

April 4, 2018

Bill Shane, Town Manager
290 Tuttle Road
Cumberland, ME 04021
RE: Solar Farm Project

Dear Bill,

ReVision Energy is grateful and excited for the opportunity to submit the attached proposal in response to the Town of Cumberland's *Request for Proposals For Solar Photovoltaic Project*.

ReVision Energy deeply admires the Town of Cumberland's leadership in reducing its energy expenses, and controlling prices for its residents, through clean, carbon-reducing solar energy. Our submission goal is to provide the Town with the most cost-effective solar energy solution for this specific RFP, while building a strong, mutually beneficial relationship with the Town, its residents, and the rest of the community. To us this means adding significant value to the Town by providing compelling presentations to students, staff and the public, and by making ReVision Energy's subject matter experts fully accessible to the Cumberland community.

Our experience, proximity and dedication to the Cumberland community is unmatched. ReVision's Portland shop is located only 10 minutes from Cumberland Center. Since it was opened in 2006, we've installed projects for more than 30 customers in the Town of Cumberland, and worked with many more on their energy savings and carbon reduction goals.

As you will see in our proposal, ReVision Energy is especially qualified to partner with the Town on this solar energy project. Our approach to solar development is unique in the region and is ideally matched to the Town's goals. We have developed more than 100 significant solar projects with local municipalities and non profits, and more than 7,000 projects with residential customers. Specific to landfill projects, ReVision has developed and installed the only two operational solar arrays on landfills in Maine, for the Cities of Belfast and South Portland. ReVision Energy's technical expertise is focused on building projects that stand the test of time in the harsh northern New England climate. Our trust-based customer-focused approach, backed by unparalleled skill and expertise in the design, installation, financing and service of solar energy systems across Maine, identifies ReVision as an unparalleled provider, deeply committed to our communities and to the sustainability of their institutions. We are highly confident that our vision, mission and values will serve the Town of Cumberland and its residents well under this solar energy project.

I am honored to serve as ReVision Energy's primary contact for this project and can be reached at (207) 756-4159 or via email at nick@revisionenergy.com.

Thank you very much for your time and consideration.

Sincerely,

Nick Sampson
Commercial and Institutional Sales

**PROJECT PROPOSAL FORM
FOR SOLAR PHOTOVOLTAIC PROJECT
AT THE DROWNE ROAD LANDFILL**

**** THIS SHEET MUST BE INCLUDED IN YOUR PROPOSAL ****

The undersigned hereby declares that they have read and understand all conditions as outlined in this Request for Proposals, and that the proposal is made in accordance with the same.

COMPANY NAME: ReVision Energy

AUTHORIZED SIGNATURE: 

DATE: 04/03/2018

PRINT NAME & TITLE: Nick Sampson, Commercial and Institutional Sales

ADDRESS: 451 Presumpscot St, Portland, ME

E-MAIL ADDRESS: nick@revisionenergy.com

PHONE NUMBER: 207.221.6342 FAX NUMBER: _____

TYPE OF ORGANIZATION (PARTNERSHIP, CORPORATION, INDIVIDUAL, OTHER): _____

100% employee owned S-corp

STATE OF INCORPORATION, IF APPLICABLE: Maine

FEDERAL TAX IDENTIFICATION NUMBER (Required): 82-2934561

AUTHORIZED SIGNATURE: 

DATE: 04/03/2018

NOTE: Proposals must bear the handwritten signature of a duly authorized member or employee of the organization submitting a proposal.

**PRICING PROPOSAL FORM
FOR A SOLAR POWER PURCHASE AGREEMENT
Town of Cumberland**

PAGE 1

Solar Provider Name:	ReVision Energy
Facility Name:	Town of Cumberland Landfill

System Equipment

Photovoltaic Module:	
Manufacturer or equivalent:	Hanwha
Model or equivalent:	Q Cells Q Plus L-G4.2 345w
Quantity (panels):	1,376
Inverter:	
Manufacturer or equivalent:	Chint Power Systems
Model or equivalent:	SCA60TKL-DO/US-480
Quantity (inverters):	6

System Cost	Cost	\$/kilowatt
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Generating equipment:	270,704	569.9
Balance of system:	180,854	380.7
Engineering and permitting:	25,000	52.6
Construction and installation:	628,718	1,323.6
Operations and maintenance:	0	
Removal cost:	Salvage value will cover	
Total:	1,105,726	2,327.8

**PRICING PROPOSAL FORM
FOR A SOLAR POWER PURCHASE AGREEMENT
Town of Cumberland**

PAGE 2

Solar Provider Name:	ReVision Energy
Facility Name:	Town of Cumberland Landfill

	KW (STC)	kW (PTC)
Capacity:	475	

	KWh at the meter
Annual AC production	617,518

Price Schedule

Year	Price per kWh
1	\$0.0909
2	\$0.0909
3	\$0.0928
4	\$0.0946
5	\$0.0965
6	\$0.0984
7	\$0.1004



REVISION ENERGY

Response to Town of Cumberland Request for Proposals

April 4, 2018

ReVision Energy Inc.
100% Employee-Owned Company
Portland, ME
www.ReVisionEnergy.com

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Introduction

ReVision Energy is northern New England's leading solar design, installation and service company deeply committed to accelerating the region's transition to clean renewable energy. We are locally-owned and staffed with offices in Portland and Liberty, ME and have completed more than 7,000 solar PV systems since 2003, including over 300 commercial and institutional PV systems. To ensure maximum performance and longevity in a relatively harsh northern climate, each system is designed by our in-house engineers trained at top universities (including Dartmouth, MIT, Brown, UMaine, and UNH) and installed by our own team of licensed, certified and highly trained solar technicians. ReVision Energy has been listed in *Solar Power World's* Top 500 North American Solar Contractors list since 2014 and in 2017 was named #1 Rooftop Solar Installer in New England. We currently have 225 full-time employee-owners in our five locations in Maine, New Hampshire, and Massachusetts, ensuring unparalleled in-house expertise in all aspects of solar development, design, and installation.

Technical and Project Expertise

ReVision Energy is uniquely qualified to deliver the solar PV project for the Town of Cumberland in a professional and timely fashion. ReVision has unmatched experience installing solar on capped landfills having installed the only two operational landfill arrays in the State for the Cities of Belfast and South Portland. Through those projects and many others, we have extensive experience working with MDEP and Sevee & Maher Engineers. We have worked with MDEP on many occasions to properly install any of our solar projects located where environmental issues could arise. Our project managers understand the issues and concerns that MDEP will have and know the construction techniques required to successfully install solar on the Town of Cumberland's capped landfill. Our experience with Sevee & Maher is also extensive having worked with them on many of our ground mounted solar projects where we contracted the firm to perform engineering services and site surveys. ReVision is excited about the opportunity to use our great relationship with Sevee & Maher on this landfill project to ensure the best possible solar installation for the Town of Cumberland.

ReVision has been installing PV solar commercially for nearly 10 years. While we install both roof mounted and ground based systems, we possess extensive experience installing ground mounted arrays. Over the past decade, we have successfully designed and installed hundreds of commercial solar arrays, including nearly 50 ground mounted systems for municipalities and nonprofits like MRRA; South Portland, ME; Camden, ME; the Wells Sanitary District; Brentwood, NH; and Belfast, ME. Our completed projects range in size from 1 kW to 1.5 MW, and we provide the same attention to detail and dedication to every project regardless of the size. The total size of all our installed commercial and nonprofit solar projects is over 16.7 MW, with 5 MW being PPAs.

Our experience in handling projects of any scale is unmatched in Northern New England. Responsiveness, honesty, and technical competency are at the forefront of our business philosophy and permeate every level of the company to ensure a positive solar energy investment experience. ReVision Energy's unprecedented installation volume in the region also helps to create and sustain a robust supply chain. We are a founding member of the nationwide Amicus Solar purchasing cooperative, which enables us to secure the highest quality components at the most competitive pricing through group volume purchasing.

direct from manufacturers, especially in the aftermath of the recent 30% presidential tariff on imported solar panels and cells.

PPA Development Capabilities

ReVision Energy is the leading provider of solar PPAs in northern New England, with nearly 100 nonprofit PPA projects built and financed over the past six years. As evidence of our commitment to providing cost-saving solar solutions to nonprofits, ReVision Energy has invested its own tax equity and in-house expertise in developing and financing nearly 80 of our solar PPA projects, totaling 5 MW of installed capacity valued at \$15 million. Many of those projects were deemed un-financeable on the private market, but our in-house legal and financing team has become adept at lowering PPA development costs and leveraging low-cost impact investor capital for the purpose. Indeed, we consider it our mission as employee owners to make solar accessible to as many public-sector, social service, and educational organizations as possible.

ReVision brings a deep understanding of the unique needs of Maine Towns. Through our relationships with Yarmouth, Scarborough, Wells, Elliot, Brunswick, Islesboro, Boothbay, Bar Harbor, Shapleigh, and many others, we have unmatched experience designing solar projects that complement Town budgets and maximize value to residents. Considering the upfront time and expense involved in negotiating PPA contracts, obtaining town permits and site plan approval, completing utility interconnection applications, etc. we believe we are uniquely capable of completing those requirements in an efficient manner to meet the Town's construction schedule.

Community Engagement

As a Certified B Corporation, ReVision Energy is committed to operating our business as a force for positive social change in the communities in which we work. Our B Corp status means we are constantly focused on the "triple bottom line" of people, planet, and profits, looking out for every opportunity to align our business ventures with education and community-based action. We carefully select our team members based not only on their skill and expertise, but on their deep commitment to the mission and their passion for helping others. If selected for this project, ReVision Energy would be excited to make our subject matter experts fully accessible to the Cumberland community for presentations to the School District, Town staff and residents, and any other interested groups in the area.

As further evidence of our commitment to the community, Revision completes at least one major charitable project per year with a local beneficiary, including the following initiatives in 2017-18 alone:

- ReVision supported the NH Solar Shares project by pledging \$25,000 through the NH CDFA tax credit program and providing design support. This project, a partnership between PAREI and NHEC, will bring the benefits of solar power to low income families in the Plymouth NH area.
- ReVision partnered with the Amicus Solar Cooperative and the nonprofit group Amurtel to launch Power on Puerto Rico, which involved the design, construction and transportation of 10 Solar Outreach Systems to hard-hit areas of Puerto Rico that remain without access to power.



REVISION ENERGY

- ReVision is supporting the Harbor Homes Veterans Housing project in Plymouth for veterans in need of supportive services by pledging \$100,000 through the NH CDFA tax credit program and offering a discounted solar installation to meet the common needs of the new facility.
- ReVision pledged a donation of more than 100 modules as part of the Energize 360 campaign, which will ultimately go to supporting a solar new array on the NH Children's Museum in Dover.

We are deeply committed to creating a clean energy future for all, and we believe that not only are we the company that provides the best opportunity for a successful project outcome, but also best equipped to tell the story of New England's transition to a clean energy future.

Financial Stability

The following material is confidential financial information for ReVision Energy Inc.

Since 2003, ReVision Energy has completed thousands of solar installations and renewable energy projects throughout New England. As a result of our commitment to reducing fossil fuel dependence and CO2 emissions while operating a sustainable business, ReVision has built a strong balance sheet and long-term financial partnerships with banks and insurance companies.

As of October 1, 2017, ReVision Energy is 100% employee-owned, as an S-Corp with 100% ownership by an ESOP Trust. The following financial information is current as of that date:

- \$5MM aggregate and \$2 million single-project liability program with Liberty Mutual
- \$2MM working capital line of credit with Bangor Savings Bank, with \$2 million available
- \$5MM approved bonding capacity
- Annual Revenues of approximately \$35MM
- 200 employees
- \$21MM under contract work in progress
- \$30MM under development

This information is indicative of ReVision Energy's financial strength, liquidity, and capacity. Should you have any further inquiries or additional questions, please contact us.

Project Description

Proposal Overview

ReVision Energy has a proven track record of successful project development and execution on schedule, working with hundreds of public and private clients throughout Maine and New England. For this project, we propose to install a 474.7 kW dc solar array on the Town of Cumberland's capped landfill under a PPA financing structure. The array has an estimated year one generation of 617,518 kWh of clean, carbon free

electricity. We have sized the array to offset 95% of the Town's 9 largest electrical accounts. Through PPA financing, the solar project is designed to have no upfront cost to the Town.

Project Information

The proposed 474.7 kW dc (360 kW ac) array consists of the following core components. (1,376) Hanwha Q Cells Q.Plus L-G4.2 345w solar panels, (6) Chint Power Systems SCA60KTL-DO/US-480 inverters, Locus L-Gate 360 revenue grade metering with an online monitoring portal, and a public solar monitoring display to be installed at a location specified by the Town. The solar panels and inverters will be mounted on SolarFlexRack B3P-X racking resting on cast in place concrete footings. We have carried the estimated costs for utility upgrade, including the extension of the three-phase service, permitting, and interconnection in our proposal. The Town will not be responsible for any of these upfront costs.



Rendering of Proposed Array

Operations and maintenance services will be performed at no additional cost to the Town for as long as the Town remains in the PPA. ReVision will monitor the operation of the array remotely, and if there is an issue, dispatch service technicians to troubleshoot and repair the problem. We will also handle an annual onsite inspection to assess the physical condition of the system and provide you a report summarizing the annual condition and performance of the array. If the Town of Cumberland chooses to purchase this system before the end of the 25-year PPA, ReVision will be able to provide these same operations and maintenance services to the Town for the remaining life of the array, for a small annual fee. While the proposed PPA includes 100% of the required system maintenance, we would recommend that the Town continue to mow the landfill, as the lowest cost option. Since site maintenance i.e. mowing is not

ReVision's strong suit, taking on this responsibility would require us to subcontract mowing with another company and roll that cost into the PPA rate. It is our understanding that the Town already has its own team that mows the landfill, and does so on a semiannual basis. We would therefore recommend that the Town continue to perform this work, rather than relying on a higher cost, third party option. As such, our proposal does not include mowing costs in the PPA, but please keep in mind that we would be more than happy to further discuss site maintenance and adjust our proposal if this is an issue for the Town. Finally, at the end of the system's useful life, we expect the salvage value of the materials to cover removal costs. The system is made up of mostly recyclable materials which can be sold when removed.

We utilize HelioScope modeling software to create our estimates of the annual production of our solar arrays. The software considers local weather patterns from the last 20 years, the length of daylight throughout the year, and efficiency losses inherent in any electrical system. Our experience with the estimates generated is that they are accurate predictors of system performance. Full details and assumptions used to model system production can be found in Appendix A.

Project Timeline

We expect this project to take, from funding approval to system operations, 19.5 weeks to complete. Two factors that can influence this timeline are MDEP approval and investor financing acquisition. Because this project requires MDEP approval and study, the project timeline is predicated on receiving timely approval from MDEP. While we have factored in nearly two months to receive approval, it could take longer than that. Additionally, our PPA program, which is detailed in a later section, involves having outside investor capital in place before construction can begin. Once we receive confirmation of funding, any projects held in our construction queue are released to operations for installation. We expect construction activities on site to take 9 weeks to complete. Please see Appendix B for a complete construction timeline.

PPA Offer

PPA Overview

Under the financial structure that we are offering, there is no upfront cost to the Town. Instead, ReVision Energy will identify a local, mission-driven investor to finance, own and operate the system on behalf of the Town of Cumberland. By searching for local investors who care about New England and its institutions, we are able to offer PPA rates that are below the market rate. Just so you're aware, under this PPA structure we cannot guarantee the timing of funding availability. We actively search for motivated investors, but always like to make sure that our customers are aware that there's the possibility that the project will need to wait in the queue for funding to be in place. Additionally, please note that both of the PPA offers outlined below are based on the assumption that there will be no property taxes assessed on the array.

Once you are comfortable with the offer we are making and you decide to accept, we will collaborate with one of our qualified New England Impact Investor partners to finance, build, own, and operate the solar array on your property. You will license the grounds needed for the solar array to operate and you will

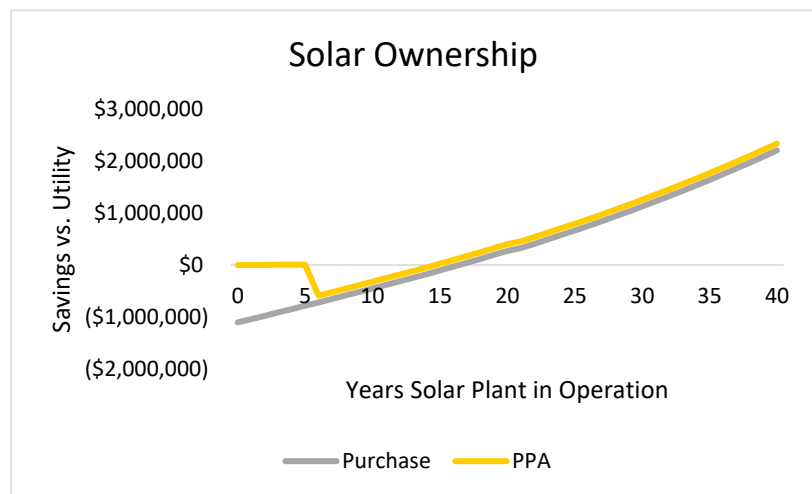
agree to purchase all the electricity generated by the solar array. ReVision Energy and the Impact Investor partner will take care of all the rest.

After 5 years, you will have an opportunity to decide whether you would like to purchase and own the solar array and close out the PPA agreement with the Investor. If you decide to exercise this early buyout option, there is no further payment to the Investor for the solar electricity delivered by the array. You will have several buyout opportunities over the life of the contract, but you may decide to keep purchasing solar electricity from the Investor for the full 25 years, after which you will have two options for 5-year extensions. If you decide to keep buying solar electricity from the Investor until the very end, you can then choose to either have the system removed for free, or purchase it at an agreed upon price. Each system is designed to reliably produce energy for another 15-25 years, at more than two-thirds of its productivity when new. The durability of solar equipment, when properly installed, is truly remarkable.

Solar electricity production from every panel is warranted by the manufacturer for 25 years, and the expected useful lifespan of these panels, all wiring, and the structural components exceeds 40 years. Inverter equipment, which typically accounts for less than 5% of upfront system cost and is becoming less expensive each year, has an expected useful life exceeding 20 years. With minimal maintenance, solar systems provide a long-term supply of trouble-free renewable energy.

A PPA is the Most Cash Effective Way to Buy Solar Electricity

PPA financing enables the project to benefit from federal solar tax credits, which can substantially reduce overall costs for you. There is never any obligation to purchase the project, but generally, the earlier you exercise your buyout option, the larger the lifetime project savings, and so we encourage you to consider that option. As shown in the accompanying graph, the PPA coupled with an early buyout results in a significantly more favorable cash flow position than a cash purchase on day one.

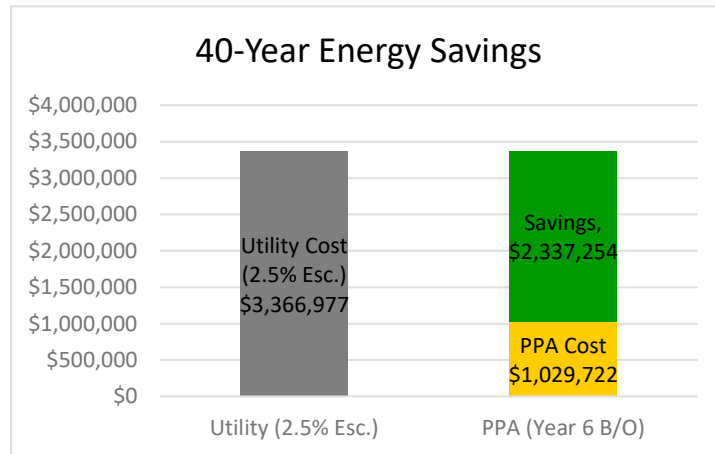


Solar Electricity Price

The project's Impact Investor partner will confirm financing for this solar project, including the sale of electricity generated by this project to you at the rates specified below, once you have accepted this proposal. Our goal is to design a rate schedule that best suits the goals of the the Town--to fulfill its commitment to sustainability and to reduce its long term energy costs--while simultaneously designing an investment that is acceptable to an Impact Investor partner. Our mission in offering solar PPAs is to make solar electricity as accessible, convenient and easy to understand as grid electricity – but without

any of the associated pollution and without the uncertainty about future prices that is inherent in electricity from the grid. The solar electricity price is as follows:

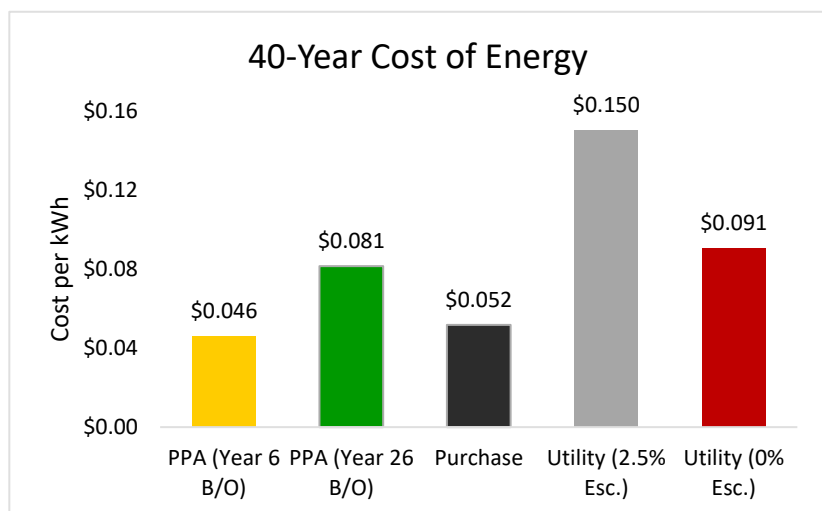
	For the first 2 Years (\$/kWh)	Fixed rate increase, regardless of inflation After Y2	Estimated Buyout Year 6 ⁱ
SOLAR	\$0.0909	2.0%	\$663,166



The solar price schedule is designed to start close to current utility rates. This solar price will also rise slower than historical utility rates (3.2% per yearⁱⁱ) and slower than projected future utility rates (2.5% per yearⁱⁱⁱ). In addition, locking in a consistent 25-year energy price schedule offers a predictable electricity budget over the lifetime of the PPA. Finally, an early buyout offers a pathway to ownership that often costs pennies on the dollar versus an upfront purchase of the same solar energy

project, allowing you to maximize your long-term energy savings while minimizing your capital investments.

A Solar PPA Has the ideal Cash Flow Structure for towns and non-profits, with zero upfront investment, and is a great way to lock in low electricity prices. A solar PPA with an early buyout provides substantial electricity savings when compared to buying electricity from the utility even where conservatively incorporating the cost of full inverter replacement after the twentieth year. If an early buyout is not feasible, taking the PPA contract to its 25-year term will lock in an electricity price that is still significantly lower than expected utility prices over the system lifetime.



A Solar PPA is a contract between you and the Impact Investor Partner.

Town of Cumberland:

- You authorize the use of your grounds to host the solar array;
- You purchase the solar electricity generated by the array according to the price schedule;
- You enter into a utility interconnection agreement arranged by ReVision Energy; and
- You add a liability insurance rider to your regular insurance coverage.

Impact Investor:

- Owns and operates the installed solar system for the duration of the PPA contract, either 25, 30 or 35 years, or until you choose to exercise a buyout option;
- Registers the system with NEPOOL-GIS in order to sell the Renewable Energy Credits;
- Maintains the system while under their ownership (no maintenance costs to you);
- Fully insures the system for both property and liability risks.

Ready to Proceed

When you notify ReVision Energy that you are ready to proceed, we will collaborate with the Impact Investor partner, who will complete its project due diligence and provide a draft PPA contract for your review. Once the PPA contract is finalized and signed, ReVision Energy will complete permitting with local and state authorities, and will prepare the interconnection application for filing with the utility. Then ReVision Energy will purchase the equipment and schedule the installation of the solar array.

Market PPA

Should the Town wish to have certainty of project financing availability, a market PPA is another alternative. We reached out to one of our PPA financing partners and gave them the specific information about this project. Their term offers are similar to ours with a 25-year term with one 5-year extension. The buyout values will also be higher. The Town would still have no upfront costs for the project and could buy the array out ReVision would also be providing operations and maintenance services for the array.

	For the first Year (\$/kWh)	Fixed rate increase, regardless of inflation in Y2	Estimated Buyout Year 7 (est)
SOLAR	\$0.1	2.0%	\$808,575

Company History and Qualifications

History

Since 2003, ReVision Energy has designed and placed into service more than 7,000 solar energy systems throughout northern New England. The company began as Energyworks LLC of Liberty, Maine, and Renewable Energy Contractors of Portland, Maine, which merged in 2008 to form ReVision Energy. These two earlier companies had been founded (the first in 2003) by the current principals of ReVision—William Behrens, Fortunat Mueller, and Phil Coupe—whose experience in renewable energy date back to 1988. Since 2003, ReVision Energy has evolved from two guys in a garage to over 220 employees working in five locations in Maine, New Hampshire, and Massachusetts. Through the installation of 20 megawatts (MW) of solar power, ReVision has become the most experienced full-service renewable energy contracting company in the Northeast. ReVision owns and operates over 80 solar projects under power purchase agreements (PPA) with hosts, totaling nearly 5 MW of installed solar energy valued at nearly \$15 million.

ReVision Energy has offices in Liberty and Portland, Maine; Brentwood and Concord, New Hampshire; and North Andover, Massachusetts. Our frequent inter-office collaboration ensures the highest level of technical expertise to be

- Grid-Tied Photovoltaic Systems
- Air-Source Heat Pumps
- Electric Vehicle Charging Stations
- Smart-Grid Storage Technologies
- Solar Hot Water Systems

found in the Northeast. ReVision's installations currently span Maine, New Hampshire, Massachusetts, and Vermont.

Our Team

By attracting and retaining exceptional people who are motivated by our mission to transition society to renewable energy, ReVision Energy consistently achieves superior professional results for its clients. ReVision is a certified B-Corp and adheres to the highest standards of treatment and respect for people, the community, and the environment. We believe in rewarding people for their dedication and exemplary work, and thus offer our employees employer-paid health insurance, a flexible work week, paid holidays and time off, 401(k) with company match, and an employee stock appreciation plan so that our employees can share in the financial success of the company.

Scope of Services

ReVision Energy has pioneered a full service mechanical contracting approach to the design and installation of solar energy systems and complementary technology. We provide a complete scope of services from project design to post-commissioning system maintenance. The following are some of the systems and services we offer:

- Community Solar Farms
- Project Development
- Project Financing
- Operations & Maintenance
- Consulting Services

Vision, Mission, and Values

Our Vision

We are trusted as the industry leader in solar design, installation, and service in northern New England. We achieve our vision by maintaining the highest standards of technical accomplishment and customer satisfaction. Fossil fuel consumption and CO2 emissions in the region are shrinking due to our installations.

Our Mission

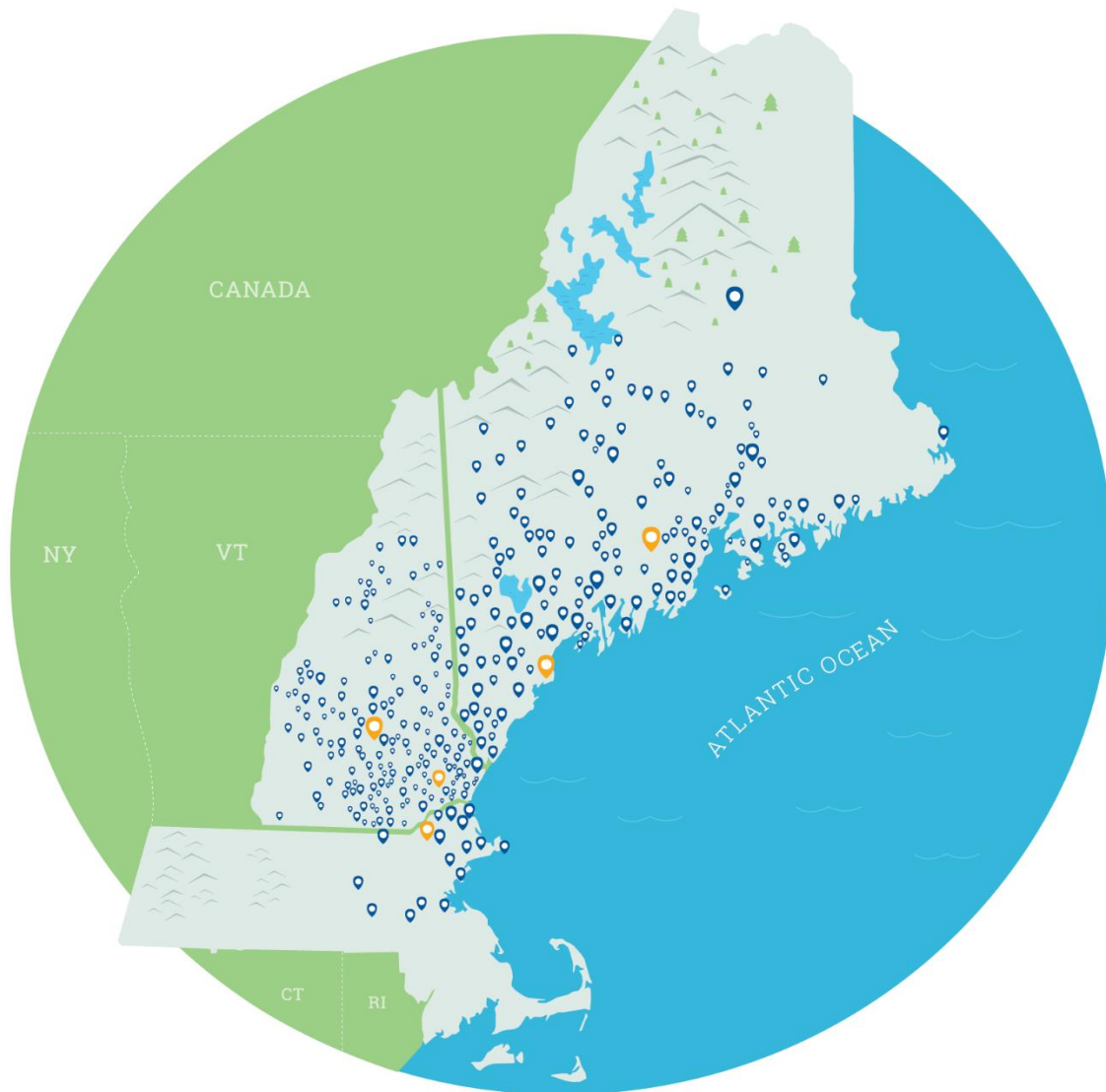
- To help society transition from fossil fuels to sustainable solar energy
- To be a profitable, sustainable business through installation of the highest quality systems
- To embody principles of fairness and equity in all of our relationships

Our Values

- Exceptional customer service, without compromise
- Respect for people and the environment in everything we do
- Responsibility for present and future generations
- Technical excellence to maximize the efficiency, longevity, and affordability of our systems
- Fostering personal and professional growth in our workplaces through a cohesive, team-oriented atmosphere



Completed Installations



= Towns with existing systems



= Office locations

Maine

91 West Main Street
Liberty, ME 04949

142 Presumpscot Street
Portland, ME 04103

Massachusetts

1980 Turnpike Street, #2
North Andover, MA 01845

New Hampshire

7 Commercial Drive
Brentwood, NH 03833

14 Dixon Avenue #201
Concord, NH 03301

Project Services

ReVision Energy is locally-owned and operated. All work is completed by solar specialists (engineers, designers, installers) with proper licensure and credentials who are full employee-owners of the company. As a full-service renewable energy firm, ReVision is proud to offer the following services:

Construction Services

- Commercial Thermal Systems
 - Design and Engineering
 - Installation
 - Maintenance and Repair
- Plumbing and Pipefitting
- Photovoltaic Systems
 - Design and Engineering
 - Installation
 - Testing and Commissioning
 - Maintenance and Repair
- Driven Post Racking Foundation Installation
- Earth Screw Racking Foundation Installation
- Ledge/Rock Drilling
- Electrical Trenching
- Electrical Service Design
- Residential Electrical Service Installation
- Commercial Electrical Service Installation
- Underground Electrical Installation
- Energy Storage Systems
 - Design
 - Installation
- Data Acquisition System Installation
- Oversight of Sub-Contracted Services
 - Medium and High Voltage Electrical Work
 - Excavation
 - Directional Drilling
 - Fencing
 - Asphalt Paving and Patching

Project Development Services

- Power Purchase Agreements
- Project Financial Modeling
- Equity Capital Relationships and Transactions
- Debt Capital Relationships and Transactions
- Renewable Energy Credit Aggregation and Marketing

Media Recognition

2018 Business NH Magazine, Business of the Year winner

2018 NH Business Review, Best Solar Company in New Hampshire

2017 Best Places to Work in Maine

2017 Solar Power World, Top 500 Solar US Contractors: #1 in New England, #14 Rooftop, #27 Residential

2016 Solar Power World, Top 500 Solar Contractors: #17 Rooftop, #39 Residential, #136 Overall

2016 Maine Sunday Telegram Source Awards, Pollinator Award

2016 75 Best Places to Work in Maine

2016 The Maine Magazine, ReVision Energy partners Fortunat Mueller and Phil Coupe named to 50 Mainers Charting the State's Future list

2016 Solar Energy Industries Association and the Solar Electric Power Association, Photovoltaic Project of Distinction Award, Semi-Finalist (Proctor Academy PPA)

2016 New Hampshire Businesses for Social Responsibility, Cornerstone Award, Finalist

2015 Solar Power World, Top 500 Solar Contractors: #24 Rooftop, #58 Residential, #165 Overall

2015 SolarReviews, Top 10 Installer

2015 Natural Resources Council of Maine, Conservation Leadership Award

2015 US Green Building Council, Maine Chapter, ReVision Energy partner Fortunat Mueller named Advocate of the Year

2015 NH Innovation Nights, Clean Energy Innovation, Crowd Choice

2015 Business NH Magazine, Business of the Year, Finalist

2015 New Hampshire Businesses for Social Responsibility, Cornerstone Award, Finalist

2014 Solar Power World, Top 400 Solar Contractors: #24 Rooftop, #53 Residential, #148 Overall

2014 Exeter Area Chamber of Commerce, Business of the Year, Real Estate, Construction and Engineering

2014 Business NH Magazine, 10 Companies to Watch

2013 City of Portland, Business Eco-Excellence Award

2013 Business NH Magazine, 10 Companies to Watch

2012 New Hampshire Businesses for Social Responsibility, Cornerstone Award, Finalist

2012 MaineBiz, ReVision Energy partners Fortunat Mueller and Phil Coupe named to Next list

2011 US Green Building Council, New Hampshire Chapter, Volunteers of the Year

Memberships & Partnerships

Maine

350 Maine
American Society of Civil Engineers
Appalachian Mountain Club
Bicycle Coalition of Maine
Blue Ocean Society for Marine Conservation
Boothbay Region Land Trust
Chewonki Foundation
Environmental & Energy Technology Council of Maine (E2Tech)
Envision Maine
Friends of Casco Bay
Greater Portland Council of Governments
Great Works Regional Land Trust
GrowSmart Maine
Habitat for Humanity of Greater Bangor
Island Institute
Leadership Seacoast
Maine Conservation Voters
Maine Audubon
Maine Association of Building Efficiency Professionals (MABEP)
MaineBiz
Maine Farm Bureau
Maine Farmland Trust
Maine Milk Commission
Maine Organic Farmers and Gardeners Association
Maine Public Broadcasting Network (MPBN)
Maine State Chamber of Commerce
Maine Sustainability Network
Maine Yogafest
Midcoast Conservancy
Morris Farm Trust
Natural Resources Council of Maine (NRCM)
Portland Buy Local
Portland Regional Chamber of Commerce
Portland Society of Architecture
Seabcooke Regional Land Trust
Sheepscot Wellspring Land Alliance
Southern Maine Conservation Collaborative
US Green Building Council Maine
WERU Community Radio
York Region Chamber of Commerce

New Hampshire

American Institute of Architects NH
BearPaw Land Trust
Beaver Brook Association
Blue Ocean Society
Clean Tech Council
Concord Chamber of Commerce
Dover Chamber of Commerce
Dover Children's Museum
Eastman's Corner
EBC (Environ Business Council)
Exeter Area Chamber of Commerce
Five Rivers Conservation Land Trust
Greater Concord Chamber of Commerce
Green Concord
Homes for Heroes
Leadership Seacoast
MacDowell Colony
Main Street Concord
NextGen Climate
NH Audubon
NH Building Officials
NH Businesses for Social Responsibility (NHBSR)
NH Clean Tech Council (NHCTC)
NH Home Builders Association
NH Preservation Alliance
NH Residential Energy Performance Association
NH Sierra Club
NH Society of Protection of Forests
NH Sustainable Energy Association (NHSEA)
NH Public Radio
Plan NH
Prescott Park
Residential Energy Performance Association (REPA)
Seacoast Science Center
Souhegan Chamber of Commerce
Southeast Habitat for Humanity
Southeast Land Trust (SELT)
Southern NH Builders & Remodelers Association
US Green Building Council NH



Massachusetts

US Green Building Council MA
Amesbury Chamber of Commerce
Cape Ann Chamber of Commerce
Center for EcoTechnology
Change is Simple
Coastal Trails
Concord Consortium
Go Green Consortium
GreenBelt Land Trust
MA Audubon
MassCEC
Merrimack Chamber of Commerce
MOFA
Newburyport Chamber of Commerce
North Shore Chamber of Commerce
North Shore Tech Council
Pan-Mass Challenge
River 9.5
Salem Chamber of Commerce
US Green Building Council MA

Regional

350.org
Amicus Solar Cooperative
Appalachian Mountain Club (AMC)
Association for Facilities Engineering (AFE)
Conservation Law Foundation
Independent Schools Association of Northern
League of Conservation Voters
New England (ISANNE)
New England Grassroots Environmental Fund
New England Women in Energy and the
Environment (NEWIEE)
New England Solar Energy Market Coalition
(NESEMC)
Northeast Organic Farming Association (NOFA)
Northeast Sustainable Energy Association
(NESEA)
Seacoast Women's Network
Sierra Club
Solar Energy Business Association of New
England (SEBANE)
The Nature Conservatory

Certifications

Certifications and Licenses

- North American Board of Certified Energy Practitioners (NABCEP) Certified Solar Photovoltaic (PV) Installers & Solar Thermal Installers
- Master Electricians
- Journeyman Electricians
- Electrical Apprentices
- Master Plumbers
- Licensed Professional Engineers
- Certified Welders
- Massachusetts Home Improvement Contractor
- Massachusetts Construction Supervisor License
- Department of Labor Certified Electrical Apprenticeship Program
- American Society of Mechanical Engineers (ASME)
- American National Standards Institute (ANSI)
- Emergency Safety and Care Institute (ESCI) AED and CPR Certified
- Occupational Safety and Health Administration (OSHA) 10 and 30 Hour Construction Courses
- Hilti and Ramset Power Tool Certifications

B Corp

As a certified B Corp, ReVision Energy adheres to a triple bottom line business philosophy by measuring its success based on financial, social, and environmental performance. B Corps are companies certified by B Labs as meeting rigorous standards of accountability, transparency, and social and environmental performance.



Certified B Corps are leading a global movement to redefine success in business. By voluntarily meeting higher standards, B Corps are distinguishing themselves in a cluttered marketplace by offering a positive vision of a better way to do business. Certified B Corps are competing to be not just “The Best in the World,” but “The Best for the World.”

At ReVision Energy, we take pride in being a mission-driven company that makes a substantial effort to embody our values in every interaction with customers, suppliers, the community, and each other. Being certified as a B Corp is a validation of those efforts and joins us in a community of over 1,800 like-minded businesses worldwide who all agree that business is not just about profits, but can and should be a source for positive social and environmental change in the world. To learn more about what it means to be a B Corp, visit <https://www.bcorporation.net/>.

System Design Process

At ReVision Energy, our design process fully considers our clients' financial goals, system reliability, longevity, and sustainability. Paramount to the final system design and installation specifications is to ensure that the final construction of the project meets or exceeds standards set by the National Electric Code (NEC), the North American Board of Certified Energy Practitioners (NABCEP), the Project Engineer, and the Local Inspector(s). The overall design strategy for our systems is to provide the longest lasting, highest quality installations available that give our clients the best financial and environmental return on their investment, while meeting or exceeding nationally accepted installation standards.

Equipment Specifications

Solar Modules

ReVision Energy designs systems with Bloomberg New Energy Finance Tier 1¹ solar modules as a minimum requirement. Tier 1 modules are the highest quality modules available and are made by manufacturers considered to be bankable and reputable. Warranties provided by these manufacturers can be expected to be fully supported through the 25-year warranty period.

Tier 1 modules are available in a variety of efficiencies, typically deemed "standard efficiency," "medium efficiency," and "high efficiency." Standard efficiency modules typically offer the best value, though there are situations where higher efficiency (and higher cost) modules are justified due to space constraints, high racking costs, or aesthetic goals (such as all black modules).

Most solar modules are available in 72 cell and 60 cell versions, measuring approximately 77"x40" and 65"x40" respectively. We use both module types in our system designs. Final module selection depends on the racking system (flush roof, ballasted roof, ground mount), local snow and wind loads, and maximum installation efficiency.

Inverters

Proper inverter selection is paramount to ensuring that a solar system will run efficiently and reliably for the life of the solar inverter (approximately 20 years), with minimum downtime and maximum production. The inverter is generally considered as the workhorse of a solar system as it is responsible for converting all of the direct current (DC) electricity generated from the solar modules into grid quality single or three phase alternating current (AC) electricity. Additionally, the solar inverters often also provide the foundation for the data acquisition system (DAS) used for plant monitoring and operations and maintenance planning. When selecting inverters, ReVision Energy puts a major emphasis on working with manufacturers that have a proven track record with regard to equipment reliability as well as technical

¹ Bloomberg New Energy Finance, *BNEF PV Module Maker Tiering System*.
http://www.bbhub.io/bnef/sites/4/2012/12/bnef_2012-12-03_PVModuleTiering.pdf

and warranty support on installed equipment. This set of criteria generally excludes the lowest cost inverter options.

Central Inverters (>1MW AC): Central inverters represent the largest inverters available in the industry. They are generally used for utility scale ground mounted systems over 1 MW in size. Advantages include low cost and high reliability. Disadvantages include the need for land space to site the inverters, generally no module level or string level optimization, and the need to mobilize specialized technicians and equipment in the event of inverter failure to minimize production/revenue loss. Though historically their lower cost made central inverters the preferred choice for projects over 500 kW, ReVision Energy increasingly finds that three phase string inverters can be competitive with central inverters when full lifecycle costs are considered, even for projects as large as 5-10 MW.

String Inverters (3kW AC to 60kW AC): String inverters are the most common inverter type in the industry. They are common for installations ranging from 3 kW to 10 MW and beyond in both roof mounted and ground mounted applications. Advantages include the ability to mount the inverters on the solar array racking, which frees up space for the array (compared to central inverters). If a single inverter fails, the other system inverters remain online and a local technician can easily replace an inverter, minimizing production loss and downtime. When integrated into string inverters, array monitoring and power optimization have significantly improved resolution compared to central inverters. The disadvantage to string inverters is that they are slightly more expensive than central inverters in first cost, though the gap has narrowed in recent years.

Module Level Power Electronics (MLPE): Module level power electronics, or module level optimizers, have become more prevalent in the solar industry as their cost has come down and their reliability has improved. MLPE allow for optimization, monitoring, and control of a solar array at the individual module level. Module level monitoring can improve responsiveness of maintenance operations and maximize performance and revenue from a solar plant. MLPE are also one way to comply, where required, with the 'Rapid Shutdown' requirements included in the 2014 edition of the National Electric Code. In much of New England, Rapid Shutdown capability is now required for new installations on building rooftops. The disadvantage of utilizing MLPE is the added cost and additional electronics subject to failure.

Mounting Systems

ReVision Energy's system design and installation expertise encompasses all types of solar installations, including: pitched roof flush mounts, ballasted flat roof mounts, carports, dual axis tracking systems, and ground mount systems with driven piles, earth screws, and concrete ballast blocks as foundations. We work with a multitude of racking manufacturers in order to meet specific project requirements. Our preference is to work with manufacturers who have strong in-house engineering and design support, and who can meet the specific project design requirements and installation timelines.

ReVision owns and operates equipment used to install ground screws for both in-house sub-contracted installations. Ground screws are often chosen as a preferred mounting system in New England because of their wider applicability and minimal failure. Ground screws can be installed in challenging terrains such as ledge and rocky soils.

Company Fleet

At ReVision Energy, we maintain an efficient fleet so that we can minimize the travel required to do our jobs. Our installers typically work 10 hour days to ensure that jobs are completed expeditiously, thereby also ensuring a minimum number of trips to a project location.

We use a fleet of vehicles smaller than is typical in the contracting industry— we use light duty trucks and vans wherever possible instead of heavy duty vehicles. Light trucks operate at 10% to 30% better efficiency than heavier trucks, and for most jobs, they are equally productive. Vehicle economy results in a savings of hundreds of gallons of gasoline and diesel fuel each year. ReVision sources biofuel for fleet vehicles through Maine Standard Biofuels and owns many full and hybrid electric vehicles (EV)—including the Chevy Bolt, the Chevy Volt, Nissan LEAF, and plug-in Prius—that are all charged at our solar-powered EV charging stations. Our fleet includes:

- 27 Sedans
- 8 Electric Vehicles
- 23 Vans
- 5 Pickup Trucks
- 18 Box Trucks
- 8 Flatbed Trucks
- 2 Trailers



Project Management

ReVision Energy has a robust set of internal procedures and controls to manage project budgets, billings, reporting, and projections. Our Senior Project Managers work closely with the site superintendents and our accounting department to assure weekly reports are updated and accurate. ReVision Energy has developed a highly efficient system of project progress tracking to assure projects remain on schedule and on budget.

Upon project award and final contract value, a detailed schedule of values (SOV) will be developed for the project based on AIA G703 documentation. The SOV includes all key line items from both a purchasing and labor perspective. ReVision Energy will submit a draft schedule of values for review by the owner within three weeks of contract award. The approved SOV will be the primary vehicle measuring the value of work done (VOWD). The SOV will be updated on a biweekly basis from both a dollar value and percentage basis. The SOV will be submitted for review and payments per the contract payment schedule.

Variations to the project cost will be addressed and discussed via formal change order applications. Work or costs above the original scope of work and/or contract value will not be completed prior to receiving written approval from the owner. In the event of an approved change order, those values will be added to the SOV for progress measurement and billing purposes. Potential variations in project cost will be discussed with owner in project meetings. Due to our extensive installation experience, unanticipated project cost increases are unlikely. However, if a potential cost variation event is identified, a written summary of the cause, project impact, proposed solution, and cost estimate will be provided to the owner for review and discussion. Based on the results of that discussion, a formal change order may or may not be issued for approval by owner.

On a weekly basis, the Project Manager will provide a written report outlining the project progress. This project update will include a written summary and percentage progress on key project deliverables and milestones, as well as photographs of work completed and/or materials received. Deliverables and milestone progress will include both forecast and actual dates for critical path project milestones, as well as relevant comments. Key narrative inclusions in the weekly report are: work planned for preceding week, work completed for preceding week, work planned for upcoming week, open issues, and open risks. Progress made in the weekly reports will be reflected in the SOV for billing purposes.

Operations & Maintenance

ReVision Energy's commitment to legendary customer service and technical excellence extends well beyond the point at which a customer's solar installation begins to produce power. As a trusted local provider, ReVision Energy maintains its own operations and maintenance (O&M) staff and provides O&M services for more than 100 renewable energy systems installed throughout northern New England, including installations that are owned and operated by third-party investor partners. With over a decade of solar experience in Northern New England's harsh environment, we have the expertise to give our clients peace of mind with respect to the long-term safety, reliability, and performance of their solar systems. We think that a solid O&M strategy begins with thoughtful design and installation quality assurance. Additionally, our experience as a full-service developer, EPC (engineering, procurement, and construction) contractor, and O&M contractor provides us with a unique, customer-focused perspective on solar system maintenance and lifecycle management.

As part of the final design and project closeout, ReVision Energy will develop a detailed, multi-point, and site-specific O&M plan for the proposed facility. ReVision Energy's comprehensive O&M plan will minimize life-cycle costs, maximize availability, and ensure that the project meets or exceeds its design, service life, and expected performance. ReVision provides O&M services to system owners and will continue to offer those services in the event of an ownership transfer. With offices and warehouses in Maine, New Hampshire and Massachusetts, in-house licensed electricians, certified solar technicians, and a locally staffed 24/7 emergency contact number, ReVision Energy will respond swiftly to any routine or urgent O&M needs of the proposed facility.

The O&M plan will consist of both routine, preventative maintenance operations as well as rapid response service plans for urgent and emergency situations. Regularly scheduled service will include preventative inspections, testing, and maintenance; performance verification; and any manufacturer-required actions. The regularly scheduled preventative visit includes, at minimum, general inspection, structural maintenance, electrical inspection, and system testing. It also includes a comprehensive report of system condition and an analysis of system production delivered both to the system owner and off-taker.

In addition, ReVision Energy will provide the system owner with ongoing system performance monitoring, and will respond swiftly to any performance anomalies identified. In case of performance loss, ReVision will perform all necessary testing, troubleshooting, and repairs—including warranty repair work—to minimize system downtime and provide maximum system production. All activity on the facility will be performed by licensed and trained personnel in accordance with industry standards and OSHA safety requirements.

ReVision Energy is completely committed to the long-term success of your solar project and the solar industry in New England, and that commitment translates into unparalleled service of both new and existing solar facilities.

Our Team

ReVision Energy has over 220 employees who all play a vital role in the success of our company. Each member of our team brings unique experience to ReVision and increases the quality of work we deliver with each installation. The following is a sample of our exceptional team; to meet more of our dedicated employees, please visit <https://www.revisionenergy.com/our-staff/>.

William Behrens, PhD, Co-Founder and Managing Partner



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Bill is one of ReVision Energy's managing partners, and provides oversight to both the Engineering and Finance divisions. Bill earned a PhD in Environmental Economics and a BS in Electrical Engineering from Massachusetts Institute of Technology. Upon completing his doctorate, he taught Resource Economics at Dartmouth College before moving to Maine and entering the construction industry. In 1972, he co-wrote the seminal book "Limits to Growth," an exploration of the anticipated problem of population growth and resource constraints. In 1993, Bill cofounded The Green Store in Belfast, Maine, from which developed Energyworks and then ReVision Energy. Bill has overseen the design and installation of many MW of solar PV over the last 20 years. Over the past 5 years, Bill has led ReVision's initiatives in providing solar to more than 50 nonprofit organizations, universities, and municipalities throughout the New England region through solar power purchase agreements.

Fortunat Mueller, P.E., Co-Founder and Managing Partner



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As co-founder and managing partner of ReVision Energy, Fortunat's responsibilities include oversight of design, engineering, and operations for residential and commercial applications in both Maine and New Hampshire. Fortunat received both his Masters and BS in Mechanical Engineering from Brown University and is a licensed Professional Engineer. He serves on the Board of Directors for the Maine Association of Building Efficiency Professionals (MABEP) and the Northeast Sustainable Energy Association (NESEA). Before co-founding Renewable Energy Contractors in 2006 and then ReVision Energy in 2008, Fortunat was a project manager and senior systems engineer at United Technologies Fuel Cells in Hartford, Connecticut.

Phil Coupe, Co-Founder and Managing Partner



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During his 25-year business career, Phil has helped start four highly successful companies that all continue to deliver legendary customer service and exceptional triple bottom line performance to stakeholders. Prior to co-founding ReVision Energy, Phil served for 12 years as Vice President and Director of Corporate Philanthropy at a Washington, D.C. based company that twice made the list of Inc. 500 fastest-growing companies in America and received numerous awards for its commitment to socially responsible business practices. Adhering to the philosophy that business can be a powerful tool to effect positive social change, Phil has guided the sales and marketing strategy at ReVision Energy for the past 11 years to grow the business from two guys in a garage to 200 employees operating out of five locations in Maine, New Hampshire, and Massachusetts. As a co-founder and managing partner, Phil continues to be directly involved in the day-to-day leadership and management of ReVision Energy, with a particular focus on helping the business accelerate the societal transition from a fossil fuel-based economy to a sustainable, renewable energy based economy. Phil is a longtime mentor in the Big Brother/Big Sister program, serves on the board and strategic direction committee of the Environmental & Energy Technology Council of Maine (www.e2tech.org), and serves as chair of Maine Audubon's corporate partner program.

Dan Clapp, General Manager and Partner



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Since joining ReVision Energy in 2010, Dan has overseen the addition of more than 55 value-driven employees and the growth of the company's New Hampshire and Massachusetts offices. Dan leads a team that has successfully designed and installed over 1,500 renewable energy systems and has been recognized as a top "Business to Watch" by *Business NH Magazine* and "Business of the Year" by the Exeter, NH, Chamber of Commerce.

After earning his BS in Environmental Science from the University of New Hampshire, Dan worked as an energy consultant then started his own renewable energy installation company in Maine and Massachusetts. Dan carries a NABCEP solar PV technical sales certification and brings many years of installation experience to ReVision. He currently serves on the Board of Directors for the Southeast Land Trust (SELT).

Stephen Hinchman, Esq., *Chief Counsel, Director of Development*



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Steve has served as the director of ReVision Energy's Finance division since 2011 and has guided the company in the development of \$10+ million company-owned, and \$5+ million investor-owned solar PPA projects. Steve specializes in developing financial and tax-advantaged investment models to achieve the most cost effective financial structures for municipal and nonprofit solar development. Steve brings more than 40 years of legal and public policy experience to ReVision, including a decade of energy and environmental law practice in New England.

A 2003 Graduate, Summa Cum Laude, of the Vermont Law School, Steve is admitted to the bar in Maine, the U.S. District Court of Maine, and the First and D.C. Circuit Courts of Appeals, and has participated in climate cases before the Second and Ninth Circuit Courts of Appeals. Steve has also practiced before the Maine Board of Environmental Protection, the Land Use Regulatory Commission, the Maine Ethics Commission, and the Legislature's Joint Standing Committees on Natural Resources and Energy and Utilities.

Sam Lavalley, *Director of Financing*



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Sam has been involved in the solar energy industry since 2007. After graduating from the University of Vermont, Sam began his professional career at Mercury Solar Systems, Inc., a startup focused on the design and construction of residential, commercial, and utility scale solar projects in the New York and New Jersey regions. While at Mercury, he focused on mergers and acquisitions due diligence and the centralization of business functions of new acquisitions. Additionally, Sam was responsible for commercial and industrial project pricing, sales operations, management of financial partners, and procurement for projects ranging from \$100,000 to \$10 million. He oversaw the growth of the Commercial & Industrial Sales program at Mercury from \$7 million in 2008 to \$60 million in 2011.

Joining ReVision Energy in 2013, Sam's responsibilities include oversight of commercial and industrial project development and financing, development and maintenance of relationships with ReVision's major project financing partners, project due diligence, and placement of capital for project finance. Sam is also responsible for the organizational leadership and strategic direction of ReVision's Commercial & Industrial program. Sam has overseen the growth of commercial and industrial sales and annual revenue at ReVision Energy from under \$1 million in 2013 to over \$10 million projected by end of 2016.

Jason Rich, Esq., *Project Financing Counsel*



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Jason joined ReVision Energy in 2017 after spending 10 years as in-house counsel with the first company to successfully pioneer and commercialize the solar PPA business model. Jason helped that business grow from a modest privately held start-up to becoming the world's largest publicly traded renewable energy company. He is pleased to be able apply the lessons learned through that experience to advance ReVision Energy's mission of leading the region's transition away from fossil fuels to sustainable solar energy. Prior to that role Jason spent 5 years working as lender's counsel and developer's counsel on renewable energy projects at a regional law firm.

Jason especially enjoys working with towns, municipalities and other forward-looking organizations to achieve their solar energy goals by partnering to create the PPAs, installation agreements and other project agreements necessary to make these sustainable solar energy projects a reality.

Jason is a 1996 graduate of College of the Atlantic (B.A. Human Ecology) and a 2002 graduate of Pace University School of Law (J.D., Cum Laude with Certificate in Environmental Law) and is admitted to practice law in Maine and New Hampshire.

Geoff Sparrow, P.E., *Director of Engineering*



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Geoff is one of the most knowledgeable and experienced solar professionals in northern New England, having guided the design and installation of thousands of solar energy systems since joining ReVision Energy in 2006. After graduating with a BS in Mechanical Engineering from the University of New Hampshire, he worked for one of the largest mechanical contracting firms in the state before starting his own small construction firm. Since joining ReVision Energy, Geoff achieved NABCEP certification as both a solar PV and solar thermal installer and has become a licensed Professional Engineer. His role in all commercial scale projects is to ensure that the final system design and installation exceed all NABCEP and National Electric Code requirements; additionally, Geoff oversees the Engineering team in both design and installation.

James Hasselbeck, *Operations Manager*



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James has been involved in the design, engineering, and construction of public and private renewable energy projects since 2006. After graduating from the University of Vermont, James went on to work at Waterline Alternative Energies, a startup focused on the design and construction of solar and wind projects. He was also the Electrical Division project manager of Waterline Industries, parent company to WAE and a general contractor focused on the design and construction of water and wastewater treatment facilities throughout New England. These critical infrastructure projects ranged in value from \$200,000 to \$12 million and spanned 3-24 months of new build and retrofit construction.

During his time with Waterline, James developed, designed, and project managed several MW of photovoltaic projects. These included many American Recovery and Reinvestment Act (ARRA) funded projects, US Department of Agriculture (USDA) grant funded projects, one of the first municipal PPAs signed in Massachusetts, and one of the largest state funded solar projects in Massachusetts.

Joining ReVision Energy in 2013, James maintains responsibilities for all construction operations for our New Hampshire and Massachusetts installation teams. His responsibility includes design, estimating, project management, and commissioning for our residential, commercial and municipal installations. He has successfully completed several MW of photovoltaic projects with ReVision. These projects include a 651 kilowatt (kW) ground mounted array for a municipality in Durham, NH; a 340 kW ground mounted array for a school district in Meredith, NH; a 375 kW roof and ground mounted installation for a private school in Andover, NH; a 256 kW ground mounted installation for a water district in Eastman, NH; a 127 kW roof mounted installation for a state university in Plymouth, NH; and a 71 kW pole mount installation for a business in Kensington, NH. James is a NABCEP certified solar PV installer and has completed over 120 hours of Interstate Renewable Energy Council (IREC) certified Advanced Solar Design courses.

Hans Albee, P.E., *Solar Energy System Designer*



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Hans has been at the forefront of solar energy development in northern New England since joining ReVision Energy in 2007. Hans is responsible for engineering oversight, project management, and branch management at ReVision Energy's Liberty, Maine, branch and leads energy storage development initiatives companywide. He has been the lead engineer and project manager on several pioneering solar installations in Maine, including the first solar photovoltaic system installed on a landfill. Hans received a BS in Mechanical Engineering from the Thayer School of Engineering at Dartmouth College, and he is a licensed Professional Engineer in Maine. He also holds a NABCEP solar PV installer certification.

Bill Levay, Master Electrician



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Bill has over 12 years of electrical construction experience and has been a vital part of ReVision Energy's team since 2011. Bill earned his AAS in Electrical Construction from Kennebec Valley Community College in 2006 and his BA in Business from the University of Maine at Farmington in 2010. Prior to joining ReVision, Bill worked for solar startup Vox Energy Solutions in Pittsburg, Pennsylvania. Bill has overseen hundreds of residential and commercial installations as ReVision Energy's companywide Master Electrician. He splits time between all four offices, establishing companywide standards and implementing industry-best installation practices. Bill currently holds Revision's Corporate Electrician license in Massachusetts and New Hampshire. He also holds his Master Electrician license in Maine, Vermont, and Connecticut. Bill is a certified NABCEP solar PV installer and a member of the International Association of Electrical Inspectors (IAEI).

Zach Good, Commercial Project Manager



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Zach has been involved in the solar industry since 2011 almost immediately after completing his BS in Environmental Health from the University of Maine at Farmington. For the first two years of his career in renewables Zach worked for a small company out of Boston, MA where he quickly became a leader amongst their modestly sized installation crew. Since joining ReVision Energy in 2014 Zach has played key roles as an installer and residential project manager for a rapidly growing installation team and even faster evolving industry. More recently Zach has joined ReVision's thriving CI&I division as a Commercial Project Manager where he works to ensure that all aspects of commercial installations not only meet but exceed client expectations. Zach has personally managed over 7 megawatts of solar projects and is responsible for everything ranging from cost estimation and budget tracking, sub-contractor negotiations and management, site supervision and executions of technical specifications, all the way to client interactions and updates. Zach is a creative and practical problem solver and brings enthusiastic energy to a team of absolutely top notch professionals that make ReVision Energy the number one ranked renewable energy contractor in New England.

Josh Baston, *Project Supervisor*



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Josh has over 8 years of solar design and installation experience and has built hundreds of commercial and residential installations. He carries a Journeyman Electrician license in both Maine and New Hampshire and has been a NABCEP certified solar PV installer since 2011. After earning a BS in Geology from Northeastern University in 2004, Josh worked in the environmental industry prior to joining ReVision Energy in 2008. He now works with both ReVision's design and commercial operations teams to help ensure efficient, safe, and code compliant commercial installations. Josh has extensive experience with GIS mapping, site layouts, interconnection work, and permitting for commercial and solar farm installations.

Gwen Baizley, Cultural Compliance Director



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In May 2015 Gwen joined the ReVision Energy team to help direct the Human Resource functions for the talented team of ReVision Energy employees. With a focus on strong Company Culture, an encouraging and collaborative work environment and advancement of the mission to reduce the fossil fuel emissions in Norther New England the position has been incredibly rewarding and fun. With over 220 team members in 5 locations there are now a Safety Director and Recruitment and Development Specialist on her HR team.

Prior to joining ReVision, Gwen spent 8 years with Whole Foods Market in various HR positions. She is a graduate of California State University; Stanislaus with a B.S. In Business Administration, concentration in Human Resources.

Dan Weeks, Director of Market Development



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Dan first began working on solar as a member of the award-winning Monadnock Solar Race Car Team in the 1990s. He brings over fifteen years' experience raising capital, working with local/state policymakers, and managing complex projects in the nonprofit and public sector. As ReVision Energy's Director of Market Development, Dan's responsibilities include developing large-scale solar projects with commercial and institutional partners, promoting policy change to accelerate the clean energy transition, educating the public about climate change and clean energy, and providing strategic direction in marketing and sales. A graduate of Yale and Oxford, Dan has written on solar and other topics in state and national media.

Project Experience

Colby Sawyer College



Camden Hills Regional High School



Proctor Academy



City of Belfast, ME



Town of Durham, NH



Town of Windham, ME



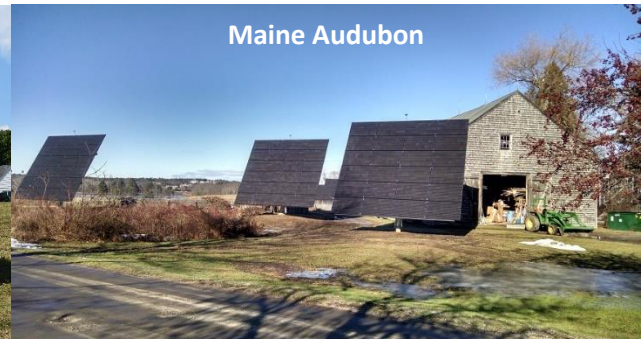
The Nature Conservancy



Avesta Housing



Maine Audubon



Throwback Brewery



Grandy Oats



Eastman's Corner



City of South Portland Landfill

The South Portland municipal landfill project was installed on a closed municipal landfill located off Highland Avenue in South Portland. This project utilized a closed landfill which was otherwise un-usable space to permit and build a flagship PV array for the City of South Portland. Construction on this project began in late June 2017 and the system was interconnected and commissioned on October 13th 2017.

Project Location: 929 Highland Ave, South Portland, ME

Commercial Operation Date: October 13, 2017

Project Details:

- 1015.7 kW (DC) grid-tied ground mounted solar array
- Installed 2944 REC 345W solar modules
- Installed 22 SMA Sunny Tripower 30000TL-US inverters mounted directly to PV racking
- Installed Solar Flex Rack concrete ballasted foundation racking system consisting of 480 ballasted foundations which were formed and then poured in place on the landfill cap utilizing pump trucks and concrete buggies
- Permitted in-house and maintained compliance with stringent Maine Department of Environmental Protection (MDEP) regulations for installing solar on a landfill cap
- Installed Also Energy revenue grade data acquisition system with weather station
- Installed and maintained erosion control which was inspected weekly by the City
- Installed 1000A service to be net metered on nine City of South Portland utility accounts

Project Challenges:

This project was only the second landfill solar array to be permitted in the State of Maine and at over 1 MW DC is by far the largest. Permitting required lengthy design submittals to MDEP and was started 6 months prior to construction. Installing on a landfill cap required construction management practices ensuring that the system could be installed efficiently without allowing any wheeled or high impact vehicles on the landfill cap. On cap trenching was limited to 6" of depth and so all conduits had to be bermed to ensure NEC burial depth.

Reference: Julie Rosenbach, Sustainability Director, City of South Portland jrosenbach@southportland.org



Midcoast Regional Redevelopment Authority (MRRA) - Brunswick Landing

The MRRA project was installed on the old Brunswick Naval Air Station, now known as Brunswick Landing. The redevelopment of the Air Station is guided by MRRA. As part of redeveloping the Air Station after its closure, a self-contained microgrid was installed. The MRRA project is located on six acres of the airfield. Construction began in late October, and was completed in late December

Project Location: Pegasus St., Brunswick, ME

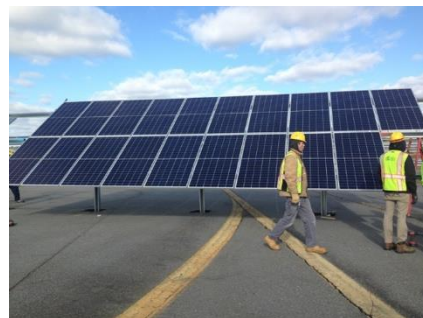
Commercial Operation Date: December 27, 2017

Project Details:

- Ground-mount solar PV system with a 1,528 kW (DC) array rating
- Installed 2,560 REC 345W, and 2,016 REC 320W PV solar panels
- Installed 34 SMA Sunny Tripower 30000TL-US inverters mounted to PV Racking
- Installed G-Max driven post ground-mounted racking system, with galvanized steel mounting rails and 708 galvanized steel posts with an embedment depth of 6 feet
- 800 feet of underground primary line extension via trench-less directional boring so that the system POI is in the center of the array footprint.
- Integrated the new PV system into existing microgrid via a 1,600A 480V 3 phase combiner panel
- Installed a Locus revenue grade data acquisition system

Project Challenges: A condensed timeline due to material availability and manufacturer delays resulted in the racking and module construction being completed in under four-week. The labor force was increased due to said time constraints requiring 25+ personal on site at one time, leading to the project being completed in just 50% of projected timeline. Additionally, the project site is an active airport requiring heightened safety precautions and strict access procedures, while extreme weather conditions (Gail force wind, rain, frigid cold, and snow) have added additional constraints to an already tight time-line. Finally, a condition of interconnection with the outside utility is that no power from the PV system can be exported beyond the MRRA microgrid. This is accomplished with a 1.5-mile line of sight radio communication system connecting the PV array to a meter at the point of microgrid/grid interconnection, this meter will throttle down and eventually disconnect the PV array if it is producing more than the microgrid needs and is in danger of exporting power to the outside utility.

Reference: Thomas Brubaker, Public Works and Utility Manager, tomb@mrta.us



Phillips Exeter Academy - Fieldhouse

ReVision installed the largest rooftop solar array of any school in New Hampshire at Phillips Exeter Academy. The ballasted rooftop array was recently installed on the academy's new, 84,574-square-foot field house in Exeter. Generating electricity with sunshine will save the academy more than \$2 million in energy costs over the life of the system and will offset the majority of the athletic facility's electric load. On an annual basis, the array will generate roughly 598,000 kilowatt hours of solar electricity. The solar power generated by the array is equivalent to offsetting 629,694 pounds of carbon pollution per year.

Project Location: Exeter, NH

Commercial Operation Date: October 29, 2017

Project Details:

- Grid-tied roof mounted solar array
- 535.44 kW (DC) array rating
- Installed 1552 REC 345W solar modules
- Installed 8 SMA Core 50kW inverters
- Installed Ecolibrium Ecofoot 2+ ballasted racking on the roof
- Installed Also Energy revenue grade data acquisition system

Project Challenges: Installing a system during the fall and beginning of winter in New England always presents challenges. Unpleasant weather for working outside on a large roof is to be expected. The installation crew had deal with rain and wind while installing this project. The array was also part of new construction, requiring us to be in constant communication with the general contractor regarding timing of the installation and delivery of materials.

Reference: Mark Leighton, Director of Projects and Building Systems, mleighton@exeter.edu



Town of Camden

ReVision installed a 122 kW dc array for the Town of Camden to offset nearly 159,000 kWhs of electricity usage ever year. This is Camden's first municipal solar project, and we hope there will be many more. Members of the Town's Energy and Sustainability Committee helped launch and coordinate this initiative and, along with converting downtown streetlights to LED, Camden is making considerable strides toward reducing its energy consumption and carbon footprint

Project Location: Sagamore Farms, Camden, ME

Commercial Operation Date: January 3, 2018

Project Details:

- Grid-tied ground-mount solar PV system with a 122.85 kW (DC) array rating
- Installed 351 Sunpower 350W solar modules
- Installed 13 SMA Sunnyboy 7.0-US inverters
- Installed MSI Sigma II+ earth screw ground-mounted racking system
- Installed a Solar-Log 200 revenue grade data acquisition system

Project Challenges: ReVision had to time the installation of the mounting system to be completed before the ground froze for the winter. Once the earth screws were installed, the solar panels could be installed if the weather cooperated. With several December snow storms, the weather did its best to keep us from completing the installation on time. Freezing rain and snow reduced the number of days suitable for installation. In the end, the install team ended up completing the project on schedule despite the poor weather.

Reference: Audra Caler-Bell, Town Manager, ACaler-Bell@camdenmaine.gov



City of Belfast – Landfill Project

ReVision Energy installed a 45.9 kW (DC) rooftop solar array on the City of Belfast's fire station before partnering with the City to install the state of Maine's first solar landfill project. While redeveloping landfills is a challenge, ReVision Energy and the City of Belfast proved that once barren land can be transformed into an energy-producing asset. The landfill project offsets approximately 20% of the City of Belfast's municipal electric load with its 120.78 kW (DC) solar capacity.

Project Location: Pitcher Road, Belfast, ME

Commercial Operation Date: December 31, 2015

Project Details:

- Grid-tied ground mount solar PV system
- 120.78 kW (DC) array rating
- Installed 396 QCell 305W solar modules
- Installed 12 SMA Sunny Boy 7700TL-US-22 single phase inverters
- Installed Schletter PVMax ballasted ground-mounted racking system consisting of 600,000 pounds of concrete ballast and 2,800 feet of aluminum rail
- Integrated the new PV system into new electrical infrastructure; the process involved a 500A 120/240V single-phase interconnection
- Installed a Solar Log revenue grade data acquisition system

Project Challenges: This project was the first solar installation to be permitted and built on a capped landfill in Maine. ReVision Energy worked closely with the Maine Department of Environmental Protection to complete the required permitting package. The capped landfill permit required zero penetration of the clay encapsulating layer, which in many cases was only six inches below the surface. This restriction drove development of innovative racking, electrical conduit, and equipment access solutions. Close coordination with the municipal government, local utility, earthworks contractor, electrical subcontractor, and concrete subcontractor allowed the project to be completed and commissioned in only 63 days after receiving the signed contract.

Reference: Sadie Lloyd, Assistant Planner, slloyd@cityofbelfast.org



Camden Hills Regional High School

Camden Hills Regional High School hosts a student-run club called the Windplanners. After researching, planning, fundraising, and ultimately installing a 155-foot wind turbine on the school's campus in 2012, the next generation of Windplanners set their sights on solar. ReVision Energy is proud to have partnered with this inspiring group of students and the high school's faculty and staff, installing 150 kW (DC) worth of solar across multiple roofs at the high school.

Project Location: 25 Keelson Drive, Rockport, ME

Commercial Operation Date: October 24, 2015

Project Details:

- Grid-tied rooftop solar PV system
- 149.94 kW (DC) array rating
- Installed 588 QCell 255W solar modules
- Installed 2 SMA Sunny Tripower 15000TL-US, 4 SMA Sunny Tripower 20000TL-US, and 1 SMA Sunny Tripower 12000TL-US inverters in coordination with the school's facilities team staff to utilize existing space within the school while maintaining NEC and manufacturer required ventilation and workspace clearances
- Installed more than 4,100 feet of aluminum mounting rail
- Maintained OSHA-compliant rooftop working conditions on five separate roof areas
- Coordinated with the local utility and the school's facilities team staff to install 200A breaker in a 2000A 277/480V three-phase Main Disconnect Panel
- Installed a Solar Log revenue grade data acquisition system

Project Challenges: Final project approval was received only a few weeks before the start of school. Module delivery was arranged directly to the job site, allowing all equipment, including racking, modules, inverters, and conduit, to be installed prior to the arrival of students. AC and DC wiring, AC interconnection, and commissioning were all carried out in coordination with school facilities team and administrative staff to minimize classroom disruption once school began. Array roofs were 45 feet above ground level, requiring specialized material and personnel lifts to facilitate a timely installation.

Reference: Margo Murphy, Science Department, margo_murphy@fivetowns.net



Company Culture

Distributed Leadership

ReVision Energy rejects the idea that the only way to achieve efficient decision making and effective communication is through a conventional top down hierarchy. We believe that empowering all employees to innovate and to lead is consistent with our values and has the potential to unleash the great power of distributed leadership. Leadership is often enacted with those not in official leadership positions, thus distributed leadership defines leadership in terms of activity and actions rather than job titles. Distributed leadership can be more responsive and more flexible than a hierarchy, and it also fosters creativity as well as organizational strength through paralleling of critical functional roles.

Since our inception, the managing partners of ReVision have always practiced the distributed leadership model. Bill, Phil, Fortunat and Dan work together to solve key problems when necessary, but delegate internally to divide and conquer the myriad of everyday challenges whenever possible.

Our branches are managed by a team of branch managers in each shop. The branch manager groups are responsible for setting shop level goals and developing and implementing strategic plans to achieve those goals, as well as maintaining the physical offices and all the resources within each shop.

We also have a number of functional groups related to job roles found in all of our branches, such as marketing, sales, operations, etc. These functional groups exist across the branches and are each supported by a distributed leadership team, typically consisting of one individual from each branch. Team leaders support the team in their branch and work together to address companywide questions related to their functional area of responsibility. The team leaders are also the primary conduit for communication between branches and between functional groups. The primary responsibilities of each distributed leadership group are embodying the values of ReVision Energy and supporting the team towards the achievement of our mission.



Sustainable Offices

At ReVision, we strive to practice what we preach—reducing our own carbon footprint in addition to helping our clients and business partners reduce theirs. Our Portland shop boasts two awning-mounted solar PV systems, two electric vehicle charging stations, a fully-automated pellet boiler, and air source heat pumps. The Portland office also participates in Garbage to Garden’s compost program, and has its own outdoor gardening space installed and maintained by ReVision employees. Our Liberty branch boasts a rooftop solar PV system, solar hot water system, and gasifying wood boiler for space heating. Our Brentwood office boasts an awning-mounted solar PV system, electric vehicle charging station, solar hot water system, a fully-automated pellet boiler, and air source heat pumps for space heating.

ReVision’s in-house “Green Team” is taking a comprehensive approach towards reducing the carbon footprint of each office, addressing everything from efficiency upgrades to improving waste streams. We offer incentives for employees who commute via bike, carpool, and on foot when possible, and we offer telecommuting options when applicable.



Employee Benefits



At ReVision Energy, we strongly believe in rewarding our employees for their dedication and exemplary work. The B Corp Declaration of Interdependence states that a B Corp is “purpose-driven and creates benefit for all stakeholders.”² This is why ReVision Energy offers our employees company-paid medical insurance, dental insurance, life insurance, disability insurance, 401(k) with company match, paid time off, paid volunteer time, and a stock appreciation rights program through which employees can share in the growth of our company.

In accordance with our vision, mission, and values, ReVision Energy also offers our employees a renewable energy discount program, making solar more accessible to the dedicated people who help us move society from fossil fuels to renewable resources.

² B Lab, *The B Corp Declaration*. <https://www.bcorporation.net/what-are-b-corps/the-b-corp-declaration>

Volunteering

ReVision Energy is committed to making a difference in the communities in which we work and live. Driven by our core values, ReVision encourages employees to volunteer by offering eight hours of paid volunteer time each year and by organizing volunteer opportunities through which employees can take advantage of this offer. Our employees have been recognized as “Volunteers of the Year,” and ReVision has been repeatedly recognized for our dedication to social responsibility. (Image: ReVision employees participate in a local beach clean-up with the Surfrider Foundation.)



Employee Wellness

At ReVision Energy, we recognize that a work-life balance is an important part of mental health and well-being, and we appreciate that our employees have passions and hobbies outside of the workplace. We offer a flexible work week and telecommuting options when applicable, and we work to accommodate all



requests for time off. We are happy to offer frequent company outings such as whitewater rafting, skiing, sailing, rock climbing, and other team-building adventures that allow us to get outside and enjoy the environment we are working to preserve. We are proud to have been recently named to the 2016 75 Best Places to Work in Maine list! (Image: ReVision Energy's 2015 annual companywide whitewater rafting trip, courtesy of North Country Rivers in Bingham, ME, a ReVision Energy customer.)

Safety Policy

ReVision Energy is dedicated to meeting and exceeding OSHA standards. All of our installers and crew members go through regular safety training in order to maintain the safest of working environments. The following is our Safety Guidelines to a safe workplace. OSHA required programs are provided in further detail in our company safety manual.

Objective

The Safety Policy of ReVision Energy is designed to comply with the standards of the Occupational Safety and Health Administration, and to endeavor to maintain a safe and injury/illness free workplace. ReVision Energy's safety policy is set forth in this manual, designed to outline the potential safety hazards that may occur in and out of the field, to learn good safety practices so to avoid accident or injury and to make aware an action plan should an emergency occur. This manual is available for all employees for use and reference; a copy shall be kept in the office at all times and will be sent to the jobsite upon request.

Compliance with the following Safety Policy and all items contained therein is mandatory for all employees of the company. Employees of the company are responsible for knowing and understanding this policy. Employees should know and understand safe working procedure and work safety action plans and should ask the Safety Coordinator or an owner if any part of these procedures or an action plan is not made clear. Employees should know where safety tools such as first aid kits, fire extinguishers, eye glasses, ear plugs, hard hats and any other items mentioned within this manual are at all times, and should ask if they do not know. Employees should know what to do if an emergency occurs and should always be alert and aware of their surrounding so to avoid injury on the job site. The authorization and responsibility for enforcement has been given to the Safety Coordinator. The owners of the company share in this responsibility as well. The responsibility for maintaining a safe work environment is given to all employees of the company. A violation of the safety policy may be noted and can result in disciplinary action, including termination.

Implementation

This Safety Policy supports three fundamental means for maximum employee involvement:

- A. Management commitment to safety.
- B. Effective job safety training for all categories of employees.
- C. On site safety meetings at commencement of job.

Management Commitment to Safety

There are a number of hazards in the workplace, especially in the field of work that ReVision Energy employees perform. It is the company's desire and commitment to identify the potential hazards on the jobsite and to implement work safety practices and policy to be adhered by all employees. Some hazards on the jobsite may include lifting and working with heavy objects, climbing on ladders and roofs, working with power tools, and working in inclement weather conditions. Wearing protective clothing and gear,

learning proper lifting and carrying techniques, staying cool and hydrated are all ways to avoid workplace injury.

Effective Job Safety Training for all Categories of Employees

As a part of the company's commitment to safety, the company is committed to ensuring that each employee is properly trained to know and understand all safety practices put into place. This includes but is not limited to knowing and understanding safe lifting and carrying practices, safe practices for climbing on roofs and ladders, working with power tools, working with electrical panels, and working in inclement weather or in small spaces.

On Site Safety Meetings at Commencement of Job

At the commencement of each job the Project Manager will go over the details of the job at the job site and include with those details any and all potential safety hazards that may occur and clarify the safety practices that are in place so to avoid these hazards. Once gone over the members who are working on the job will sign off that they attended this safety meeting.

Basic Safety from A to Z

- A. Work smart and be aware of your surroundings. Please let a project manager or owner know if you are not feeling well or if there is any reason you may not be able to perform safely on the jobsite.
- B. Compliance with applicable federal, state, county, city, client, and company safety rules and regulations is a condition of employment.
- C. All injuries, regardless of how minor, must be reported to the Safety Coordinator immediately. An OSHA 301 form should be filled out with each incident of injury.
- D. Hard hats must be worn when: objects might fall from above and strike you on your head, when you may bump your head against fixed objects such as exposed pipes or beams, when there is a possibility of accidental head contact with electrical hazards. Alterations or modifications of the hat or liner are prohibited. Hats must be worn with the bill facing forward.
- E. Appropriate eye or face protection must be worn when exposed to eye or face: hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
- F. Fall Protection Requirements: OSHA approved Fall Protection requirements must be adhered to at all times. Each employee engaged in any work activities on any surface 6 ft. or more above a lower level with unprotected sides or edges must be protected from falling through the use of guardrails, safety nets, or personal fall protection arrest systems.
 - 1. Only trained workers shall be allowed to work in attics and on roofs, and only as necessary to complete the construction of the system being installed.
 - 2. Materials and equipment for the work shall be located conveniently close to the workers.
 - 3. Materials and other object which could pose impalement hazards shall be kept out of the area below where workers are working, or properly guarded.
 - 4. While attic or roof work is in progress, workers not involved in such work shall not stand or walk below or adjacent to any openings in the ceiling where they could be struck by falling objects.



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- 5. When adverse weather, such as high winds, rain, snow, or sleet creates a hazardous condition, operations shall be suspended until the hazardous condition no longer exists.
- G. Clothing must provide adequate protection to the body. Shirts must have at least a tee sleeve. Shirts with sleeves and long pants will be worn at all times. No shorts are to be worn on projects. Sturdy work boots with rigid, slip resistant soles are required. No clogs, tennis shoes or loafers are permitted.
- H. All personnel will be required to attend safety meetings as stipulated by project requirements in order to meet OSHA Safety Standards.
- I. Firearms, alcoholic beverages or illegal drugs are not allowed on company property or in company vehicles at any time. When drugs are prescribed by a physician (that alters your physical performance), an owner must be informed. The use or possession of illegal drugs or alcoholic beverages on the jobsite will result in immediate termination.
- J. Housekeeping shall be an integral part of every job. All employees are responsible for keeping their work areas clean and hazard-free. Clean up is required when a job is finished at the end of the day.
- K. Burning and cutting equipment shall be checked daily before being used. Flash back arresters shall be installed at the regulators on both oxygen and LP bottles. All gas shall be shut off and hoses disconnected from bottles and manifolds at the end of the work day. Caps shall be replaced on bottles when gauges are removed. When gauges are removed and caps replaced, the oxygen and LP bottles shall be separated into storage areas no less than 20 feet apart with a No Fire or Smoking sign posted and a fire extinguisher readily available. Makeshift field repairs will not be allowed.
- L. Drinking water containers are to be used for drinking water and ice only. Stay hydrated and cool when working in hot conditions. Wear sunscreen when working in sun for extended periods of time.
- M. All tools whether company or personal, must be in good working condition. Defective tools will not be used. Examples of defective tools include chisels with mushroomed heads, hammers with loose or split handles, guards missing on saws or grinders, etc.
- N. All extension cords, drop cords, and electrical tools shall be checked, properly grounded with ground fault interrupters (GFI=s), and color-coded by a designated competent person each month. This shall be part of the assured grounding program. Cords and equipment that do not meet requirements shall be immediately tagged and removed from service until repairs have been made.
- O. Horseplay on the jobsite is strictly prohibited.
- P. Glass containers or bottles of any kind are not permitted on jobsites or in company vehicles.
- Q. The jobsite speed limit is 10 MPH. No employee is permitted to ride in the bed of a truck standing up or sit on the outside edges of a truck. Employees must be sitting down inside the truck or truck bed when the vehicle is in motion. Riding as a passenger on equipment is prohibited unless the equipment has the safe capacity for transporting personnel.
- R. Adequate precautions must be taken to protect employees and equipment from hot work such as welding or burning. Fire extinguishing equipment shall be no further than 50 feet away from all hot work. Used fire extinguishers must be returned to the office to be recharged immediately. Use of welding blinds is required in high traffic areas.



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- S. All scaffolding and work platforms must be built and maintained in accordance with OSHA specifications. All ladders must be in safe condition without broken rungs or split side rails. Damaged ladders shall be removed from service. Ladders shall be secured at the top and bottom and extend three (3) feet past the working surface. Metal ladders around electrical work are prohibited. A step ladder shall never be used as an extension ladder. A step ladder must only be used when fully opened with braces locked.
- T. Report all unsafe conditions and near accidents to the project manager so corrective action can be taken.
- U. All floor openings or excavations shall be barricaded on all sides to ensure employees are aware of the hazards. Floor holes shall be covered, with the covers secured and clearly marked.
- V. Warning signs, barricades, and tags will be used to fullest extent and shall be obeyed.
- W. All OSHA Safety Standards will be followed for job processes where respiratory protection is required, at jobs where we perform excavation, and when confined space entry is a concern.
- X. A fall protection plan must be written out for each commercial jobsite.
- Y. Know where all safety equipment is in the shop, or on the job site. Let the Safety Coordinator know if any safety equipment is running low, or not in working order.
- Z. Report any injury immediately and take action. Call 911 if you see an emergency happening; help the victim to the extent your training allows. Call the office if an emergency on the jobsite has occurred once all other appropriate measures have been taken. The Safety Coordinator will ensure the incident is documented, and reviewed to determine if it could have been prevented.

Working smart and staying alert will help to prevent workplace injury. Understanding workplace hazards and how to prevent them is the underlining goal of ReVision Energy's Safety Policy. Understanding what to do if an emergency occurs can prevent confusion and can ensure that actions are taken appropriately, as quickly and as efficiently as possible. The Safety Coordinators from each branch will ensure that each employee understands the potential safety hazards and will ensure that each employee has been given proper training to safe working practices. Project managers will hold on site safety meetings at the commencement of each job. Other safety meetings will be held periodically as seeming necessary. ReVision Energy is committed to providing, maintaining, and continuously improving our safe work environment; it is the responsibility of each and every employee to maintain and regulate this policy.

Insurance

The following is a summary of ReVision Energy Inc.'s insurance policies. For more information, please contact us.

Automobile

Energi, HDI Global

Broker: Murphy Agency

Inland Marine

Acadia Insurance

Broker: United Insurance

General Liability

Liberty Mutual

\$2M aggregate, \$1M per occurrence

Broker: United Insurance

Professional Liability & Pollution Incident Liability

Houston Casualty Company

\$1M aggregate, \$1M per claim

Broker: United Insurance

GL Commercial Umbrella

Liberty Mutual

\$2M annual aggregate, \$2M per occurrence

Broker: United Insurance

Workers Compensation

Energi, HDI Global

Covered in ME, MA, and NH

Broker: Murphy Agency



ⁱ Pursuant to IRS rules, future buyout estimates may be expressed as an amount equal to the greater of Fair Market Value or a schedule of values. See IRS Publication 561: <https://www.irs.gov/publications/p561/ar02.html#d0e139>; and 22 U.S. Code § 7701(e)(4)(A)(iv) <https://www.law.cornell.edu/uscode/text/26/7701> (which prohibits solar PPAs financed with ITC proceeds from including any option or requirement providing for the host's purchase of the solar equipment at any price less than its fair market value).

ⁱⁱ US Energy Information Administration, November 9, 2017. https://www.eia.gov/electricity/data/state/avgprice_annual.xlsx; 3.2% represents the simple average annual rise of the Total price for the Total Electric Industry in all six New England states 2003-2016.

ⁱⁱⁱ US Energy Information Administration, Annual Energy Outlook 2018, "Table 8. Electricity Supply, Disposition, Prices & Emissions", February 6, 2018. https://www.eia.gov/outlooks/aeo/excel/aeotab_8.xlsx; 2.5% represents the simple average annual rise in the nominal End-Use Prices for the All Sectors Average 2017-2040.

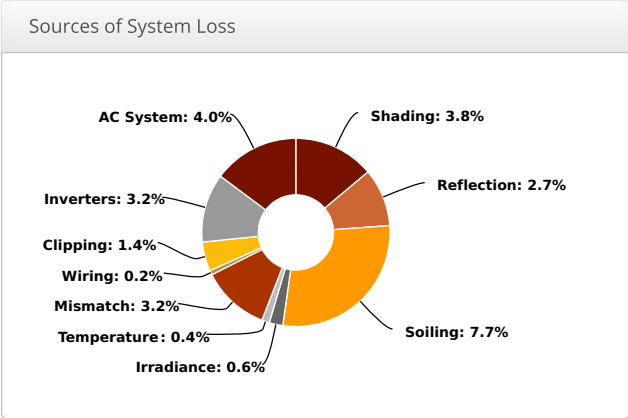
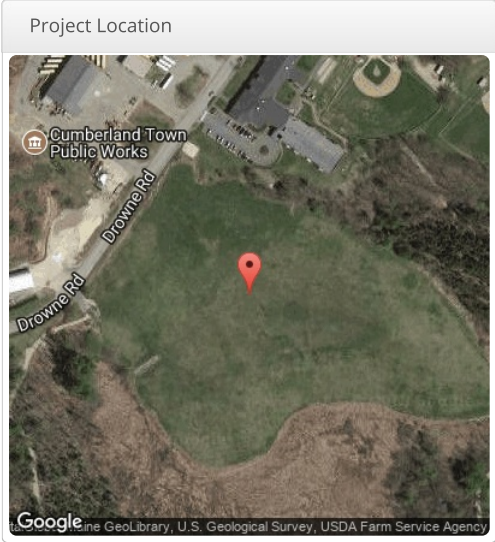
APPENDIX A:

Town of Cumberland
Landfill HelioScope

2018.03.29 - RFP Response Cumberland Landfill, Drowne Road, Cumberland, ME

Report	
Project Name	Cumberland Landfill
Project Address	Drowne Road, Cumberland, ME
Prepared By	Lukas Brostek luke@revisionenergy.com

System Metrics	
Design	2018.03.29 - RFP Response
Module DC Nameplate	474.7 kW
Inverter AC Nameplate	360.0 kW Load Ratio: 1.32
Annual Production	617.5 MWh
Performance Ratio	75.8%
kWh/kWp	1,300.8
Weather Dataset	TMY, PORTLAND, NSRDB (tmy2)
Simulator Version	0bfe9118a6-e3e6521bb8-f76514897c-d7478aeac6





Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,440.9	
	Adjusted Global Horizontal Irradiance	1,440.9	0.0%
	POA Irradiance	1,716.5	19.1%
	Shaded Irradiance	1,652.1	-3.8%
	Irradiance after Reflection	1,607.6	-2.7%
	Irradiance after Soiling	1,484.1	-7.7%
	Total Collector Irradiance	1,484.1	0.0%
Energy (kWh)	Nameplate	704,084.4	
	Output at Irradiance Levels	699,626.5	-0.6%
	Output at Cell Temperature Derate	697,128.6	-0.4%
	Output After Mismatch	675,066.8	-3.2%
	Optimal DC Output	673,659.2	-0.2%
	Constrained DC Output	664,540.9	-1.4%
	Inverter Output	643,248.0	-3.2%
	Energy to Grid	617,518.0	-4.0%
Temperature Metrics			
Avg. Operating Ambient Temp			10.7 °C
Avg. Operating Cell Temp			17.8 °C
Simulation Metrics			
		Operating Hours	4719
		Solved Hours	4719

Condition Set												
Description	Condition Set - TMY2, 35D											
Weather Dataset	TMY, PORTLAND, NSRDB (tmy2)											
Solar Angle Location	Project Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a		b		Temperature Delta						
	Fixed Tilt	-3.56		-0.075		3°C						
	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	M	A	M	J	J	A	S	O	N	D
	14.4	31.5	4	4	4	4	4	4	4	4	4	26.1
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	4.00%											
Module Characterizations	Module						Characterization					
	Q.PLUS L-G4.2 345 (Hanwha Q Cells)						Hanwha_Qcells_QPLUS_L-G4.2_345_Ref5.PAN, PAN					
Component Characterizations	Device								Characterization			
	CPS SCA60KTL-DO/US-480 V1.2b (Chint Power Systems)								Manufacturer			

Components		
Component	Name	Count
Inverters	CPS SCA60KTL-DO/US-480 V1.2b (Chint Power Systems)	6 (360.0 kW)
Combiners	14 input Combiner	4
Combiners	15 input Combiner	2
Strings	10 AWG (Copper)	86 (14,436.0 ft)
Module	Hanwha Q Cells, Q.PLUS L-G4.2 345 (345W)	1,376 (474.7 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	16	16-16	Along Racking

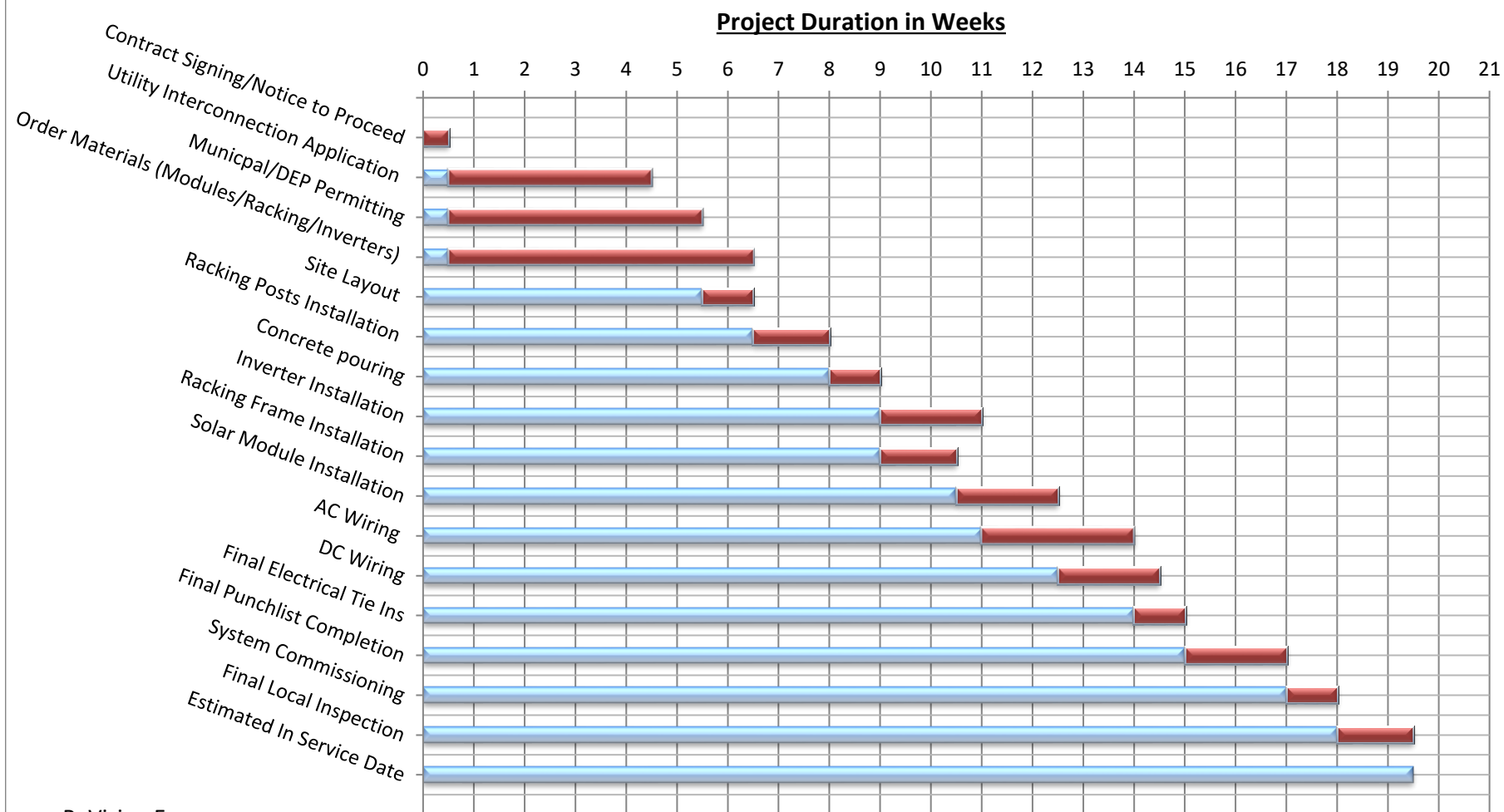
Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Portrait (Vertical)	35°	180°	24.0 ft	2x8	86	1,376	474.7 kW

Detailed Layout



APPENDIX B:
Project Timeline

Town of Cumberland Landfill Preliminary Schedule



ReVision Energy
142 Presumpscot St
Portland, ME 04103
www.ReVisionEnergy.com

Blue Line Represents Activity Start Date Timeline
Red Line Represents Activity Duration
All Dates and Durations are Preliminary and Subject to Change