with them. She also mentioned that all of the 10th and 11th grades have been registered for next week's in school PSATs.

IV. Smarter Balanced Assessment Consortium Scores Presentation

The Director of Curriculum and Instruction, Gwen Carmolli, presented the Smarter Balanced Assessment Consortium (SBAC) scores from 2016. Overall it was a strong year for Colchester students. Her presentation included disaggregated scores in several categories and discussed trends and areas for improvement. She also shared that the VT Agency of Education has determined the SBAC will no longer be testing 11th grade students and will instead move that assessment to 9th grade level. The full presentation has been made available online.

V. Second and Final Reading of School Crisis Prevention and Response Policy: E3

Since the last reading this policy underwent some formatting adjustments. The language continues to be in direct alignment with the recommended language from the VSBA model policy.

Director Kieny moved to approve the second and final reading of the School Crisis Prevention and Response policy, seconded by Director Cox. The motion passed unanimously, 5-0.

VI. Second and Final Reading of School Sponsored Trips Policy: G3

Since the last reading, along with formatting this policy, there were some language changes made to section III to reflect discussion had by the board at the last meeting. Specifically regarding the sixmonth advanced notice for certain trips.

Director Cox asking why the school board must approve the trip if it has already been approved by the principal and superintendent. She stated it appears to be a formality because they cannot think of a situation when, after support from administrators, they would then deny it. Superintendent Minor and Business and Operations Manager George Trieb agreed that connection to the board is related to the budget. There is a lot of risk involved with trips which can end up costing the district money in litigation.

Director Taylor moved to approve the second and final reading of the School Sponsored Trips policy, seconded by Director White. The motion passed unanimously, 5-0.

VII. Approval of Personnel Consent Agenda

The following Personnel Consent Agenda was presented on October 3, 2017.

Director White moved to approve the Personnel Consent Agenda for September 19, 2017, seconded by Director Kieny. The motion passed unanimously, 5-0.

VIII. Approval of Minutes: September 19, 2017

Director Cox moved to approve the minutes of September 19, 2017, seconded by Director Taylor. The motion passed unanimously, 5-0.

IX. Board/Administration Communications, Correspondence, Committee Reports

• Superintendent Minor gave up update following her first meeting in Montpelier for the Marijuana Education and Prevention Subcommittee.

X. Possible Future Agenda Items

- PPS and UMS School Reports
- Quarterly Special Education and Financial Reports
- Food Service Presentation and Discussion
- Solar Update
- Budget Discussion
- Continued Policy Work

XI. Executive Session to Discuss Negotiations

Director White moved to enter executive session at 8:12 p.m. to discuss negotiations as permitted by 1 V.S.A. § 313, seconded by Director Kieny. The motion passed unanimously, 5-0.

XII. Adjournment

Director White moved to exit executive session and adjourn at 9:52 p.m., seconded by Director Taylor. The motion passed unanimously, 5-0.

Recorder:	Board Clerk:
Meghan Baule	Craig Kieny
Communications Specialist	Board Clerk