



State of Connecticut
Department of Administrative Services
Procurement Division

“Energy Efficiency Retrofits and Energy Cost-Saving Services for Existing Buildings”

Response to Request for Proposal #18PSX0104

Submitted on September 10, 2018

Prism Energy Services
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Prism Energy Services is SDO Certified in MA and RI. Certified Nationally through WBENC.

1.0 Proposer's Qualifications and Capability

Prism Energy Services (Prism) is pleased to offer this proposal in response to the Request for Proposals #18PSX0104 "Energy Efficiency Retrofits and Energy Cost-Saving Services for Existing Buildings" issued by the State of Connecticut Department of Administrative Services (DAS) Procurement Division. Prism's business approach and expertise have been developed over two decades of experience delivering comprehensive energy efficiency projects to customers in government, commercial, industrial, and non-profit market segments throughout the New England region. For the past 20 years we have continually refined and improved our business practices, encompassing engineering capabilities, and professionalism in project management, customer education and marketing activities. We sincerely appreciate the opportunity to submit this proposal for consideration by the DAS.

a. Type of Firm

Prism Consulting, Inc., DBA Prism Energy Services, is a professional energy efficiency services company, organized intentionally as a private, closely-held corporation. This structure lends the greatest degree of control over the conduct, services, and output of the organization, ensuring all clients receive highly personal and superior quality service. Prism Energy Services conducts our business and services our clients based on our mission statement and company values: to provide superior value through Technical Accuracy, Innovative Solutions, Ethical Behavior, and Strong Relationships with customers, vendors, and employees. Prism is a WBENC (national) certified woman-owned business. Prism Energy Services specializes in auditing; engineering; design; energy and financial analysis; utility incentive qualification; installation; post-inspection; and measurement and verification of energy efficiency measures for government, institutional, non-profit and private sector customers. Prism's experience encompasses lighting, comprehensive HVAC, building and energy control systems and custom industrial process measures. We offer full engineering and construction capabilities to design and install electric, gas, other fuels, and water conservation measures.

b. Number of Years in the Energy Business

Prism has been providing energy efficiency services to its customers for over 20 years since its founding in 1998. Prism's founder Wendy Simmons has been active in the energy efficiency industry for over 35 years, and Prism's senior level technical and business development managers each have in excess of 25 years' experience in the energy, engineering or construction industries.

c. Number and Value of Similar Contracts

Prism has been a leading energy conservation turnkey program administrator for New England utility companies, as well as one of three competitively selected ESCOs for the State of Rhode Island Master Price Agreement to perform energy efficiency projects at state and municipal buildings, as well as being a MA certified DCAMM EE Vendor. Details of relevant contracts are as follows:

- Rhode Island MPA 508 Contract: Since 2015. State and Municipal Buildings Blanket Contract. Up to \$600,000 per individual project.
- National Grid Project Expediter (PEX) Program: Since 2001. MA and RI State and Municipal Projects are served as a sub-portion of this program with NGRID staff and guidelines specific to Government Projects. In conjunction with MA Green Communities in MA and Rhode Island Infrastructure Bank in RI. Turnkey design and build energy efficiency and water savings audits and installations.
- Eversource Municipal Program: Since 2008. State and Municipal Projects served under this Program. Turnkey design and build energy efficiency and water savings audits and installations.

In addition to the above program participation, Prism has completed hundreds of energy efficiency upgrades for clients over the years. A summary of recent projects is provided in Section 2.

d. Number of full time personnel

Number of full-time personnel: 14

- Wendy Simmons, President & CEO (B.S. Univ of New Hampshire)
- Jerry Giusti, AVP Field Operations (B.S. Construction Mgmt. and Arch., Roger Williams Univ.)
- Ben Toby, Director Bus Dev (B.S. Mech Engr., M.S. Civil Engr., Univ. of California; FE, CEM)
- Cheryl Ray, Engineering Manager (BS Marine Engineering Mass Maritime)
- Kristine Gill, Engr. Project Manager (BS Electromechanical Engr, Wentworth Inst of Tech)
- Matt Jayne, Engr. Project Manager (BS Electrical & Computer Engr., Eastern Nazarene)
- Rickey Crepin, Asst. Project Manager (BS Electrical Engr, Eastern Nazarene College)
- Nick Fernandez, Mechanical Engr. (B.S. Mech Engr, Eastern Nazarene College)
- Melissa Lloyd, Lead Auditor (AA Industrial Electricity, Electrician NH #17301, ME # JY200032129)
- Andrew Detsikas, Energy Auditor (BS Industrial Tech & Energy Management)
- Doug McLeod, Construction Manager (Electrician MA #52315, RI #B-014691)
- Janet Lukas (Sales support MA/NH)
- Abby Plourde, Marketing Associate
- Ann Phillips, Office Manager

e. Accreditations and other Pre-Qualifiers

Prism maintains the following certifications as a corporation, recognizing that the strength of our organization is in the professionalism and expertise of our team members. As noted above, most of our employees have four-year technical degrees, and several hold CEM certifications and electrician licenses.

- Capital and Asset Management and Maintenance (DCAMM) Certified in MA: Certified in turnkey services for design and build energy efficiency projects for the Commonwealth of MA. Since 2013

- Women’s Business Enterprise National Council (WBENC) Certified Woman-Owned Business (WBE): National Certification (all states).

2.0 Proposer’s Experience

a. Types of Services Being Offered and Expertise in Various Systems

Prism’s services include:

- Energy auditing
- Design engineering
- Financial analysis
- Utility incentive commitment
- Construction and project management
- Commissioning
- Measurement & verification
- Operations & Maintenance
- Sustainability studies
- Project Finance

We have extensive expertise with these technologies:

- High efficiency lighting (LED)
- Advanced Lighting Controls
- Energy Management Systems (EMS)
- Weatherization and building envelope
- Variable frequency drives (VFDs)
- Advanced Motors & Industrial process efficiency
- High efficiency HVAC systems.

Prism employs both electrical and mechanical engineers with extensive experience to audit and design based on accuracy, state of the art technology, and professional project and construction management services. As shown in the project experience table in the next section, we specialize in comprehensive projects, in which two or more energy conservation measures are installed simultaneously, which enables our customers to achieve deeper long-lasting savings and to maximizing utility company efficiency incentives.

b. Projects the Firm has Managed in the Past Three Years

Over the past three years Prism Energy Services has completed a total of 69 energy efficiency projects valued at over \$6.3 million in the government, institutional, and non-profit sectors. Note, this is not all the projects completed, as we also completed many projects for clients in the private sector during this time period.

#	Name and Type of Project	Measures*	Contact Name and Number	Project Size	Annual Savings
2015					
1	Ayer Police Department	LED	Dan Sherman, (978) 772-8200 x 509	\$ 8,959	\$ 1,612
2	Bancroft School	LED / EMS	Peter Mckone, (508) 854 -9250	\$ 410,036	\$ 85,289
3	Town of Bridgewater	LED / VFDs / RTUs / EMS	Lisa Sullivan, (508) 583-1833 x 214	\$ 250,622	\$ 42,887
4	City of Brockton	LED (2 bldgs)	Dave Norton, (508) 580-7827	\$ 100,702	\$ 13,719

5	Cambridge Rindge & Latin Garage	LED	Ellen Katz, (617) 349-6956	\$ 41,142	\$ 7,969
6	Church St School	LED	Amelia Silver, (413) 233-1703	\$ 31,921	\$ 4,781
7	Dr Franklin Perkins School	LED (6 bldgs)	Steve Young, (978) 368-6445	\$ 114,251	\$ 17,891
8	Dudley-Charlton School District	LED (4 bldgs)	Richard Mathieu, (508) 943-6888 x 143	\$ 112,730	\$ 20,154
9	Hillside School	LED	Peter Mckenna, (508) 868-8061	\$ 38,661	\$ 4,426
10	Hillview Montessori Charter Public School	LED	Richard Weeks, (978) 521-2616 x 129	\$ 49,766	\$ 9,941
11	Narragansett Wastewater Treatment Plant	LED	Jeff Ceasrine, (401) 782-0637	\$ 14,695	\$ 2,894
12	Pine Cobble School	LED	Carley Stevenson, (413) 884-2571	\$ 20,674	\$ 2,144
13	St Mary's School (Our Lady of Czestochowa)	LED	Adam Cormier, (774) 239-0753	\$ 40,387	\$ 4,088
14	Sutton Elementary School	VFDs / DCV	Roger Raymond, (508) 581-1600 x 4138	\$ 169,935	\$ 26,602
15	The Derryfield School	LED	Gary Harper, (603) 624-6143	\$ 6,145	\$ 843
16	Venerini Academy	LED	Lori Ensom, (508) 753-3210 x 7060	\$ 2,654	\$ 1,746
17	Webster Fish & Game	LED	Rachel Piette/ Tracy, (508) 943-9806	\$ 3,200	\$ 1,039
18	Clark Memorial YMCA	LED / VFDs	Dave Bilodeau, (978) 297-9622	\$ 22,340	\$ 2,465
19	Unitarian Universalist Service Committee	LED / VFDs / EMS	Ethan Adams, (617) 301-4311	\$ 216,981	\$ 20,867
20	Friendly House Inc	LED	Susan Daly, (508) 755-4362	\$ 4,360	\$ 2,586
21	Cambridge Highlands	LED	Matthew Digiovanni, (617) 354-0835	\$ 88,989	\$ 4,575
22	Christopher Heights/House	LED / EC Motors	Walter Ohanian, (508) 281-8000	\$ 92,714	\$ 10,665
23	Continuing Care Management	LED	Ed Banek, (774) 276-0636	\$ 46,807	\$ 9,334
24	Farivew extended care	LED	Eric Merullo, (413) 525-6361 x 208	\$ 17,614	\$ 1,030
25	Morris Healthcare	LED	Kevin Morris, (617) 285-7503	\$ 64,346	\$ 14,297
26	Neville Communities	LED	Kate Norfleet, (617) 497-0600 x 182	\$ 58,477	\$ 8,552
27	Lebanon Hill Housing	LED	David Gagnon, (774) 230-3862	\$ 17,672	\$ 3,080
28	MHRA	LED	Jeanne Bailey, (603) 365-6518	\$ 6,609	\$ 906
total				\$2,053,387	
<u>2016</u>					
1	Town of Ayer	LED	Dan Sherman, (978) 772-8200 x 509	\$ 55,846	\$ 6,154
2	Town of Bridgewater	LED / VFD / EMS / weatherization (9 bldgs)	Lisa Sullivan, (508) 583-1833 x 214	\$ 206,958	\$ 32,535
3	Brockton Wastewater Treatment Plant	LED (exterior)	Dave Elliott, (508) 755-6101 x 232	\$ 27,430	\$ -
4	Boston University Engineering Library	LED	Tim O'Connor, (617) 353-9154	\$ 126,406	\$ 19,837
5	Charlton Police Dept	LED	Chief James Pervier, (508) 248-2251	\$ 4,573	\$ 1,093
6	Dr Franklin Perkins School	LED / VFDs	Steve Young, (978) 368-6445	\$ 34,065	\$ 7,621

7	Hampden-Wilbraham Regional Schools	LED (8 bldgs)	Sam Boyd, (413) 222-7369	\$ 324,942	\$ 36,497
8	Town of Hampton Falls	LED (3 bldgs)	Lori Ruest, (603) 926-4618 x 3	\$ 17,688	\$ 1,386
9	Town of Hopkinton	LED (4 bldgs)	Dave Daltorio, (508) 497-9738	\$ 171,695	\$ 21,692
10	Town of Lakeville	LED / weatherization / controls	Nate Darling, (508) 946-8804	\$ 134,643	\$ 22,889
11	Medway Police Station	EMS	Bob Weiss, (508) 376-7040 x 106	\$ 96,968	\$ 7,507
12	Merrimack Valley Schools	LED (8 bldgs)	Neil Barry, (603) 753-6422	\$ 147,537	\$ 25,825
13	Town of Millbury	LED (2 bldgs)	Richard Bedard, (508) 865-9501	\$ 54,894	\$ 17,478
14	City of Quincy	LED (2 bldgs)	Shelly Dein, (617) 984-8754	\$ 113,349	\$ 18,664
15	Town of Stoughton	LED / VFDs (4 bldgs)	Noreen O'Toole, (781) 341-1300 x 9201	\$ 182,087	\$ 28,538
16	Town of Sutton	LED / EC Motors / weatherization (3 bldgs)	Susan Rothermich, (508) 581-1600 x 1110	\$ 86,270	\$ 14,686
17	The Derryfield School	LED	Gary Harper, (603) 624-6143	\$ 16,156	\$ 3,584
18	YMCA Boroughs	LED	Dave Elliott, (508) 755-6101 x 232	\$ 40,407	\$ 13,568
19	Quincy Youth Hockey Arena	LED	Michelle Stenberg, (617) 479-8371 x 101	\$ 39,831	\$ 10,964
20	Community Healthlink	LED	Jake Guzman, (508) 860-1123	\$ 39,831	\$ 10,964
21	Manchester Housing Authority	LED	Jeanne Bailey, (603) 365-6518	\$ 5,405	\$ 1,530
22	NFPA	LED	Kevin Carr, (617) 984-7308	\$ 194,221	\$ 11,869
			total	\$2,121,204	
2017					
1	Ayer Spectacle Pond Water Treatment Plant	VFDs	Dan Van Schalkwyk, (978) 772-8240	\$ 27,068	\$ 14,887
2	Bart Charter School	LED	Martha Mellor, (413) 743-7311 x 126	\$ 110,255	\$ 9,537
3	Town of Bridgewater	VFDs / EMS / Boiler / Weatherization	Lisa Sullivan, (508) 583-1833 x 214	\$ 251,289	\$ 33,395
4	Bridgewater-Raynham High School	EMS	Paul Fox, Jr., (508) 279-2140 x 128	\$ 18,631	\$ 78,513
5	Dr Franklin Perkins School	EMS / VFDs	Steve Young, (978) 368-6445	\$ 104,086	\$ 35,874
6	Foxborough Regional Charter School	LED / EMS	Tony Pina, (508) 359-6032	\$ 12,850	\$ 72,161
7	Town of Hampton Falls	LED (2 bldgs)	Lori Ruest, (603) 926-4618 x 3	\$ 5,107	\$ 2,185
8	Hopkins Elementary School	LED / EMS / VFDs	Dave Daltorio, (508) 497-9738	\$ 254,850	\$ 22,657
9	Town of Kensington	LED (2 bldgs)	Paul Bannister, (603) 502-2824	\$ 41,213	\$ 5,584
10	Millbury High School	LED	Richard Bedard, (508) 865-9501	\$ 5,553	\$ 441
11	Minnechaug Regional High School	LED	Sam Boyd, (413) 222-7369	\$ 41,561	\$ 3,237
12	Nativity School of Worcester	LED	Pat Maloney, (508) 799-0100	\$ 24,668	\$ 2,379
13	Town of Oakham	Weatherization	Donna Couture, (508) 882-5549 x 307	\$ 15,850	\$ 2,695
14	St Mary's School (Our Lady of Czestochowa)	LED	Adam Cormier, (774) 239-0753	\$ 5,503	\$ 618

15	Quincy Catholic Academy	LED	Cathy Cameron, (617) 328-3830	\$ 57,625	\$ 13,375
16	University of Connecticut	LED	Dave Macintosh, (860) 486-3591	\$ 997,784	\$ 51,084
17	Wilbraham Public Library	LED	Karen Demers, (413) 596-6141	\$ 45,859	\$ 6,950
18	Worcester Boys & Girls Club	LED	Ian Witt, (508) 753-3377	\$ 120,784	\$ 22,441
19	NFPA	LED	Kevin Carr, (617) 984-7308	\$ 12,938	\$ 2,381
total				\$2,153,473	

* Measures: LED = light emitting diode, VFD = variable frequency drive, RTU = rooftop unit, EMS = energy management system, DCV = demand control ventilation

Example Project: University of Connecticut

Location: Various Contact: Dave McIntosh, (860) 486-3591 / Gregg Snyder, (781) 850-6466
 Complete Interior and Exterior LED Lighting Retrofit project for Academic Buildings: Psychology, Chemistry and Bio-Physics, and Exterior LED Lighting Retrofit for four additional Academic Buildings. This was a lighting only project simply because Prism was invited in to replace a non-performing lighting contractor in the midst of a performance contract. This was a performance-based contract and the payback period required by the customer was achieved. UCONN was extremely pleased with Prism’s designs, ability to meet savings and payback criteria, and installation. Total project cost was \$997K, utility incentives \$167K, electric savings 879,672 kWh per year, and annual savings over \$51K.

c. Audit, Monitoring and Savings Verification Methodologies

There are five commonly applied approaches for the Measurement & Verification (M&V) of energy savings in buildings: (1) Retrofit Isolation: Key Parameter Measurement; (2) Retrofit Isolation: All Parameter Measurement; (3) Whole Facility: Savings are determined by measuring energy use at the whole facility or sub-facility level; (4) Calibrated Simulation, in which savings are determined through simulation of the energy use of the whole facility, or of a sub-facility (aka Energy Monitoring); and (5) Stipulated, in which savings are determined based on industry accepted engineering standards. (Stipulated is the method commonly used by Eversource CT and most other Utility Company energy efficiency programs.) Below are two examples of how we have conducted M&V for recent relevant projects:

UConn Lighting Project

At UConn, Prism completed retrofits of the existing fixtures, lamps, and/or ballasts with more energy-efficient units, and installed occupancy sensor controls in selected locations. Verification of electric energy Savings (kWh) was based upon a one-time measurement of the lighting power capacity under existing conditions, a one-time measurement of the lighting power capacity upon completion of the lighting retrofit project, and agreed-upon annual operating hours. Spot wattage measurements of a representative sample of baseline and post-installation fixture types or fixture circuits was used to establish demand. As per FEMP guidelines, fixture power measurements represent a minimum of 75%

of the post-retrofit connected load at 85% confidence and 15% precision, with overall population sample size not to exceed 10% of the retrofit population.

Reebok World HQ, Canton MA

For Reebok, Prism completed an M&V study consisting of a hybrid of stipulated, energy modeling, and metering approaches. The pilot project floor (Building 2, Level 3) and the control floor (Building 2, Level 2) had pre- and post-project energy data based upon chilled water and hot water metering for over a month's duration to confirm the effectiveness of the project. Metering consisted of lighting circuits (HOBO kWh meters), supply fans (Variable speed drive on board kWh meters), hot water (VAV reheat loop metered with a Btu meter), and chilled water (supply fan cooling coil metered with a Btu meter). The M&V study confirmed a 49% reduction in vent fan energy, an 18% reduction in chilled water energy, a 52% reduction in heating energy, and a 21.6% reduction in lighting energy.

3.0 Pricing and Fees

a. Describe the pricing structure for the type of retrofit projects/services being proposed

Proposals are developed as material cost plus labor cost (prevailing wage or unit as applicable) multiplied by a mark-up that varies according to overhead time and professional services time necessary to complete the work allowing for a modest profit. Our goal is to cover our costs and to pay a living wage and market competitive benefits to our employees. Prism work scopes and associated costs are always provided in advance and in writing to our customers and their approval is always documented in writing in advance of any work being performed.

i. Specify costs that are fixed/variable

Prism does have experience with performance-based energy service contracting, in which customers pay for energy efficiency upgrades out of savings resulting from the installation of more efficient equipment, and would be happy to provide projects of this type to the State of Connecticut. Most projects, however, are structured as fixed capital expenditures, inclusive of material costs, sales or other taxes (if applicable), materials, labor, recycling of regulated waste, lift equipment, project management, and administrative overhead.

ii. Specify if there is an initial capital cost outlay; if not, is that option available?

In most cases energy efficiency upgrades deliver attractive returns that pay for themselves many times over during the life of the measure. Most clients find that self-financing with their own capital budgets provides an attractive option to capitalize on these benefits. In other cases capital budgets may have been allocated to other uses. In such cases, Prism Energy is capable to offer project financing options to its customers allowing energy conservation projects to proceed with no upfront capital requirement on the part of the client.

b. Describe all cost markups and how they may be applied

As noted above, Prism quotes projects inclusive of materials, labor, taxes, related costs, and administrative overhead, with adequate profit margin to cover our costs and to pay a living wage and market competitive benefits to our employees. These costs are included in the project costs that we quote to our customers. Prism is known for our competitive pricing. As an example, Prism is one of the most cost-effective PEX Vendors for National Grid, who tracks and publishes the savings/incentive dollar metric for all Vendors and publishes them to the Vendor group. The Vendor goal from National Grid for 2017 was \$.30/kWh and Prism's rate for the year was \$.28/kWh, well under the goal. The metric for 2018 has been reduced to \$.28/kWh and Prism's current cost/kWh is at \$.21, again, well under the published goal. Prism works diligently to monitor, track and consistently produce attractive projects that meet our clients' cost-effectiveness goals with a demonstrated track record of producing cost-effective projects, as evidenced by our cost-effectiveness metrics for National Grid.

c. Describe all other costs such as maintenance and monitoring and how they are applied

Maintenance and monitoring costs generally are estimated and provided to the customer, and the customer can elect to use their own staff, outside service companies, or can enter into a maintenance agreement with Prism to perform the required maintenance on a fee-for-service basis. To the extent that monitoring is required by the utility for verification of energy savings under an incentive program or are required/requested by the clients, for example the installation of metering devices, those services are built into the project cost.

d. Describe any potential rebates and incentives

Prism works closely on behalf of its clients to secure the highest level of incentives available from utilities for energy conservation measures installed. We specialize in bundling several ECMs into a single project, which is rewarded by utilities with "custom" incentives, which tend to be more generous than prescriptive or upstream incentives. Prism's business process and Utility representative relationships ensure that utility incentives are secured and committed to the project before contracts to proceed with the project are executed, thereby ensuring clients of the most cost-effective project possible. Instrumental to this is a reputation for transparency and accuracy of technical data and analysis that results in the realization of the energy savings that are estimated. When a Utility engineer or technical representative is confident of a Vendor's submissions, then they are more likely to approve the savings estimates that are the basis for the incentives assigned by the Utility for specific measures, particularly for custom incentives.



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4.0 Form RFP-16 (Exhibit B)