

# City of Milwaukee

RFP 99-2023 for a Guaranteed Energy  
Savings Performance Contract

December 15, 2023



**Diana Vargas**  
Senior Account Executive  
P: 312-994-8628  
[dvargas@ameresco.com](mailto:dvargas@ameresco.com)



## Table of Contents

Page 3	<b>Cover Letter</b>
Page 4	<b>Part VI: Evaluation Criteria</b>
Page 7	<b>Attachment 2-A: ESCO Profile</b>
Page 30	<b>Attachment 2-B: Technical Energy Assessment</b>
Page 43	<b>Attachment 2-C: ESCO Preliminary Project Cost and Cash Flow Analyses</b>
Page 45	<b>Attachment 2-D: DPW Field HQ Baseline Energy Use and Estimated Savings Calculator</b>
	<b>Attachment 2-F: Sample Documents</b>
Page 33	a. Project Commissioning Plan
Page 45	b. Sample Measurement and Verification Plan
Page 51	<b>Attachment 2-H: Small Business Enterprise Form A- Contractor Compliance Plan</b>
	a. Belonger Corporation, Inc.
	b. Dairyland Energy Solutions, Inc.



December 15, 2023  
City of Milwaukee  
Via email electronic submission: ttarko@milwaukee.gov

Dear Mr. Tarkowski and Evaluation Committee:

Ameresco, Inc. ("Ameresco"), is pleased to provide this response to the City of Milwaukee's Request for Proposal (RFP) for Energy Savings Performance Contract (ESPC). We commend the City of Milwaukee for its efforts to reduce energy use across its building portfolio by 20% of the 2009 baseline while also achieving net zero emissions by 2050. **We have thoroughly reviewed the RFP and associated addenda and respectfully submit this Proposal on behalf of the team customized to bring the best value and solution to the City of Milwaukee.**

**i. Company History & Experience | Local Team, National Expertise**

Founded in 2000 and publicly traded on the New York Stock Exchange since 2010, Ameresco is a leading cleantech integrator and renewable energy asset developer, owner, and operator. Our comprehensive portfolio of services includes energy efficiency, infrastructure upgrades, asset sustainability, and both onsite and offsite renewable energy solutions. Over our history, Ameresco has streamlined the process of collaboratively developing energy plans that are realistic, goal-based, financially responsible, and accurately budgeted. We have completed over \$13 billion in projects including \$1.25 billion of work exclusively within the Midwest, primarily for public institutions, including energy audits, design, construction, ownership and operation, and measurement and verification. Ameresco has worked with hundreds of municipalities including the County of Milwaukee, Cook County, and the City of Chicago to improve occupant comfort and reduce energy consumption and costs.

**ii. Scope of Services Understanding | ENERGY STAR Benchmarking**

Sustainability is a bedrock of our Company Vision and Mission, as evidenced by our renewable energy assets and customer projects that have delivered a **cumulative carbon offset of over 75 million metric tons of carbon dioxide equivalents since 2010**. Ameresco understands the objectives of the project including targeted greenhouse gas emissions reductions, energy savings, turn-key implementation, measurement and verification services and reporting, ENERGY STAR® benchmarking, and incorporating utility rebates and tax credits. Ameresco has assisted numerous institutions in obtaining over **\$330 million in grants, rebates, and incentives. For the City of Milwaukee, we are proposing a budget-neutral ESPC project that will reduce operating costs by nearly \$58,000 annually and reduce building energy use intensity by 22.6% over the 2009 baseline while also addressing critical deferred maintenance and improving occupant safety and comfort.**

**iii. Demonstrated Commitment To A Diverse Workforce | Providing Workforce Opportunities**

Milwaukee values and pursues diversity in project work, and Ameresco aligns well with these values. We are committed to exceeding the 25% participation goals, providing workforce opportunities to unemployed, underemployed, and low-income residents, and incorporating apprentices into the project. **Our proposal achieves 53.8% SBE participation, and we put together a preliminary team of six strong local SBEs committed to working with the Ameresco team on future projects. We will collaborate with our consultant, Cross Management Services, Inc. to establish and achieve even more aggressive aspirational SBE goals and grow local capacity.**

We would be honored to have the opportunity to work with the City of Milwaukee.

Respectfully,

Diana Vargas  
Senior Account Executive  
312-953-2758 | dvargas@ameresco.com

## Part VI: Evaluation Criteria

### Complete Energy Services Partner | Vendor Neutral

Ameresco, Inc. (NYSE: AMRC), founded in 2000, is a leading cleantech integrator and renewable energy asset developer, owner, and operator. Ameresco has provided energy performance contracting since its incorporation, and performance contracting continues to be our core business, constituting approximately 70% of our business. Over the last twenty-two years, we have completed over \$13 billion in projects primarily focused on energy efficiency, renewable energy, and energy infrastructure including over \$1.25 billion in municipal, county, state, and federal government projects.

Our principal service is the audit, analysis, development, design, engineering, and installation of projects that reduce the operating costs of our customers' facilities, address deferred maintenance, and meet financial and carbon reduction goals. We also incorporate operation and maintenance (O&M) along with measurement and verification (M&V) services, as desired by our customers.

Municipalities and other public entities are a critical part of our business and we have worked with over 250 municipalities nationwide, including local regional projects, such as the Minneapolis Airport Commission, Southwest Wisconsin Technical College, Wautoma Area School District, Milwaukee County, City of Chicago, and Metropolitan Pier and Exposition Authority (MPEA).

Company-wide we have delivered a cumulative carbon emissions reduction of **75 million metric tons of CO<sub>2</sub>**. Ameresco has the technical expertise to align, strategize, and construct projects for the City of Milwaukee that will achieve carbon reduction goals, both for the short term and long-term. Ameresco's approach is an advantage to the City of Milwaukee, because unlike some ESCO's, we are vendor neutral and can integrate systems across the City with no need to sell equipment. Ameresco is an accomplished community engagement partner with proven workforce training and jobs programs that target economically disadvantaged communities. With no competing business units that sell services or equipment, Ameresco is an energy neutral,

## Extensive Experience

### Innovative:

- ✓ St. John Paul II High School: Canada's first carbon neutral school
- ✓ City of Bristol England: Selected to implement carbon neutrality plan
- ✓ City of Eau Claire Microgrid Feasibility Study

### Comprehensive Solutions:

- ✓ Public Building Commission of Chicago implemented energy savings projects at 36 buildings
- ✓ Milwaukee County implemented energy savings projects at 8 buildings
- ✓ Southwest Wisconsin Technical College: Completed an Energy Master Plan for achieving carbon neutrality
- ✓ City of Chicago natural gas and electricity procurement
- ✓ Hamilton County Ohio, multi-phase ESPC at 11 facilities and John Brown Stadium
- ✓ Federal Building and US Courthouse in Milwaukee will undergo an investment grade audit as part of a larger GSA project.

### Carbon Reduction Focus:

- ✓ Minneapolis-St. Paul International Airport: Saved over 9,400 CO<sub>2</sub>eq tons annually from 4.3MW of custom solar structures, Installed eight EV charging stations and upgraded over 12,000 light fixtures to LED
- ✓ Northwestern University: multi-phase, campus-wide Energy as a Service engagement including supporting portfolio manager reporting

### Local Diverse & Resident Workforce Success

- ✓ Ameresco hired over 60% of the Chicago Streetlighting Project workforce from City residents, including those from economically disadvantaged areas.

vendor neutral and solution neutral company. This means that the solutions will be tailored to the City of Milwaukee's needs and can be integrated across the City, regardless of the manufacturer. By selecting a vendor-neutral firm that can address all of your energy and sustainability needs, the City will benefit from an independent approach that is tailored to the needs of the City and focused on achieving most effective outcome regardless of equipment or system vendor.

## Innovation

Ameresco will continue to work with the City of Milwaukee through all phases of the project to ensure that the best approaches, whether traditional or innovative, are considered to meet the city's goals and communicate those strategies. We stay informed and engaged in industry best practices, emerging technologies, and service delivery models so that we can implement them for our customers. Ameresco employees engage in continuous education through participation in professional organizations, such as ASHRAE, through continual training of its employees, and through the continuing education requirements of the certifications and licenses held by its employees. Additionally, Ameresco works with vendors and manufacturers on a regular basis to ensure that we are aware of current opportunities. Ameresco has an extensive list of completed solutions for various types of buildings/facilities/customers that are out of the box and innovative. Ameresco investigates these opportunities and proposes them to the City of Milwaukee. Innovative solutions include:

- **Magnetite Windows:** These windows are an interior acrylic layer that can be installed to maintain the aesthetics of the current windows while improving insulating value, reducing noise, and reducing infiltration. While not a new technology, it is an innovative one that does not consistently fit as part of the typical energy conservation measures proposed. This solution is significantly less expensive than new windows while providing many of the same benefits.
- **Geothermal Heating and Cooling:** Geothermal systems can reduce the dependency on fossil fuel heating and electric cooling. Vertical or horizontal well fields can be installed to serve heat pumps which will also improve the efficiency of the system.
- **Electric Vehicle Charging Stations:** This could provide a source of revenue generation for the City or charging for its municipal fleet. It would also highlight the City's commitment to sustainable practices.

## Municipal Facilities Experience

- **City of Chicago Public Building Commission:** 22 Chicago Public Libraries, including Harold Washington Library, & Chicago Cultural; Police Stations & Training Center & 311 Center
- **City and County of Denver, CO** libraries and recreation centers
- **City of Boulder, CO** Library, Dunshabe Tea House, City Administration Building
- **Metro West Fire Protection District, MO**
- **Hamilton County, OH:** 911 Communications Building, Sheriff's Patrol Headquarters,
- **City and County of Denver, CO:** Fire and Police Stations & 911 Call Center
- **Springfield, IL** Sangamon County Complex
- **Danville, IN** Hendricks County Government Center
- **Marion County, IL** City Hall and City Hall Annex; 911 Communications, Sheriff's office, Courthouse
- **City of Mankato, MN** Civic Center and Intergovernmental Center
- **Unified Government of Wyandotte County Kansas City, KS** Numerous buildings, including City Hall, Public Health Department, Police Headquarters
- **City of Arvada, CO** City Hall & Annex, Police Stations
- **Lake County, IN** Government Complex Buildings and Courthouse
- **Town of Plainfield, IN,** 10,000 water meters & Software



- **Air Handling Unit Condensate Capture:** By capturing condensate from air handling unit cooling coils, the water can be re-used instead of being sent to the sewer. Collecting the water in hot summer months can be used for irrigation on the grounds or the water may be able to be fed into makeup water systems.
- **Sewer Deduct Meters:** While not affecting consumption, sewer deduct meters allow facilities to deduct water that does not go to the sewer, i.e., water that is evaporated or used for irrigation, from their sewer bills reducing costs.
- **Energy as a Service:** Ameresco can explore Energy as a Service (EaaS) projects for the City, if desired. We have implemented several EaaS projects where Ameresco owns and maintains the equipment, and the customer only pays a service fee based on realized savings. This project structure can allow entities to further stretch their capital budgets while improving efficiency.
- **Ultraviolet Germicidal Lamps:** These lamps are used in air handlers to improve indoor air quality by reducing the presence of microbial agents in the air handlers and supply air providing health benefits to occupants. This includes viruses, bacteria, and fungi which have become especially relevant given the current pandemic. Ameresco proposes that these be reviewed for installation in future phases as a proactive way for the City to show steps towards eliminating harmful viruses in building air distribution systems.
- **Enhanced Filtration:** Required maintenance can be reduced and costs for air handler filters can be eliminated through the use of an ionic filtration strategy. Ionic filtration provides the added benefit of removing odors from the airstream. Additional energy savings could be realized by reducing the amount of outside air intake based on air quality.

One example of our success with innovative projects is the John Paul II Secondary School in Canada. This 25-year Energy as a Service project reduced electricity costs by 68% percent as the school and included an advanced geothermal heating and cooling system, solar PV carports, electric vehicle charging stations including a bus charging station, a battery energy storage system, a microgrid, and integrated building controls including automated load shedding capability. John Paul II Secondary School was Canada's first school to achieve carbon neutrality from building retrofits.

Ameresco is committed to pursuing any and all ideas that have potential to improve the City's building infrastructure and help the City reach and exceed its energy and greenhouse gas goals. We evaluate each building independently to find the right measures to implement, regardless of vendor systems. With Ameresco's independence, knowledge, experience, and local presence there are no limitations to the types of projects that can be implemented and environmental goals that can be accomplished.

## Recommended Project and Results

Ameresco evaluated energy conservation measures (ECM) and developed an exciting opportunity to retrofit and recommission building lighting, retro-commission building automation systems, improve garage and workshop ventilation and install rooftop solar PV systems that will self-fund while reducing building energy consumption by over 22% and operating costs by \$58,000 annually. We do not recommend every ECM identified in the Energy Master Plan. Instead, by implementing ECMs (1) Compressed Air Leak Survey, (2) LED Lighting Retrofit with Occupancy and Daylighting Sensors, (4) Garage Demand Controlled Ventilation, and (7) Rooftop Solar Array, the project self-funds in 20-years. In addition, systems such as the solar array will continue to provide value and additional benefits well after year 20 while showcasing the City's ongoing commitment to renewable energy and sustainability. This recommended project will also highlight the City's commitment to the local community by exceeding 50% small business enterprise participation. Ameresco looks forward to discussing this proposal and how we can partner with the City of Milwaukee to achieve your energy and sustainability goals.

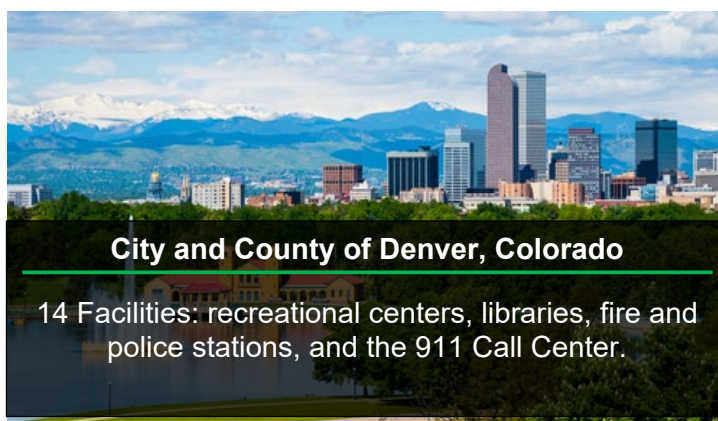
## Attachment 2-A | ESCO Profile Form

### 1. FIRM:

<b>AMERESCO, Inc.</b> <b>City:</b> Framingham, MA <b>Business Address:</b> 111 Speen Street, Suite 410 <b>City:</b> Framingham <b>Zip Code:</b> 01701	<b>2. TYPE OF FIRM:</b> Corporation
<b>a. NAMES AND TITLES OF TWO CONTACT PERSONNEL</b> 1) Diana Vargas, Senior Account Executive Phone (312) 953-2758 2) Steve Taggart, Vice President Phone (312) 994-8620	<b>3. FEDERAL EMPLOYMENT IDENTIFICATION NUMBER:</b> 04-3512838
<b>b. SUBMITTAL IS FOR:</b> Parent Company: <b>AMERESCO, Inc.</b> <b>Division</b> (attach separate list if more than one is to be included): <b>N/A</b> <b>Subsidiary:</b> <b>N/A</b> <b>Branch Office:</b> AMERESCO, Inc. <b>Name of Entity:</b> AMERESCO, Inc. <b>Address:</b> 10 S. LaSalle St., Suite 3450, Chicago, IL 60601	<b>4. YEAR FIRM WAS ESTABLISHED:</b> 2000
	<b>5. NAME AND ADDRESS OF PARENT COMPANY, (if applicable):</b> N/A
	<b>6. FORMER FIRM NAME(S), (if applicable):</b> N/A

### 7. FIVE YEAR SUMMARY OF CONTRACT VALUES FOR ENERGY PERFORMANCE CONTRACTING

Year	Nationwide EPC Project Values
2022	\$1 Billion
2021	\$996 Million
2020	\$855 Million
2019	\$719 Million
2018	\$653 Million



### PROJECTS:

### 8. CORPORATE BACKGROUND/HISTORICAL DATA

- a. How many years has your firm been in business under its present business name? **23 Years**  
 Indicate all other names by which your firm has been known and the length of time known by each name.  
**Not Applicable**
- b. How many years has your firm been involved in energy performance contracting? Ameresco, since its incorporation, twenty-three years ago, has been contracting under energy performance agreements. Approximately seventy percent of Ameresco's business is conducted under performance contracting agreements.

- c. Indicate the number of all energy performance contracting projects implemented by and currently under contract with your firm. Limit your response to ONLY those projects that have been managed directly by the specific branch, division, office or any individual in such branch, division or office that will be specifically assigned to this project. Attach additional sheets as necessary.

Ameresco has implemented projects for over 8,000 customers nationwide. Locally, in the Midwest, Ameresco has managed over \$1.25 Billion in energy projects. Ameresco has implemented 125 energy savings performance contracts locally, many of which resulted in multiple phases.

## 9. PERSONNEL INFORMATION

- a. Please indicate the number of full-time personnel employed by your firm and the number available to work on this project.

**1,300+ Employees** | 15 Employees are available to work on this project. Ameresco can supplement the local workforce with specialists across the Midwest.

- b. Project Team Members

<b>Diana Vargas</b> Senior Account Executive	<b>Steve Taggart</b> Vice President	<b>Jay Fleishman</b> Vice President-Engineering
<b>Adam D'Ambrosio</b> Director of Operations	<b>Brian Roskens</b> Manager of Project Development	<b>Zaki Mafraji</b> Manager of Construction
<b>Kristin Bernstein</b> Sr. Project Development Engineer	<b>Dave Shu</b> Project Development Engineer	<b>Jackson Bode</b> Associate Development Engineer
<b>Dan Nemeth</b> Sr. Project Manager	<b>Tony Castellani</b> Sr. Project Manager	<b>Kevin Whittier</b> Project Manager
<b>Rick McDonald</b> Controls Implementation Specialist	<b>Jared Hughes</b> Manager of Performance Assurance	<b>Greg Studier</b> Sr. M & V Engineer

The following relevant experience are provided for key personnel; however, the entire team is represented in the organizational chart. Due to page restrictions, we have not included any additional resumes.

Project Team Member	Diana Vargas
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Title:</b> Senior Account Executive <b>Job Responsibilities:</b> Business Development & Client Liaison <b>Number of Years With ESCO:</b> 5 years <b>Primary Office Location:</b> Chicago
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco Inc., 2018 - Present</b> Senior Account Executive   Business Development & Client Liaison <b>Automated Logic, Inc., 2012 - 2018</b> Senior Account Executive   Business Development & Client Liaison <b>Johnson Controls, Inc., 2004-2012</b> Service Sales Representative   Business Development & Client Liaison
Educational Background List all academic degrees, certifications, professional affiliations, relevant	<b>BS, Business Administration</b> University of Illinois Urbana-Champaign <b>Professional Associations</b>



publications and technical training.	Illinois Association of School Business Officials Illinois Association of School Administrators Large Unit District Association
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Public Building Commission</b>   Chicago, IL   Public Schools   Audit of 17 facilities towards ESPC   \$15,000,000 project cap   2023-current <b>Oakwood CUSD 76</b>   Oakwood, IL   K-12 Buildings   Design/Build   \$6,100,000   2022 <b>Troy CCCSD</b>   Plainfield, IL   K-12 Buildings & Solar PV and BESS   \$17,977,525   ESPC   Multi-phase, most recent phase completed 2022 <b>Mahomet-Seymour CUSD 3</b>   Mahomet, IL   K-12 Buildings ESPC \$6,385,948   Multi-phase, most recent phase completed 2022 <b>Rhodes School District 84.5</b>   Rhodes, IL   K-12 Buildings   ESPC   \$1,006,720   completed 2020 <b>Central Stickney District 110</b>   Stickney, IL   K-12 Buildings   ESPC   \$330,350   Completed 2020 <b>Deer Creek-Mackinaw CUSD 701</b>   Deer Creek, IL   ESPC   \$202,690   completed 2023 <b>Maroa-Forsyth CUSD 2</b> ESPC \$2,400,000   Completed 2022
Describe the specific role and responsibilities this individual had for each listed project.	Project Business Development & Client Liaison
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Project Main Contact and Client Liaison – Ms. Vargas with stay in continual communication with the City and provide progress reporting on development and implementation from project start to completion.
Describe any other relevant technical experience.	
Indicate the total years of relevant energy related experience for this individual.	Twenty Years (20 years)
<b>Project Team Member</b>	<b>Steve Taggart</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Title:</b> Vice President <b>Job Responsibilities:</b> Business Development & Management <b>Number of Years With ESCO:</b> 20 Years <b>Primary Office Location:</b> Chicago
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco, Inc. 2018 - Present</b> Vice President   Business Development & Management <b>Ameresco, Inc. 2012-2018</b> Regional Director   Business Development & Management <b>Ameresco, Inc. 2008-2012</b> Manager-Business Development President   Business Development & Management <b>Ameresco, Inc. 2004-2007</b> Senior Sales Representative President   Business Development <b>Exelon Solutions 2002-2004</b> Senior Account Executive President   Business Development
Educational Background List all academic degrees, certifications, professional	BA, Marketing   La Sierra University <b>Training</b> Silver Spring (Itron) Lighting

affiliations, relevant publications and technical training.	Management System Training
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<p><b>Northwestern University</b>   Chicago &amp; Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Confidential   2022-Project Ongoing</p> <p><b>City of Chicago</b>   Chicago, IL   LED Lighting &amp; LMS System   Design-Build   \$160,000,000   2022 Project Completion</p> <p><b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   2023 New Phase for Design of CUP   <b>48% M/WBE Achieved</b></p> <p><b>City of South Bend, IN</b>   South Bend, IN   Convention Center, Performance Center, Event Center   ESPC   \$5,361,000 (Phase 2)   2023 Project Substantial Completion</p> <p><b>University of Illinois-Chicago</b>   Chicago, Illinois   5 campus buildings: classrooms, research laboratories, offices, engineering buildings   ESPC   \$65,000,000   2018   45% CO2 reduction   Fume Hoods, HVAC upgrades, chilled beam, lighting   <b>25% M/WBE Participation</b></p>
Describe the specific role and responsibilities this individual had for each listed project.	Business Development and Management, regional project oversight to ensure project success and customer needs are met.
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Business Development and Management, regional project oversight to ensure project success and Milwaukee needs are met.
Describe any other relevant technical experience.	Awards for community engagement: <b>Strategic Partner of the Year-</b> General Electric / <b>Contractor of The Year-</b> Coalition for United Community Action / <b>Community Partner</b> for Engineering-UIC Chance Program (2004-2014)
Indicate the total years of relevant energy related experience for this individual.	Twenty-two Years (22 Years)
<b>Project Team Member</b>	<b>Jay Fleishman, PE, CEM, LEED-AP</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<p><b>Sr. Vice President of Engineering</b>   Management and Oversight of Engineering Project Development</p> <p><b>Number of Years with ESCO:</b> 6 Years</p> <p><b>Primary Office Location:</b> Oak Brook, IL</p>
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<p><b>Ameresco 2023 – Sr. Vice President of Engineering</b> Regional Engineering Oversight, contract negotiations 32 states</p> <p><b>Ameresco, Inc. 2020 – 2023</b>   Vice President-Operations   Regional Engineering and Construction oversight, contract negotiations 17 states</p> <p><b>Ameresco, Inc. 2018 – 2019</b>   Director of Operations   Engineering and Construction oversight in Illinois</p> <p><b>Ameresco, Inc. 2017 - 2018</b>   Director of Strategic Initiatives   Project Development</p> <p><b>NORESCO 2013 – 2017</b>   Senior Project Developer   Lead Project Development</p> <p><b>NORESCO 2010 – 2013</b>   Project Developer II   Project Development</p> <p><b>OWP/P Cannon Design 2008 – 2010</b>   MEP III Engineer/Project Manager   Project Development and Management</p>

	<b>Teng and Associates, Inc.</b> 2003-2008   Project Manager/Project Engineer   Project Development and Management
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	MBA, Leadership and Change Management, <b>DePaul University</b> BSE, Mechanical Engineering, <b>University of Iowa</b> Licensed Professional Engineer IL, WI, IA Certified Energy Manager (CEM) LEED Accredited Professional Professional Affiliations: American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Member
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Northwestern University</b>   Chicago & Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Confidential   2022-Project Ongoing <b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   2023 New Phase for Design of CUP   <b>48% M/WBE Achieved</b> <b>City of South Bend, IN</b>   South Bend, IN   Convention Center, Performance Center, Event Center   ESPC   Phase 2: 2023 Project Substantial Completion   \$5,361,000 (Phase 2) <b>Chicago Housing Authority</b>   Chicago, IL   Housing Authority Residences   \$54,784,144   ESPC   <b>2019   56% M/WBE Participation</b>
Describe the specific role and responsibilities this individual had for each listed project.	Engineering Development and Construction Oversight
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Engineering Development Oversight – project costing, ECM development review
Describe any other relevant technical experience.	Project development experience with large scale municipal projects including for the Chicago Housing Authority
Indicate the total years of relevant energy related experience for this individual.	Twenty Years (20 Years)
<b>Project Team Member</b>	<b>Adam D'Ambrosio, PE, CEM, LEED-AP</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	Director of Operations   Regional Project Development Management <b>Years With ESCO:</b> 1 Year <b>Office:</b> Oak Brook, IL
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco, Inc. 2022 - present</b> Director of Operations – Regional Manager of Engineering Project Development, Audit Oversight, ECM development Oversight, Costing and Subcontractor Scope of Work Oversight <b>University of Chicago 2018-2022</b> Senior Director, Energy Services and Sustainability <b>NORESCO &amp; Carrier Corporation 2006-2018</b> Regional General Manager, Midwest, Project Development and Engineering Midwest Manager, Project Development and Engineering Midwest Manager, Project Development Sr. Project Development Engineer, Lead Project Development

	<b>U.S. Navy 1997-2005</b> Nuclear Trained Engineering Officer Submarines
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	Master of Business Administration Northwestern University MS and BS, Electrical and Computer Engineering Carnegie Mellon University Licensed Professional Engineer, IL   Certified Energy Manager, CEM   LEED-AP   ASHRAE member
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   2023 New Phase for Design of CUP  <b>48% M/WBE Achieved</b> <b>Northwestern University</b>   Chicago & Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Confidential   2022-Project Ongoing <b>Public Building Commission</b>   Chicago, IL   Public Schools   Audit of 17 facilities towards ESPC   \$15,000,000 project cap   2023-current <b>University of Illinois-Chicago</b>   Chicago, IL   Higher Education buildings   Audit and Audit Report towards ESPC   \$22,000,000
Describe the specific role and responsibilities this individual had for each listed project.	Project development oversight of costing, energy measures and savings
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Executive Engineering Oversight, review costing, energy conservation measure (ECM) development, ECM savings validation, and M&V Plan.
Describe any other relevant technical experience.	Adam spent five years focused on Energy, Utilities and Sustainability at University of Chicago, a campus with over nine million square feet in over 100 buildings. The University was awarded an ENERGY STAR® Partner of the Year for three consecutive years under his leadership and is participating in the Better Buildings Challenge and the Better Climate Challenge.
Indicate the total years of relevant energy related experience for this individual.	Twenty-six (26 Years)
<b>Project Team Member</b>	<b>Brian Roskens, AIA</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Manager of Project Development</b> and is responsible for the project team's whole building evaluation and leads the development of energy conservation measures, pricing for costs and savings, and supports implementation and M&V efforts. <b>Years With ESCO:</b> 12 Years <b>Office:</b> Oak Brook, IL
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco, Inc. 2021 - present</b> Manager Project Development: Project Development Oversight and Manage Development Team <b>Ameresco, Inc. 2018 – 2021</b> Project Development Team Lead, Lead Project Development and manage Development Team <b>Ameresco, Inc. 2012 – 2018</b> Senior Project Developer Lead Project Development and Assist in Project Management <b>McCauley Mechanical 2010-2012</b> Construction Project Manager for Mechanical Contracting <b>KHB Group, LLC 2005-2010</b> Project Manager & Designer   Project Design and Implementation Management

	<b>Kroeschell, Inc. 2003-2005</b> Design Engineer & Assistant Project Manager   Assist in Project Development & Construction Management
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	BArch, Architecture Iowa State Registered Architect Illinois American Institute of Architects
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Northwestern University</b> Chicago & Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Project Value Confidential   2022-Project Ongoing <b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   Phase I: 2019-2022; mechanical measures, building controls, and lighting upgrades and new controls Phase II: 2023 New Phase for Design of CUP with previous phase interior & exterior LED lighting   <b>48% M/WBE Achieved</b> <b>Southwest Technical College</b>   Fennimore, Wisconsin   15 campus buildings including: Campus Offices, Classrooms, Child Care Center, Maintenance Buildings, Electro-Mechanical Building, Auto Center   Energy Master Plan delivery March 2023 <b>University of Illinois-Chicago</b>   Chicago, Illinois   5 campus buildings: classrooms, research laboratories, offices, engineering buildings   ESPC   \$65,000,000   2018   45% CO2 reduction   Fume Hoods, HVAC upgrades, chilled beam, lighting   25% M/WBE Participation
Describe the specific role and responsibilities this individual had for each listed project.	Metropolitan Pier, Ave Marie and Southwest Technical College, Lead Project Development. Northwestern University Project Development Management Oversight
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Mr. Roskens will oversee project development, organize audit, ensure customized measures to provide energy and operational savings. Provide oversight on costing, subcontractor selection.
Describe any other relevant technical experience.	OSHA 10 HR
Indicate the total years of relevant energy related experience for this individual.	Twenty years (20 years)
<b>Project Team Member</b>	<b>Kristin Bernstein, PE, CEM, NABCEP PVIP</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Sr. Project Development Engineer</b> and is responsible for project energy measure auditing, analysis and project development, costing and solar analysis. <b>Years With ESCO:</b> 7 Years <b>Office:</b> Oak Brook, IL
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco, Inc. 2019-Current</b> , Sr. Project Development Engineer, lead site auditing, lead project development <b>Ameresco, Inc. 2016 – 2019</b> , Project Development Engineer, Assist with project development, costing, utility analysis <b>Schneider Electric 2013-2016</b> , Energy Engineer, utility analysis
Educational Background	<b>Northwestern University</b> , MS, Environmental Engineering <b>Northwestern University</b> , BS, Environmental Engineering



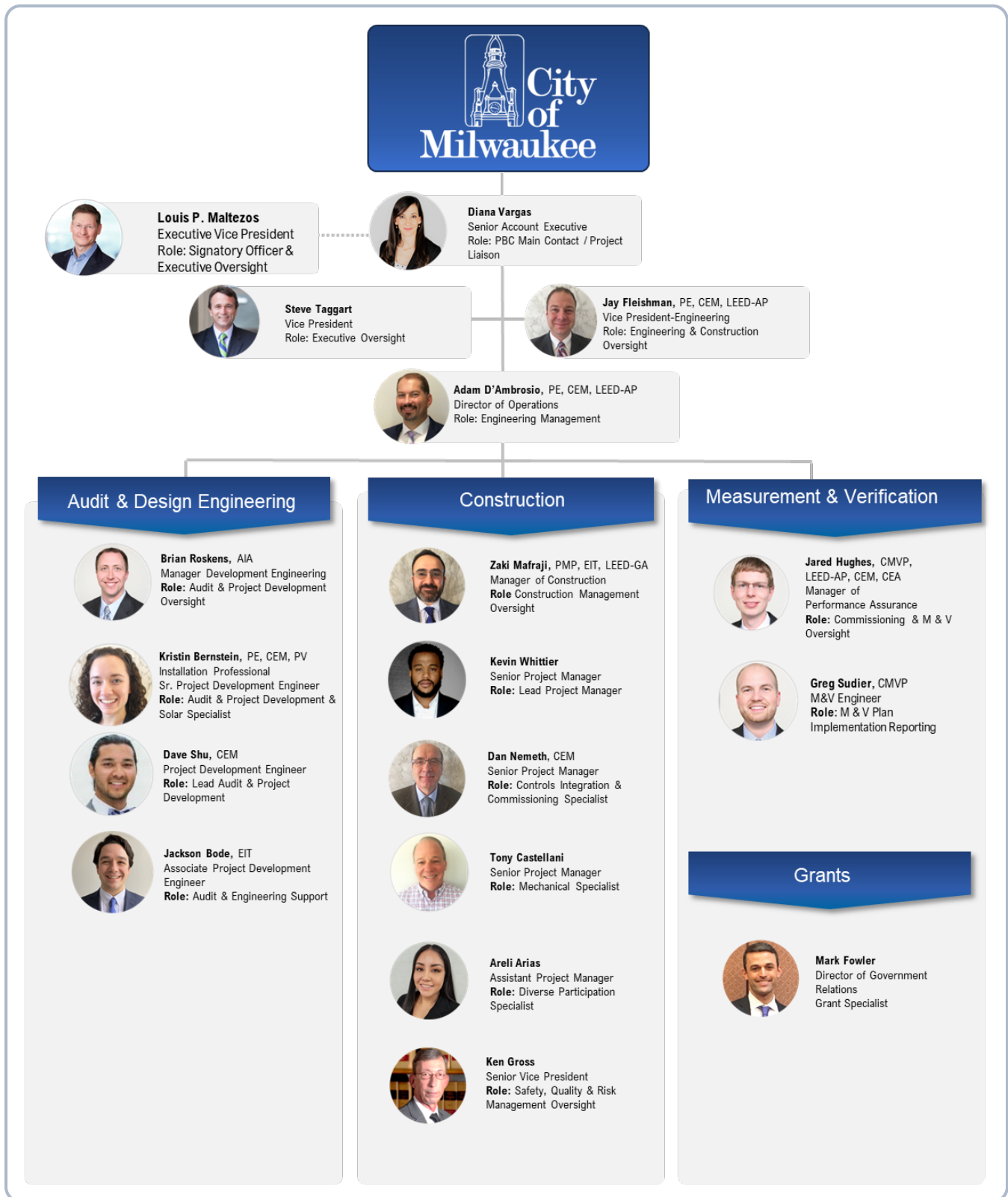
List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	Professional Engineer IL Certified Energy Manager NABCEP: PV Installation Professional
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Northwestern University</b> Chicago & Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Project Value Confidential   2022-Project Ongoing <b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   Phase I: 2019-2022; mechanical measures, building controls, and lighting upgrades and new controls Phase II: 2023 New Phase for Design of CUP with previous phase interior & exterior LED lighting 2023 New Phase for Design of CUP with previous phase interior & exterior LED lighting   <b>48% M/WBE Achieved</b> <b>Troy CCSD 30-C</b>   Plainfield, IL, Educational Facilities, ESPC   \$17,977,552   Multi-Phase   Solar REC and O & M Management, roof analysis and repair, rooftop solar PV at 6 schools, 2.2MW, with BESS   2015-2022 <b>Olympia CUSD 16</b>   Stanford, IL   Educational Facilities   Multi-Phase ESPC   \$5,000,000   Roof analysis and repair, rooftop & ground mount solar PV at 4 schools, 1.49MW. Implemented 2018
Describe the specific role and responsibilities this individual had for each listed project.	Northwestern University, Lead Project Development and Auditor, Interim Energy Manager,
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Ms. Bernstein will be responsible for the team building auditing, analysis and project development, costing and solar analysis.
Describe any other relevant technical experience.	Procore Certified: Project Construction Management Software OSHA 10 Hour Renewable Energy Credit Application and Management
Indicate the total years of relevant energy related experience for this individual.	Ten Years (10 Years)
<b>Project Team Member</b>	<b>Zaki Mafraji, PMP, CEM, EIT</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Manager of Construction</b> , Oversee project construction for the central region, ensure safety, quality control, budget and scheduling. <b>Years With ESCO:</b> 7 Years <b>Office:</b> Oak Brook, IL
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<b>Ameresco, Inc. 2021- present</b> Manager of Construction   Manage and oversee regional construction projects <b>Ameresco, Inc. 2020- 2021</b> Senior Project Manager   manage projects in central region, ensure budgetary and schedule adherence <b>Ameresco, Inc. 2017- 2020</b> Project Manager / Development Engineer   Assist project development leads with utility analysis, energy measure development. <b>UIC Energy Resources Center 2015-2017</b> UIC Graduate Research Assistant- assist on various research projects <b>Franklin Energy Services 2013-2015</b> Energy Engineer – utility analysis <b>ANHAM, US Army Corps of Engineers 2008-2009</b>

	<p>Industrial Engineer – assist project rehabilitation development and design</p> <p><b>US Army Corps of Engineers 2008-2009</b> Engineering Support Technician – field development and design support of rehabilitation projects</p> <p><b>Octagon Co, 2006-2008</b> Mechanical Engineer – assist with development of projects</p>
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	<p>Master in Energy Engineering, University of Illinois-Chicago</p> <p>BS, Mechanical Engineering, Al-Mustansria University, Baghdad, Iraq</p> <p>Project Management Professional (PMP)</p> <p>EIT Certificate – NCEES</p> <p>Certified Energy Manager</p> <p>LEED Green Associate – USGBC</p>
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<p><b>City of South Bend</b>   South Bend, Indiana   Convention Center, Cultural Center and Event Center   ESPC   \$5,361,000 (Phase 2)   2023 Substantial Completion</p> <p><b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   Phase I: 2019-2022; mechanical measures, building controls, and lighting upgrades and new controls Phase II: 2023 New Phase for Design of CUP with previous phase interior &amp; exterior LED lighting   <b>48% M/WBE Achieved</b></p> <p><b>Northwestern University</b> Chicago &amp; Evanston, IL   Higher Education Buildings   EaaS (EPC Phases)   Project Value Confidential   2022-Project Ongoing</p> <p><b>Chicago Housing Authority</b>   Chicago, IL   Housing Authority Residences   \$54,784,144   ESPC   <b>2019   56% M/WBE Participation</b></p>
Describe the specific role and responsibilities this individual had for each listed project.	<p>City of South Bend, Chicago Housing Authority, Zaki was the Project Manager who was the direct customer contact through construction, ensured project delivery and closure. Metropolitan Pier and Northwestern, Zaki was the Manager of Construction, who is overseeing implementation, ensuring quality control, budgeting and schedule.</p>
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	<p>Zaki will oversee construction, manage Sr. Project Managers, and ensure adherence to budget and schedule.</p>
Describe any other relevant technical experience.	<p>Industrial Design Certificate, Oakton Community College</p>
Indicate the total years of relevant energy related experience for this individual.	<p>Fifteen Years (15 Years)</p>
<b>Project Team Member</b>	<p><b>Tony Castellani</b></p>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<p><b>Manager of Construction</b>, Oversee project construction for the central region, ensure safety, quality control, budget and scheduling.</p> <p><b>Years With ESCO:</b> 16 Years</p> <p><b>Office:</b> Oak Brook, IL</p>
Employment History Company Name: Primary job responsibilities: Number of years with firm:	<p><b>Ameresco, Inc. 2007 - present</b> Senior Project Manager, manage projects in central region, ensure budgetary and schedule adherence, quality assurance and control.</p> <p><b>Pacific Construction Services, Inc. 2004-2007</b> Project Manager  Manage construction projects, communications, schedule, budget.</p>

	<b>Energy Systems Group 2003-2004</b> Project Manager   Manage energy construction projects communications, schedule, budget. <b>NICOR Energy Solutions 2001-2003</b> Project Manager Manage energy construction projects communications, schedule, budget. <b>International Test and Balance 1990-2001</b> Project Manager/Sales Engineer   Manage communications, schedule, budget.
Educational Background List all academic degrees, certifications, professional affiliations, relevant publications and technical training.	BS, Industrial Technology-Manufacturing, Southern Illinois University AAS, Heating and Refrigeration Service, Wm. Rainey Harper College OSHA 30 HOUR
List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	<b>Harold Washington Social Security Administration Building</b> , Chicago, IL   Federal Government Administration Building   ESPC   2016-2018   Boiler and chiller plant upgrades, HVAC optimization, building automation system upgrades and optimization   \$17,553,264 <b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   Phase I: 2019-2022; mechanical measures, building controls, and lighting upgrades and new controls Phase II: 2023 New Phase for Design of CUP with previous phase interior & exterior LED lighting   <b>48% M/WBE Achieved</b> <b>Chicago Housing Authority</b>   Chicago, IL   Housing Authority Residences   \$54,784,144   ESPC   2019   <b>56% M/WBE</b> participation <b>University of Illinois-Chicago</b>   Chicago, Illinois   5 campus buildings: classrooms, research laboratories, offices, engineering buildings   ESPC   \$65,000,000   45% CO2 reduction   <b>25% M/WBE Achieved</b>
Describe the specific role and responsibilities this individual had for each listed project.	Role: construction management, customer communication, scheduling, adherence to budget and schedule. Quality control and assurance.
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Amongst the team of project managers, Tony's focus will be on mechanical systems and mechanical system subcontractor management, identifying mechanical equipment options for procurement
Describe any other relevant technical experience.	Tony has been responsible for the construction management of two large scale solar projects totaling 28 MW
Indicate the total years of relevant energy related experience for this individual.	Twenty-three years (23 years)
<b>Project Team Member</b>	<b>Jared Hughes, CMVP, CEA, CEM, LEED-AP</b>
Current Job Title: Job responsibilities: Number of years with ESCO: Primary Office Location:	<b>Manager of Performance Assurance</b> , Oversee performance assurance of agreed upon energy projects. <b>Years With ESCO:</b> 11 Years <b>Office:</b> Missouri
Employment History Company Name: Primary job responsibilities:	<b>Ameresco, Inc. 2018 - present</b> Manager – Performance Assurance, ensuring Measurement and Verification program plan is implemented, overseeing post-performance reporting

Number of years with firm:	<p><b>Measurement &amp; Verification Team Leader 2016-2018</b> develop M and V plans, oversee plan implementation and reporting</p> <p><b>Senior Measurement &amp; Verification Specialist 2012-2016</b> develop M and V plans, pre and post project utility analysis</p> <p><b>CTS Group 2009-2012, Measurement &amp; Verification Specialist</b>, assist with Measurement and Verification reports, utility use analysis pre and post project</p> <p><b>Schneider Electric Energy Solutions 2008-2009</b>, Project Development Engineer, Assist with project develop of energy projects.</p>
<p>Educational Background</p> <p>List all academic degrees, certifications, professional affiliations, relevant publications and technical training.</p>	<p>MS, Data Analytics, Northern Illinois University</p> <p>BS, Construction Management Missouri State University</p> <p>Certified M &amp; V Professional</p> <p>Certified Energy Manager</p> <p>Certified Energy Auditor</p> <p>LEED Accredited Professional</p>
<p>List all guaranteed energy performance contracting projects this individual has been involved with during past 5 years.</p> <p>Include project location, type of facilities, year implemented and dollar value of installed project costs.</p>	<p><b>Metropolitan Pier &amp; Exposition Authority</b>   Chicago, IL   Convention Center Buildings   ESPC   \$59,000,000   Phase I: 2019-2022; mechanical measures, building controls, and lighting upgrades and new controls</p> <p>Phase II: 2023 New Phase for Design of CUP with previous phase interior &amp; exterior LED lighting   <b>48% M/WBE Participation</b></p> <p><b>City and County of Denver, Colorado</b>   Denver, CO   Municipal buildings: libraries, police station, 911 center, municipal government offices, recreation centers   \$8,000,000</p> <p>Summary: Multiple Phases, ESPC</p> <p><b>City of South Bend</b>   South Bend, Indiana   Convention Center, Cultural Center and Event Center   ESPC   \$4,855,897 (Phase 1)</p> <p>\$5,361,000 (Phase 2)</p>
Describe the specific role and responsibilities this individual had for each listed project.	Role: Performance Assurance Management. Ensuring Measurement and Verification program plan is implemented, overseeing post-performance reporting
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	Jared will lead Performance Assurance Management by collaborating with the development team on ECM savings estimations, utility analysis confirmation. Additionally, Jared will ensuring Measurement and Verification program plan is implemented, overseeing post-performance reporting.
Describe any other relevant technical experience.	
Indicate the total years of relevant energy related experience for this individual.	Fifteen Years (15 Years)

c. Submit an organizational chart that clearly identifies the roles and relationships of all key team members.





- d. Certify that your firm will comply with all terms and conditions contained in the City of Milwaukee's Request for Proposals (RFP) and contract documents

Ameresco certifies that we will comply with terms and conditions contained in the RFP and a mutually agreed upon contract, including the terms and conditions agreed upon with the City of Milwaukee.

- e. Briefly describe the types of financing used by your firm for past energy performance contracts, including the source of funds and the potential dollar amounts currently available to your firm to finance these types of projects.

### Project Financing Options

As a company, Ameresco has financed projects in a variety of ways, including energy savings performance contracts (ESPC), Energy as a Service (EaaS), and Design, Build, Own, Operate and Maintain (DBOOM). Ameresco does not have a preference for the type of financing utilized; we feel that each project should be tailored to the client needs and project type. Potential financing options include DBOOM, ESPC, Power Purchase Agreements (PPAs), and Budget Neutral Infrastructure Upgrades as its core structures for energy project financing. We also often assist our customers in obtaining tax exempt bond and lease financing.

Ameresco has also become an EaaS partner to some of our customers. This approach is particularly popular with Universities, and Ameresco is now Northwestern University's long-term EaaS partner with a third phase of projects under development. This type of partnership addresses deferred maintenance needs while developing and implementing energy conservation measures. Under the EaaS structure, Ameresco owns the equipment and systems installed for 30-years and only charges an annual service fee for verified savings achieved. This type of structure may be considered off balance sheet and can be set up to be cashflow neutral.

Ameresco is also at the forefront of innovative funding opportunities such as public private partnerships (P3), renewable energy certificate contracts, and PACE financing. We maximize the receipt of grants, utility rebates, and tax credits at the federal and state levels. This allows for a complete and up-to-date evaluation of potential aid to finance renewable energy projects and energy efficiency projects. Ameresco can tailor ownership and responsibilities based on the City's needs and preferred financing structure. Interest rates, term, repayment schedules, ownership, security interest, and terms and conditions will be discussed with the City to collaboratively determine the best financing strategy for the City's needs.

### Financing Capacity

**Ameresco has no barriers to financing.** Ameresco has sourced and raised more than \$4 billion of project financing over the past 23 years, from various lending sources including John Hancock, Huntington National Bank, Bank of America, Capital One, Chase Bank, Crews and Associates, Union Bank and several other financial institutions. Ameresco has a deep capital markets team and is constantly sourcing new lending and investing relationships with some of the largest international investment banks and institutional investors in the world.

**Ameresco is a strong, proven project sponsor.** With 2022 revenues of \$1.82 billion and a total construction backlog exceeding \$2.6 billion, Ameresco is a leading independent energy services company in the United States providing comprehensive energy efficiency and renewable energy solutions for facilities throughout North America and the United Kingdom. For the year ending 2022, Ameresco had total assets of approximately \$2.8 billion, cash in excess of \$116 million and a \$495 million credit facility.

Ameresco has experience implementing a variety of financing structures, examples demonstrating our capabilities include:

- Tax exempt lease financing for municipalities, hospitals, housing authorities and universities totaling over \$615 million, including \$32.4 million tax exempt lease financing for a \$64 million project at a large university in Chicago, IL.

- \$23.3 million taxable lease purchase Qualified Energy Conservation Bond (QECB) for the Metropolitan Airports Commission (MAC) in Minnesota for the largest solar project in the state. Ameresco collected unused allocations from area municipalities and worked with the State to reallocate this federal financing incentive back to the MAC.
- \$17.5 million tax exempt lease financing for the State of Hawaii to implement 28 separate ECMs including solar PV across six islands.
- \$22.8 million municipal advanced refunding of two separate outstanding series of Certificates of Participation for a Virginia school district in which Ameresco served as lessor.
- \$13 million financing for a city in Tennessee (private label) in which Ameresco served as lessor.
- \$13.9 million TELP financing for a housing authority in the Commonwealth of Massachusetts.
- Non-recourse project finance debt of \$177 million for \$351 million of renewable energy facilities throughout the country including both biogas and solar facilities.
- Successful procurement of two investors to purchase six solar facilities valued at \$35 million located in the Commonwealth of Massachusetts.
- Deployment of a \$50 million sale leaseback facility for financing solar projects developed, constructed and owned by Ameresco across the US.
- Sale and assignment of receivables totaling approximately \$1.36 billion from 74 Federal Energy Savings Performance Contracts, including Task Orders awarded by Department of Energy, Department of Defense, US Department of Agriculture, Federal Bureau of Prisons, VA hospitals, the Department of Interior and other Government Agencies.

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## 10. FINANCIAL REFERENCES:

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- a. Provide a company prospectus to include a Balance Sheet and Cash Flow Analysis not more than fifteen (15) months old.

Using existing cash resources, cash flows from Ameresco's operating activities, and access to credit through multiple lending relationships, Ameresco has the financial resources and strength necessary to undertake and successfully complete this project for the City of Milwaukee.

Ameresco's most recent 10-K for the period ending December 31, 2022 is included in the Appendix, and may be located using the U.S. Securities and Exchange Commission website as follows:

10-K: <https://www.sec.gov/ix?doc=/Archives/edgar/data/1488139/000148813923000014/amrc-20221231.htm>

Ameresco's most recent 10-Q for the period ending June 30, 2023 may be located using the U.S. Securities and Exchange Commission website as follows:

10-Q: <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001488139/000148813923000121/amrc-20230630.htm>

Our consolidated income and balance sheet statements, which can also be found on pages 44-47 of the 10-K for the period ending December 31, 2022, are provided on the following pages. These statements, which include information on Ameresco's revenues for the last two to three years, demonstrate the company's financial strength.

- b. Please provide the name, address, and the telephone number of the firm(s) that prepared the Financial Analysis.

Ameresco used the accounting firm, RSM US LLP to prepare the financial statements. Their contact information is:


RSM US LLP  
80 City Square

Boston, Massachusetts 02129  
617-912-9000

- c. Please enclose banking references including financial institution, address, contact person, telephone number, and specific information on your firm's credit that may be used to fund construction for large-scale projects.

#### Ability to Undertake Required Capital Expenditures

With total assets of approximately \$2.8 billion and cash in excess of \$116 million, Ameresco maintains a **\$340 Million Revolving Credit Facility** and strong banking relationship with Bank of America. The relationship is managed by Jane Parker, Senior Vice President, as follows:

**Bank of America**  Jane A. Parker, Senior Vice President  
One Monument Square, Portland, Maine 04101  
Phone: 207-253-7445 | Email: [jane.a.parker@bofa.com](mailto:jane.a.parker@bofa.com)

Our finance professionals have secure relationships with the following banks and financial institutions including the following references.

<p><b>Banc of America Public Capital Corp</b> c/o: Holly Andreozzi - Senior Vice President 100 Federal Street, 8-11 Boston, MA 02110 617-434-7760</p>	<p><b>The Huntington National Bank</b> Jacob Crouch VP – Huntington Public Capital 317-770-4746 / M: 317-266-9534 Huntington.com</p>
<p><b>TD Equipment Finance, Inc.</b> David Mullen Regional Manager 401-455-2921 M: 774-991-4712 F: 401-272-3469</p>	<p><b>D.A. Davidson &amp; Co.</b> Charles Zitnik, Sr. VP, Public Finance 800 West 47<sup>th</sup> Street, Suite 512 Kansas City, MO 64112 czitnik@dadco.com 816-360-2276 / M: 816-223-8009</p>
<p><b>Stifel, Nicolaus Company, Incorporated</b> Public Finance Investment Banking Tyler W. Hoch, Managing Director 60 S. 6<sup>th</sup> Street, Suite 3000, Minneapolis, MN 55402 612-455-5592 hocht@stifel.com / www.stifel.com</p>	

- d. Maximum individual project and aggregate bonding limits.

**Individual Project Bonding Limits:** \$500 M on an individual project

**Aggregate Bonding Limits:** \$2 billion surety credit facility, \$340 million credit facility.

- e. Please certify that your company does not owe the State of Wisconsin any taxes.

Ameresco certifies that the company does not owe the State of Wisconsin any taxes.

- f. Please certify that your company is not currently under suspension or debarment by the State of Wisconsin, any other City, or the federal government.

Ameresco certifies that the company is not currently under suspension or debarment by the State of Wisconsin, any other City, or the federal government.

- g. Please identify your firm's legal counsel for this project. Give the name and address of the primary individual responsible for contract negotiation.

Jay Fleishman  
Vice President of Operations  
1900 Spring Road, Suite 400  
Oak Brook, IL 60523

John Pickett  
Deputy General Counsel  
111 Speen Street, Suite 410  
Framingham, MA,

## 11/12. PROJECT HISTORY, CLIENT REFERENCES, ENERGY SAVINGS PERFORMANCE DATA:

Using the following forms, list five (5) energy performance contracting projects currently in repayment and under contract with your firm which most resemble the scope of this project, including at least two projects that include adding solar generation to facilities. **Please also list all energy performance contracting projects performed in the City of Milwaukee.** Projects with installed costs of less than \$500,000 or single technology (e.g. lighting only, controls only, etc.) will not be considered. Attach additional sheets as necessary. Please put an asterisk by those project references involving buildings similar to the building(s) described in Appendix A. All information is required. For each project described above, complete the following table. Energy savings data must be provided in fuel units.

Project Name, Location, and City	1. City of South Bend, Indiana *
Project Dollar Amount (installed project costs)	\$4,855,897 (Phase 1) \$5,361,000 (Phase 2)
Primary ECMs Installed	<b>Phase 1:</b> 1: Roofing Replacement, 2: Lighting Replacement, 3: Lighting II -Upgrades, 4: HVAC System Upgrades, 5: HVAC Control System Upgrades, 6: Ceiling Tile Replacement and Upgrades, 7: Install <b>Solar PV</b> <b>Phase 2:</b> 1: Boiler & Pump Replacement, 2: AHU-1 Replacement, 3: RTU & MAU Replacement, 4: Heat pump Controls Upgrades, 5: New Building Automation System, 6: Plumbing Fixture Replacement, 7: Roofing Replacement, 8: Fire Alarm System Replacement, 9: LED lighting Upgrades
Date Construction Started	<b>Phase 1:</b> 04/28/2015   <b>Phase 2:</b> 10/26/2021
Date Construction Completed	<b>Phase 1:</b> 05/01/2016   <b>Phase 2:</b> Substantially Complete
Guarantee Period Start & End Dates	<b>Phase 1:</b> October 1 <sup>st</sup> through September 30 <sup>th</sup>
Dollar Value of Projected Annual Energy Savings	\$82,268 (Phase 1) \$47,488 (Phase 2)
Dollar Value of Guaranteed Annual Energy Savings	\$82,268 (Phase 1) \$47,488 (Phase 2)
Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$6,500 (Phase 1) \$199,866 (Phase 2)
Method(s) of Savings Measurement and Verification	Option A & Agreed-Upon Savings
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	<b>Brian Roskens</b> , Manager Project Development, Project Development Oversight (See Section 10) <b>Dave Shu</b> , Project Development Engineer, Lead Project Developer (See Section 10 and resume appendix) <b>Zaki Mafraji</b> , Manager of Construction, Project Manager (See Section 10)
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure	Eric Horvath Public Works Director ehorvath@southbendin.gov P: (574) 235-9251

that all representatives are familiar with this project.

The units shown in the table below are from the South Bend Phase 1 project only. Phase 2 has been recently accepted as substantially complete, and therefore, a year of achieved savings are not available yet.

#### The City South Bend, Indiana – Phase 1

	Projected Savings	Guaranteed Savings	Achieved Savings						
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
kWh	1,062,226	1,062,226	1,173,938	1,173,938	1,173,938	1,173,938	1,173,938	1,173,938	1,173,938
KW	0	0	0	0	0	0	0	0	0
Therms	638	638	638	638	638	638	638	638	638
Water kGallons	0	0	0	0	0	0	0	0	0
Other (specify)	0	0	0	0	0	0	0	0	0

Project Name, Location, and City	2. City and County of Denver, Colorado*
Project Dollar Amount (installed project costs)	\$1,992,641 (Phase 1) \$1,685,491 (Phase 2)
Primary ECMs Installed	<b>Phase 1:</b> 1: Interior Lighting Upgrades, 2: Exterior Lighting Upgrades, 3: Lighting Controls, 4: Control System Upgrades, 5: Pump Improvements 6: Pipe and Equipment Insulation, 7: Vending Machine Controls, 8: Pool Covers, 9: Building Envelope Improvements, 10: Transport Gas Contract, 11: Energy Education and Live Energy Monitoring  <b>Phase 2:</b> 1: Interior Lighting Upgrades, 2: Exterior Lighting Upgrades, 3: Pool Cover, 4: Live Energy Monitoring  <b>14 facilities</b> made up of recreational centers, libraries, fire and police stations, and the 911 Call Center.
Date Construction Started	<b>Phase 1:</b> 12/17/2015 <b>Phase 2:</b> 12/09/2021
Date Construction Completed	<b>Phase 1:</b> 03/07/2017 <b>Phase 2:</b> 12/08/2022
Guarantee Period Start & End Dates	<b>Phase 1:</b> April 1 <sup>st</sup> through March 31 <sup>st</sup> <b>Phase 2:</b> January 1 <sup>st</sup> through December 31 <sup>st</sup>
Dollar Value of Projected Annual Energy Savings	\$98,891 (Phase 1) \$96,525 (Phase 2)
Dollar Value of Guaranteed Annual Energy Savings	\$98,891 (Phase 1) \$96,525 (Phase 2)



Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$24,023 (Phase 1) \$2,929 (Phase 2)
Method(s) of Savings Measurement and Verification	Option A, Option D, & Agreed-Upon Savings
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	<b>Erin Ells</b> , Sr. Project Development Engineer, Project Development Lead & Auditor <b>Rob Sevier</b> , Sr. Account Executive, Project Liaison <b>Scott Logan</b> , Sr. Project Manager, Project Management
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Thomas Ochtera Energy Manager P: (720) 913-5708 E: Thomas.ochtera@denvergov.org

The units shown in the table below are from the City and County of Denver Phase 1 project only. Phase 2 was accepted as substantially complete within the last 12 months, and therefore, a year of achieved savings are not available yet.

#### City and County of Denver, Colorado – Phase 1

	Projected Savings	Guaranteed Savings	Achieved Savings		
			Year 1	Year 2	Year 3
kWh	289,470	289,470	316,464	316,464	316,464
KW	1,168	1,168	1,291	1,291	1,291
Therms	-8,362	-8,362	-9,250	-9,250	-9,250
Water kGallons	0	0	0	0	0
Other (specify)	0	0	0	0	0

Project Name, Location, and City	3. City of Mankato, Minnesota *
Project Dollar Amount (installed project costs)	\$4,603,699 (Phase 1) \$2,494,608 (Phase 2)
Primary ECMs Installed	1. Lighting Upgrades, 2: Water Conservation 3: Mechanical Insulation, 4: Building Envelope Measures, 5: Building Automation Improvements 6: Boiler Replacement, 7: Boiler Plant Upgrades 8: Arena Air Handlers, 9: Arena Isolation Doors 10: Building Automation System Upgrades 11: Arena Space Dehumidification  The project covered fifteen city buildings and 941 City-owned streetlights. Innovative solutions were implemented at the Civic Center Ice Arena to ensure proper levels of dehumidification at the ice arena.
Date Construction Started	<b>Phase 1:</b> 12/21/2016 <b>Phase 2:</b> 12/27/2017
Date Construction Completed	<b>Phase 1:</b> 02/28/2018

	<b>Phase 2: 02/11/2019</b>
Guarantee Period Start & End Dates	<b>Phase 1:</b> March 1 <sup>st</sup> through February 28 <sup>th</sup> <b>Phase 2:</b> March 1 <sup>st</sup> through February 28 <sup>th</sup>
Dollar Value of Projected Annual Energy Savings	\$216,754 (Phase 1) \$29,787 (Phase 2)
Dollar Value of Guaranteed Annual Energy Savings	\$216,754 (Phase 1) \$29,787 (Phase 2)
Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$42,413 (Phase 1) \$39,806 (Phase 2)
Method(s) of Savings Measurement and Verification	Option A & Agreed-Upon Savings
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	<b>Dawn Fischer</b> , Director of Engineering, Project Design and Engineering <b>Kent Wolf</b> , Sr. Account Executive, Client Liaison <b>Chris Sawyer</b> , Sr. Project Manager
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Jeff Johnson, City Engineer jjohnson@mankatomn.gov   P: (507) 387-8640 Tom Fournier, Facilities Project Coordinator tfournier@mankatomn.gov P: (507) 387-8695

#### City of Mankato, MN – Phase 1

	Projected Savings	Guaranteed Savings	Achieved Savings	
			Year 1	Year 2
kWh	2,282,443	2,282,443	2,418,839	2,441,884
KW	4,319	4,319	4,481	4,481
Therms	37,095	37,095	36,775	36,775
Water kGallons	253	253	318	318
Other (specify)	0	0	0	0

#### City of Mankato, MN – Phase 2

	Projected Savings	Guaranteed Savings	Achieved Savings	
			Year 1	Year 2
kWh	338,853	338,853	355,478	355,478
KW	0	0	0	0
Therms	14,382	14,382	14,382	14,382
Water kGallons	0	0	0	0
Other (specify)	0	0	0	0

Project Name, Location, and City	4. City of Arvada, Colorado*
Project Dollar Amount (installed project costs)	\$4,550,563
Primary ECMs Installed	1: Building Envelope - Infiltration Upgrades, 2: Envelope - Added Insulation, 4: Cooling Upgrades, 5: RTU Upgrades, 6: Boiler Upgrades, 7: Interior & Exterior Lighting Upgrades, 8: Street Lighting Upgrades, 9: Electric Tariff Optimization, 10: Gas Procurement Optimization, 11: <b>Solar PV</b> , 12: Plumbing Fixture Efficiency, 13: MSU Conversion to VAV, 14: Update Delta Software, 15: Event Schedule Integration to BAS, 16:: Analytics Planner 14 Municipal Buildings Including: Water Treatment Facilities, Wastewater Operations, Fleet Repair Shop, Police Stations, City Hall
Date Construction Started	01/16/2020
Date Construction Completed	03/08/2021
Guarantee Period Start & End Dates	April 1 <sup>st</sup> through March 31 <sup>st</sup>
Dollar Value of Projected Annual Energy Savings	\$202,785
Dollar Value of Guaranteed Annual Energy Savings	\$202,785
Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$38,390 Solar Production Credit: \$312,125
Method(s) of Savings Measurement and Verification	Option A
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	Erin Ells, Sr. Project Development Engineer, Lead Project Developer & Auditor Rob Sevier, Sr. Account Executive, Project Liaison Joe Brajdich, Sr. Project Manager, Project Management Jared Hughes, Manager of Performance Assurance, Develop M and V Plan, Oversee Reporting ((See Section 10) Greg Studier, Sr. M and V Engineer, M and V Reporting (See Section 10 and resume appendix)
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Kim Vagher, Manager of City Facilities City of Arvada 920-787-7112   kvagher@arvada.org

#### City of Arvada, Colorado

	Projected Savings	Guaranteed Savings	Achieved Savings	
			Year 1	Year 2
kWh	849,709	849,709	917,434	917,434
KW	2,371	2,371	2,503	2,503
Therms /MMBtus	7,569	7,569	7,438	7,438
Water kGallons	1,368	1,368	1,440	1,440

Other (specify)	0	0	0	0
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Project Name, Location, and City	5. Public Building Commission of Chicago *
Project Dollar Amount (installed project costs)	\$6,055,124
Primary ECMs Installed	<p>1: Retro-Commission Mechanical Systems, 2: Boiler Replacements, 3: Chiller System Replacements, 4: Condensing Units &amp; RTUs, 5: Single-Zone VAV, 6: Motor &amp; Pump Upgrades 7: Buildings Controls Upgrade, 8: HVAC Systems Upgrade, 9: Interior Lighting Upgrade, 10: Lighting Occupancy Sensors</p> <p>Engineering audit of over 80 buildings across the City of Chicago. The final contract covered 36 buildings with a combined space of over 1.8 million square feet: heavily trafficked City of Chicago libraries, including the 970,000+ square foot Harold Washington Library, Police Stations, a police training academy, City Water, non-emergency 311 and Operations offices and the historic Chicago Cultural Arts Center</p> <p><b>Ameresco exceeded 30% combined Minority and Women owned hiring requirements for the duration of the project</b></p>
Date Construction Started	04/11/2014
Date Construction Completed	12/01/2015
Guarantee Period Start & End Dates	December 1 <sup>st</sup> through November 30 <sup>th</sup>
Dollar Value of Projected Annual Energy Savings	\$702,178
Dollar Value of Guaranteed Annual Energy Savings	\$702,178
Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$0
Method(s) of Savings Measurement and Verification	Option A & Non-measured savings
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	<p>Steve Taggart, Vice President, Project Liaison (See Section Section 10)</p> <p>Tony Castellani, Sr. Project Manager, Project Manager (See Section Section 10)</p> <p>Jared Hughes, Manager of Performance Assurance, M and V Plan Development and Assurance (See Section Section 10)</p> <p>Greg Studier, Sr. M and V Engineer, M and V Reporting (See Appendix of Resumes)</p>
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project.	<p>George Marquisos, Deputy of Infrastructure, Office of the Mayor, City of Chicago</p> <p>P: (312) 744-8359</p>

You should ensure that all representatives are familiar with this project.

E; george.marquissos@cityofchicago.org

### Public Building Commission of Chicago

	Projected Savings	Guaranteed Savings	Achieved Savings			
			Year 1	Year 2	Year 3	Year 4
kWh	8,244,308	8,244,308	9,478,034	9,531,394	9,262,887	9,253,390
KW	0	0	0	0	0	0
Therms /MMBtus	70,915	70,915	183,356	187,417	176,773	169,441
Water kGallons	0	0	0	0	0	0
Other (specify)	0	0	0	0	0	0

Project Name, Location, and City	Milwaukee County, Wisconsin *
Project Dollar Amount (installed project costs)	\$1,671,694
Primary ECMs Installed	1. Lighting Retrofit. 2. DDC Controls Upgrade, 3. Building Envelope Upgrades 4. VFD for AHU fans 5. High Efficiency Motors 6. Retrofit Windows with Low E Film 7. Water Conservation 8. Retrofit Airhandlers at pool with preheat coil Locations: King Park, Koschuzko Community Center, Washington Park, Miller Pavillion, O'Donnell Parking Structure, Brown Deer Golf Clubhouse, Health and Human Services COGS Center, Noyes Pool, Pulaski Pool, Wilson Ice Arena
Date Construction Started	February 5, 2008
Date Construction Completed	December 23, 2009
Guarantee Period Start & End Dates	Year 1 M&V 3/1/2010 through 2/28/2011, and Year 2 3/1/2011 through 2/28/2012 M and V was canceled after year two report was completed.
Dollar Value of Projected Annual Energy Savings	\$189,434
Dollar Value of Guaranteed Annual Energy Savings	\$189,434
Dollar Value and Type of Annual Operations Cost Savings (if applicable)(e.g. outside maintenance contract, material savings, etc.)	\$25,674
Method(s) of Savings Measurement and Verification	Option A & D
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel information.	Steve Taggart, Vice President, Project Liaison (See Section Section 10) Tony Castellani, Sr. Project Manager, Project Manager (See Section Section 10) Jared Hughes, Manager of Performance Assurance, M and V Plan Development and



Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.

	Projected Savings	Guaranteed Savings	Achieved Savings	
			Year 1	Year 2
kWh	1,932,566	1,932,566	1,932,566	1,932,566
KW				
Therms	98,436	98,436	98,436	98,436
Water kGallons				
Other (specify)				

## Attachment 2-B | Technical Energy Assessment

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### 1. PROJECT MANAGEMENT:

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#### a. Project Summary

##### **Complete Energy Services Partner**

Our principal service is the audit, analysis, development, design, engineering, and installation of projects that reduce the operating costs of our customers' facilities, address deferred maintenance, and meet financial and carbon reduction goals. We also incorporate operation and maintenance (O&M) along with measurement and verification (M&V) services, as desired by our customers. These projects generally include a variety of measures that incorporate innovative technology and techniques that are customized for the facility and designed for the highest levels of efficiency of major building systems while enhancing the comfort and resiliency of the buildings. Ameresco approaches energy from a holistic perspective, and our services reflect the diversity of our solutions. Ameresco has the technical expertise to align, strategize, and construct projects for the City of Milwaukee that will achieve carbon reduction goals, both short term and long-term. We are a recognized leader in project execution and collaborate with our partners and customers to ensure aggressive timelines are met and budgets are maintained. As a vendor neutral company, Ameresco will leverage our buying power and relationships in the marketplace to maximize the economic benefits and provide the best solution for the City. We are the best firm to be the City of Milwaukee's comprehensive energy services partner. By selecting a single firm that can address all of your energy and sustainability needs, the City will benefit from a single point of contact, a well-integrated project, and the opportunity for significant innovation.

##### **Comprehensive Approach**

Ameresco's comprehensive approach to managing your performance contract is designed to ensure that we deliver the maximum value for our customers. We work with our customers to determine the best approach to meet their climate, energy and facilities goals, with the consideration of ALL solutions. This process typically begins with energy analytics, utility analysis, and facilities condition data indexing to identify areas of deferred maintenance and define a strategic roadmap for energy and infrastructure improvements. Then we identify specific efficiency conservation measures (ECM) to reduce demand, eliminate excess energy usage, and establish the associated guaranteed cost savings. As a vendor-neutral company, we focus on finding the best products and solutions rather than trying to sell a specific product or service, and we can provide open protocol solutions. Following the identification of potential demand reductions, our dedicated renewable energy team works with customers to right-size distributed generation solutions to balance or offset reliance on the grid and maximize the sustainability and financial benefits of renewable energy, battery storage, and advanced energy controls. By approaching a project with the intent of minimizing the energy load first, any renewable energy systems employed will meet more of the reduced facility load and maximize carbon emissions reduction. By combining renewable energy with energy efficiency work, we are often able to fund more work overall, including meeting deferred maintenance goals, while helping meet aggressive climate action plan goals. Finally, we continuously add value to the customer's energy portfolio with skilled measurement & verification (M&V) of savings and operations and maintenance (O&M) services to ensure savings are achieved and persist. We follow industry standard International Performance Measurement and Verification Protocol (IPMVP) and Federal energy Management Program (FEMP) M&V guidance to measure and report achieved savings. In addition, any savings above the guaranteed level solely benefit the customer.

Ameresco has the capacity and experience to address a broad range of systems including both traditional energy performance contracting work and cutting-edge technologies that can make a substantial impact for the City of Milwaukee. In addition, we utilize consultants and sub-contractors to supplement our internal staff. This allows us to incorporate local, diverse, and small business labor as well as provide the staffing capabilities for any size projects. We also have experts on staff who analyze government policies including the Inflation

Reduction Act and know how to bring the benefits of direct pay tax incentives to our tax-exempt customers. Ameresco has the technical capability address a broad range of systems. In addition, some notable measures we have implemented are listed below.

- **Renewable Energy Systems:** Ameresco has installed over 577MW of solar PV. We procure and manage REC contracts, secure utility rebates, and perform operations and maintenance services. In addition to designing and building energy assets for others, Ameresco owns and operates over 250MWe of our own energy assets with another 258MWe of energy assets in development and construction.
- **Battery Energy Storage and Microgrid Systems:** Ameresco implemented a microgrid resiliency solution for United States Marine Corps Recruit Depot Parris Island including ECMs, a combined heat and power (CHP) plant capable of producing 3.5MW of electricity and all of the steam required for the entire installation, 4MW/8MWh battery energy storage system (BESS), 6.7MW of solar PV, and a microgrid control system capable of fast load shedding. This comprehensive project will ensure a reliable, secure energy supply and reduce lifecycle operating costs of Marine Corps facilities while managing future commodity price volatility.
- **HVAC Systems:** Ameresco has built over 125 central plants, installed thousands of chillers and cooling towers, implemented chilled beam systems, retrofitted and replaced air handling units, and more HVAC upgrades. We are also in construction of new air handling units for Northwestern University at their administrative building where the President and board of trustees of the University sit without disturbing daily operations.
- **Building Automation Systems (BAS):** Ameresco has implemented numerous controls and BAS projects with and without accompanying HVAC upgrades. We are in the midst of a multi-phase project with Ave Maria University to upgrade the BAS on their campus including in their chilled water plant, academic builds, and student housing.
- **Lighting Systems:** Ameresco completed a smart city streetlighting project for the City of Chicago that not only upgraded the lights to LED but included a mesh network lighting control system. Ameresco also upgraded almost 70,000 interior and exterior light fixtures to LED for McCormick Place Convention Center with a new lighting control system for the exhibit halls.
- **Water Metering:** Under a guaranteed savings agreement, Ameresco upgraded the water metering system for the Town of Plainfield including installation and testing of approximately 10,000 water meters that serve residential and small commercial accounts throughout the Town.
- **Portfolio Manager:** We have supported Northwestern University in its ENERGY STAR® reporting and have completed building data entry into Portfolio Manager for Southwest Technical College for their Integrated Energy Master Plan for Energy Neutrality.
- **Utility Procurement:** Ameresco's Supply Management group worked with customers including municipalities to assist with the budgeting, purchase, and price risk management of all electricity and natural gas supply. In addition, Ameresco reviews electricity and natural gas invoices; we perform this analysis on a site-by-site basis and correct any problems uncovered prior to vendor payment by the customer.

#### b. Project Work Plan and Milestones

##### Project Schedule and Milestones

Ameresco will develop and maintain a project schedule that clearly outlines milestones and major activities required to implement the City project in a timely manner. Ameresco will have constant oversight of schedule timelines and will conduct at a minimum a biweekly program plan meeting to review goals, task completions, and milestone achievement review. All the tasks for the development and implementation phases will be developed thoroughly by the project team in close coordination with the City staff. The timeline will be approved internally by Ameresco management staff and then used diligently by the field staff to track the progress of the

project. The project schedule is a living document and is constantly updated during the life of the project by the Project Manager. The schedule will be reviewed with the City and all subcontractors on a weekly basis. Due to this constant overview, Ameresco management can adjust the resources committed to a project and will dedicate additional resources to the project in order to meet or exceed schedules. Ameresco emphasizes effective planning and project control to ensure the demands on resources are managed properly. A top priority is to ensure coordination with customer staff to eliminate potential scheduling conflicts.

The following project schedule and milestone timeline are preliminary based on the contents of this RFP and are specifically focused on the project at the DPW Field Headquarters building. If selected, Ameresco looks forward to working closely with the city of Milwaukee to select the buildings for the phase of projects and refine this schedule to best meet your needs and phasing plans. We have the staff and resources necessary to ramp up and meet any required schedule. In this schedule, we have included review time to allow the City to ensure that projects and contracts meet their needs as well as allowance to account for weather impacts.

Proposed Project Schedule	
Milestone	Anticipated Completion
IGA Contract Executed	January 2024
DPW Field Headquarters IGA Draft	April 2024
IGA Review and Final Draft Completion	May 2024
Energy Savings Performance Contract Executed	June 2024
Subcontractor Contracts Executed	July 2024
Equipment Ordered (excluding solar)	July 2024
Solar Interconnection Design and Application Submission	August 2024
Compressed Air Survey Completed with Recommendations	August 2024
Motor Upgrade Installation	September 2024
LED Lighting Retrofit Installation	September 2024
Garage Demand Controlled Ventilation Installation	September 2024
Solar Interconnection Approval	October 2024
Solar Equipment Ordered	October 2024
Radiant Heat Installation	December 2024
Solar Array Energized	April 2025
Final Project Closeout	May 2025

### Project Ownership

Ameresco's comprehensive approach includes working closely with our customers to clearly define needs; we provide expert engineering and technical capabilities to maximize value to the customer throughout each phase of project development; and we communicate freely and openly. We achieve this goal through ownership of the entire process from auditing to development to construction to commissioning and savings verification. Any concerns, needs, or issues will be resolved directly with Ameresco. **Diana Vargas, Senior Account Executive**, is the primary point of contact through the process to ensure consistency. **Kristin Bernstein, Lead Development Engineer**, coordinates development activities including auditing, data analysis, scope development, and project pricing to provide a comprehensive project. Once in construction, **Tony Castellani, Senior Project Manager**, will lead the construction process and communication with the City of Milwaukee with

project scheduling and progress reporting. Ameresco will call upon its national and regional staff to provide additional local project managers, engineers, and technical experts as needed to ensure the best person for the job is available. This structure ensures that work proceeds smoothly and that a high-quality project is completed. Ameresco self-performs energy analysis, building audits, scope development, preliminary design, savings calculations, project management, and M&V with support from local and small business partners. Ameresco sub-contracts installation work and final design work. We regularly use apprentices and local resident labor and will do so for the City. Depending on the scope of work, material purchasing and distribution may be contracted through a sub-contractor or performed directly by Ameresco. We also have a network of high-quality contractors and consultants that we work with on a regular basis that allows us to expand our capabilities to address larger scopes of buildings in a shorter timeframe.

### Project Management Approach

Ameresco's project management approach is to:

- **Co-develop the schedule with the City.** This generates a clear timeline for the scope of work that meets all your needs and goals while taking into consideration each facility's operation and use.
- **Employ experienced, qualified engineers, designers, and project managers** and provide continuing training to enhance their capabilities.
- **Assign the Ameresco lead project manager as the single point of contact** and responsibility during construction.
- **Right-size the effort**, allowing the lead project manager flexibility during execution using Ameresco's extensive capabilities as needed.

Having clear communication and designated leaders is the key to setting, managing, and maintaining requirements throughout the entire ESPC process. As our project process is well-defined with clear expectations for which team member is responsible for each part (such as the audit, construction, and measurement and verification), we also continually communicate the client's requirements to the team member who needs that information at the right time. Regular meetings with customer staff are scheduled as part of our routine process to ensure progress and expectations are met and all needs are identified, discussed, and incorporated into the final project plan. Ameresco will develop a detailed work plan and review with the City. We also use checklists for preparation of construction sub-tasks, for developing detailed scope of work documents, and for tracking completion of the work. For specific work that has potential for disruption of a major system, contingency plans will be included as part of the work plan. Clear, concise communications will enable us to address projects of any size or scale in the desired timeframe. Ameresco anticipates organizing project meetings during all phases of the project to ensure that there is proper and frequent communication with City staff, and that the goals and expectations are properly communicated and understood by both the teams. During all phases, critical issues will be identified, addressed, and properly communicated. Following are examples of such critical issues: work scheduling, access issues, shutdown or interruption of utilities, construction safety, location of equipment, and permits.

Our project management team will ensure that each measure is installed in a safe and effective manner. All work will be documented and logged in order to maintain transparency with the City. In addition, Ameresco will ensure that all subcontractors maintain cleanliness throughout the spaces they will visit. This involves removing and disposing of old material, moving furniture back to original location if relocation is necessary, cleaning any potential debris or dust, and sweeping and or vacuuming if needed.

### Quality Assurance

Ameresco's 20-year track record building – and in many instances operating and maintaining – varied renewable energy and energy efficiency projects attests to the integrity of our Quality Control and Quality Assurance Program (QCQAP). The purpose of QCQAP is three-fold:



- **First**, to assure that the project meets all of the project commitments and City requirements as defined in the contract documents.
- **Second**, to assure that we comply with all federal, state, interstate, local, and facility-specific laws, codes, and regulations for the design, construction, and operation and maintenance of the proposed system.
- **Third**, to ensure that the project reliably delivers the expected performance in a consistently safe and reliable manner, and in accordance with all environmental and other permitting requirements

Through our extensive experience delivering complex projects to municipal customers, we have become well-versed in applying our QCQAP program these types of projects. We have also developed systems to assure that our subcontractors and suppliers comply with these requirements through proper training and education, and flow-down provisions in our subcontracts.

### System Performance Quality Control Procedure (Commissioning)

One of the final steps in the QCQAP process involves functional testing of the systems to ensure that all elements of a system are installed and programmed correctly such that the systems operate per their design intent through all their designed modes of operation and operate according to the energy efficiency expectations. For example, it is not sufficient for a chiller plant to supply chilled water to meet a system cooling load. In addition, functional testing will verify that the plant is meeting the cooling load while operating in an energy efficient/cost effective mode. Additional Cx elements will include the following:

- **Testing, Adjusting and Balancing (TAB):** The TAB contractor will create the TAB plan. Included in the approach is an explanation of the intended use of the building control system. The TAB contractor will submit periodic written reports of discrepancies and lists of completed tests to the commissioning agent (CxA). TAB work will not begin until the control system has been pre-functionally tested and selective functional tests have been performed and approved by the CxA.
- **Functional Performance Tests Development and Implementation:** The Functional Performance Tests (FPTs) provide a functional demonstration of the control and operational sequence of the various systems. The Contractor will complete all of the customized system functional performance test procedures prior to system acceptance by Ameresco. The Owner is welcome to participate in the Cx acceptance process. The CxA will facilitate the Contractor's implementation of these tests. The functional performance test procedures will be developed by the CxA.
- **Deficiencies, Re-testing and Acceptance:** Incomplete work or deficiencies discovered during FPTs will be corrected by the responsible contractors and re-tested or witnessed to produce satisfactory results prior to proceeding to the next stage of the Commissioning process.

Detailed commissioning plans will be created for each measure during the IGA and construction. The commissioning for each of the measures will include, but is not limited to:

1. Compressed Air Leak Survey: Inspection of proper installation of required repairs
2. LED Lighting Upgrades: Control systems will be tested to ensure the lights turn on and off at the appropriate times in response to occupancy levels and daylight.
3. Convert Garage from Forced Air to Radiant Heat: The heaters will be tested to ensure that they turn on and off at the appropriate air temperatures in the space.
4. Garage Demand Controlled Ventilation: The MAUs will be tested to ensure that they turn on when the recommended limit of carbon monoxide is detected and off when the levels are appropriately reduced.
5. Retrofit Air Handling Units to VAV: The RTUs will be tested to ensure that they vary the airflow in response to heating and cooling requirements in the space.
6. Upgrade Motors to Premium Efficiency: The motors will be tested to ensure they are operating correctly.

7. Rooftop Solar Array: All cabling, switchgear, and electrical distribution equipment will be tested. Megger testing of conductors will be performed and the polarity at the combiner box/string inverter will be confirmed.

c. Training Provisions

All installed equipment must be properly maintained to perform efficiently and reliably. Ameresco develops a customized and comprehensive training program for each project to provide a smooth transition of ownership after construction. People learn in different ways. For this reason, training involves on-site, classroom, visual, and applied learning. Training is typically performed when substantial completion of each measure is achieved. Ameresco can provide multiple trainings to accommodate buildings with multiple shifts, as desired. Training sessions will be recorded to provide future reference and will include a review of the overall installation and performance history so that everyone understands the benefits of the program. A Power Point presentation will be prepared to cover the highlighted areas of the Training Manual. Ameresco also makes it standard practice to provide electronic versions of the training media as well. The specific location of training sessions will depend on the technology installed and the needs of the training program; it can include the job site, a customer's central offices, the installation contractor's facilities, or at the manufacturer's facilities. Arrangements for additional training facilities or sessions can also be made by Ameresco as the project demands.

Education materials will be developed to reinforce the importance of the equipment selected, proper maintenance, and energy conservation. The materials serve as a reminder to staff and answer questions about proper use, care, and energy use. Ameresco utilizes a combination of manufacturer-developed materials, industry resources, and consultant recommendations. Our experience has shown that bound printed copies of all training material are most appreciated by field personnel. Ameresco will prepare a Training Manual for each specific new piece of equipment which includes O&M manuals, drawings, and equipment specification literature. A review of the manufacturer's O&M manuals and an explanation of the warranties will be provided. A digital copy will also be provided for future personnel.

Along with details on project performance requirements and equipment maintenance, all training sessions will include a clear separation between Ameresco's responsibilities and the City of Milwaukee's responsibilities. The City's maintenance responsibilities will be agreed upon during the Investment Grade Audit and reviewed in detail at the training sessions. Beyond the initial training, Ameresco will have seasonal, annual, or on demand training sessions available to assure that new equipment is properly maintained, and that expected energy savings are being delivered.

As a part of our comprehensive training program, Ameresco has identified four levels of training that is required for the specific energy conservation projects presented. Because this project is paid for from on-going savings, it is critical that Ameresco and City of Milwaukee facilities personnel are aligned with equipment O&M requirements and expectations.

- **Level 1:** For systems and equipment that are to be a direct replacement of the existing, such that no new processes will be required to perform operations and maintenance functions, training will be limited to a general overview of the installed equipment to provide staff with familiarity of the installed equipment, manufacturer's recommended maintenance procedures, and all warranty information.
- **Level 2:** For systems and equipment which are new to the site and require some general understanding as to their function and operation, training will include classroom instruction that will provide an overview of the specific technology selected, specific equipment installed, review of the O&M manuals, and an explanation of equipment warranties. This training will also concentrate on the manufacturer's operational procedures and on the recommended maintenance schedule including the spare part's list. Following the classroom training session, a site tour will be scheduled to view the specific installation and operation of the equipment.
- **Level 3:** For systems and equipment which are new to the site, and are more complex in nature, training will require more extensive classroom training to discuss seasonal modes of operations,

comfort conditions, operation of individual components, emergency conditions, sequences of operations, alarms, diagnostics. Level 3 classroom training will a guide on how to troubleshoot malfunctions and basic problems. This training will also concentrate on the manufacturer's operational procedures and the recommended maintenance schedule including the spare part's list. Following the classroom training, a site tour will be scheduled to view the specific installation, operation of the equipment, and hands on maintenance instructions by industry experts and manufacturer's representatives. This level of training will provide staff with a comprehensive understanding of all equipment details as well as hands on familiarity with the equipment.

For the projects proposed for DPW Field Headquarters, the following training is proposed:

ECM Training Matrix			
ECM	Level 1	Level 2	Level 3
Compressed Air Leak Survey	X		
LED Lighting Retrofit with Controls		X	
Convert Garage Heating from Forced Air to Radiant			X
Garage Demand Controlled Ventilation		X	
Retrofit Air Handling System to VAV			X
Upgrade Motors to Premium Efficiency on As-Fails Basis	X		
Install 160kW Solar PV System			X

#### d. Project Financing

##### Financial Strength

Ameresco has the financial capabilities to be the City of Milwaukee's long-term partner. In 2022, Ameresco (NYSE: AMRC) had a construction backlog exceeding \$2.6 billion. Our 2022 revenues were \$1.8 billion, and we had total assets of approximately \$2.88 billion, cash in excess of \$116 million, and a \$495 million credit facility. Due to our financial strength, we can secure long-term project financing and maintain 20-year operations responsibility for projects that we own. We can also assist our customers in securing financing.

##### Project Financing Options

As a company, Ameresco does not have a preference for the type of financing utilized. We feel that each project should be tailored to the City of Milwaukee's needs, goals and project type. Potential financing options include DBOOM (Design, Build, Own, Operate and Maintain), Performance Contracting, Power Purchase Agreements (PPAs), and Budget Neutral Infrastructure Upgrades as its core structures for energy project financing. We often assist our customers to obtain tax exempt bond and lease financing.

The more complicated Energy as a Service (EaaS) or Power Purchase Agreements are also options for the City that can provide an alternate strategy for securing energy efficient upgrades without a capital outlay. These agreements involve third-party ownership of the systems. This type of structure may be considered off balance sheet and can be set up to be cashflow neutral. Guidehouse Insights has ranked Ameresco #1 in the EaaS industry for the first two years of the ranking's existence because we meet each customer's needs with a unique solution. We aren't trying to force each project or customer into the same model repeatedly. On the range of services, the EaaS space often consists of a lot of lighting only projects. Ameresco's offering is much broader in the types of energy services we provide. We have executed agreements that include streetlights, boilers, chillers, building HVAC systems and many other energy improvements in between. Our EaaS model is one that is really focused on solving the operational headaches of our customers while achieving sustainability goals. We are experts in all of these areas, and we would be happy to answer any questions that may arise regarding these topics.

Ameresco is also at the forefront of innovative funding opportunities such as public private partnerships (P3), renewable energy certificate contracts, PACE Financing, grants, utility rebates, and tax credits continuously in development at the federal and state levels. This allows for a complete and up-to-date evaluation of potential aid to finance renewable energy projects and energy efficiency projects. Ameresco can tailor ownership and responsibilities based on the City's needs and preferred financing structure. Interest rate, term, repayment schedule, ownership, security interest, and terms and conditions will be discussed with the City to find the best financing strategy for your needs. The following table provides a comparison of the features and benefits of the various financing structures. The financing options in the Chart are 'asset based' requiring a security interest in the energy devices installed.

Financing solutions are driven by two main factors – your goals and the technology being implemented. Ameresco works with our clients to discover their appetite for risk and responsibility for the proposed technologies to offer optimal ownership structures to deliver the maximum benefit to our customers. This opportunity could be bid out to several very large banks such as US Bank or Bank of America, as well as other lenders who specialize in our industry such as Webster Bank, Hannon Armstrong, or Crews and Associates.

 <b>CHART OF FINANCING OPTIONS</b>						
	TAX EXEMPT LEASE PURCHASE (TELP)	PUBLIC BONDS	PROPERTY ASSESSED CLEAN ENERGY (PACE)	ENERGY SAVINGS AGREEMENTS (ESA)	PROJECT FINANCE	PUBLIC PRIVATE PARTNERSHIPS (P3)
APPLICABILITY	Capex projects below \$50M.	Best for projects \$50M and up.	All project sizes	All project sizes	Revenue generating assets exceeding \$10M.	Infrastructure financing. Large projects only.
ASSET OWNERSHIP	Customer	Customer	Customer	Customer	ESCO / Project Owner	Varies
UP FRONT CAPITAL REQUIRED	Not Required	Not Required	Not Required	Not Required	May require equity by project owner. Not required from Customer/ User.	May require equity by project owner. Not required from Customer / User.
DO PAYMENTS BEGIN ONLY AFTER SAVINGS ARE PROVEN ?	Yes	No	Yes	Yes	Yes	Varies
OBLIGATED PARTY	Customer	Customer	Customer	Customer is the primary obligor, with ESCO as a contingent obligor.	ESCO / Project Owner	Varies
TERM	10 to 20 Years	Up to 30 Years	Up to 30 years	Up to 15 years	10-25 Years	20-50 Years
O&M RESPONSIBILITY	Customer or ESCO	Customer or ESCO	Customer	Customer or ESCO	ESCO / Project Owner	ESCO / Project Owner
GUARANTEED SAVINGS	Yes	Yes	No	Yes	Re-payment based on power generated and sold.	Yes
SECURITY INTEREST REQUIRED	Yes. On installed devices only, not on the real estate	Yes. On installed devices only, not on the real estate	Security interest is required on the real estate	Yes. On installed devices only, not on the real estate	Yes, assets secured by the Owner's lender.	Yes, assets secured by the Owner's lender.
PRIMARY FEATURES	Lower rates and closing costs, ease of execution. Cost of issuance below 1%.	Lower rates, cost of issuance can be higher, best for larger projects.	Longer term maturities to 30 years.	ESCO is a counterparty to the financing. Payment contingent of savings. Non-traditional debt obligation.	Repayment based on asset revenue and cash flow.	Long term agreement to management and operate assets.
TYPE RATES	Tax Exempt	Tax Exempt	Taxable	Taxable. Contingent Payment based on Savings.	Taxable commercial rates	Taxable commercial rates
CLOSING COSTS	Low	Mid - Range	Mid-Range to High	Low to Mid range	High	High
NOTES	Standard form of financing. Private placement. Many available lenders.	Large, Public Bond market with many lenders.	Terms and conditions vary per State.	Limited supply of lenders who offer ESA.	Multiple counterparty structure using third party asset ownership.	Enterprise infrastructure. Multiple counterparty structure using third party asset ownership.
Comments and information are generalizations and may vary in some cases.						



## Local and Federal Incentives

Ameresco stays abreast of federal and state grants, rebates, and incentives. Our staff quickly analyzes and disseminates information from pending and passed legislation. Additionally, we have regional staff who work closely with clients to assist in grant, incentives, and tax rebate applications. We have secured more than **\$330 million in grants, incentives, and rebates for projects throughout the country**. Ameresco's local presence and experience provides us an intimate knowledge of local rebates, grants, and incentives. We have already investigated Focus on Energy rebates for the proposed measures. In addition, the City may be able to use funding from the Energy Efficiency and Conservation Block Grant (EECBG).

Ameresco will prepare and submit the required applications for utility incentives for applicable measures. For each of our projects, we research current utility rebates as well as local and federal grants to maximize financial benefits to the City. This often includes the 179D tax credit programs, federal and state grants, and utility programs. Ameresco has secured awards and incentives for a wide range of ECMs including LED lighting, HVAC equipment, building envelope, roofing, renewable energy including solar and geothermal, natural gas incentives, and utility plant equipment such as chillers, pumps, and boilers. Ameresco has participated in federal and state grant processes for energy performance contracts.

Some incentives that may be applicable to the City's project at DPW Field Headquarters include:

- **Installation of VFD motors on HVAC fans:** \$30/hp for a total of \$600
- **Unit Heaters:** \$2.50/MBH for a total of \$8,915
- **Lighting for a total of \$1,336**
  - LED Linear Replacement Lamps: \$1.25-\$3/lamp
  - LED track lamps and downlights: \$0.10/watt reduced
- **Solar PV Systems:**
  - \$13,000 plus \$100/kW above 100 kW Rebate for a total of \$19,000
  - 30% Investment Tax Credit (ITC) through Direct Pay to the City for a total of \$280,500
- **U.S DOE Energy Savings Performance Contracting Campaign** will help building owners use future energy savings to pay for efficiency upgrades by providing training, resources, and peer engagement opportunities.

Many of our municipal customers select the tax exempt lease purchase (TELP). For a single project valued at close to \$2 million at the DPW Field Headquarters, the TELP would have the benefit of low-cost financing with ease of execution that can be facilitated by Ameresco at no additional cost. A TELP is a standard form of financing with many available lenders that would be competitively bid to ensure the best interest rates and service. TELP financed options are structured as "self-financing" where the amount of energy and operational savings is used to pay off finance payments so that no additional financial obligations are created for the district. Likely interest rates would range from 4.50% to 5.00% for the City of Milwaukee. Terms could range as high as 25-years, and the City would maintain ownership of all systems installed. This financing method would have the added benefit of providing direct-payment of the \$280,500 ITC to the City of Milwaukee without any third-party markups. Ameresco would provide a savings guarantee, validated through an M&V program, to ensure that the City has sufficient savings to cover the cost of finance payments. Ameresco is flexible and can collaboratively establish ongoing O&M responsibilities between the City and Ameresco O&M staff.

### e. Equipment and Installation Procurement

As a vendor neutral company, Ameresco's approach for selecting equipment and installation sub-contractors is to secure high-quality products and services from reputable companies that will provide the best solution for the City. For equipment this includes evaluating warranty, cost, efficiency, product quality, suitability for the application, etc. to ensure the right product is used. We will procure equipment through direct purchases from the manufacturers and through local distributors that will include City certified small businesses. Ameresco

prequalifies sub-contractors and distributors to ensure that they have the financial, technical, and safety capabilities to perform. We then competitively bid the work to local contractors to find the best value. Where we cannot hire firms directly, we will partner with Tier 1 subcontractors to hire Tier 2 subcontractors to further diversify the labor force and include smaller firms that may not have the financial strength for a direct contract with Ameresco.

We are well-versed in working with local diverse contractors, city agencies, and utilities to deliver projects on budget and on time. Ameresco has extensive experience assembling superior teams that can adjust to the workload and the specific measures for each client. These teams also include small and disadvantaged businesses and local labor to provide local opportunities. Ameresco is an accomplished community engagement partner, who has proven workforce training and jobs, especially for those who are economically disadvantaged. This includes ensuring that we have the necessary labor in high demand situations. We are aware of the large upcoming projects in the Milwaukee area that will tax the local labor force and are committed to providing an exceptional team. We have already engaged a number of local contractors in reference to this project including small business enterprise (SBE) firms with significant experience utilizing resident labor and apprentices. Apprentices from MATC's Technical Studies Apprentice Degree program will be incorporated into the project. The SBE firms include Belonger Corporation, Rockwell Mechanical, Dairyland Energy Solutions, and Hurt Electric. We will expand our team as necessary to meet the project requirements including larger firms such as Bear Construction, Uihlein Electric, HVA Products who is a registered DBE and SBE in Milwaukee county and an MBE in the State of Wisconsin, etc. Ameresco's practices align well with the City's values and pursuit of diversity in project work. We see participation goals as an opportunity to provide real value to the community by growing local SBE capacity and creating jobs. Ameresco has included some of the SBE contractors in the DPW Field Headquarters project to not only meet, but significantly exceed them. We have included 53.8% SBE in this project. We will work with Cross Management Services, Inc. to establish and achieve more aggressive SBE participation goals, grow local capacity to achieve those goals and address potential SBE labor shortages in the future.

## POTENTIAL AMERESCO SBE AND DBE PARTNERS

The following SBEs and DBEs have committed to support and bid on City of Milwaukee ESPC project scopes:

- Cross Management Services, Inc.
- Belonger Corporation, Inc.
- Dairyland Energy Solutions, Inc.
- Hurt Electrical
- Rockwell Mechanical
- Hero Plumbing
- HVA Products

## 2. SITE SPECIFIC:

### a. Technical Site Assessment and Estimates Costs

#### Existing Conditions

Ameresco has audited the DPW Field Headquarters, reviewed the available drawings and control system, and analyzed the available data to understand the existing conditions at the building and the potential for energy savings. The DPW Field Headquarters is an approximately 260,000 square foot building that consists of office spaces, high bay shops, and garage areas. While the facility has made energy efficiency upgrades, we identified opportunities for additional measures.

- The lighting in the garage and shop areas have already been upgraded with LED fixtures, many of which appear to have occupancy sensors, while the office spaces had fluorescent fixtures. The lights in the shop areas were almost all on when the spaces were entered during the walkthrough.

- Several exhaust fans, makeup air units, and rooftop units serve the building. When on-site, the makeup air unit MAU-2 was not running despite a carbon monoxide level of over 28ppm, above recommended maximum levels. Exhaust fumes were easily noticeably in the parking area.
- Several points within the control system were not operating properly including temperature readings which were incorrect and in a state of alarm.

## Energy Conservation Measures

The following are proposed as the base scope for the project based on the City's requested measures:

1. **Compressed Air Leak Survey:** Ameresco will survey the compressed air system and provide a report of the leaks present, the extent of the leaks, and the costs to repair the leaks.
2. **LED Lighting Upgrades:** Ameresco investigated three options for upgrading the existing fluorescent lights to LED in office areas, break rooms, locker rooms, restrooms, and the lobby. This included both retrofits and new fixtures with and without controls. We recommend that the City move forward with retrofitting existing fluorescent lights and installing new LED drivers. The existing LED lights will not be upgraded. No existing ballasts will remain with the new LED lamps. Retrofit the fluorescent lights with new LED lamps and drivers. In addition, we would install single fixture daylighting sensors to twenty 2x4 fixtures adjacent to the windows in the main office area and five fixtures in the lobby area. Switch mounted or ceiling mounted occupancy sensors would be installed in offices, restrooms, locker rooms, and break rooms. Occupancy sensors will divide the larger spaces into zones to optimize light usage.
3. **Convert Garage from Forced Air to Radiant Heat:** Ameresco evaluated the replacement of the unit heaters serving the garage with new high efficiency gas fired radiant tube heaters and integration of the units to the building automation system. This measure is currently based off of installing the same number and capacity radiant heaters, providing 2-stage tube heaters, and hardwiring the controls in the spaces. There may be opportunities to reduce the cost during the IGA process by investigating panel heaters in lieu of tube, reducing heater capacity, consolidating units, using a zigbee wireless communication network, modulating burners, etc. These alternate construction/design options may also present the opportunity for greater controllability and savings. We noted that the electric savings presented in the Master Energy Plan significantly exceed the electrical energy that the existing units could possibly use to run their low horsepower fans. While this ECM is included in the tables below per the guidance of the RFP, we would not recommend inclusion of this ECM in a final project unless more effective alternatives were developed due to the poor financial return.
4. **Garage Demand Controlled Ventilation:** Ameresco will add or reprogram existing carbon monoxide (CO) sensor in MAU-1 and MAU-2 to adjust the airflow within the garages based on CO limits. Typical limits are 25-ppm. By monitoring and adjusting airflow according to need, significant reduction in airflow and corresponding energy can be achieved. In addition, the garage will no longer have more than the recommended limits of CO in the space, as observed during the site visit. This measure would significantly reduce fan and heating energy while improving the safety and indoor air quality for garage occupants. At this stage, this ECM would be recommended in place of the radiant heat recommendation.
5. **Retrofit Air Handling Units to VAV:** Ameresco will replace the existing fan motors in RTU-2 and RTU-3 and install new premium efficiency fan motors with VFDs. This will allow the airflow to be adjusted based on need within the space. The existing RTU control sequences will be upgraded to include a VAV control sequence and the fan minimum will be restricted to ensure that the unit does not overheat due to the constant burner levels. Given that these RTUs are nearing their end of useful life over the next decade, the City should consider a full replacement of the RTUs with a conversion to VAV at that time.
6. **Upgrade Motors to Premium Efficiency:** Ameresco recommends focusing on motors of 20HP and above for premium efficiency upgrades including those in MAU-1, MAU-2, and MAU-11.

7. **Rooftop Solar Array:** Ameresco is proposing a 160kW-AC/213.1kW-DC rooftop solar array to offset the building's utility load. Rebates are available from Focus on Energy for this work as are investment tax credits that would significantly reduce the cost to the City.

Ameresco also recommends the following additional measures for consideration. These measures are common in energy efficiency projects and would benefit the DPW Field Headquarters.

- **Additional Rooftop Solar PV:** Ameresco recommends that the City take advantage of the significant rooftop space to install a large solar PV array. Based on the City's goal of reducing energy usage by 20% over the 2009 baseline, the building could benefit from approximately 600kW-AC/650kW-DC of rooftop solar. This larger size would result in a more economical solar project as large systems benefit from economies of scale. Based on the interval usage of electricity at the site, Ameresco could further refine this size to minimize export of energy.
- **Retro-Commissioning (RCx) and Monitoring Based Commissioning (MBCx):** Ameresco proposes to RCx the building and implement ongoing MBCx to return the building to optimal performance and to ensure its continual performance. This would also including reviewing the existing lighting occupancy sensor setpoints. Lights seemed to be running even when spaces were unoccupied; these may benefit from smaller zones for occupancy or shorter durations of runtime after occupancy is detected. It would also address the many failed field sensors and controls we identified when surveying the Metasys front-end. Many of these Metasys failures could lead to unsafe conditions including low ventilation, high CO levels and inconsistent working temperatures.
- **Water Conservation Measures:** Ameresco proposes to audit the domestic plumbing fixtures within the building and retrofit them to low flow options to reduce water usage and the domestic water heating in the building.
- **Domestic Water Heater Replacement:** Ameresco recommends evaluating new high efficiency tankless water heaters to replace the point of use water heaters in the building within the shop spaces. This ECM could be implemented as a single project or as the units reach the end of their life.
- **Domestic Water Fixture Upgrade:** While there are a limited number of plumbing fixtures in the DPW headquarters, replacing/installing aerators, replacing showerheads, and install toilet flush valve diaphragm kits would reduce the water consumption of these fixtures. This measure could be easily expanded across the City.
- **Weatherization Measures:** Ameresco recommends a survey of the existing door sweeps, weather stripping, caulking, etc to identify areas for improvement to reduce infiltration into the building.
- **Energy Efficiency Transformers:** replacing aging transformers with new energy efficient versions can save significant energy from the base load of the transformers. Ameresco recommends surveying the building transformers in the City to identify the units that will provide the most benefit from replacement.

## Project Costs & Savings

The projects costs and savings are based on Ameresco's initial evaluation of DPW Field Headquarters. The costs of the ECM equipment and installation will be refined during the investment grade audit. Ameresco would be happy to review our assumptions included in the analyses with the City of Milwaukee.

Costing assumptions include, but are not limited to:

- Work can be performed during normal hours
- Mechanical upgrades will have the same capacity as existing per the equipment schedules.
- The existing unit heaters use building air for combustion and the radiant unit heaters will require new air inlets and penetrations through the roof.
- 2x4 and 2x2 lighting fixtures have two lamps each. If there are more lamps per fixture, the project payback will improve.

Savings assumptions include, but are not limited to:

- On-Peak Hours are 9am-9pm. Based on occupied building hours, 30% of savings are attributed to off-peak times except for compressed air savings which are 50% off-peak. Solar on-peak versus off-peak savings are based on hourly production models.
- Ameresco calculates the reduced heat output from the lighting to accurately calculate savings and capture any heating penalties.
- Garage controlled ventilation savings were taken before the unit heater savings to avoid double counting savings.
- Solar savings have been included in electricity savings to accurately calculate the financial value but are not included in kBTU reduction

2-C ESCO Preliminary Project Cost and Cash Flow Analyses and 2-D DPW Field HW Estimated Savings can be found below and on the following page based on the requested scope.

We recognize that the cash flow for the ECMs required by the City for this response do not provide a positive cash flow or self-fund in 20-years at a 7% interest rate. We recommend removing the following ECMs: (3) Convert Garage Heating from Forced Air to Radiant, (5) Retrofit Air Handling System to VAV, and (6) Upgrade Motors to Premium Efficiency from the scope while evaluating the inclusion of some of the additional measures presented for consideration.

By implementing ECMs (1) Compressed Air Leak Survey, (2) LED Lighting Retrofit with Occupancy and Daylighting Sensors, (4) Garage Demand Controlled Ventilation, and (7) Rooftop Solar Array and financing the project with a 20-year TELP loan at our expected interest rate of 4.5%, the project self-funds including all M&V, O&M, and training fees in 20-years. In addition, systems such as the solar array will continue to provide value and additional benefits after year 20. Ameresco feels confident that we can help the City move forward with a successful project at the DPW.

### Attachment 2-C: ESCO's Proposed Project Costs and Cash Flow Analysis

Attachment 2-C ESCO's Proposed Project Costs	
<b>Project Name: 99-2023 Energy Savings Performance Contract</b>	
<b>Agency Name: Department of Public Works and Environmental Collaboration Office</b>	
<b>ESCO Name: Ameresco, Inc.</b>	
PROJECT COSTS	
Fee Category	Fees <sup>(1)</sup> Dollar (\$) Value
Engineering and Project Management	\$127,538
Investment Grade Energy Audit	\$20,000
Design Engineering Fees	\$85,025
Construction Management	\$69,083
System Commissioning	\$31,884
Initial Training Fees	\$14,879
<b>Project Service Fees Sub Total</b>	<b>\$348,409</b>
<b>Energy Conservation Measures - Equipment and Installation</b>	<b>\$1,777,218</b>
(1) Compressed Air Leak Survey	\$6,119
(2) LED Lighting Retrofit with Occupancy and Daylighting Sensors	\$68,889
(3) Convert Garage Heating from Forced Air to Radiant	\$615,796
(4) Garage Demand Controlled Ventilation	\$230,718
(5) Retrofit Air Handling System to VAV	\$144,590



(6) Upgrade Motors to Premium Efficiency	\$41,520
(7) Rooftop Solar Array	\$669,585
Fees for ESCO-Arranged Financing	\$0
Other Financing Costs	\$0
<b>TOTAL FINANCED PROJECT COSTS:</b>	<b>\$2,125,627</b>
<b>PROPOSED ANNUAL SERVICE FEES</b>	
<b>First Year Annual Service Fees</b>	<b>Fees<sup>(1)</sup> Dollar (\$) Value</b>
Measurement and Verification (Traditional Annual Report)	\$4,628
On-going System Monitoring (ESCO has Access to Building Automation System and will alert City Staff of Energy Performance Issues Throughout the Year)	\$2,314
Staff Training Services	Included in project cost
<b>TOTAL FIRST YEAR ANNUAL SERVICES:</b>	
ESCO's proposed interest rate available at the time of submission: 4.5-5%	
Financial Institution: Bank of America	
Contact person: Holly Andreozzi, holly.andreozzi@baml.com, 617-434-7760	

Attachment 2-C ESCO's Proposed Cash Flow Analysis										
Escalation Rate by Utility/Fuel: 3%		Principal: \$2,125,627			Financed Project Costs: \$0		Annual Payment: \$203,926			
Electric:		Water:			Finance Term: 20 Years					
Construction Months: 3		Escalation Rate for Annual Fees: 3%			Annual Interest Rate: 7%		Incentives: \$270,107			
Year	Electric Cost Savings	Water Cost Savings	Natural Gas Savings	Operational Cost Savings	Incentives	Total Cost Savings	Maintenance, Monitoring, EM&V, and Training Fees	Guaranteed Cost Savings	Financing Payment	Net Savings
1	\$42,704		\$25,005		\$270,107	\$67,709	-\$8,125	\$64,323	\$203,926	\$122,379
2	\$43,985		\$25,755			\$69,740	-\$8,369	\$66,253	\$203,926	-\$146,042
3	\$45,304		\$26,528			\$71,832	-\$8,620	\$68,240	\$203,926	-\$144,306
4	\$46,664		\$27,323			\$73,987	-\$8,878	\$70,288	\$203,926	-\$142,517
5	\$48,063		\$28,143			\$76,207	-\$9,145	\$72,396	\$203,926	-\$140,675
6	\$49,505		\$28,987			\$78,493	-\$9,419	\$74,568	\$203,926	-\$138,777
7	\$50,991		\$29,857			\$80,848	-\$9,702	\$76,805	\$203,926	-\$136,823
8	\$52,520		\$30,753			\$83,273	-\$9,993	\$79,109	\$203,926	-\$134,810
9	\$54,096		\$31,675			\$85,771	-\$10,293	\$81,483	\$203,926	-\$132,736
10	\$55,719		\$32,626			\$88,344	-\$10,601	\$83,927	\$203,926	-\$130,600
11	\$57,390		\$33,604			\$90,995	-\$10,919	\$86,445	\$203,926	-\$128,401
12	\$59,112		\$34,612			\$93,724	-\$11,247	\$89,038	\$203,926	-\$126,135
13	\$60,885		\$35,651			\$96,536	-\$11,584	\$91,709	\$203,926	-\$123,801
14	\$62,712		\$36,720			\$99,432	-\$11,932	\$94,461	\$203,926	-\$121,397
15	\$64,593		\$37,822			\$102,415	-\$12,290	\$97,294	\$203,926	-\$118,921
16	\$66,531		\$38,957			\$105,488	-\$12,659	\$100,213	\$203,926	-\$116,371
17	\$68,527		\$40,125			\$108,652	-\$13,038	\$103,220	\$203,926	-\$113,745
18	\$70,583		\$41,329			\$111,912	-\$13,430	\$106,316	\$203,926	-\$111,039
19	\$72,700		\$42,569			\$115,269	-\$13,832	\$109,506	\$203,926	-\$108,253
20	\$74,881		\$43,846			\$118,727	-\$14,247	\$112,791	\$203,926	-\$105,382
<b>Total</b>	<b>\$1,147,466</b>		<b>\$671,888</b>		<b>\$270,107</b>	<b>\$1,819,354</b>	<b>-\$218,324</b>	<b>\$1,637,418</b>	<b>\$4,078,520</b>	<b>-\$2,298,351</b>

Attachment 2-D DPW Field HQ Estimated Savings								
ECM No.	1	2	3	4	5	6	7	Total
ECM Description	Compressed Air Survey	LED Lighting Retrofit with Occupancy and Daylighting Sensors	Convert Garage to Radiant Heat	Garage Demand Controlled Ventilation	Retrofit Air Handling Units	Upgrade Motors to Premium Efficiency	Rooftop Solar Array	
Electricity Savings - Grid Purchase (kWh) On Peak	2,975	33,978	19,539	105,616	30,428	4,434	198,169	395,139
Electricity Savings - Grid Purchase (kWh) Off Peak	2,975	14,562	8,374	45,264	13,041	1,900	70,106	156,222
Electricity Savings - Grid Purchase (kWh)	5,950	48,540	27,913	150,880	43,469	6,334	268,275	551,361
Electricity Savings - Grid Purchase (kBtu)	20,303	165,619	95,239	514,802	148,315	21,611		965,889
Electricity Savings – Generated from Onsite Renewable Systems and Used Onsite (kWh)								-
Electricity Savings – Generated from Onsite Renewable Systems and Used Onsite (kBtu)	-	-	-	-	-	-	-	-
Natural Gas Savings (therms)		(835)	7,608	42,255				\$ 49,029
Natural Gas Savings (kBtu)	-		760,838	4,225,546	-	-	-	4,986,385
Total kBtu Savings (Site Energy)	20,303		856,078	4,740,348	148,315	21,611	-	5,786,655
Electric Cost per KWH On Peak	\$ 0.08666	\$ 0.08666	\$ 0.08666	\$ 0.08666	\$ 0.08666	\$ 0.08666	\$ 0.08666	
Electric Cost per KWH Off Peak	\$ 0.05416	\$ 0.05416	\$ 0.05416	\$ 0.05416	\$ 0.05416	\$ 0.05416	\$ 0.05416	
Gas Cost per Therm	\$ 0.51000	\$ 0.51000	\$ 0.51000	\$ 0.51000	\$ 0.51000	\$ 0.51000	\$ 0.51000	
Electric Savings On Peak	\$ 258	\$ 2,945	\$ 1,693	\$ 9,153	\$ 2,637	\$ 384	\$ 17,173	\$ 34,243
Electric Savings Off Peak	\$ 161	\$ 789	\$ 454	\$ 2,451	\$ 706	\$ 103	\$ 3,797	\$ 8,461
Demand Charge Savings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gas Savings	\$ -	\$ (426)	\$ 3,880	\$ 21,550	\$ -	\$ -	\$ -	\$ 25,005
Total Dollar Savings	\$ 419	\$ 3,307	\$ 6,027	\$ 33,154	\$ 3,343	\$ 487	\$ 20,970	\$ 67,709
Incentives		\$ 1,336	\$ 8,915		\$ 600		\$ 259,256	\$ 270,107
Project Cost	\$ 7,318	\$ 82,395	\$ 736,518	\$ 275,948	\$ 172,936	\$ 49,660	\$ 800,852	\$ 2,125,627
Simple Payback after Incentives	17.47	24.51	120.72	8.32	51.55	101.94	25.83	27.40
Estimated Site kBTU after project (all else being equal)								11,410,132

#### b. Energy Baseline Calculation Methodology and Measurement & Verification Plan

Our regional team has completed hundreds of energy solutions projects, the majority of which guarantee savings. These projects range from single building school districts to comprehensive solutions over a large portfolio of buildings. Ameresco uses a robust measurement and verification approach based on the IPMVP and FEMP M&V Guidelines to substantiate the project's performance in achieving expected energy cost savings. Due to the variables and dynamics that are unique to each performance contract, an individual M&V plan will be developed for each project. The M&V process starts during the development of the project to take baseline measurements and ensure that expected savings are achievable. During the construction process, M&V processes verify that everything is installed consistent with the expectations and savings calculations. Then M&V monitors the project performance over the long term to ensure the long-term achievement of savings. This process provides the City assurance that the guaranteed savings are achievable and will occur over the long term.

#### Baseline Energy Usage

Ameresco utilizes a variety of data sources to create a comprehensive baseline that can be used to evaluate the performance of the project. Data sources include monthly utility data, hourly interval data, BAS data, existing submeter data, or any other source of data that documents the existing building condition. Ameresco uses several software tools that perform different functions to allow us to learn as much as possible about existing conditions from each source of data. Examples of third-party software utilized include PowerBI, ECAM, Universal Translator, and Metrix. We also use our internal Asset Planner tool that provides a sophisticated and cohesive platform to gather and analyze data from existing utility usage tracking systems, existing metering, existing building automation systems, and strategically placed temporary or permanent wireless meters and sensors.

#### Potential Adjustments

Adjustments for routine and non-routine adjustments may be necessary if conditions in the reporting period change from the baseline. The adjustments and reporting expectations are discussed below.

##### Routine Adjustments

Routine adjustments are changes to the baseline energy consumption due to factors which are both significant to the energy consumption and vary predictably. Factors resulting in routine adjustments include weather, temperature setpoint, hours of operation, and number of occupants. Routine adjustments will be performed annually and will affect the performance period in which the adjustment occurs.

##### Non-Routine Adjustments

Non-routine adjustments are changes to the baseline energy consumption due to factors that are significant to the energy consumption but do not vary predictably. Factors resulting in non-routine adjustments include additions or reductions to the area of a building, changes to the use of a building, installation, modification, or replacement of equipment, and changes to the building envelope.

#### Reporting of Routine and Non-Routine Adjustments

Both Ameresco and the City of Milwaukee share responsibility in identifying routine and non-routine adjustments. Ameresco will monitor key parameters and perform site visits as required per the M&V plan. If, during these actions, operations or changes to the buildings or systems that would result in a baseline adjustment are identified, Ameresco will notify the City accordingly as outlined in the project agreement. The City will notify Ameresco when material changes occur within the facilities and provide additional information as required.

To ensure project results are reliably measured during the performance period, additional metering or measuring hardware can be installed as necessary to isolate project related factors from non-project related factors. There are no occurrences that would cause the need to void the savings guarantee. Ameresco is

always able to work with customers to determine the best course of action and appropriate adjustment to account for any foreseeable change to a given facility.

## Procedures, Formulas, and Methodologies to Measure Savings

### Energy Savings

Measurement and Verification (M&V) is an essential part of any performance contract because it substantiates the project's performance in achieving expected energy cost savings. Ameresco has designed an M&V plan that provides assurance to the City of Milwaukee that the project is performing as expected and is achieving the guaranteed savings.

As the project scope is finalized, the M&V plan will enable an accurate assessment of energy savings being realized for the project. Ameresco utilizes both the International Performance Measurement and Verification Protocol (IPMVP) and U.S. Department of Energy Federal Energy Management Program (FEMP) M&V Guidelines Version 4.0. Both IPMVP and FEMP will serve as a framework in determining energy savings resulting from this project.

Four M&V options are available and are used for specific situations. Oftentimes, more than one option is possible, and multiple options may be used on a single project. The general approach to determining energy savings in these four options involves comparing the energy use associated with a certain energy consuming system within a facility, or the energy use of an entire facility, before installation of the ECM (baseline) and after installation of the ECM (post-installation).

Ameresco recognizes the City's requirement that Option C savings tracking be utilized for projects that are developed under the Master Energy Services Agreement. Ameresco routinely provides this type of M&V approach for projects with significant overall savings within a facility as contemplated in the RFP. Ameresco will establish a utility baseline for each facility that will be used to compare the future utility consumption against to track savings. Utility data will be obtained on an ongoing basis either from the City, or directly from the utility providers. This data will be reviewed monthly, to ensure that the overall savings are being achieved.

If Ameresco observes that savings are not occurring as expected in the energy meter data, Ameresco will work with the city to evaluate the building operations to determine the cause of higher than expected energy consumption. An important component of utility tracking is the use of interval data available from the utility companies. Ameresco expects to use this data to validate the 15 minute level energy consumption of the building. This will help identify issues with the performance of the building, or potential changes in the equipment operation that may be causing any issues with the savings. Using this level of data analytics provides much more robust responses to any concerns about savings. This approach will provide the savings reporting in the format required by the City, and will provide a robust method to ensure long term savings are achieved.

Ameresco has experience tracking project savings using the Energy Star Portfolio Manager to track building performance. Once the utility meter data has been processed, a regular update of Portfolio Manager data will be performed to ensure the Energy Star portal stays up to date with project results.

The measured energy savings will be calculated based on the following formula:

$$\text{Energy Savings} = \text{Baseline Energy Consumption} - \text{Post Retrofit Energy Consumption} \pm \text{Adjustments}$$

Due to the variables and dynamics that are unique to each project, an individual M&V plan must be developed for each measure. Ameresco will propose an M&V plan that meets the project requirements and any additional needs of the City. Ameresco uses a variety of tools and data sources to measure the savings for various ECMs. In combination with using the utility data, Ameresco may utilize other data gathering techniques if needed to validate proper equipment operation. This may include spot measurements using True RMS meters, or sub-meters on specific sections of the building or specific pieces of equipment to confirm usage of certain systems. Using component level data analysis along with the utility data to validate savings provides assurance to the City that the project is performing as expected and the savings will be achieved over the life of the project.

### Operational Savings

Operational savings represents the maintenance costs reduction due to the implementation of the proposed ECMs. Existing maintenance costs are determined from maintenance cost history provided by the City and current costs of existing system components. Future maintenance costs for proposed equipment is estimated based on lifespan of the equipment and currently available prices for the components.

### Data Analytics and Visualization

Ameresco has developed Data Analytics processes as part of our Measurement and Verification services to provide robust data analytics. Ameresco will provide detailed reporting that will include extensive data visualization charts to help enable the City to see exactly how the project is performing and how the buildings are functioning.

### Annual Measurement and Verification Services

Ameresco includes Measurement & Verification Services as part of each project. Measurement & Verification work begins immediately after selection to ensure that ample data is collected and utilized in the calculations so that the savings projections are accurate. The proposed savings included in this proposal may be updated if additional data is obtained about the buildings or the system operation. It is expected that additional savings could be found if more data becomes available to help optimize savings calculations. M&V Services will be provided for any term length as desired by the City. Most commonly, M&V is provided for the first three years after a project is completed to ensure persistence of savings.

### Greenhouse Gas Emissions and LEED | Verification and Certifications

Ameresco tracks and reports greenhouse gas emissions that are achieved through the projects it implements annually. This is done using the measured and verified energy savings and the Energy Star Portfolio Manager Technical Reference on Greenhouse Gas Emissions to determine the effect based on the carbon associated with fuels in different areas. This information is also provided as part of the IGA and can be incorporated into measurement and verification reports to customers to help them define and communicate the impact of the projects. At the beginning of an IGA, Ameresco will meet with the professionals responsible for the City's carbon reporting and use the same factors to calculate and report greenhouse gas emissions reductions from the energy efficiency projects implemented. Ameresco has also used ENERGY STAR on numerous projects, including for Northwestern University and Southwest Technical College. We look forward to being the City of Milwaukee's partner in reporting and will be consistent with ENERGY STAR guidelines in our savings calculations.

#### c. Equipment Maintenance Approach

### Performance of Maintenance on Equipment

City staff currently performs the maintenance for their buildings, and Ameresco anticipates that the City will choose to continue performing this role. This project does not create significant modifications to many of the current maintenance requirements. If the City prefers, Ameresco can perform the maintenance services on the new/upgraded equipment in the building. This could include, but is not limited to, changing filters, replacing fan belts, replacing fixtures, etc. Services can be tailored to meet the needs of the City on a system-by-system basis. Ameresco can and often does take on O&M responsibilities for solar PV systems. Possibilities include Ameresco retaining maintenance responsibility for the equipment, providing maintenance training to City staff, or developing maintenance program documentation so the City can contract outside maintenance services. The City can and is more than welcome to continue to provide maintenance on their systems; training will be a vital part of the project in that case. Ameresco has enacted each of the above maintenance strategies, all with positive results.



### Relationship of Maintenance Services to the Savings Guarantee

The energy savings do not depend on a maintenance agreement between Ameresco and the City. Ameresco will document required equipment maintenance procedures and their frequency. It is completely up to the City if you would like to perform that maintenance in house, have Ameresco perform it, or outsource it to a third party. Our interest is that the maintenance is performed so that energy savings may persist throughout the project term. Ameresco's savings guarantee will remain in effect regardless of how the City decides to perform maintenance. There is no minimum maintenance agreement length required nor would a termination of Ameresco's maintenance services affect the savings guarantee, as long as proper maintenance continues to be performed. The majority of Ameresco's ESPC customers choose to self-perform their own maintenance.

Because this project is paid for from on-going savings, facilities personnel must be motivated to integrate energy into their daily routine. Ameresco works closely with facility personnel and trains them to understand that their efforts keep the equipment performing efficiently and effectively, and that their observations can be important indicators of where and when waste is occurring. The primary goal of Ameresco's training program is to educate designated O&M staff in the key areas that relate to the energy conservation measures installed throughout the project. Hands-on or field training will occur throughout the commissioning phase, especially during inspections, equipment start-up, and functional performance testing activities. This valuable experience specifically takes O&M staff through the process of bringing the system on-line and working out any issues that may arise. Apart from the industry experts and manufacturer or vendor representatives, all training services are provided using Ameresco's in house expertise. Ameresco produces training manuals as part of the comprehensive training program. These manuals address specific operating procedures, routine maintenance intervals and procedures, repair procedures per manufacturers' recommendations, as well as troubleshooting steps. The hand-off of these manuals is a key component in the commissioning of the installed measures and improvements.

Throughout the project term, Ameresco will continue to monitor the performance of the ECMs as part of ongoing measurement and verification activities to ensure that the needed maintenance is being performed. If any issues are observed, Ameresco will notify the City so that they can be addressed.

### Maintenance and Warranty

Ameresco includes, at a minimum, a one-year equipment and labor warranty on all installed equipment. Ameresco will also include any extended warranties that apply. Lighting warranties are typically longer than mechanical system warranties, and Ameresco expects a 5-10 year warranty on lighting components. Ameresco will work with the City regarding the length and details of equipment warranties during the IGA. The cost of all warranties will be included in the project price and will not have any additional annual fees. Warranties that apply to the typical project include:

#### Equipment Warranties

- All standard equipment warranties are included
- Any extended warranties that Ameresco can negotiate are included.
- All warranties are clearly defined in the ESPC.

#### Workmanship Warranties

- One-year workmanship warranty upon completion of work
- Work is free from all faults and defects in material and design.
- Work is compliant with the requirements of the contract.

If at any time during the warranty period the City provides Ameresco a notice of any failure to comply with the warranty, Ameresco and its subcontractors shall promptly and satisfactorily correct such noncompliance, and

remedy any damage to other parts of the work or any other property resulting from such noncompliance. All costs incidental to such correction are the responsibility of Ameresco and its subcontractors.

Depending on the route chosen for annual maintenance, the costs will vary. If the City chooses to maintain the equipment themselves, existing maintenance staff can be used to perform the labor. There will also be a reduced annual cost of parts, as repairs will be needed less frequently on the newer equipment. The longer lifespan of the AHU filters and LED lamps will also require fewer replacements. Overall, the annual cost to maintain these systems is expected to decrease as a result of this project.

### Measure Specific Maintenance

Ameresco anticipates the following maintenance activities will need to be performed in relation to the installed ECMs.

ECM	Maintenance
Compressed Air Leak Survey	<ul style="list-style-type: none"> <li>Period inspections of the system</li> </ul>
LED Lighting Retrofit with Controls	<ul style="list-style-type: none"> <li>Clean fixture lenses and sensors as required</li> <li>Replace lamps, drivers, and fixtures at end of life</li> <li>Replace sensors at end of life</li> <li>Confirm setpoints are maintained</li> </ul>
Convert Garage Heating from Forced Air to Radiant	<ul style="list-style-type: none"> <li>Conduct routine adjustments and checks including visual inspections</li> </ul>
Garage Demand Controlled Ventilation	<ul style="list-style-type: none"> <li>Replace sensors at end of life</li> <li>Confirm setpoints are maintained</li> </ul>
Retrofit Air Handling System to VAV	<ul style="list-style-type: none"> <li>Conduct routine adjustments and checks including visual inspections</li> <li>Perform manufacturer maintenance requirements</li> <li>Repair/replace AHU components and controls as needed</li> </ul>
Upgrade Motors to Premium Efficiency on As-Fails Basis	<ul style="list-style-type: none"> <li>Conduct routine adjustments and checks including visual inspections</li> <li>Replace motors as needed</li> </ul>





# City of Milwaukee

## Office of Equity and Inclusion (OEI)

### Small Business Enterprise Certification & Compliance Program

This certificate acknowledges

### **Belonger Corporation, Inc.**

As a **Small Business Enterprise (SBE)** owned, operated and controlled company, which has met the criteria established by the City of Milwaukee.

**CERTIFICATE EXPIRES: 06/21/2024**

<u>NAICS Code</u>	<u>Description</u>
236210	Industrial Building Construction
238220	Plumbing, Heating & Air Conditioning Contractors
238210	Electrical Contractors
238160	Roofing Contractors
238170	Siding Contractors
238390	Other Building Finishing Contractors



Chief Equity Officer

*This certificate supersedes any certificate previously issued. If there is a material change in your small business status (i.e. business structure, ownership, day-to-day management, operational control, change of address), it is your responsibility to notify this office within thirty (30) days of such changes. The Office of Equity and Inclusion reserves the right to conduct a compliance review at any time to confirm continued certification eligibility. Furthermore, certification may be suspended or revoked upon findings of false, misleading or fraudulent information.*

**CITY OF MILWAUKEE | OFFICE OF EQUITY & INCLUSION****FORM A – CONTRACTOR COMPLIANCE PLAN**

List all subcontractor information in its entirety, identifying the Contractor's SBE designation. Individual subcontractor SBE percentages should equal the overall participation as listed on Page 1. Please visit the following website to access the list of City of Milwaukee SBE certified firms: <https://milwaukee.diversitycompliance.com/>

**IV. SUBCONTRACTOR INFORMATION**

Contractor Name Dairyland Energy Solutions, Inc.  
Address 8920 W. Heather Ave.  
City, State, Zip Code Milwaukee, WI 53224  
Contact Person Chris Martinez Title President  
Phone Number 262-783-1550 E-mail Address cmartinez@dairylandenergy.com  
Subcontractor SBE-certified? Yes X No       

Please identify the proposed commodity or service, award amount and contract percentage the subcontractor will fulfill.

Proposed award amount \$ 357,925 Percentage of contract 16.8 %

Work performed/materials provided Electrical wiring

Name of Owner/Representative Christopher Martinez

Signature of Owner/Representative Christopher Martinez Date Dec 14, 2023

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Contractor Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip Code \_\_\_\_\_  
Contact Person \_\_\_\_\_ Title \_\_\_\_\_  
Phone Number \_\_\_\_\_ E-mail Address \_\_\_\_\_  
Subcontractor SBE-certified? Yes \_\_\_\_\_ No \_\_\_\_\_

Please identify the proposed commodity or service, award amount and contract percentage the subcontractor will fulfill.

Proposed award amount \$ \_\_\_\_\_ Percentage of contract \_\_\_\_\_ %

Work performed/materials provided \_\_\_\_\_

Name of Owner/Representative \_\_\_\_\_

Signature of Owner/Representative \_\_\_\_\_ Date \_\_\_\_\_

**If you need to provide additional subcontractor information, please duplicate this page as needed.**



**Signature:** *Christopher Martinez*

**Email:** [cmartinez@dairylandenergy.com](mailto:cmartinez@dairylandenergy.com)

# City of Milwaukee

## Office of Equity and Inclusion (OEI)

### Small Business Enterprise Certification & Compliance Program

This certificate acknowledges

## Dairyland Energy Solutions, Inc.

As a **Small Business Enterprise (SBE)** owned, operated and controlled company, which has met the criteria established by the City of Milwaukee.

**CERTIFICATE EXPIRES: 11/03/2026**

<u>NAICS Code</u>	<u>Description</u>
238210	Electrical Contractors and Other Wiring Installation Contractors
238220	Plumbing, Heating, and Air Conditioning Contractors



DocuSigned by:  
*Dontreal League*  
1E1FAD958CD144F

Business Inclusion Program Coordinator

*This certificate supersedes any certificate previously issued. If there is a material change in your small business status (i.e. business structure, ownership, day-to-day management, operational control, change of address), it is your responsibility to notify this office within thirty (30) days of such changes. The Office of Equity and Inclusion reserves the right to conduct a compliance review at any time to confirm continued certification eligibility. Furthermore, certification may be suspended or revoked upon findings of false, misleading or fraudulent information.*