



March 19, 2019

Region 14 Education Service Center  
1850 Highway 351  
Abilene, Texas 79601

RE: Solicitation Number: 08-19

Dear Region 14 Education Service Center and NCPA,

The Midstate Energy (MSE) team is pleased to offer our response to the Region 14 Education Service Center and the National Cooperative Purchasing Alliance (NCPA) High-Performance Building Consulting, Smart Technology and Utility Management Solutions Request for Proposal.

MSEs core business model is to support educational outcomes through high-performance building consulting and energy efficient performance contracting. We provide in-house capabilities for core energy conservation measures such as lighting, mechanical, controls, water, renewable conservation measures (solar, storage), predictive maintenance analytics, and energy behavior modification options.

### **Why select Midstate Energy?**

MSE uses four key differentiators that distinguish our company from others: flexibility, creativity, vast educational facility experience, and expertise with energy efficient buildings. MSEs unique approach to project development – and our reputation – are built around the following cornerstones:

#### ***Account Management***

MSE utilizes a client-centric approach where our Account Team will embed itself within the NCPA client team to identify client educational initiatives and performance indicators with long-term goals that may be missed under standard models. While our energy engineers are developing modeling, MSEs Account Team searches for innovation, overlooked savings and solutions that can support client's goals.

#### ***In-House Expertise***

MSE employs over 230 in-house experts in lighting, water, sustainable energy, design engineering, central plant engineering, TAB (Testing, Adjusting, and Balancing), commissioning and measurement and verification. Fewer handoffs from one company to another, mean greater accountability for Region 14 and NCPA clients, fewer chances for mistakes and a quicker process.

#### ***Vendor Neutrality***

MSE is an engineering and construction company, and we are under no mandate or incentive to use equipment or services provided by a specific company. Our open-book pricing model allows the client to benefit from the optimal selection of vendors and products for Region 14 school facilities.



23325 North 23<sup>rd</sup> Avenue, Suite 120  
Phoenix, Arizona 85027  
(602) 452-8700  
[www.midstate-energy.com](http://www.midstate-energy.com)

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### *Established Local Partners*

MSE success at educational facility improvements is based on bringing the best teams together for our clients. Establishing partnerships with the best local contractors keeps money in the local community while creating employment opportunities.

### *Conservative Estimating*

MSE takes a conservative approach when estimating the savings that our proposed building enhancements can achieve. MSE will not overpromise on savings, or underestimate project cost.

### *Transparency & Integrity*

Our team has completed over \$280 Million in energy projects in the southwest over the last five years, using our client-centric and open-book pricing model to achieve client outcomes. Our letters of references speak to the success of this approach.

In partnership with the Midstate Energy team, we will assist Region 14 and NCPA clients develop a clear path to high performance building solutions, smart technology and long-term energy savings. We look forward to investing in Regions 14 Education Service Center's future and partnering with you.

With Highest Regards,

*John Hobbes*

John Hobbes, Chief Executive Officer  
Midstate-Energy, LLC  
O: 602.452.8720 | [jhobbes@midstate-energy.com](mailto:jhobbes@midstate-energy.com)

**Date:**

March 19, 2019

**Solicitation Number:**

RFP 08-19

**To:**

**Region 14 Education Service Center**

1850 Highway 351

Abilene, Texas 79601

Email: [questions@ncpa.us](mailto:questions@ncpa.us)

**From:**

**Ron Stalica**

**Vice President of Business Development**

**Midstate Energy, LLC**

5601 Bridge Street, #300

Fort Worth, TX 76112

C: 682-300-1970

Email: [rstalica@midstate-energy.com](mailto:rstalica@midstate-energy.com)

**John Hobbes**

**Chief Executive Officer**

**Midstate Energy, LLC**

23325 North 23<sup>rd</sup> Avenue, Suite 120

Phoenix, Arizona 85027

C: 480-261-6045 | O: 602-452-8720

Email: [jhobbes@midstate-energy.com](mailto:jhobbes@midstate-energy.com)

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- The package must be clearly identified as listed below with the solicitation number and name of the company responding. All packages must be sealed and delivered to the Region 14 ESC offices no later than the submittal deadline assigned for this solicitation.

From: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Solicitation Name and Number: \_\_\_\_\_

Due Date and Time: \_\_\_\_\_

## Tab 1 – Master Agreement

### General Terms and Conditions

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#### ◆ Customer Support

- The vendor shall provide timely and accurate technical advice and sales support. The vendor shall respond to such requests within one (1) working day after receipt of the request.

#### ◆ Assignment of Contract

- No assignment of contract may be made without the prior written approval of Region 14 ESC. Purchase orders and payment can only be made to awarded vendor. Awarded vendor is required to notify Region 14 ESC when any material change in operation is made.

#### ◆ Disclosures

- Respondent affirms that he/she has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with this contract.
- The respondent affirms that, to the best of his/her knowledge, the offer has been arrived at independently, and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other vendors in the award of this contract.

#### ◆ Renewal of Contract

- Unless otherwise stated, all contracts are for a period of one (1) year with an option to renew annually for an additional four (4) years if agreed to by Region 14 ESC and the vendor.

#### ◆ Funding Out Clause

- Any/all contracts exceeding one (1) year shall include a standard “funding out” clause. A contract for the acquisition, including lease, of real or personal property is a commitment of the entity’s current revenue only, provided the contract contains either or both of the following provisions:

- Retains to the entity the continuing right to terminate the contract at the expiration of each budget period during the term of the contract and is conditioned on a best efforts attempt by the entity to obtain appropriate funds for payment of the contract.
- ◆ Shipments (if applicable)
  - The awarded vendor shall ship ordered products within the written estimate of delivery time by the vendor to the entity after the receipt of the order unless modified. If a product cannot be shipped within that time, the awarded vendor shall notify the entity placing the order as to why the product has not shipped and shall provide an estimated shipping date. At this point the participating entity may cancel the order if estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. destination.
- ◆ Tax Exempt Status
  - Since this is a national contract, knowing the tax laws in each state is the sole responsibility of the vendor.
- ◆ Payments
  - The entity using the contract will make payments directly to the awarded vendor or their affiliates as long as written request and approval by NCPA is provided to the awarded vendor.
- ◆ Adding authorized distributors/dealers
  - Awarded vendors are prohibited from authorizing additional distributors or dealers, other than those identified at the time of submitting their proposal, to sell under their contract award without notification and prior written approval from NCPA.
  - Awarded vendors must notify NCPA each time it wishes to add an authorized distributor or dealer.
  - Purchase orders and payment can only be made to awarded vendor unless otherwise approved by NCPA.
  - Pricing provided to members by added distributors or dealers must also be less than or equal to the pricing offered by the awarded contract holder, unless otherwise approved by NCPA.
- ◆ Pricing
  - All pricing submitted to shall include, as a cost of sale to the awarded vendor, the administrative fee to be remitted to NCPA by the awarded vendor. It is the awarded vendor's responsibility to keep all pricing up to date and on file with NCPA. For those pricing requiring annual or periodic pricing updates, awarded vendors are expected to provide these changes as submitted.
  - All deliveries shall be freight prepaid, F.O.B. destination and shall be included in all pricing offered unless otherwise clearly stated in writing
- ◆ Warranty
  - Proposals should address each of the following:

- Applicable warranty and/or guarantees of equipment and installations including any conditions and response time for repair and/or replacement of any components during the warranty period.
  - Availability of replacement parts
  - Life expectancy of equipment under normal use
  - Detailed information as to proposed return policy on all equipment
- All supplies, equipment and services shall include manufacturer's minimum standard warranty and one (1) year labor warranty unless otherwise agreed to in writing.

◆ Administrative Fee

- All pricing submitted to Region 14 ESC shall include the administrative fee to be remitted to NCPA by the awarded vendor.
- The awarded vendor agrees to pay administrative fees to NCPA of **three percent (3%)**.

◆ Audit rights

- Vendor shall, at Vendor's sole expense, maintain appropriate due diligence of all purchases made by any entity that utilizes this Agreement. NCPA and Region 14 ESC each reserve the right to audit the accounting for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. In the State of New Jersey, this audit right shall survive termination of this Agreement for a period of five (5) years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.
- Region 14 ESC shall have the authority to conduct random audits of Vendor's pricing that is offered to eligible entities at Region 14 ESC's sole cost and expense. Notwithstanding the foregoing, in the event that Region 14 ESC is made aware of any pricing being offered to eligible agencies that is materially inconsistent with the pricing under this agreement, Region 4 ESC shall have the ability to conduct an extensive audit of Vendor's pricing at Vendor's sole cost and expense. Region 14 ESC may conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 14 ESC or NCPA.

◆ Indemnity

- The awarded vendor shall protect, indemnify, and hold harmless Region 14 ESC and its participants, administrators, employees and agents against all claims, damages, losses and expenses arising out of or resulting from the actions of the vendor, vendor employees or vendor subcontractors in the preparation of the solicitation and the later execution of the contract.

◆ Licenses and Duty to keep current licenses

- Vendor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by vendor. Vendor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the contract. Region 14 ESC reserves the right to stop work and/or cancel the contract of any vendor whose license(s) expire, lapse, are suspended or terminated. Vendor is expected to provide all required license(s) with this RFP response.

◆ Franchise Tax

- The respondent hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes.

◆ Supplemental Agreements

- The entity participating in this contract and awarded vendor may enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in this contract i.e. invoice requirements, ordering requirements, specialized delivery, etc. Any supplemental agreement developed as a result of this contract is exclusively between the participating entity and awarded vendor.

◆ Certificates of Insurance

- Certificates of insurance shall be delivered to the Public Agency prior to commencement of work. The insurance company shall be licensed in the applicable state in which work is being conducted. The awarded vendor shall give the participating entity a minimum of ten (10) days notice prior to any modifications or cancellation of policies. The awarded vendor shall require all subcontractors performing any work to maintain coverage as specified.

◆ Legal Obligations

- It is the Respondent's responsibility to be aware of and comply with all local, state, and federal laws governing the sale of products/services identified in this RFP and any awarded contract and shall comply with all while fulfilling the RFP. Applicable laws and regulation must be followed even if not specifically identified herein.

◆ Protest

- A protest of an award or proposed award must be filed in writing within ten (10) days from the date of the official award notification and must be received by 5:00 pm CST. No protest shall lie for a claim that the selected Vendor is not a responsible Bidder. Protests shall be filed with Region 14 ESC and shall include the following:
  - Name, address and telephone number of protester
  - Original signature of protester or its representative
  - Identification of the solicitation by RFP number
  - Detailed statement of legal and factual grounds including copies of relevant documents and the form of relief requested
- Any protest review and action shall be considered final with no further formalities being considered.

◆ Force Majeure

- If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the



continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

- The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or any civil or military authority; insurrections; riots; epidemics; landslides; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty

#### ◆ Prevailing Wage

- It shall be the responsibility of the Vendor to comply, when applicable, with the prevailing wage legislation in effect in the jurisdiction of the purchaser. It shall further be the responsibility of the Vendor to monitor the prevailing wage rates as established by the appropriate department of labor for any increase in rates during the term of this contract and adjust wage rates accordingly.

#### ◆ Miscellaneous

- Either party may cancel this contract in whole or in part by providing written notice. The cancellation will take effect 30 business days after the other party receives the notice of cancellation. After the 30th business day all work will cease following completion of final purchase order.

#### ◆ Cancellation for Non-Performance or Contractor Deficiency

- Region 14 ESC may terminate any contract if awarded vendor has not used the contract, or if purchase volume is determined to be low volume in any 12-month period.
- Region 14 ESC reserves the right to cancel the whole or any part of this contract due to failure by contractor to carry out any obligation, term or condition of the contract.
- Region 14 ESC may issue a written deficiency notice to contractor for acting or failing to act in any of the following:
  - ◆ Providing material that does not meet the specifications of the contract;
  - ◆ Providing work and/or material that was not awarded under the contract;
  - ◆ Failing to adequately perform the services set forth in the scope of work and specifications;
  - ◆ Failing to complete required work or furnish required materials within a reasonable amount of time;
  - ◆ Failing to make progress in performance of the contract and/or giving Region 14 ESC reason to believe that contractor will not or cannot perform the requirements of the contract;
- Upon receipt of a written deficiency notice, contractor shall have ten (10) days to provide a satisfactory response to Region 14 ESC. Failure to adequately address all issues of concern

may result in contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by contractor under the contract shall become the property of Region 14 ESC on demand.

◆ Open Records Policy

- Because Region 14 ESC is a governmental entity responses submitted are subject to release as public information after contracts are executed. If a vendor believes that its response, or parts of its response, may be exempted from disclosure, the vendor must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, the respondent must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s).
- The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 14 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the respondent are not acceptable. Region 14 ESC must comply with the opinions of the OAG. Region 14 ESC assumes no responsibility for asserting legal arguments on behalf of any vendor. Respondent are advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

**If awarded vendor is going to do business in the State of Arizona, the following terms and conditions shall apply**

◆ Cancellation for Conflict of Interest

- Per A.R.S. 38-511 a School District/public entity may cancel this Contract within three (3) years after Contract execution without penalty or further obligation if any person significantly involved in initiating, negotiating, securing, drafting, or creating the Contract on behalf of the School District/public entity is, or becomes at any time while the Contract or an extension the Contract is in effect, an employee of or a consultant to any other party to this Contract with respect to the subject matter of the Contract. The cancellation shall be effective when the awarded vendor receives written notice of the cancellation unless the notice specifies a later time.

◆ Registered Sex Offender Restriction

- Pursuant to this order, the awarded vendor agrees by acceptance of this order that no employee of the awarded vendor or a subcontractor of the awarded vendor, who has been adjudicated to be a registered sex offender, will perform work on any School District's premises or equipment at any time when District students are, or are reasonably expected to be, present. The awarded vendor further agrees by acceptance of this order that a violation of this condition shall be considered a material breach and may result in a cancellation of the order at the District's discretion.

◆ Contract's Employment Eligibility

- By entering the contract, awarded vendor warrants compliance with A.R.S. 41-4401, A.R.S. 23-214, the Federal Immigration and Nationality Act (FINA), and all other federal immigration laws and regulations. A School District/public entity may request verification

of compliance from any contractor or subcontractor performing work under this contract. A School District/public entity reserves the right to confirm compliance in accordance with applicable laws. Should the School District/public entity suspect or find that the awarded vendor or any of its subcontractors are not in compliance, the School District/public entity may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the contract for default, and suspension and/or debarment of the awarded vendor. All costs necessary to verify compliance are the responsibility of the awarded vendor.

◆ Terrorism Country Divestments

- Per A.R.S. 35-392, a School District/public entity is prohibited from purchasing from a company that is in violation of the Export Administration Act.

◆ Fingerprint Checks

- If required to provide services on School District/public entity's property, awarded vendor shall comply with A.R.S. 15-511(h).

◆ Indemnification

- Notwithstanding all other provisions of this agreement, School District/public entity does not agree to accept responsibility, waive liability, or indemnify the awarded vendor, in whole or in part, for the errors, negligence, hazards, liabilities, contract breach and/or omissions of the awarded vendor, its employees and/or agents.

◆ Open Records Policy

- Because Region 14 ESC is a governmental entity responses submitted are subject to release as public information after contracts are executed. If a vendor believes that its response, or parts of its response, may be exempted from disclosure, the vendor must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, the respondent must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s).
- The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 14 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the respondent are not acceptable. Region 14 ESC must comply with the opinions of the OAG. Region 14 ESC assumes no responsibility for asserting legal arguments on behalf of any vendor. Respondent are advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

# Process

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Region 14 ESC will evaluate proposals in accordance with, and subject to, the relevant statutes, ordinances, rules, and regulations that govern its procurement practices. NCPA will assist Region 14 ESC in evaluating proposals. Award(s) will be made to the prospective vendor(s) whose response is determined to be the most advantageous to Region 14 ESC, NCPA, and its participating agencies. To qualify for evaluation, response must have been submitted on time, and satisfy all mandatory requirements identified in this document.

- ◆ Contract Administration
  - The contract will be administered by Region 14 ESC. The National Program will be administered by NCPA on behalf of Region 14 ESC.
- ◆ Contract Term
  - The contract term will be for one (1) year starting from the date of the award. The contract may be renewed for up to four (4) additional one-year terms or any combination of time equally not more than 4 years.
  - It should be noted that maintenance/service agreements may be issued for up to (5) years under this contract even if the contract only lasts for the initial term of the contract. NCPA will monitor any maintenance agreements for the term of the agreement provided they are signed prior to the termination or expiration of this contract.
- ◆ Contract Waiver
  - Any waiver of any provision of this contract shall be in writing and shall be signed by the duly authorized agent of Region 14 ESC. The waiver by either party of any term or condition of this contract shall not be deemed to constitute waiver thereof nor a waiver of any further or additional right that such party may hold under this contract.
- ◆ Products and Services additions
  - Products and Services may be added to the resulting contract during the term of the contract by written amendment, to the extent that those products and services are within the scope of this RFP and has written approval of NCPA and Region 14ESC.
- ◆ Competitive Range
  - It may be necessary for Region 14 ESC to establish a competitive range. Responses not in the competitive range are unacceptable and do not receive further award consideration.
- ◆ Deviations and Exceptions

- Deviations or exceptions stipulated in response may result in disqualification. It is the intent of Region 14 ESC to award a vendor's complete line of products and/or services, when possible.
- ◆ Estimated Quantities
  - The estimated dollar volume of Products and Services purchased under the proposed Master Agreement is (\$100,000,000.00) one hundred million dollars annually. This estimate is based on the anticipated volume of Region 14 ESC and current sales within the NCPA program. There is no guarantee or commitment of any kind regarding usage of any contracts resulting from this solicitation
- ◆ Evaluation
  - Region 14 ESC will review and evaluate all responses in accordance with, and subject to, the relevant statutes, ordinances, rules and regulations that govern its procurement practices. NCPA will assist the lead agency in evaluating proposals. Recommendations for contract awards will be based on multiple factors, each factor being assigned a point value based on its importance.
- ◆ Formation of Contract
  - A response to this solicitation is an offer to contract with Region 14 ESC based upon the terms, conditions, scope of work, and specifications contained in this request. A solicitation does not become a contract until it is accepted by Region 14 ESC. The prospective vendor must submit a signed Signature Form with the response thus, eliminating the need for a formal signing process.
- ◆ NCPA Administrative Agreement
  - The vendor will be required to enter and execute the National Cooperative Purchasing Alliance Administration Agreement with NCPA upon award with Region 14 ESC. The agreement establishes the requirements of the vendor with respect to a nationwide contract effort.
- ◆ Clarifications / Discussions
  - Region 14 ESC may request additional information or clarification from any of the respondents after review of the proposals received for the sole purpose of elimination minor irregularities, informalities, or apparent clerical mistakes in the proposal. Clarification does not give respondent an opportunity to revise or modify its proposal, except to the extent that correction of apparent clerical mistakes results in a revision. After the initial receipt of proposals, Region 14 ESC reserves the right to conduct discussions with those respondent's whose proposals are determined to be reasonably susceptible of being selected for award. Discussions occur when oral or written communications between Region 14 ESC and respondent's are conducted for the purpose clarifications involving information essential for determining the acceptability of a proposal or that provides respondent an opportunity to revise or modify its proposal. Region 14 ESC will not assist respondent bring its proposal up to the level of other proposals through discussions. Region 14 ESC will not indicate to respondent a cost or price that it must meet to neither obtain further consideration nor will it provide any information about other respondents' proposals or prices.

- ◆ Multiple Awards
  - Multiple Contracts may be awarded as a result of the solicitation. Multiple Awards will ensure that any ensuing contracts fulfill current and future requirements of the diverse and large number of participating public agencies.
- ◆ Past Performance
  - Past performance is relevant information regarding a vendor's actions under previously awarded contracts; including the administrative aspects of performance; the vendor's history of reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the vendor's businesslike concern for the interests of the customer.

## Evaluation Criteria

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- ◆ Product & Services/Pricing (40 points)
  - Respondent(s)' products and services (e.g.; quality and breadth of product(s)/service(s), description(s) quality, reputation in the marketplace, average on time delivery rate and historical shipping timelines, return and restocking policies and applicable fees, average Fill Rate, shipping charges and other)
  - Competitive Level of Pricing for vendor's available products and services
  - Warranties on Respondent(s)' products and services (e.g.; availability of standard/extended warranties, pricing, detailed descriptions, ease of process and others)
  - Evidence of the ability of Respondent(s)' products and services to save members time and money (e.g.; breadth of service departments, technological advances, personnel experience, product(s) efficiencies, and others)
  - Other factors relevant to this section as submitted by the responder(s)
- ◆ Ability to Provide and Perform the Required Services for the Contract (25 points)
  - Response to emergency orders & service (e.g.; response time, breadth of service coverage, strength of meeting service and warranty needs of members)
  - Customer service/problem resolution (e.g.; technical abilities of service personnel; quality of processes,)
  - Invoicing process (e.g.; ease of use; transparency, billing resolutions)
  - Respondent(s)' processes, and quality of organizational structure
  - Contract implementation/Customer transition
  - Financial condition of vendor
  - Offeror's safety record (e.g.; benchmarks, lost hours, reporting)
  - Instructional materials and training (e.g.; administrative documentation, internal technical training, training of agencies)
  - Other factors relevant to this section as submitted by the proposer
- ◆ References (10 points)
  - A minimum of ten (10) customer references for product and/or services of similar scope dating within past 3 years

◆ Qualification and Experience (15 points)

- Respondent(s)' reputation in the marketplace
- Past relationship with Region 14 ESC and/or NCPA members
- Experience with cooperative selling (e.g.; number of other cooperatives, Exhibited understanding of cooperative purchasing)
- Experience and qualification of key employees
- Location and number of sales persons who will work on this contract
- Marketing plan and capability
- Past experience working with the government sector
- Past litigation, bankruptcy, reorganization, state investigations of entity or current officers and directors
- Completeness of response (e.g.; filled out all sections, answered all questions, provided pricing)
- Other factors relevant to this section as submitted by the proposer

◆ Value Added Services Description, Products and/or Services (10 points)

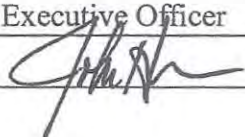
- Marketing and agency Training
- Customer Service
- Sales force training (e.g.; internal training plan, corporate officer involvement, orientation commitment)
- Marketing plan and capability (e.g.; contract rollout plan, benchmarks, goals)
- Green initiative(s) (e.g.; philosophy, certificates, awards)
- Quality and breadth of value add(s)
- Other factors relevant to this section as submitted by the proposer

## Tab 1 – Signature Form

### Signature Form

The undersigned hereby proposes and agrees to furnish goods and/or services in strict compliance with the terms, specifications and conditions at the prices proposed within response unless noted in writing. The undersigned further certifies that he/she is an officer of the company and has authority to negotiate and bind the company named below and has not prepared this bid in collusion with any other Respondent and that the contents of this proposal as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any person engaged in this type of business prior to the official opening of this proposal.

Prices are guaranteed: **120 days**

Company name	Midstate Energy
Address	23325 North 23 <sup>rd</sup> Avenue, Suite 120
City/State/Zip	Phoenix, Arizona 85027
Telephone No.	602.452.8700
Fax No.	N/A
Email address	jhobbes@midstate-energy.com
Printed name	John Hobbes
Position with company	Chief Executive Officer
Authorized signature	



## Tab 2 – NCPA Administration Agreement

### Tab 2 – NCPA Administration Agreement

This Administration Agreement is made as of April 1, 2019, by and between National Cooperative Purchasing Alliance ("NCPA") and Midstate Energy, LLC ("Vendor").

#### Recitals

WHEREAS, Region 14 ESC has entered into a certain Master Agreement dated April 1, 2019, referenced as Contract Number 02-65, by and between Region 14 ESC and Vendor, as may be amended from time to time in accordance with the terms thereof (the "Master Agreement"), for the purchase of **High Performance Building Consulting and Utility Management Solutions, Smart Technology and Related Products and Services**;

WHEREAS, said Master Agreement provides that any state, city, special district, local government, school district, private K-12 school, technical or vocational school, higher education institution, other government agency or nonprofit organization (hereinafter referred to as "public agency" or collectively, "public agencies") may purchase products and services at the prices indicated in the Master Agreement;

WHEREAS, NCPA has the administrative and legal capacity to administer purchases under the Master Agreement to public agencies;

WHEREAS, NCPA serves as the administrative agent for Region 14 ESC in connection with other master agreements offered by NCPA

WHEREAS, Region 14 ESC desires NCPA to proceed with administration of the Master Agreement;

WHEREAS, NCPA and Vendor desire to enter into this Agreement to make available the Master Agreement to public agencies on a national basis;

NOW, THEREFORE, in consideration of the payments to be made hereunder and the mutual covenants contained in this Agreement, NCPA and Vendor hereby agree as follows:

#### ♦ General Terms and Conditions

- The Master Agreement, attached hereto as Tab 1 and incorporated herein by reference as though fully set forth herein, and the terms and conditions contained therein shall apply to this Agreement except as expressly changed or modified by this Agreement.
- NCPA shall be afforded all of the rights, privileges and indemnifications afforded to Region 14 ESC under the Master Agreement, and such rights, privileges and indemnifications shall accrue and apply with equal effect to NCPA under this Agreement including, but not limited

to, the Vendor's obligation to provide appropriate insurance and certain indemnifications to Region 14 ESC.

- Vendor shall perform all duties, responsibilities and obligations required under the Master Agreement in the time and manner specified by the Master Agreement.
- NCPA shall perform all of its duties, responsibilities, and obligations as administrator of purchases under the Master Agreement as set forth herein, and Vendor acknowledges that NCPA shall act in the capacity of administrator of purchases under the Master Agreement.
- With respect to any purchases made by Region 14 ESC or any Public Agency pursuant to the Master Agreement, NCPA (a) shall not be construed as a dealer, re-marketer, representative, partner, or agent of any type of Vendor, Region 14 ESC, or such Public Agency, (b) shall not be obligated, liable or responsible (i) for any orders made by Region 14 ESC, any Public Agency or any employee of Region 14 ESC or Public Agency under the Master Agreement, or (ii) for any payments required to be made with respect to such order, and (c) shall not be obligated, liable or responsible for any failure by the Public Agency to (i) comply with procedures or requirements of applicable law, or (ii) obtain the due authorization and approval necessary to purchase under the Master Agreement. NCPA makes no representations or guaranties with respect to any minimum purchases required to be made by Region 14 ESC, any Public Agency, or any employee of Region 14 ESC or Public Agency under this Agreement or the Master Agreement.
- The Public Agency participating in the NCPA contract and Vendor may enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in this contract i.e. invoice requirements, ordering requirements, specialized delivery, etc. Any supplemental agreement developed as a result of this contract is exclusively between the Public Agency and Vendor. NCPA, its agents, members and employees shall not be made party to any claim for breach of such agreement.

♦ **Term of Agreement**

- This Agreement shall be in effect so long as the Master Agreement remains in effect, provided, however, that the obligation to pay all amounts owed by Vendor to NCPA through the termination of this Agreement and all indemnifications afforded by Vendor to NCPA shall survive the term of this Agreement.

♦ **Fees and Reporting**

- The awarded vendor shall electronically provide NCPA with a detailed monthly or quarterly report showing the dollar volume of all sales under the contract for the previous month or quarter. Reports shall be sent via e-mail to NCPA offices at [reporting@ncpa.us](mailto:reporting@ncpa.us). Reports are due on the fifteenth (15<sup>th</sup>) day after the close of the previous month or quarter. It is the responsibility of the awarded vendor to collect and compile all sales under the contract from participating members and submit one (1) report. The report shall include at least the following information as listed in the example below:

Agency Name	Zip Code	State	RQN Proposal #	Order Date	Internal PO, Job #, FX#, Notes etc.	Sale Amount	Admin Fee (3%)
-------------	----------	-------	----------------	------------	-------------------------------------	-------------	----------------

**Total** \_\_\_\_\_

- Each month or quarter NCPA will invoice the vendor based on the total of sale amount(s) reported. From the invoice the vendor shall pay to NCPA four (4%) administrative fee on the amount of the agency's purchase order less any applicable sales tax and Performance



and/or Payment bond cost. Deadline for term of payment will be included in the invoice NCPA provides.

- Supplier shall maintain an accounting of all purchases made by Public Agencies under the Master Agreement. NCPA and Region 14 ESC reserve the right to audit the accounting for a period of four (4) years from the date NCPA receives the accounting. In the event of such an audit, the requested materials shall be provided at the location designated by Region 14 ESC or NCPA. In the event such audit reveals an underreporting of Contract Sales and a resulting underpayment of administrative fees, Vendor shall promptly pay NCPA the amount of such underpayment, together with interest on such amount and shall be obligated to reimburse NCPA's costs and expenses for such audit.

◆ General Provisions

- This Agreement supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other agreement, statement, or promise relating to the subject matter of this Agreement which is not contained herein shall be valid or binding.
- Awarded vendor agrees to allow NCPA to use their name and logo within website, marketing materials and advertisement. Any use of NCPA name and logo or any form of publicity regarding this contract by awarded vendor must have prior approval from NCPA.
- If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement or to recover any administrative fee and accrued interest, the prevailing party shall be entitled to reasonable attorney's fees and costs in addition to any other relief to which such party may be entitled.
- Neither this Agreement nor any rights or obligations hereunder shall be assignable by Vendor without prior written consent of NCPA, provided, however, that the Vendor may, without such written consent, assign this Agreement and its rights and delegate its obligations hereunder in connection with the transfer or sale of all or substantially all of its assets or business related to this Agreement, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement.
- This Agreement and NCPA's rights and obligations hereunder may be assigned at NCPA's sole discretion, to an existing or newly established legal entity that has the authority and capacity to perform NCPA's obligations hereunder
- All written communications given hereunder shall be delivered to the addresses as set forth below.

National Cooperative Purchasing Alliance:	Date:	<u>3/19/2019</u>
Name: <u>Matthew Mackel</u>	Vendor:	<u>Midstate Energy, LLC</u>
Title: <u>Director, Business Development</u>	Name:	<u>John Hobbes</u>
Address: <u>PO Box 701273</u>	Title:	<u>Chief Executive Officer</u>
<u>Houston, TX 77270</u>	Address:	<u>23325 N. 23<sup>rd</sup> Ave., Suite 120</u>
Signature: <u></u>		<u>Phoenix, AZ 85027</u>
<u>April 1, 2019</u>	Signature:	<u></u>

Date: 3/19/2019

### **NCPA Registered Vendor Quotation Number**

RFP responders are requested to agree to a quotation number registration program to provide consistency and faster service for our facility awarded vendors, agency members and participants. The process will require Facility Contract holders to register and receive a NCPA Vendor Registered Quotation Number that must be prominently displayed on each proposal(s) that you present to the agencies. The system will track Facility transactions from the initial proposal stage to the completion of each project. NCPA has assembled an experienced Facilities Management Team that stands ready and willing to assist its vendors in providing quality services to the awarded vendor's organization. Failure to receive the Vendor Registered Quotation Number can result in potential delays to your services and the only acceptable proposals need to have a NCPA Vendor Registered Quotation Number.

### **NCPA Registered Vendor Quotation Number Process**

Fill out the form on the Facilities page at [www.NCPA.us](http://www.NCPA.us)

- \*Click on RQN Logo in the right hand corner of the home page and a form will pop up.
- \* Fill out and submit.

- All registered vendor quotation number requests must be submitted and a proposal number received before you present it to your potential customer.
- You will have a response with a NCPA Vendor Registered Quotation Number within 5 minutes.
- Include the quotation number on all proposals.

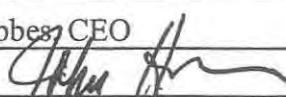
This document acknowledges that you have received and agree to the details, directions and expectations of the NCPA Vendor Registered Quotation Number process.

Date: 3/19/2019

RFP Number: 08-19

Company Name: Midstate Energy, LLC

Printed Name: John Hobbes CEO

Signature: 

## Tab 3 – Vendor Questionnaire

### Tab 3 – Vendor Questionnaire

Please provide responses to the following questions that address your company's operations, organization, structure, and processes for providing products and services.

♦ States Covered

- Bidder must indicate any and all states where products and services can be offered.
- Please indicate the price co-efficient for each state if it varies.

☐ 50 States & District of Columbia (Selecting this box is equal to checking all boxes below)

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Alabama              | <input type="checkbox"/> Maryland            | <input type="checkbox"/> South Carolina   |
| <input type="checkbox"/> Alaska               | <input type="checkbox"/> Massachusetts       | <input type="checkbox"/> South Dakota     |
| <input checked="" type="checkbox"/> Arizona   | <input checked="" type="checkbox"/> Michigan | <input type="checkbox"/> Tennessee        |
| <input type="checkbox"/> Arkansas             | <input type="checkbox"/> Minnesota           | <input checked="" type="checkbox"/> Texas |
| <input type="checkbox"/> California           | <input type="checkbox"/> Mississippi         | <input type="checkbox"/> Utah             |
| <input checked="" type="checkbox"/> Colorado  | <input type="checkbox"/> Missouri            | <input type="checkbox"/> Vermont          |
| <input type="checkbox"/> Connecticut          | <input type="checkbox"/> Montana             | <input type="checkbox"/> Virginia         |
| <input type="checkbox"/> Delaware             | <input type="checkbox"/> Nebraska            | <input type="checkbox"/> Washington       |
| <input type="checkbox"/> District of Columbia | <input type="checkbox"/> Nevada              | <input type="checkbox"/> West Virginia    |
| <input type="checkbox"/> Florida              | <input type="checkbox"/> New Hampshire       | <input type="checkbox"/> Wisconsin        |
| <input type="checkbox"/> Georgia              | <input type="checkbox"/> New Jersey          | <input type="checkbox"/> Wyoming          |
| <input type="checkbox"/> Hawaii               | <input type="checkbox"/> New Mexico          |   |
| <input type="checkbox"/> Idaho                | <input type="checkbox"/> New York            |   |
| <input type="checkbox"/> Illinois             | <input type="checkbox"/> North Carolina      |   |
| <input type="checkbox"/> Indiana              | <input type="checkbox"/> North Dakota        |   |
| <input type="checkbox"/> Iowa                 | <input checked="" type="checkbox"/> Ohio     |   |
| <input type="checkbox"/> Kansas               | <input type="checkbox"/> Oklahoma            |   |
| <input type="checkbox"/> Kentucky             | <input type="checkbox"/> Oregon              |   |
| <input type="checkbox"/> Louisiana            | <input type="checkbox"/> Pennsylvania        |   |
| <input type="checkbox"/> Maine                | <input type="checkbox"/> Rhode Island        |   |



☐ **All US Territories and Outlying Areas** (Selecting this box is equal to checking all boxes below)

- |   |   |
|---|---|
| <input type="checkbox"/> American Samoa                 | <input type="checkbox"/> Northern Mariana Islands |
| <input type="checkbox"/> Federated States of Micronesia | <input type="checkbox"/> Puerto Rico              |
| <input type="checkbox"/> Guam                           | <input type="checkbox"/> U.S. Virgin Islands      |
| <input type="checkbox"/> Midway Islands                 |   |

♦ **Minority and Women Business Enterprise (MWBE) and (HUB) Participation**

- It is the policy of some entities participating in NCPA to involve minority and women business enterprises (MWBE) and historically underutilized businesses (HUB) in the purchase of goods and services. Respondents shall indicate below whether or not they are an M/WBE or HUB certified.
- **Minority / Women Business Enterprise**
    - Respondent Certifies that this firm is a M/WBE ☐
  - **Historically Underutilized Business**
    - Respondent Certifies that this firm is a HUB ☐

♦ **Residency**

- Responding Company's principal place of business is in the city of Phoenix  
State of AZ

♦ **Felony Conviction Notice**

- Please Check Applicable Box;
- ☐ A publically held corporation; therefore, this reporting requirement is not applicable.
  - ☒ Is not owned or operated by anyone who has been convicted of a felony.
  - ☐ Is owned or operated by the following individual(s) who has/have been convicted of a felony
- If the 3<sup>rd</sup> box is checked, a detailed explanation of the names and convictions must be attached.

♦ **Distribution Channel**

- Which best describes your company's position in the distribution channel:
- |  |  |
|--|--|
| <input type="checkbox"/> Manufacturer Direct               | <input type="checkbox"/> Certified education/government reseller |
| <input checked="" type="checkbox"/> Authorized Distributor | <input type="checkbox"/> Manufacturer marketing through reseller |
| <input type="checkbox"/> Value-added reseller              | <input type="checkbox"/> Other: _____                            |

♦ **Processing Information**

- Provide company contact information for the following:
- **Sales Reports / Accounts Payable**

Contact Person: John Hobbes  
 Title: Chief Executive Officer  
 Company: Midstate Energy, LLC  
 Address: 23325 North 23<sup>rd</sup> Avenue, Suite 120  
 City: Phoenix State: AZ Zip: 85027  
 Phone: 602.452.8720 Email: jhobbes@midstate-energy.com

## ▪ Purchase Orders

Contact Person: Tonja Hale  
Title: Senior Project Manager  
Company: Midstate Energy, LLC  
Address: 23325 North 23<sup>rd</sup> Avenue, Suite 120  
City: Phoenix State: AZ Zip: 85027  
Phone: 602.452.8709 Email: thale@midstate-energy.com

## ▪ Sales and Marketing

Contact Person: Marketing: Vincent Esparza  
Title: Director of Marketing  
Company: Midstate Energy, LLC  
Address: 23325 North 23<sup>rd</sup> Avenue, Suite 120  
City: Phoenix State: AZ Zip: 85027  
Phone: 602.452.8746 Email: vesparza@midstate-energy.com

## ♦ Pricing Information

- In addition to the current typical unit pricing furnished herein, the Vendor agrees to offer all future product introductions at prices that are proportionate to Contract Pricing.
  - If answer is no, attach a statement detailing how pricing for NCPA participants would be calculated for future product introductions.

☒ Yes      ☐ No
- Pricing submitted includes the required NCPA administrative fee. The NCPA fee is calculated based on the invoice price to the customer.

☒ Yes      ☐ No
- Vendor will provide additional discounts for purchase of a guaranteed quantity.

☒ Yes      ☐ No

## Tab 4 – Vendor Profile

Please provide the following information about your company:

- **Company's official registered name.**

Midstate Energy, LLC

- **Brief history of your company, including the year it was established.**

Since 2010, Midstate Energy has specialized in high performance building consulting, facility improvements, modernization of existing building systems, smart technology and sustainable energy design, including geothermal, solar and battery storage solutions. The focus of our efforts is aimed at reducing energy usage and the total cost of facility ownership for our clients. We seek the best options for our partners and ensures correct installation and system operation.

We have worked in occupied city, county and state buildings, and understand the importance of safety, communication and other coordination protocols to ensure no disruption to existing environments. We emphasize a cooperative team approach with a focus on quality, cost savings, energy objectives and results. We bring a proactive and progressive style to every project we undertake and are committed to delivering the highest level of services and superior quality to all NCPA projects.

Over a year ago, Midstate Energy acquired Urban Energy Solutions and Natural Power & Energy. They have performed work including the installation of energy management control systems, photovoltaic equipment, storage and comprehensive electrical construction. Our three companies have been working closely together for several years, making it a simplified transition, with strong results in the ability to self-perform projects across electrical, lighting, HVAC, solar and water conservation solutions for school districts, higher education and municipalities. Together, we are now one unified company bringing a comprehensive set of services to Region 14 and NCPA clients.





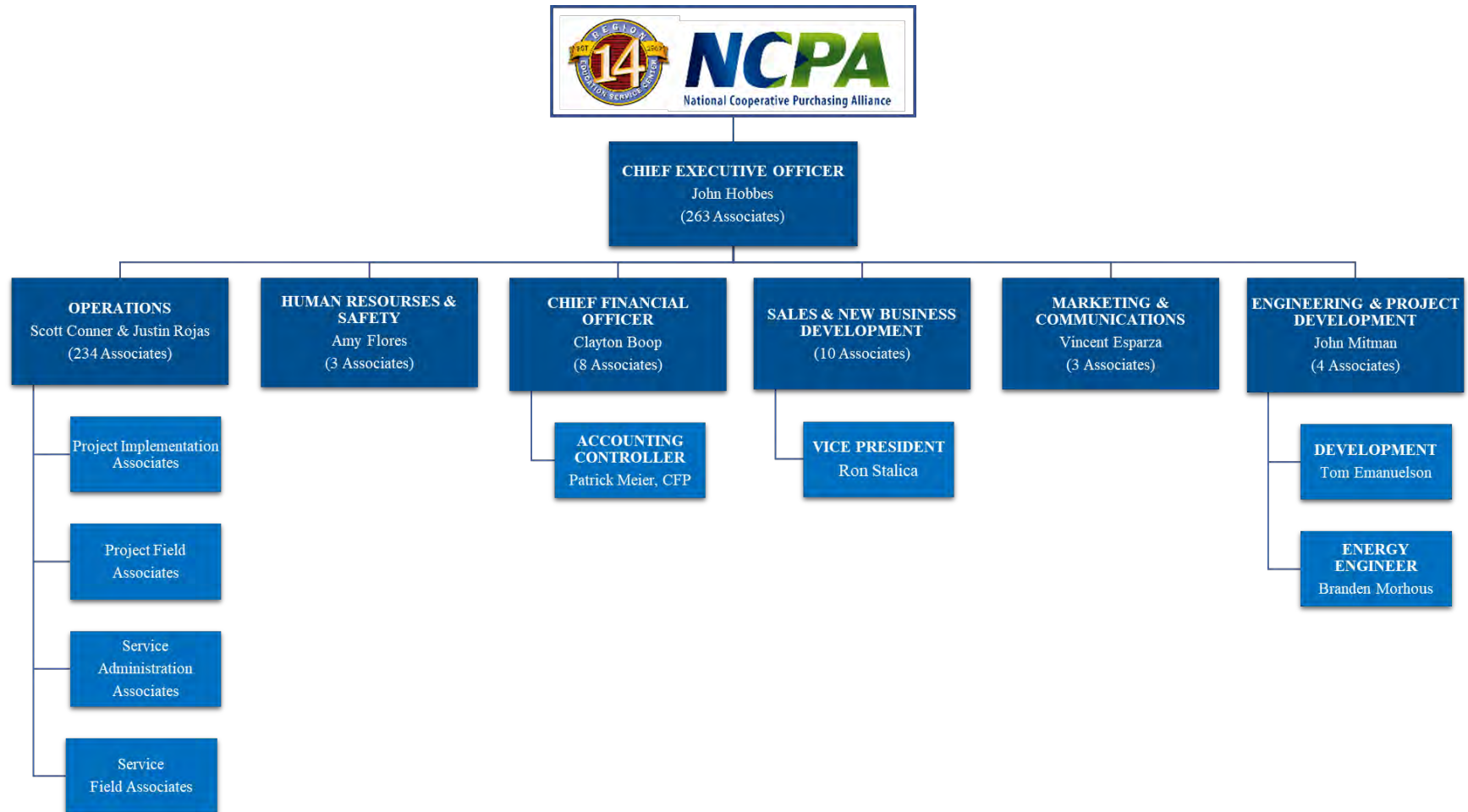
- **Company's Dun & Bradstreet (D&B) number.**

Our Dun & Bradstreet number is 968635081. Additionally, below is testament to our company financial stability, a recent letter from our banking institution, Key Bank, N.A.



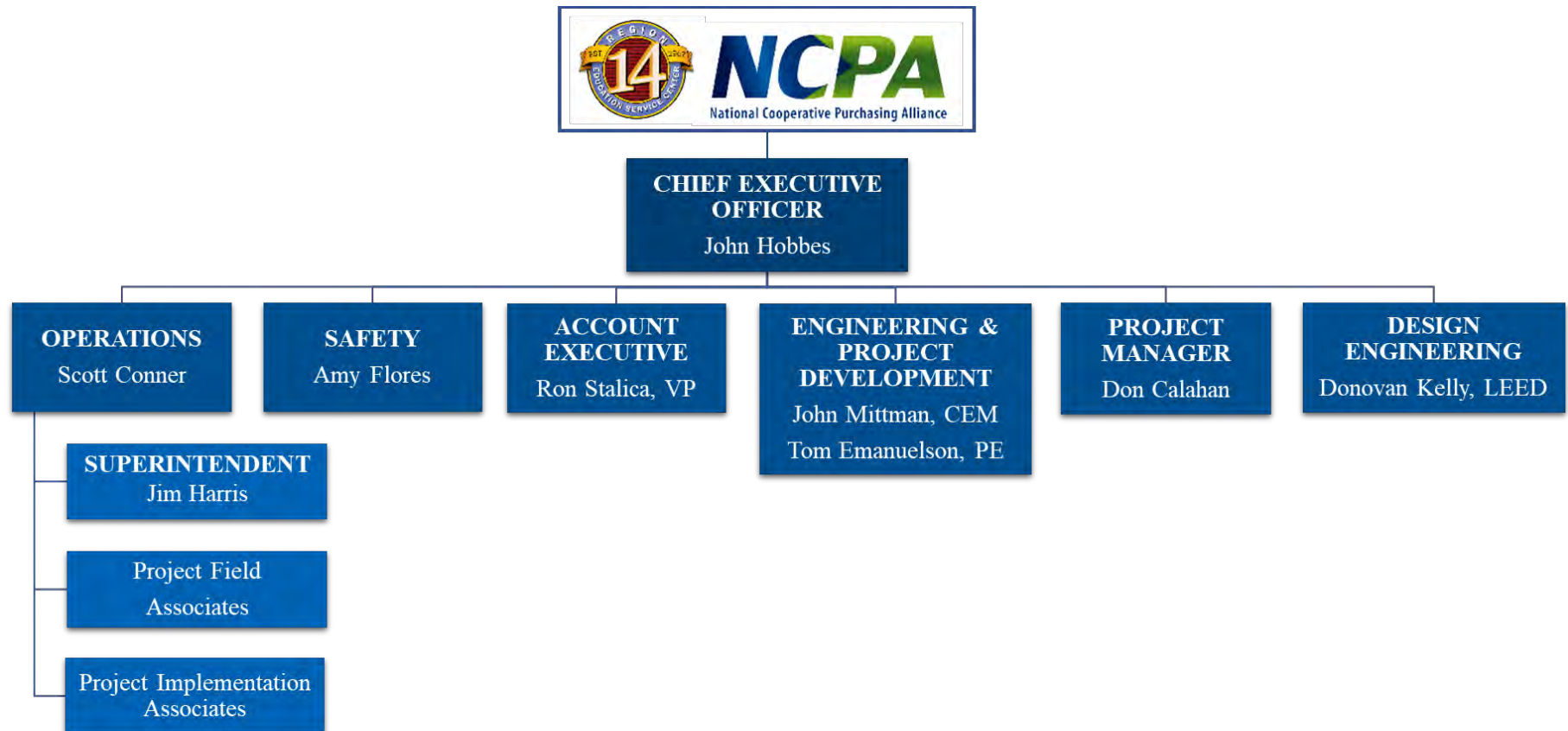
- Company's organizational chart of those individuals that would be involved in the contract.**

Our organization is comprised of 263 full-time associates. The organizational chart below details a high-level representation of the Midstate management team, their respective divisions and number of direct associates. The divisions include operations, human resources, accounting, sales, new business development, marketing, communications, engineering and project development. A sample designated NCPA and Region 14 project team is featured on the following page.



### Sample NCPA and Region 14 Project Team

Below is a potential project specific organizational chart comprised of our key personnel. Depending on the size and complexity of the NCPA project, we will collaborate with Region 14 to determine the number of project managers, engineers, construction management and/or various trade subcontractors we will need to deploy ensuring a successful project.



- **Corporate office location.**
  - **List the number of sales and services offices for states being bid in solicitation.**

### *Office Locations*

<b>Texas</b> 5601 Bridge St., #300 Fort Worth, TX 76112 682-300-1970	<b>North Phoenix (Headquarters)</b> 23325 North 23 <sup>rd</sup> Ave., #120 Phoenix, Arizona 85027 602.452.8700	<b>Central Phoenix</b> 3312 East Broadway Rd. Phoenix, AZ 85040
<b>Tucson</b> 4655 South Coach Drive Tucson, AZ 85714	<b>Denver</b> 445 Storm Mountain Court Steamboat Springs, CO 80487	

- **List the names of key contacts at each with title, address, phone and e-mail address.**

#### **John Hobbes**

Chief Executive Officer  
23325 North 23<sup>rd</sup> Avenue, Suite 120  
Phoenix, AZ 85027  
602-452-8720  
jhobbes@midstate-energy.com

#### **Ron Stalica**

Vice President of Business Development  
5601 Bridge Street, #300  
Fort Worth, TX 76112  
682-300-1970  
rstalica@midstate-energy.com

#### **Tom Jennings**

Senior Account Executive  
5601 Bridge Street, #300  
Fort Worth, TX 76112  
682-300-1970  
tjennings@midstate-energy.com

#### **Vincent Esparza**

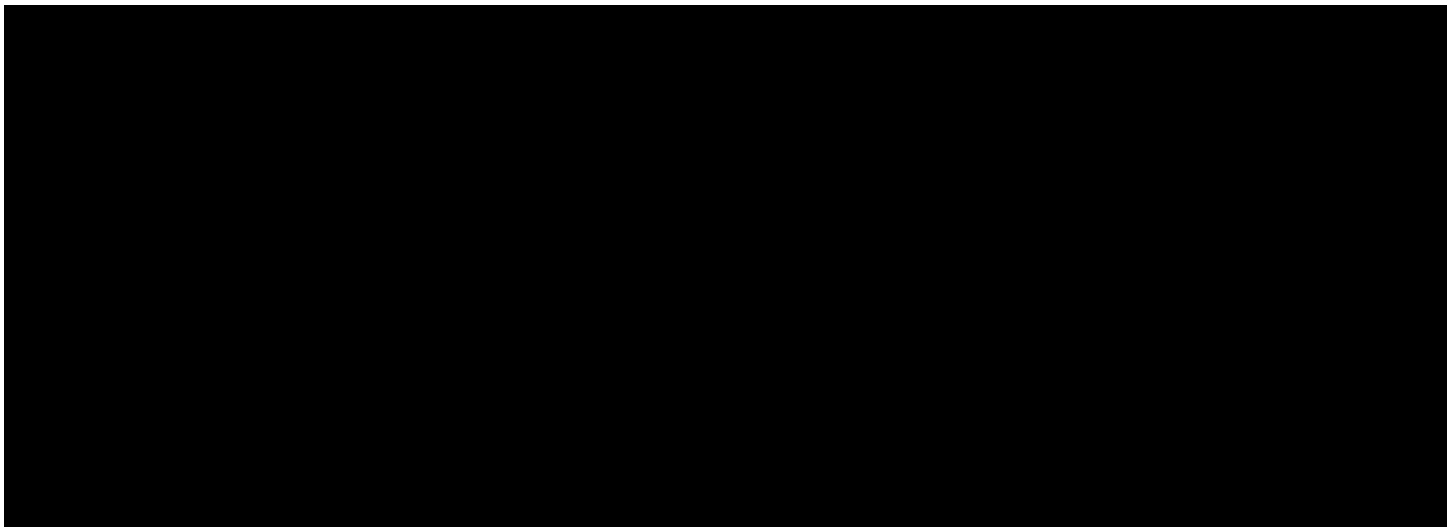
Director of Marketing  
23325 North 23<sup>rd</sup> Avenue, Suite 120  
Phoenix, AZ 85027  
602-452-8746  
vesparza@midstate-energy.com

- **Define your standard terms of payment.**

Midstate Energy, LLCs standard terms depend on the overall project size; however, are large construction standards are typically based around net 30 or net 45.

- **Who is your competition in the marketplace?**

– McKinstry                      – Honeywell                      – Trane                      – Siemens



- **What differentiates your company from competitors?**

***We're Part of the Solution and We Deliver***

There is no time for hindsight in the construction process. To deliver projects on time and on budget requires quick and accurate focus on solutions when problems arise. How a company responds to the unexpected is key; Midstate Energy is a proven provider of high-performance building consulting and energy management solutions with over 600 individual public facility projects completed.

***We're Innovative Thinkers***

We utilize a client-centric approach where our account team will embed themselves within the Region 14 teams to identify their business initiatives and performance indicators that may be missed under standard models for high performance building consulting and smart technology integration. While our design engineers are performing energy modeling, our account team searches for innovation, overlooked savings and investment opportunities for your academic institutions.

### ***We're Vendor Neutral***

Midstate Energy is an engineering and construction company, and we are under no mandate or incentive to use equipment or services provided by a specific company. Our open book pricing model allows Region 14 to benefit from the optimal selection of vendors and products.

### ***We're Experienced and Certified***

Midstate's engineers, superintendents and tradesman are licensed professionals who maintain an array of certifications and licenses including certified energy manager (CEM) certifications and LEED professional designations, to name a few.



The Association of Energy Engineers  
[www.aeecenter.org/](http://www.aeecenter.org/)



United States Green Building Council  
[www.usgbc.org/](http://www.usgbc.org/)



Certified Energy Manager  
[www.aeecenter.org/](http://www.aeecenter.org/)



Energy Services Coalition  
[www.energyservicescoalition.org/](http://www.energyservicescoalition.org/)



Energy Star  
[www.energystar.gov/](http://www.energystar.gov/)



Energy Efficiency Business Coalition  
[www.eebco.wildapricot.org/](http://www.eebco.wildapricot.org/)



National Association of Energy Services Companies  
(NAESCO) [www.naesco.org](http://www.naesco.org)



### ***We're Committed to Success and We Deliver Results***

Midstate Energy teams have completed over \$280 Million in high performance building consulting, utility management and energy projects in the last half decade and have had the privilege of being recognized for these efforts. Below is a list of recent awards:

**2018** – Salt River Project (SRP) Trade Ally of the Year

**2018** – Association of Energy Engineers (AEE) Distinguished Energy Professional Award

**2017** - Arizona Association of School Business Officials Vendor of the Year.

**2017** - Peoria Unified School District - Education Visionary Awards - Business Leader Award

**2017** - Sunnyside Unified School District – Awarded at the Battle of the Buildings



**2016** - Tucson Electric Power – Project of the Year Award for the Sunnyside Unified School District Energy Savings Performance Project

**2016** – UniSource Trade Ally of the Year

**2014** - Roadrunner School – Energy Project awarded 1st Platinum LEED Certification in Arizona

### ***We're Committed to Continued Education & Partnerships***

Beyond our membership with the National Association of Energy Service Companies (NAESCO), we have many active membership and trade alliances with local, state and national associations. Our participation and membership within these organizations offers an array of advantages. Each organization has specific meetings, expositions, rich online content, networking, the sharing of best practices and strict codes of ethics to continually educate our Midstate Energy, LLC team members and management. Our active and long-term relationships developed with each of these associations has strengthened our reputation as a trusted energy service company in the southwest.



Arizona Association of School Business Officials  
[www.aasbo.org/](http://www.aasbo.org/)



Arizona Association of Latino Administrators and Superintendents - [www.azalas.org/](http://www.azalas.org/)



Arizona Business & Education Coalition  
[www.azbec.org/](http://www.azbec.org/)



Arizona City County Management Association  
[www.azmanagement.org/](http://www.azmanagement.org/)



Arizona Department of Administration - Guaranteed Energy  
Savings Performance Contractor - [www.app.az.gov](http://www.app.az.gov)



Arizona Forward  
[www.arizonaforward.org/](http://www.arizonaforward.org/)



Arizona Public Service Trade Alliance  
[www.aps.com/](http://www.aps.com/)



Arizona Rural School Association  
[www.azruralschools.org/](http://www.azruralschools.org/)



Arizona School Administrators  
[www.azsa.org/](http://www.azsa.org/)



Arizona School Boards Association  
[www.azsba.org/](http://www.azsba.org/)



Colorado Energy Office – Pre-Qualified Energy Service  
Company - [www.colorado.gov/pacific/energyoffice](http://www.colorado.gov/pacific/energyoffice)



Certified Energy Manager  
[www.aeecenter.org/](http://www.aeecenter.org/)



Department of Administration Procurement  
[www.spo.az.gov/](http://www.spo.az.gov/)



Energy Services Coalition  
[www.energyservicescoalition.org/](http://www.energyservicescoalition.org/)



Energy Star  
[www.energystar.gov/](http://www.energystar.gov/)



Energy Efficiency Business Coalition  
[www.eebco.wildapricot.org/](http://www.eebco.wildapricot.org/)



1Govermental Procurement Alliance  
[www.1gpa.org/](http://www.1gpa.org/)



International Facility Management Association  
[www.ifma.org](http://www.ifma.org)



Leadership in Energy and Environmental Design  
[www.new.usgbc.org/leed/](http://www.new.usgbc.org/leed/)





League of Arizona Cities and Towns  
[www.azleague.org](http://www.azleague.org)



Mohave Educational Service Cooperative  
[www.mesc.org/](http://www.mesc.org/)



National Association of Women in Construction  
[www.nawic.org/](http://www.nawic.org/)



National Association of Energy Services Companies (NAESCO) [www.naesco.org](http://www.naesco.org)



Salt River Project Power and Water Trade Alliance  
[www.srpnet.com/](http://www.srpnet.com/)



Texas Association of Latino Administrators and Superintendents - [www.tasanet.org/](http://www.tasanet.org/)



The Unified Group  
[www.theunifiedgroup.com](http://www.theunifiedgroup.com)



Tucson Electric Power Trade Alliance  
[www.tep.com/](http://www.tep.com/)



Tucson Water Trade Alliance  
[www.tucsonaz.gov/water](http://www.tucsonaz.gov/water)



UniSource Energy Services Trade Alliance  
[www.uesaz.com](http://www.uesaz.com)

### *We Strive to Build Long Term Relationships*

Below are some recent Letters of Recommendation communicating our historic consulting and performance with school districts and their administration.



February 24, 2019

Here is a letter of support.

As school districts are increasingly asked to review the expenditures happening each year and to try to make the resources and budget allocations stretch farther one area that schools should start with is utilities. MidState Energy met with me to discuss the various strategies and to design a solution to those issues.

The focus was to maximize our resources to achieve a bigger bang for the buck. I was pleased with the no cost no commitment results guaranteed evaluation that we received. With the lack of capital funding performance contracting allowed Peoria USD to upgrade lighting systems throughout the district. The energy savings obtained were used to cover the project costs. This was a win in many ways, first the lighting was upgraded, second the district reduced its energy consumption and finally, the district received a warranty on the systems and rebates from the utility companies.

The partnership that was created was real, genuine and beneficial. That was over five years ago and I continue to work with MidState Energy in various capacities.

Sincerely,

*Ken Hicks*

Ken Hicks

Current Assistant Superintendent for Business Services at Dysart Unified School District  
Former Chief Financial Officer at Peoria Unified School District



February 20, 2019

Dr. Lily Matos DeBlieux  
Superintendent

**GOVERNING BOARD**  
Susan Serin  
President

Hilda Ortega-Rosales  
Vice-President

Jose Arenas  
Member

Senator Martin Quezada  
Member

Jefe White  
Member

**EXECUTIVE CABINET**

Joanne Fimbres  
Chief Financial Officer

Patli Tussey  
Chief Human Resource Officer

It is with great pleasure that I write this letter of recommendation for Midstate Energy LLC, a partner and service provider with Pendergast District.

We have partnered with Midstate beginning in the school year 2017/18 and have worked together to accomplish significant energy savings districtwide. During November 2018, Pendergast decreased electricity use by 330,535 kWh (36%) and decreased costs by \$30,629 (32%), compared to November 2017. During October 2018, Pendergast decreased electricity use by 270,837 kWh (23%) and decreased costs by \$26,816 (19%), compared to October 2017. District decrease in electricity use and energy costs is proof solid that Midstate has worked tirelessly to insure savings for the District.

Midstate Energy has shown excellence and dedication to Pendergast District. Their employees work in the best interest of the District. Midstate has completed all mechanical work in a safe and timely manner. Midstate provides the District with an energy savings checklist and materials with information on how the District can communicate best practices with all staff. They have made available sustainability activities for the classrooms to help conserve energy. They also communicate exceptionally well, sending out daily emails and keeping the District updated on all projects.

Midstate employees are proactive and thorough problem-solvers in all projects. Midstate's leadership and experience exemplifies the exceptional quality of work they provide. They deliver great customer service and are great to work with.

Midstate Energy is not just a vendor. They are a valued partner to Pendergast engaging with us in vital efforts to help our students achieve and succeed. They recently demonstrated this by generously supporting the Speak Up, Stand Up, Save a Life Conference to help save the lives of youth in our state. I cannot say enough wonderful things about this company and highly recommend them to be a part of your organization's efforts to improve efficiency and cost savings to your bottom line. Please feel free to contact me for any further information.

Sincerely,

Dr. Lily Matos DeBlieux  
Pendergast District Superintendent

3802 North 91st Avenue • Phoenix, Arizona 85037 • (623) 772-2200 • [www.pesd92.org](http://www.pesd92.org)

EMPOWERING EXCELLENCE AND SUCCESS





## Nogales Unified School District No. 1



February 20, 2019

To Whom It May Concern:

We have been in partnership with MidState Energy for the past four years. I first had the opportunity to work and partner with MidState Energy and representatives as an Assistant Superintendent when our District explored and studied the idea of an Energy Savings Project. I appreciated their professionalism, their personal approach and their perspective and education provided on energy savings for our District's understanding. MidState Energy has been effective, efficient and transparent. Our partnership has flourished and they have been very attentive to our needs or any concerns we have had since our Energy Savings Project has been in place.

Over the past four years, our District has seen tremendous savings to our utility costs. Our District also has an Energy Savings Plan in place that includes a green team, composed of students, teachers and staff district-wide as well as ongoing energy savings education and energy savings training.

MidState is always available to assist and support with any mechanical needs that are needed including providing technical advice and guidance. More importantly, MidState has been available and has presented personally to our Governing Board the End of the Year Energy Savings Data Report to better understand the savings to the District and highlight areas of concern that need to be addressed.

If there are any questions or additional information you need, please do not hesitate to contact me directly at 520-397-7917.

Sincerely,

A handwritten signature in black ink, appearing to read "Fernando Parra".

Fernando Parra  
Superintendent

PO BOX 5000 \* NOGALES \* ARIZONA \* 85628



February 12, 2019

To Whom It May Concern:

I am writing this letter as a positive reference for Midstate Energy and their ability to assist public entities with planning and installing energy conservation measures through guaranteed performance contracting.

Midstate Energy is currently involved in an extensive project to provide our school district with upgraded energy conservation measures (LED lighting, low-flow plumbing and HVAC systems) at 14 school sites and our district office administration building. I was extremely impressed with the expertise Midstate Energy's team provided in pre-planning for this project. That initial work involved extensive study, investigation and recommendations regarding our current systems and a thorough, yet understandable, explanation as to how we could improve our energy efficiencies. In addition, Midstate Energy brought a wealth of information, knowledge and expertise about options to finance our project costs, which would have otherwise been complexity beyond the knowledge and expertise of our in-district team.

Now that we are implementing the project, Midstate Energy has again impressed with their ability to provide project management for installation of the energy conservation measures. Their team of project managers and site supervisors has done an outstanding job installing equipment in the least disruptive manner at 14 active school sites.

It is without hesitation that I recommend Midstate Energy for your energy project needs.

Sincerely,



Jeff Stratman  
General Legal Counsel and Capital Bond Project Manager  
Alhambra Elementary School District

*"Everyone Matters"*

4510 N. 37th Avenue, Phoenix, AZ 85019 • 602.336.2920 • 602.336.2266 (fax) • [www.alhambraesd.org](http://www.alhambraesd.org)

**TUCSON UNIFIED SCHOOL DISTRICT**

Office of the Superintendent

*H.T. Sanchez, Ed.D*

February 6, 2017

To Whom It May Concern:

I would recommend Midstate Energy to any Arizona entity that is interested in reducing its energy consumption and seeking to make capital improvements. Midstate Energy worked closely with our key district staff to establish long-term sustainable solutions that align with our goals and economic needs.

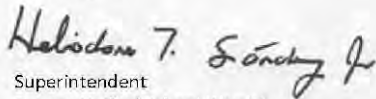
Our project with Midstate Energy included mechanical, building energy management systems and integration, lighting, and water conservation upgrades. Midstate leadership was in constant communication with district leadership, and Midstate supported the district beyond our high expectations for communication, collaboration, and outcomes.

Midstate remained thoroughly engaged in assisting the Tucson Unified School District with service, planning, data analysis, and uncovering additional needs that have greatly appreciated our District. The benefits of working with a local Arizona company have allowed us consistent communication, great service, local economic benefits and a much better value for our community.

Midstate Energy is an asset, supportive and a true partner to Tucson Unified School District. Because of these reasons, I would not hesitate to recommend Midstate Energy to anyone looking for a partner to investigate energy performance contracting.

If you have any questions or would like to further discuss Midstate Energy, please do not hesitate to contact me at [ht.sanchez@tusd1.org](mailto:ht.sanchez@tusd1.org) or (903) 279-1821.

Sincerely,



Superintendent  
Tucson Unified School District



- **Describe how your company will market this contract if awarded.**

Our executive leadership and sales teams have been increasing our presence among various associations and leadership groups in the State. This anchor point of activity, along with an awarded contract with NCPA is a formula that has work for our team in other geographic regions. We will take the following efforts to market our collaborative relationship. These are typical activities and not necessarily done sequentially.

- Meet with the NCPA and offer our marketing team and resources (Social Media, Press Releases, Website Integration, Conference Signage, Videos). Understand current marketing efforts underway by NCPA and determine how we can assist with either resources or expertise.
- Continue building a network of local subcontractors and understand their relationship with NCPA.
- Increase tradeshow and conference activity in the State ensuring NCPA branding is present.
- Leverage NCPA relationship in communications and advertisements with City County Managers Associations, School Superintendent Associations, School Board Associations, etc.
- Increase consultants in the State, for vertical markets (K-12, Muni, State). This activity includes contractual relationships with former superintendents, city and county managers, and legislators.

Overall, our approach is to become a long-term partner with NCPA and our joint clients.

- **Describe how you intend to introduce NCPA to your company.**

When awarded an NCPA vendor, we will communicate this information with every department in our organization using CEO messaging, intranet posts, email and company meeting communications. Our goal will be to increase broad awareness ensuring NCPA and Midstate Energy are successful in marketing our relationship.

- **Describe your firm's capabilities and functionality of your on-line catalog / ordering website.**

Our website is currently under construction to accommodate an ordering system. In the interim, NCPA and clients can utilize a detailed Adobe PDF version of all available parts and speak personally with our customer service team to ensure logistics are on point for arrival within the needed timeframes.

- **Describe your company's Customer Service Department (hours of operation, number of service centers, etc.)**

Normal business hours are Monday through Friday from 9:00 AM to 6:00 PM (CDT) and can be reached at (602) 452-8800 or (602) 452-8700; however, the Midstate Energy Customer Service Department is also available on an emergency basis 24 hours a day, seven days a week.

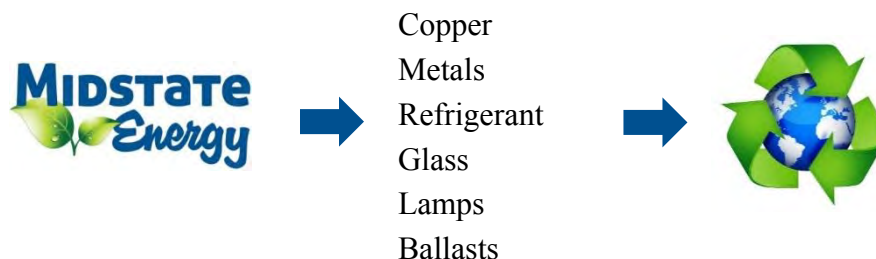
- **Green Initiatives**
  - **As our business grows, we want to make sure we minimize our impact on the Earth's climate. We are taking every step we can to implement innovative and responsible environmental practices throughout NCPA to reduce our carbon footprint, reduce waste, energy conservation, ensure efficient computing and much more. To that effort we ask respondents to provide their companies environmental policy and/or green initiative.**

### *Midstate Energy's Philosophy on Sustainability*

The construction industry in the United States has a significant impact on the environment, which is why at Midstate Energy we live sustainability. Our projects have saved thousands of acres of forest, millions of gallons of water and millions of kilowatts per hour, while reducing schools and cities carbon footprint. Through a better understanding and working knowledge of sustainable practices and renewable alternatives, we are able to collaborate with owners, designers and end users to provide 'green' solutions to both sophisticated systems and simple, everyday issues.

### *Environmental Recycling and Hazardous Materials*

Construction and energy efficient upgrades often involves removal of existing building materials to accommodate new mechanical or electrical systems. Midstate Energy recycles such materials whenever possible. We collect them during the demolition phase and contact a local recycling agency for drop-off or pickup. Materials we typically recycle include the following:



It is our goal and practice to identify potential hazardous materials upfront during consulting or the investment grade audit. At project closeout, we will provide documentation regarding all transportation and disposal of hazardous materials. During the construction phase, our project manager will coordinate with clients and appropriate hazardous waste agencies to ensure the proper disposal and documentation of all such materials. The project manager will see to it that hazardous waste manifestos are signed

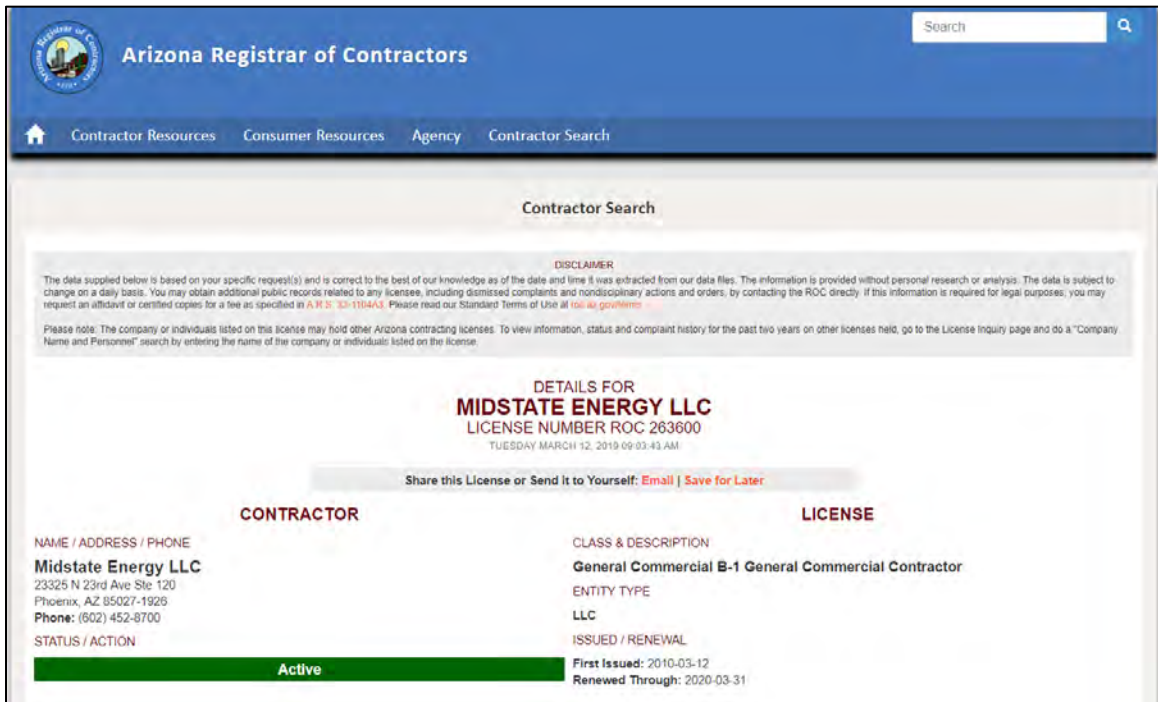


by the correct parties and filed in accordance with Environmental Protection Agency (EPA) and Department of Transportation (DOT) requirements.

- **Vendor Certifications (if applicable)**
  - **Provide a copy of all current licenses, registrations and certifications issued by federal, state and local agencies, and any other licenses, registrations or certifications from any other governmental entity with jurisdiction, allowing respondent to perform the covered services including, but not limited to, licenses, registrations, or certifications. Certifications can include M/WBE, HUB, and manufacturer certifications for sales and service.**

### B-1 General Commercial Contractor

Midstate Energy, LLC – License Number ROC 263600



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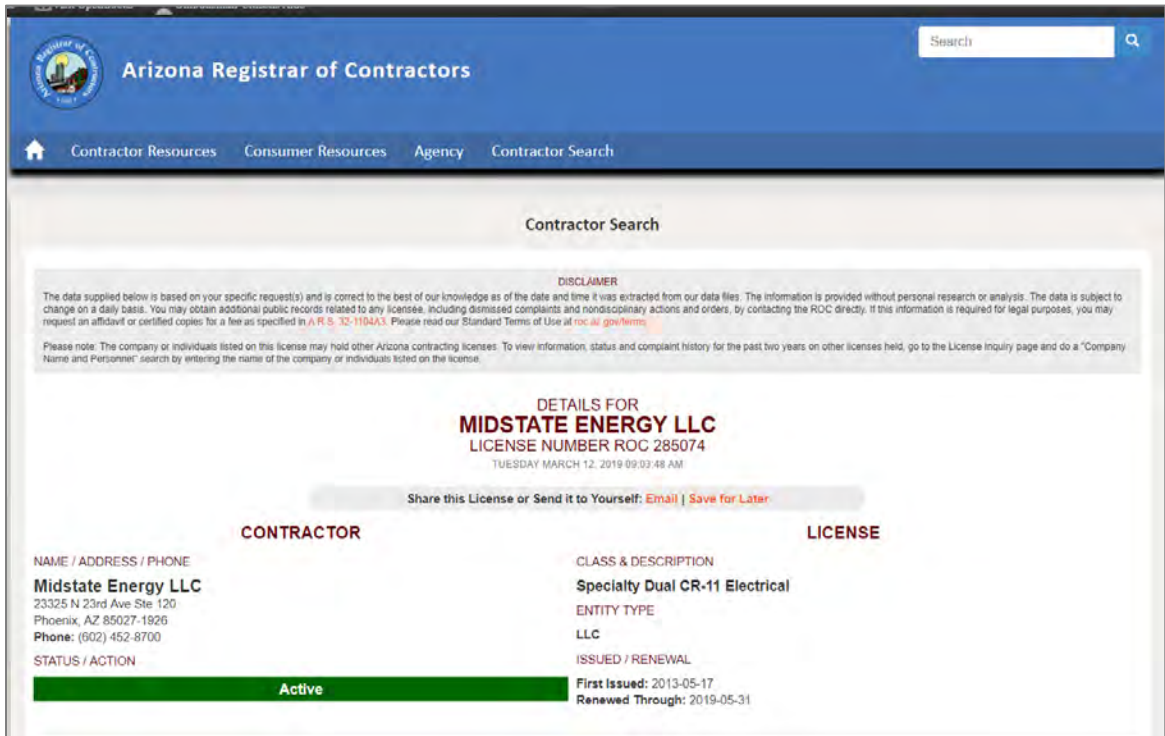
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## CR-11 Specialty Dual Electrical

### Midstate Energy, LLC – License Number ROC 285074



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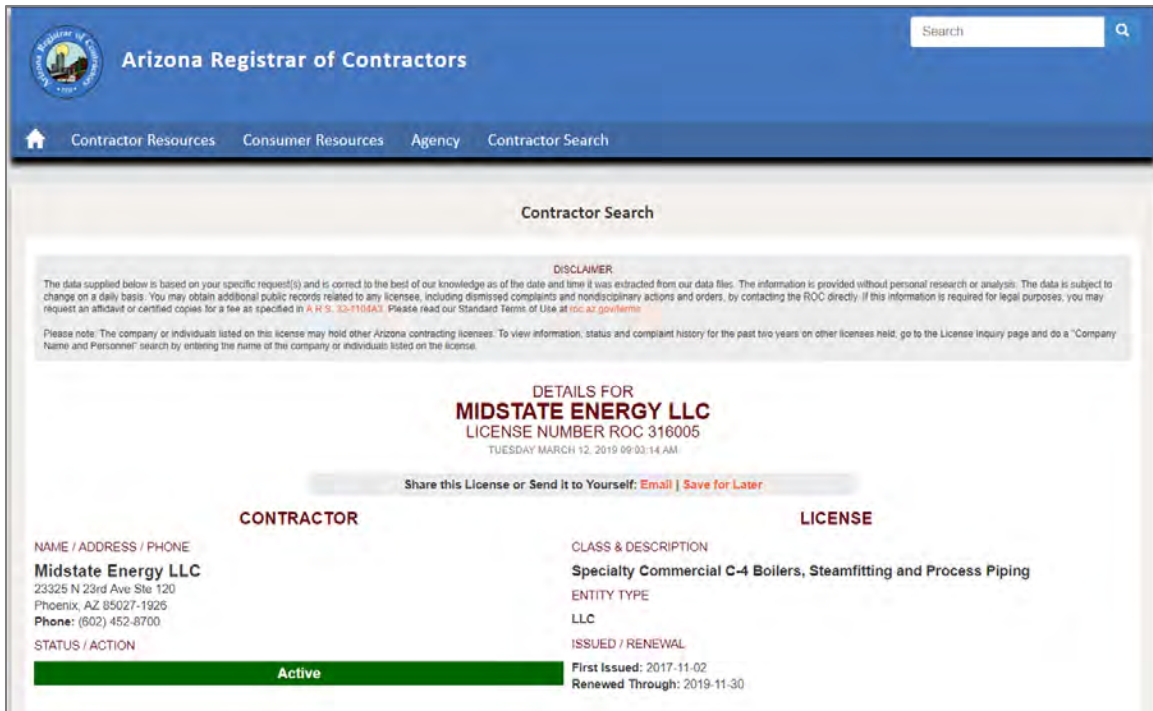
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## C-4 Specialty Commercial Boilers, Steamfitting and Process Piping

### Midstate Energy, LLC – License Number ROC 316005



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## CR-37 Specialty Dual Plumbing

### Midstate Energy, LLC – License Number ROC 316151

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## CR-39 Specialty Dual Air Conditioning and Refrigeration

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## Tab 5 – Products and Service /Scope

- Respondent shall perform and provide these products and/or services under the terms of this agreement. The supplier shall assist the end user with making a determination of their individual needs.
- The following is a list of (but not limited to) suggested categories. List all categories along with manufacturer that you are responding with:

Midstate Energy does not manufacture any products and we are under no mandate or incentive to use equipment or services provided by a specific company. Our open book pricing model allows Region 14 and NCPA clients to benefit from the optimal selection of vendors and products. For the purposes of this RFP, we have listed a sample selection of manufactured products typically offered to our clients, due to their quality, warranties and consumer satisfaction. Additionally, Midstate Energy offers a 2-year installation warranty and all extended manufactures warranties are available to NCPA and Region 14 clients.

### *Energy Management Systems Products*



**Reliable<sup>®</sup> controls**

**MACH-ProZone™**  
BACnet® Controller

**Get in the zone**

Small, durable and packed with flexibility, the Reliable Controls® MACH-ProZone™ is a fully programmable BACnet Building Controller (B-BC) with highly scalable I/O in a very small footprint. The MACH-ProZone is ideal for a wide range of applications that include small to mid-sized roof top and heatpump applications, and small mechanical room applications.

**5 year**  
WARRANTY

Better by design

ISO 9001 QUALITY ASSURED Member of BACnet International

[www.reliablecontrols.com/MPZ](http://www.reliablecontrols.com/MPZ)



## MACH-ProZone™

### Tech Specs

#### Processor

- 66 MHz, high-performance, 32-bit embedded microcontroller with onboard Flash memory
- Controller database, values and configuration held in robust non-volatile memory
- Operating System firmware easily updated at any time over the network

#### Supply Voltages

- 24 VAC  $\pm 10\%$  25 VA max, 50/60 Hz
- 24 VDC  $\pm 10\%$  12 W max

#### Communications

- EIA-485 @ 76.8 kbps max.
- SMARTNet™ (8 SMART-Sensors max.)
- Auto-baud detection

#### Universal Inputs

- 12-bit A/D converter
- Soft selectable: 0–10 VDC, 4–20 mA, thermistor/dry contact
- Impedance:
  - 3M  $\Omega$  on 0–10 VDC range
  - 250  $\Omega$  on 4–20 mA range
  - 20k  $\Omega$  on thermistor range
- Pulse counting up to 40 Hz (supports flow meters)
- 24 VAC over-voltage protection

#### Universal Outputs

- 12-bit D/A converter
- Analog: 0–12 VDC
- Binary: 0/12 VDC
- Output power:
  - 75 mA @ 12 VDC
- 24 VAC over-voltage and short protection
- Jumper selectable TRIAC

#### TRIAC Outputs

- 24 VAC @ 0.5 A

#### SETUP-Tool™

- SETUP-Tool optional for configuration

#### Real-time Clock (optional)

- $\pm 5$  seconds per month

#### Memory/RTC Backup

- 72 hour backup
- 10 years for database

#### Terminal Blocks

- 12 to 30 AWG (3.31 mm<sup>2</sup> to 0.05 mm<sup>2</sup>)
- Stranded or solid core
- Copper conductors only

#### Dimensions

- 10.9 cm L x 19.1 cm W x 4.9 cm H  
(4 3/8" L x 7 1/2" W x 1 5/8" H)

### Features

#### Dynamic Database

- Allows a maximum of 128 objects to be created of any supported type in any model of controller
- Typical Object Configuration table (below) shows the usage of expanded memory

#### Protocol

- BACnet®
- MS/TP (EIA-485)

#### Control-BASIC Programs

- 8500 bytes of programmable control strategy in a readable, BASIC-like language
- 3200 bytes per program

#### Inputs

- Universal ranges
- Soft selectable 0–10 VDC, 4–20 mA, thermistor/dry contact

#### Outputs

- Universal ranges
- Jumper selectable 0–12 VDC, or TRIAC

#### Variables

- Selectable standard and custom ranges, as well as fixed or program-driven values

#### PID Loops

- Standard P, PI, or PID controllers for closed loop control

#### Single-Point Trend Logs

- Stores 128 samples at programmable time intervals

#### Multipoint Trend Logs

- Each Trend Log stores 128 samples of 8 points at programmable time intervals

#### Runtime Report

- Records the total On time and the total number of transitions as well as daily transitions for every binary point
- A 50 sample runtime log is optional for each binary point

#### System Groups

- Allows related points to be grouped onto one display
- 60 points/group

#### Schedules

- 7 On/Off times for each weekday or exception

#### Calendars

- Days of the year designated as holidays

#### Arrays

- Up to 128 elements in a one-dimensional array

#### Tables

- For creating custom input ranges and Control-BASIC™ lookup tables

#### Custom Units

- 8 analog engineering units
- 8 binary engineering units
- 8 multistate units with 8 states, 32-characters each

#### SMART-Net Port

- Networks up to 8 SMART-Sensors™

#### 64 Network In Points

#### 32 Network Out Points

- The total maximum number of writes and shares to other devices

#### Warranty

- 5 years

#### Certification

- BTL Listed (B-BC)
- UL916 Listed
- CE

### Ordering

#### MPZ-44-XM

- MACH-ProZone controller with 4 inputs, 4 outputs, and expanded memory

#### MPZ-48-XM

- MPZ controller with 4 inputs, 8 outputs, and expanded memory

#### MPZ-84-XM

- MPZ controller with 8 inputs, 4 outputs, and expanded memory

#### MPZ-88

- MPZ controller with 8 inputs, 8 outputs, and expanded memory

#### Accessories

##### MPZ-DL

- Door lid decal kit for MPZ series

##### KN-JB4

- 4 position insulated jumper bar for MPZ (package of 10)

#### Options

- -C Adds battery backup for real-time clock



# MACH-ProZone™

## Typical Object Configuration

There are physical limitations to the number of inputs, outputs, and SMART-Sensors that can be connected to a MACH-ProZone controller. For other object types, there are no imposed limits for the maximum number of objects of a single type that can be created. The total number of objects (including inputs, outputs, and SMART-Sensors) is limited to 128, and is also limited by the onboard memory. The table below details typical databases that fit in all models.

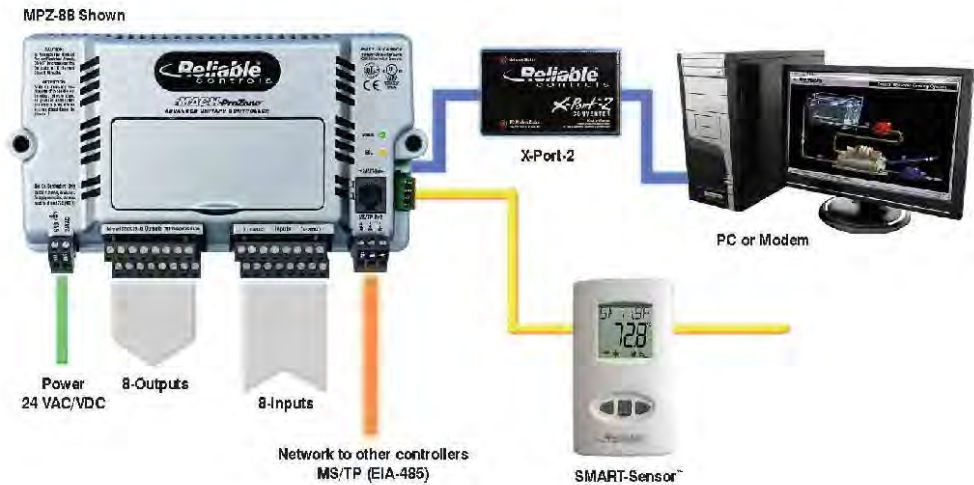
Memory	Variables	Loops	Schedules	Calendars	Tables*	Groups	Multipoint Trend**	Runtime*	Arrays	Program	SMART-Sensor***
-XM and MPZ-88	64	8	4	2	4	4	10	128	4	8	8

\* Tables and Runtime Logs are not counted in the 128 object limit. Inputs, outputs, and the device object are counted in the 128 object limit.

\*\* Trends are configured to store 128 samples.

\*\*\* All models accommodate a maximum of 8 SMART-Sensors.

## APPLICATION DIAGRAM







## Power Monitoring Single-circuit

# Enhanced Power and Energy Meter

## E5x Series



E50/E51

### Versatile Energy Monitoring Solution

#### FEATURES

- Revenue Grade measurements
- High reliability with ANSI C12.20 0.2% accuracy, IEC 62053-22 Class 0.2S on E5xxx
- DIN rail or screw mounting options...easy installation
- Real energy output and phase loss alarm output on E50Bx and E5xCx models...one device serves multiple applications
- 90-600VAC...application versatility with fewer models to stock
- Data logging capability (E5xC3 and E5xx5)... ensures long term data retrieval and safeguards during power failures
- Compatible with CTs from 5A to 32000A...wide range of service types
- User-enabled password protection...protect from tampering
- System integration via Modbus (E5xCx), BACnet MS/TP (E5xHx), or Lonmark-certified LON FT (E50Fx)...convenient compatibility with existing systems
- Native BACnet MS/TP support (no gateway) with serial rates up to 115.2 kbaud (E5xHx)
- BTL-certified (E5xH2)
- E51 models: Bi-directional metering (4-quadrant), an essential solution for solar and other renewable energy applications, measures Import, Export and net energy transfer
- CSI approved...eases submission process for California Solar Initiative
- E51Cx includes SunSpec compliant common and meter register blocks

#### APPLICATIONS

- Energy monitoring in building automation systems
- Renewable energy
- Energy management
- Commercial submetering
- Industrial monitoring
- Cost allocation

#### SPECIFICATIONS

**5 Year**  
 Warranty

<b>Agency Approvals</b>	UL508 (Open Type Device), EN61010-1, California GSI Solar, ANSI C12.20, Cat III, pollution degree 2
<b>INPUTS</b>	
<b>Control Power, AC</b>	50/60 Hz, 5VA max.; 90V min.; UL Maximums: 600V L-L (347V L-N); CE Maximum: 300V L-N
<b>Control Power, DC</b>	3W max.; UL and CE: 125 to 300VDC (external DC current limiting required)
<b>Voltage Input</b>	UL: 90V L-N to 600V L-L; CE: 90V L-N to 300V L-N
<b>CURRENT INPUT</b>	
<b>Scaling</b>	5A to 32,000A
<b>Input Range</b>	0 to 0.333V or 0 to 1V (selectable) CTs must be rated for use with Class 1 voltage inputs
<b>Pulse Inputs</b> <i>E5xHx &amp; E50Fx only</i>	Contact inputs to pulse accumulators (one set with E5xH2 and E50F2; two sets with E5xH5 and E51F5)*
<b>ACCURACY</b>	
<b>Real Power &amp; Energy</b>	0.2% (ANSI C12.20, IEC 62053-22 Class 0.2S)
<b>OUTPUTS</b>	
<b>E50B1 &amp; E5xCx</b>	Real Energy Pulse: N.O. static**; Alarm contacts: N.C. static**
<b>E50Bx</b>	Reactive energy pulse 30VAC**
<b>E5xCx</b>	RS-485 2-wire Modbus RTU (1200 baud to 38.4 kbaud)
<b>E5xHx</b>	RS-485 2-wire BACnet MS/TP (9600 baud to 115.2 kbaud)
<b>E50Fx</b>	2-wire LON FT
<b>MECHANICAL</b>	
<b>Mounting</b>	DIN Rail or 3-point screw mount
<b>ENVIRONMENTAL</b>	
<b>Altitude of Operation</b>	3000 m
<b>Operating Temp Range</b>	-30° to 70°C (-22° to 158°F)
<b>Storage Temp Range</b>	-40° to 85°C (-40° to 185°F)
<b>Humidity Range</b>	<95% RH noncondensing; indoor use only

\*10kΩ VAC/DC to 4-10VDC

\*\*30VAC/DC, 100mA max. (AC: 50/60Hz)

#### DESCRIPTION

The **E5x Series** DIN Rail Meter combines exceptional performance and easy installation to deliver a cost-effective solution for power monitoring applications. The E5x can be installed on standard DIN rail or surface mounted as needed. The Modbus, LON, and BACnet output models offer added flexibility for system integration. The data logging capability (E5xC3 and E5xx5) protects data in the event of a communications or power failure elsewhere in the system. Combinations of serial communication, pulse output, and phase alarms are provided to suit a wide variety of applications. Additional pulse inputs on E5xHx and E50Fx provide an easy way to incorporate simple flow sensors to track gas, water, steam, or other energy forms using a BACnet or LON system.

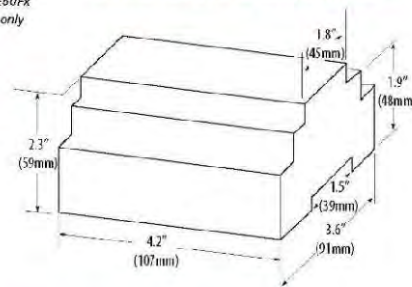
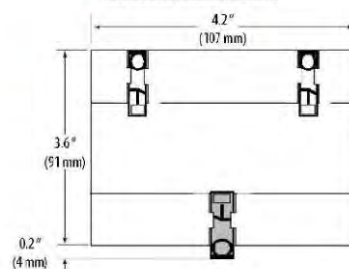
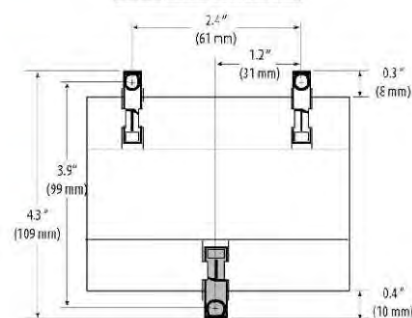
The E51 models add a bi-directional monitoring feature designed expressly for renewable energy applications, allowing measurement of power imported from the utility grid as well as power exported from the renewable energy source (e.g. solar panels). In this way, a facility administrator can track all energy data, ensuring accuracy in billing and crediting. They are also useful for monitoring loads that use regenerative braking.

**VERIS**  
 INDUSTRIES

HQ0001710-K 0115

**E5x Series****Power Monitoring Single-circuit****ORDERING INFORMATION**E51Cx  
onlyE5xH2  
onlyE60Fx  
only

	E50B1	E50C2	E50C3	E50F2	E50F5	E60H2	E50H5	E51C2	E51C3	E51H2	E51H5
<b>MEASUREMENT CAPABILITY - FULL DATA SET</b>											
Bi-directional Energy Measurements											
Power (3-phase total and per phase): Real (kW), Reactive (kVAR), and Apparent (kVA)											
Power Factor: 3-phase average & per phase											
Present Power Demand: Real (kW), Reactive (kVAR), and Apparent (kVA)											
Import and Export totals of Present Power Demand: Real (kW), Reactive (kVAR), and Apparent (kVA)											
Peak Power Demand: Real (kW), Reactive (kVAR), and Apparent (kVA)											
Current (3-phase average and per phase)											
Voltage: Line-Line and Line-Neutral (3-phase average and per phase)											
Frequency											
ANSI C12.20 0.2% accuracy IEC 62053-22 Class 0.2S											
Accumulated Net Energy: Real (kWh), Reactive (kVARh), and Apparent (kVAh)											
Accumulated Real Energy by phase (kWh)											
Import and Export Accumulators of Real and Apparent Energy											
Reactive Energy Accumulators by Quadrant (3-phase total & per phase)											
Demand Interval Configuration: Fixed or Rolling Block											
Demand Interval Configuration: External Sync to Comms											
<b>DATA LOGGING</b>											
Data Logging: 10 16-Bit Configurable (can include Date/Time) Data Buffers											
Data Logging: 3 Timestamped 32-Bit Configurable Data Buffers											
Store up to 60 days of readings at 15-minute intervals											
<b>OUTPUTS</b>											
Alarm Output (N.C.)											
1 Pulse Output (N.O.)											
2 Pulse Outputs (N.O.)											
RS-485 Serial (Modbus RTU Protocol)											
RS-485 Serial (BACnet MS/TP Protocol)											
LonWorks FT Serial (LonTalk Protocol)											
<b>INPUTS</b>											
2 Pulse Contact Accumulator Inputs											
1 Pulse Contact Accumulator Input											

**DIMENSIONAL DRAWINGS****MOUNTING DIAGRAMS****DIN Mount Configuration****Screw Mount Configuration****ACCESSORIES**

NEMA4 enclosure (AE010) and locking mechanism (AE011)  
 Fuse Kits with hi-interrupt capability AC Fuses (AH02, AH03, AH04)  
 Split-core and solid-core CTs (H681x, E680x)  
 Replacement mounting clips (AE004)

DIN Rail (AV01), DIN Rail Stop Clips (AV02)  
 Modbus TCP Gateway (U013-0012)  
 BACnet IP Router (U013-0013 or U013-0015)  
 Modbus to BACnet Converter (E8961)  
 Network Display (H8932, H8936)



HQ0001710-K-0115

800.354.8556

+1 503.598.4564

www.veris.com



**data sheet**

# JACE<sup>®</sup> 8000 controller

## PRODUCT DEFINITION

The JACE 8000 is a compact, embedded IoT (Internet of Things) controller and server platform for connecting multiple and diverse devices and sub-systems. With Internet connectivity and Web-serving capability, the JACE 8000 controller provides integrated control, supervision, data logging, alarming, scheduling and network management. It streams data and rich graphical displays to a standard Web browser via an Ethernet or wireless LAN, or remotely over the Internet.

The licensing model for the JACE 8000 controller is simplified and features standard drivers along with optional IO and field bus expansion modules for ultimate flexibility and expandability. The JACE 8000 controller operates with Niagara 4, the latest version of the Niagara Framework<sup>®</sup>, for optimum performance. In larger facilities, multi-building applications and large-scale control system integrations, Niagara 4 Supervisors can be used with JACE 8000 controllers to aggregate information, including real-time data, history and alarms, to create a single, unified application.

## HARDWARE SPECIFICATIONS

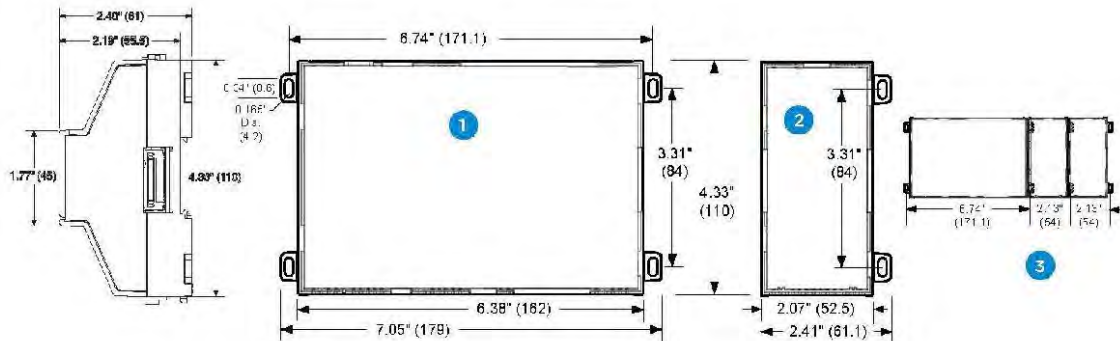
TI AM3352: 1000MHz ARM <sup>®</sup> Cortex™-A8
1GB DDR3 SDRAM
Removable micro-SD card with 4GB flash total storage/2GB user storage
Wi-Fi (Client or WAP) IEEE802.11a/b/g/n IEEE802.11n HT20 @ 2.4GHz IEEE802.11n HT20/HT40 @ 5GHz Configurable radio (Off, WAP, or Client) WPA2PSK/WPA2PSK supported
USB type A connector Back-up and restore support
(2) Isolated RS-485 with selectable bias and termination
(2) 10/100MB Ethernet ports
Secure boot
24VAC/DC power supply
Runs Niagara 4.1 and later
Real time clock
Batteryless



powered by  
**niagara**  
 framework<sup>®</sup>

## JACE® 8000 CONTROLLER MOUNTING & DIMENSIONS

- 1 JACE 8000 controller. Allow at least 1.5" (38mm) clearance around all sides and minimum 3" (76mm) at bottom for Wi-Fi antenna
- 2 Expansion module. Up to four (4) may be used. See "Expansion Module and IO Configurations"
- 3 Distances between center of tabs from one unit to another unit



Compatible with (DIN43880) enclosures  
Suitable for mounting to a panel or to an EN50022 standard 35mm rail

### AGENCY CERTIFICATIONS

- UL 916
- CE EN 61326-1
- FCC Part 15 Subpart B, Class B
- FCC Part 15 Subpart C
- C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment"
- 1999/5/EC R&TTE Directive
- CCC
- SRRC
- RSS
- ROHS

### ENVIRONMENTAL SPECIFICATIONS

- Operating temperature: -20-60°C
- Storage temperature: -40-85°C
- Humidity: 5%-95% — Non condensing
- Shipping & vibration: ASTM D4169, Assurance Level II
- MTTF: 10 years+





## HVAC Control Products



# SPACE-Sensor™ Temperature

### Tech Specs

#### Supply Voltage

- 24VAC  $\pm 15\%$  1VA max. 50/60 Hz (CO2 models only) \*
- 9-24VDC  $\pm 15\%$  1.2W max. (CO2 models only)
- OC only models require only 0.1VA or 0.1W

#### Temperature Specifications

- Dedicated 10k thermistor onboard
- Range: 0 °C to 40 °C (32 °F to 104 °F)
- $\pm 0.1$  °C (0.18 °F) resolution
- User calibrated to  $\pm 0.1$  °C (0.18 °F) accuracy

#### CO<sub>2</sub> Sensor Specifications

- NDIR sensor with auto calibration
- 1-4 VDC output (use table in range)
- 0-2000 ppm
- Accuracy  $\pm 30$  ppm 5% of measured value

#### Occupancy Sensor Specifications

- Passive Infrared Radiation (PIR) sensor
- 64 detection zones
- 100° horizontal / 82° vertical
- 5m (16.4 ft) max. detection distance

#### Buttons

- Models with the -O option feature a custom silicon rubber override button
- Models with the -L option feature an LED illuminated override button
- Models with the -UD option feature custom silicon rubber up/down adjust buttons

#### Dimensions

- 12 cm L x 7 cm W x 2.4 cm H (4 3/4" L x 2 3/4" W x 1 5/16" H)

#### Weight

- 0.09 kg (0.195 lb.)

#### Ambient Limits

- Operating: 0 °C to 40 °C (32 °F to 104 °F)
- Shipping: -40 °C to 60 °C (-40 °F to 140 °F)
- Humidity: 10% to 90% RH non-condensing

### Features

#### Aesthetic Design

- Smooth contoured lines
- Slim profile
- Available in Warm Gray or Solid White

#### Space Sensing

- Temperature
- CO<sub>2</sub>
- Occupancy

#### Access and Adjust

- Soft rubber button design
- Setpoint adjust using Up and Down buttons or slider
- Momentary contact override center button
- LED option for illuminated override button
- RJ-11 connector on bottom provides access to host network (X-Port™ required)

#### Warranty

- 5 years
- 1 year for CO<sub>2</sub> sensor

### Ordering

#### SST (base model)

- SMART-Sensor™ Temperature with dedicated 10k thermistor onboard

#### Options

- CO2 adds CO<sub>2</sub> sensor
- J adds comm jack
- L adds LED
- O adds momentary contact override
- OC adds occupancy sensor
- S adds 20k slider
- UD adds up/down adjust buttons
- /W for white enclosure (e.g. SST/W-UD-J)

Note that some options are not available together. Please see Submittal Sheet for valid combinations.

### COVER EXAMPLES



### APPLICATION DIAGRAM



\* 24VAC only for Rev H and newer

SST-2/3/4/5 TKB

© 2012-2013 Reliable Controls Corporation

Designed and Manufactured in Canada

## Data Management Products

### SOLUTIONS PROPOSAL DETAILS

#### SOLUTIONS SCOPE OF WORK

##### Fusebox Software Solutions



**Cloud-based Software:** Fusebox® is a cloud based software solution allowing the client to access it 24 hours a day and 7 days a week from any computer or mobile device in the world. As a cloud-based product it does not use up valuable space on the client's servers and is continually updated without requiring support from the client's IT staff.

**Dashboard Analytics:** Fusebox® provides a dashboard for each client customized to meet their unique needs. Data analytics can be managed via the dashboard for all energy types and for water. Attractive and engaging graphics show the client's data, costs, green team activities, savings reductions and 15-minute interval data for use in managing electrical load (available from select utilities). Are you wondering which of your buildings cost the most to operate? A quick glance at the use and cost per square foot graph shows you this and allows you to filter information by an unlimited number of variables. Did you use more water this year than last year? The year over year comparison graph allows you to compare and spot problems in an instant. These and other graphs bring organization to the mass of utility bills received.

**Energy Planning Tools:** Fusebox® Software provides a variety of energy management tools for the client to use in developing and implementing an energy management program. Fusebox® allows the client to (1) create and document an energy strategy specific for their organization; (2) view examples of strategies, vision statements, and policies related to energy conservation and sustainability which can serve as guides to support development of a complete organizational energy management program; (3) create goals, setup energy teams, and support competitions to drive success.

**Dedicated Sustainability Manager:** Every client who subscribes to Fusebox® Software receives access to their own Team Sustainability Manager for a specified number of hours annually. This talented and informed energy and sustainability expert can assist the client in the development of their energy program, training staff, assisting with data management, etc.



## SOLUTIONS PROPOSAL DETAILS

### SOLUTIONS SCOPE OF WORK

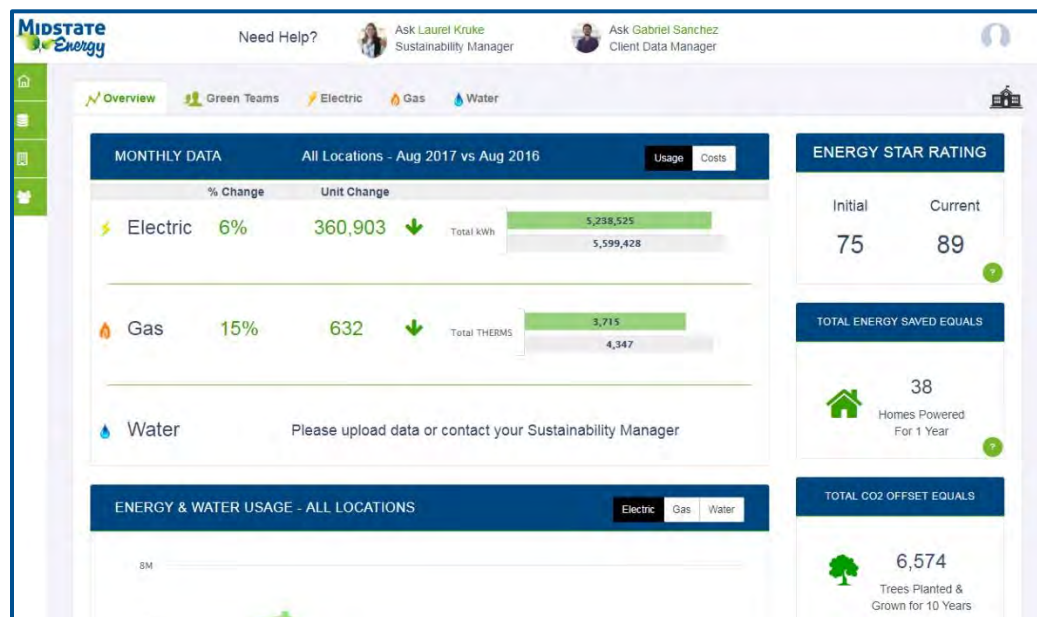
#### Utility Data Management



You have a capital plan, a strategic plan, a financial plan and so many more. What is your utility management plan? Midstate Energy, LLC will work with the client to create a utility management plan that creates a strategy for reducing energy use and cost. The following services can be provided.

**Data Management & Reporting:** Midstate Energy, LLC uses Fusebox®, a cloud based energy management tool to compile, track and analyze utility data. Interval data will be available in Fusebox® for select utilities. Fusebox® is supported by our own experienced sustainability and client data managers. Together they will walk a client through each step in the planning process to create their program, capture utility data, generate reports, and to support staff and stakeholder engagement. Monthly and quarterly energy reports will be generated and distributed. In addition, Midstate Energy, LLC will monitor all facilities in ENERGY STAR Portfolio Manager so that they can be compared with other like facilities in the region.

**Building Tours & Program Design:** Midstate Energy, LLC will conduct tours of all sites and quantify plug load and energy saving opportunities. This information will be used to facilitate conversations with the client regarding energy policy, energy standards and energy program design. Energy standards will be reviewed and/or developed for the client that identify how buildings will be operated from an energy perspective. Standards will address occupied and unoccupied thermostat set-points, a sequence of operations, community use and hours of operation and other information that can guide the District in managing facilities to optimize energy savings.



## HVAC Systems

**48HC**  
High-Efficiency  
Single Package Rooftop  
Gas Heat/Electric Cooling  
with Puron® (R-410A) Refrigerant  
15, 17.5, 20, 25 Tons – (Sizes 17, 20, 24, 28)



### Product Data



C10997

(Unit shown with economizer and power exhaust.)



Table 6 – PHYSICAL DATA

(COOLING)

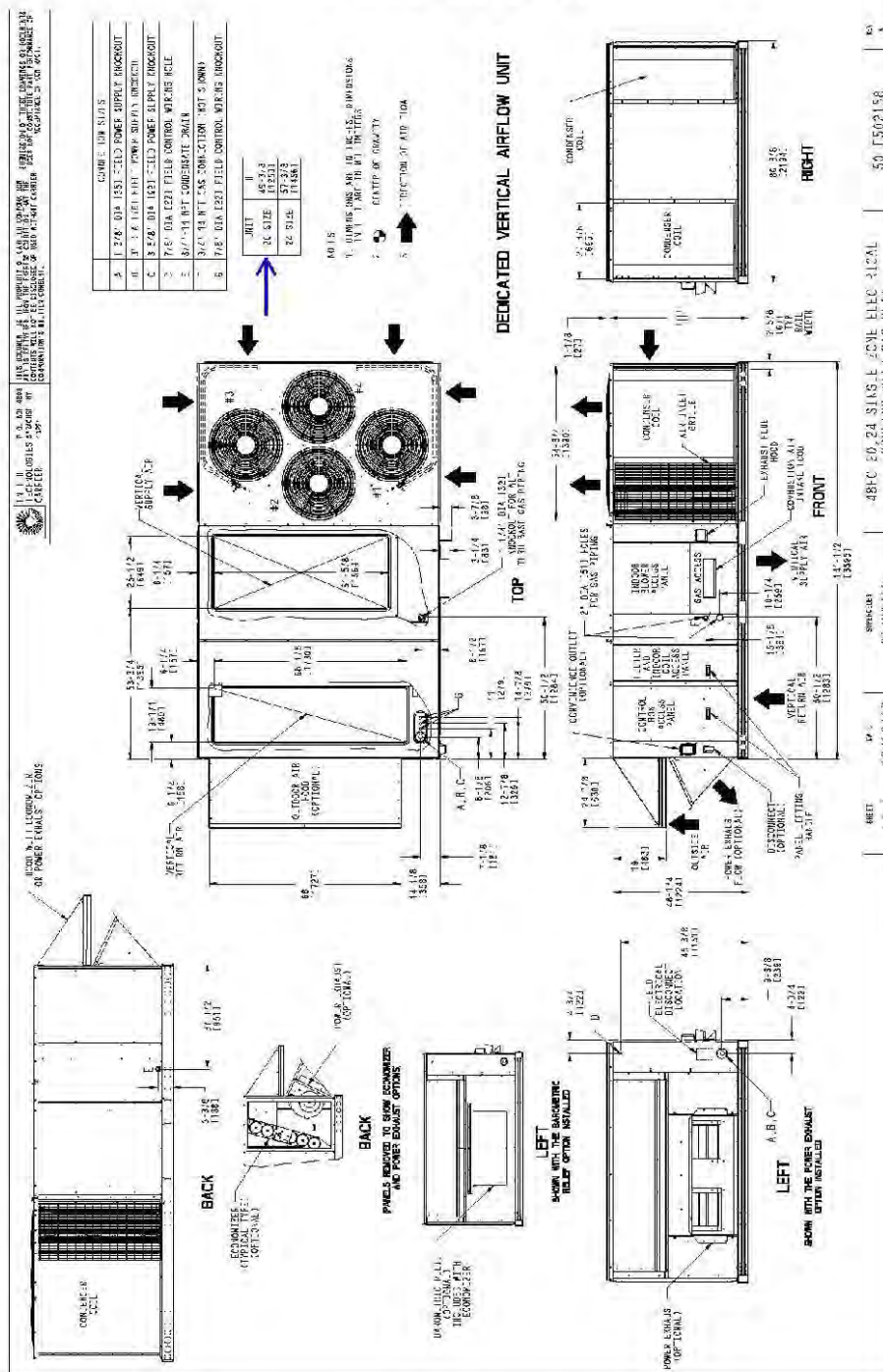
17.5T

15 - 25 TONS

	48HC**17	48HC**20	48HC**24	48HC**28
<b>Refrigeration System</b>				
# Circuits / # Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll
R-410A charge A/B (lbs)	17/16.4	17.5/16.6	23.6/23.1	24.9/27.7
w/ Humidi-MiZer <sup>®</sup> R-410A charge A/B (lbs)	24.5/25.7	25.5/25.5	30.0/30.7	35.1/35.4
Metering device	TXV	TXV	TXV	TXV
High-press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 505
Low-press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117	54 / 117
w/ Humidi-MiZer, Low-press. Trip / Reset (psig)	27 / 44	27 / 44	27 / 44	27 / 44
<b>Evap. Coil</b>				
Material	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Tube Diameter	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI	4 / 15	4 / 15	4 / 15	4 / 15
Total face area (ft <sup>2</sup> )	22	22	28	26
Condensate drain conn. size	3/4-in	3/4-in	3/4-in	3/4-in
<b>Humidi-MiZer Coil</b>				
Material	Cu / Al	Cu / Al	Cu / Al	Cu / Al
Tube Diameter	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF	3/8-in RTPF
Rows / FPI	1 / 17	1 / 17	1 / 17	1 / 17
Total face area (ft <sup>2</sup> )	22	22	28	26
<b>Evap. fan and motor</b>				
<b>VERTICAL</b>				
Standard Static	Motor Qty / Belt Qty / Drive type	1 / 1 / Belt	1 / 1 / Belt	n/a
	Max BHP	2.9	3.7	n/a
	RPM range	514-680	622-822	n/a
	Motor frame size	56	56	n/a
	Fan Qty / Type	2 / Centrifugal	2 / Centrifugal	n/a
	Fan Diameter (in)	15 x 15	15 x 15	n/a
Medium Static	Motor Qty / Belt Qty / Drive type	1 / 1 / Belt	1 / 1 / Belt	n/a
	Max BHP	3.7	4.9	n/a
	RPM range	679-883	713-879	n/a
	Motor frame size	56	56	n/a
	Fan Qty / Type	2 / Centrifugal	2 / Centrifugal	n/a
	Fan Diameter (in)	15 x 15	15 x 15	n/a
High Static	Motor Qty / Belt Qty / Drive type	1 / 1 / Belt	n/a	n/a
	Max BHP	4.9	n/a	n/a
	RPM range	826-1009	n/a	n/a
	Motor frame size	56	n/a	n/a
	Fan Qty / Type	2 / Centrifugal	n/a	n/a
	Fan Diameter (in)	15 x 15	n/a	n/a
Standard Static High Efficiency	Motor Qty / Belt Qty / Drive type	n/a	n/a	1 / 1 / Belt
	Max BHP (208/230/460/575v)	n/a	n/a	6.5/6.9/7.0/8.3
	RPM range	n/a	n/a	690-883
	Motor frame size	n/a	n/a	184T
	Fan Qty / Type	n/a	n/a	2 / Centrifugal
	Fan Diameter (in)	n/a	n/a	15 x 15
Medium Static High Efficiency	Motor Qty / Belt Qty / Drive type	n/a	n/a	1 / 1 / Belt
	Max BHP (208/230/460/575v)	n/a	n/a	6.5/6.9/7.0/8.3
	RPM range	n/a	n/a	835-1021
	Motor frame size	n/a	n/a	184T
	Fan Qty / Type	n/a	n/a	2 / Centrifugal
	Fan Diameter (in)	n/a	n/a	15 x 15
High Static High Efficiency	Motor Qty / Belt Qty / Drive type	n/a	1 / 1 / Belt	1 / 1 / Belt
	Max BHP (208/230/460/575v)	n/a	6.5/6.9/7.0/8.3	10.5/11.9/11.9/11
	RPM range	n/a	882-1078	941-1176
	Motor frame size	n/a	184T	213T
	Fan Qty / Type	n/a	2 / Centrifugal	2 / Centrifugal
	Fan Diameter (in)	n/a	15 x 15	15 x 15



### DIMENSIONS (cont.)



**Fig. 6 - Unit Dimension Drawing - Size 20 - 24 Units - Sheet 1 of 3**

012816



## HVAC Chillers



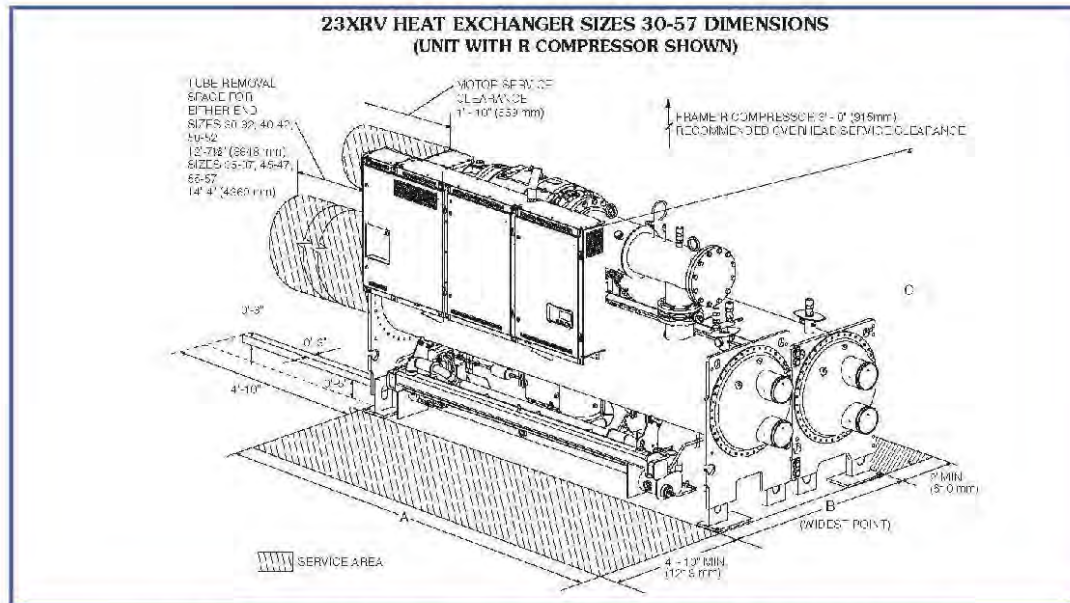
### Product Data

AquaEdge® High-Efficiency  
Variable Speed Screw Chiller  
175 to 550 Nominal Tons  
(615 to 1934 Nominal kW)



23XRV  
High-Efficiency Variable Speed Screw Chiller  
with Greenspeed® Intelligence

## Dimensions



**23XRV HEAT EXCHANGER SIZES 30-57 DIMENSIONS (NOZZLE-IN-HEAD WATERBOX)**

HEAT EXCHANGER SIZE	A (Length, with Nozzle-in-Head Waterbox)						B (Width)	C (Height)
	1-Pass		2-Pass*		3-Pass			
	ft-in.	mm	ft-in.	mm	ft-in.	mm		
30 to 32	14- 3 <sup>1</sup> / <sub>4</sub>	4350	13- 8 <sup>1</sup> / <sub>2</sub>	4172	14- 3 <sup>1</sup> / <sub>4</sub>	4350	See unit certified drawings	
35 to 37	15-11 <sup>3</sup> / <sub>4</sub>	4870	15- 4 <sup>3</sup> / <sub>2</sub>	4693	15-11 <sup>3</sup> / <sub>4</sub>	4870		
40 to 42	14- 9	4496	14- 3 <sup>1</sup> / <sub>8</sub>	4347	14- 6	4420		
45 to 47	16- 5 <sup>1</sup> / <sub>2</sub>	5017	15-11 <sup>3</sup> / <sub>8</sub>	4867	18- 2 <sup>1</sup> / <sub>2</sub>	4940		
50 to 52	14-10	4521	14- 4 <sup>1</sup> / <sub>8</sub>	4382	14- 6 <sup>1</sup> / <sub>2</sub>	4432		
55 to 57	16- 6 <sup>1</sup> / <sub>2</sub>	5042	16- 1	4902	16- 3	4953		

**23XRV HEAT EXCHANGER SIZES 30-57 DIMENSIONS (MARINE WATERBOX)**

HEAT EXCHANGER SIZE	A (Length, Marine Waterbox)				B (Width)	C (Height)
	2-Pass*		1 or 3-Pass†			
	ft-in.	mm	ft-in.	mm		
30 to 32	14- 9	4496	16- 4 <sup>3</sup> / <sub>4</sub>	4997	See unit certified drawings	
35 to 37	16- 5 <sup>1</sup> / <sub>2</sub>	5017	18- 1 <sup>1</sup> / <sub>4</sub>	5518		
40 to 42	15- 2 <sup>3</sup> / <sub>2</sub>	4642	16- 3 <sup>1</sup> / <sub>4</sub>	5086		
45 to 47	16-11 <sup>3</sup> / <sub>4</sub>	5163	18- 4 <sup>3</sup> / <sub>4</sub>	5607		
50 to 52	15- 3 <sup>1</sup> / <sub>2</sub>	4661	16- 8 <sup>1</sup> / <sub>2</sub>	5093		
55 to 57	17- 0	5182	18- 5	5613		

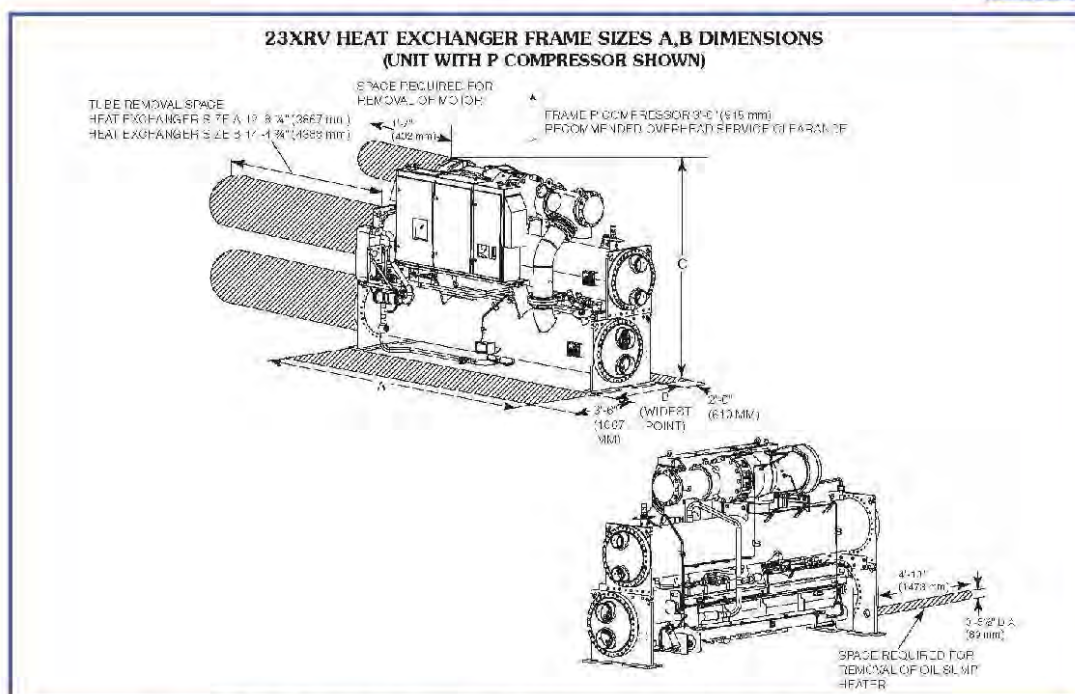
\*Assumes both cooler and condenser nozzles on same end of chiller.  
 †One or 3-pass length applies if cooler is a one or 3-pass design.

**NOTES:**

- Service access should be provided per American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 15, latest edition, National Fire Protection Association (NFPA) 70, and local safety code.
- Allow at least 3 ft (915 mm) overhead clearance for service rigging for the compressor.

- Certified drawings available upon request.
- Marine waterboxes may add 6 in. (152 mm), to the width of the machine. See certified drawings for details.
- 'A' length and 'B' width dimensions shown are for standard 150 psig (1034 kPa) design and Victaulic connections. The 300 psig (2068 kPa) design and/or flanges will add length. See certified drawings.
- Dished head waterbox covers not available for the 3-pass design.




**23XRV HEAT EXCHANGER SIZES A,B DIMENSIONS (NOZZLE-IN-HEAD WATERBOX)**

HEAT EXCHANGER SIZE	A (LENGTH)*						B (WIDTH)	C (HEIGHT)
	1-PASS		2-PASS		3-PASS			
	ft.-in.	mm	ft.-in.	mm	ft.-in.	mm		
A	14- 6 3/4	4439	14- 1 1/4	4301	14- 6 3/4	4439	See unit certified drawings	
B	16- 3 1/2	4959	15- 9 3/4	4822	16- 3 1/4	4959		

\*1 or 3 pass length applies if either (or both) cooler or condenser is a 1 or 3 pass design. The 2-pass length assumes both cooler and condenser nozzles on same end of chiller.

**NOTES:**

- Service access should be provided per American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 15, latest edition, National Fire Protection Association (NFPA) 70, and local safety code.
- Allow at least 3 ft (915 mm) overhead clearance for service rigging for compressor.
- Certified drawings available upon request.
- Marine waterboxes may add 6 in. (152 mm) to the width of the machine. See certified drawings for details.
- 'A' length dimensions shown are for standard 150 psig (1034 kPa) design and Victaulic connections. The 300 psig (2068 kPa) design and/or flanges will add length. See certified drawings.
- Dished head waterbox covers are available only for 2-pass design.

**23XRV HEAT EXCHANGER SIZES A,B DIMENSIONS (MARINE WATERBOX)**

HEAT EXCHANGER SIZE	A (LENGTH)*						B (WIDTH)	C (HEIGHT)
	1-PASS		2-PASS		3-PASS			
	ft.-in.	mm	ft.-in.	mm	ft.-in.	mm		
A	15- 9	4801	14- 6 1/2	4435	15- 5	4899	See unit certified drawings	
B	17- 5 1/2	5322	16- 3	4955	17- 1 1/2	5220		

\*1 or 3 pass length applies if either (or both) cooler or condenser is a 1 or 3 pass design. The 2-pass length assumes both cooler and condenser nozzles on same end of chiller.

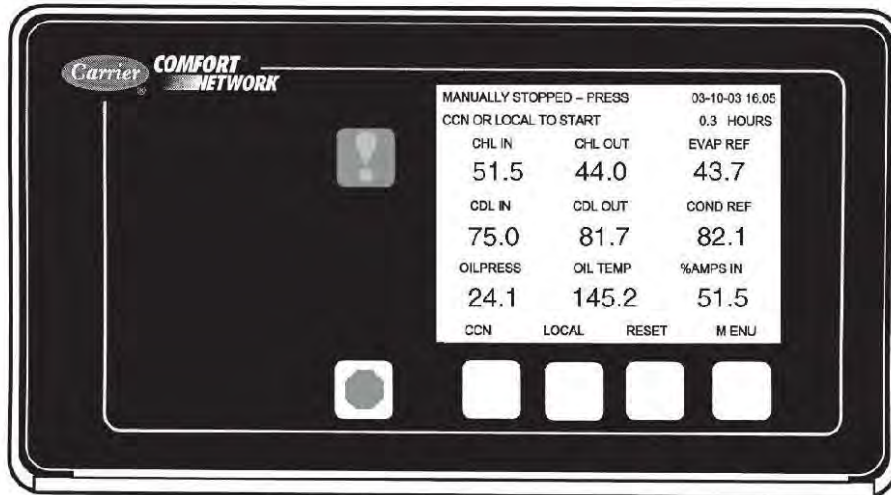
**NOTES:**

- Service access should be provided per American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 15, latest edition, National Fire Protection Association (NFPA) 70, and local safety code.
- Allow at least 3 ft (915 mm) overhead clearance for service rigging for the compressor.
- Certified drawings available upon request.
- Marine waterboxes may add 6 in. (152 mm) to the width of the machine. See certified drawings for details.
- 'A' length dimensions shown are for standard 150 psig (1034 kPa) design and Victaulic connections. The 300 psig (2068 kPa) design and/or flanges will add length. See certified drawings.

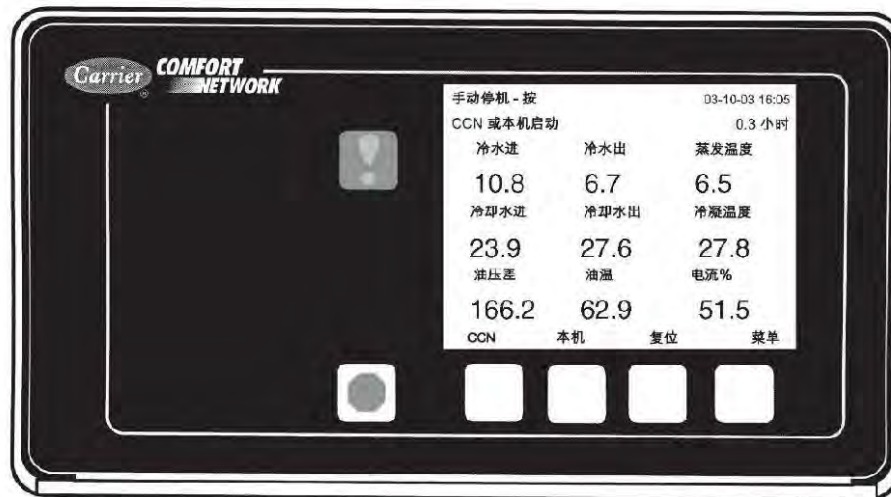
## Controls (cont)



**CONTROL PANEL DISPLAY (Front View)**  
 ICVC ENGLISH DISPLAY IN ENGLISH UNITS

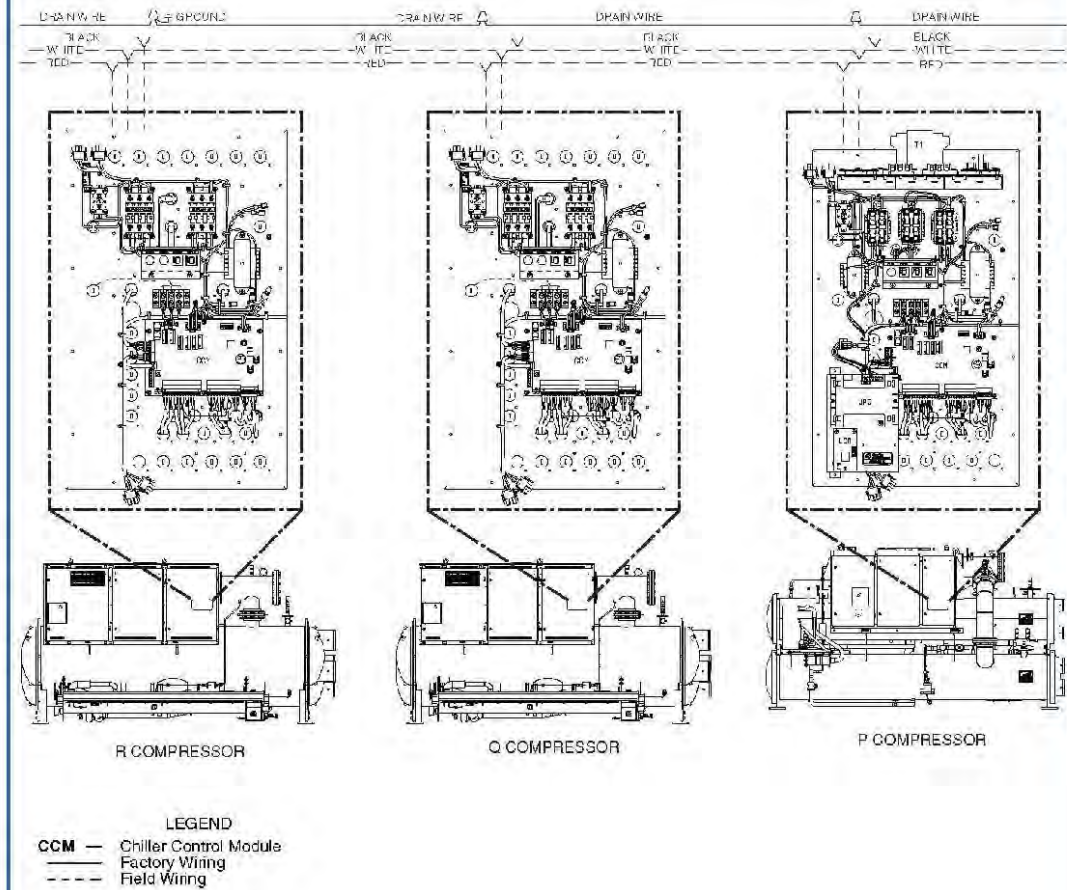


ICVC CHINESE DISPLAY IN METRIC UNITS





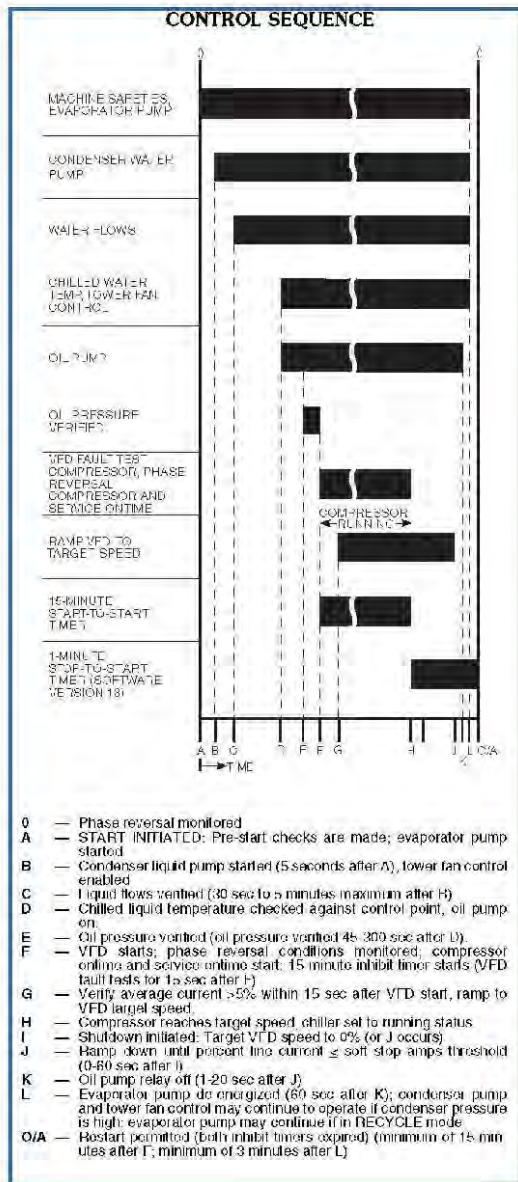
CCN COMMUNICATION WIRING FOR MULTIPLE CHILLERS (TYPICAL)







## Controls (cont)



### Control sequence

**To start** — Local start-up (manual start-up) is initiated by pressing the LOCAL or CCN menu softkey, which is indicated on the default International chiller visual control (ICVC) screen. Time schedule 01 or 03, respectively, must be in the Occupied mode and the internal 15 minute start to start and the 1 minute stop to start inhibit timers must have expired. All pre-start safeties are checked to verify that all prestart alerts and safeties are within limits (if one is not, an indication of the fault displays and the start will be delayed or is aborted). The signal is sent to start the cooler liquid pump. Five seconds later, the condenser liquid pump is energized. If satisfied, it checks the chilled liquid temperature against the control point. If the temperature is less than or equal to the chilled liquid control point, the condenser liquid pump is de-energized and the chiller goes into a recycle mode.

If the chilled liquid temperature is high enough, the start-up sequence continues. The oil pump is started and waits a minimum of 45 seconds to verify oil flow. Once oil flow is verified, the VFD is energized. The control will monitor for a phase reversal condition. At this time, the following occurs:

- The “start to stop” timer is activated.
- The “compressor on-time” and “service on-time” timers are activated.
- The “starts in 12 hour counter” advances by one.
- The “total compressor starts counter” advances by one.

**Once started** — If the VFD average current is >5% within 15 seconds after VFD start, the machine enters run mode and speed will be ramped up to meet VFD target speed. Once the target speed is met, the control enters the capacity control mode.

**Shutdown sequence** — The chiller shutdown is initiated if any of the following occur:

- The Stop button is pressed for at least one second (the alarm light blinks once to confirm the stop command).
- A recycle shutdown is initiated.
- The time schedule has gone into unoccupied mode.
- The chiller protective limit has been reached and the chiller is in alarm.
- The start/stop status is overridden to stop from the ICVC, CCN system, or building management system.

Once the controls shutdown sequence is initiated, the compressor is stopped and the VFD target speed is set to 0. If optional soft stop unloading is activated when the Stop button is pressed or the remote contacts open, motor speed decreases to a configured amperage level, and the compressor is stopped. The display indicates “Shutdown in Progress” while the motor speed decreases. Compressor on-time and service on-time timers stop once the current in all phases is <5%, indicating a VFD Stop Complete. The oil pump and cooler liquid pump are then de-energized. The condenser liquid pump shuts down when the refrigerant temperature or entering condenser liquid temperature is below pre-established limits. The 3-minute start-to-stop timer starts.

**Restart** — Restart is permitted after both inhibit timers have expired. If shutdown was due to a safety shutdown, the reset button must be depressed before restarting the chiller.



## Solar PV Module Products

# Sunmodule®

## SW 340-350 XL MONO

**TUV Power controlled:**  
Lowest measuring tolerance in industry

Every component is tested to meet  
3 times IEC requirements

Designed to withstand heavy  
accumulations of snow and ice

Available with either 1000 V or 1500 V  
maximum voltage rating

25-year linear performance warranty  
and 10-year product warranty

Glass with anti-reflective coating

**World-class quality**  
Fully-automated production lines and seamless monitoring of the process and material ensure the quality that the company sets as its benchmark for its sites worldwide.

**SolarWorld Plus-Sorting**  
SolarWorld guarantees highest system efficiency. SolarWorld only delivers modules that have greater than or equal to the nameplate rated power.

**25-year linear performance guarantee and extension of product warranty to 10 years**  
SolarWorld guarantees a maximum performance digression of 0.7% p.a. in the course of 25 years, a significant added value compared to the two-phase warranties common in the industry, along with our industry-first 10-year product warranty.\*

\*In accordance with the applicable SolarWorld Limited Warranty at purchase.  
[www.solarworld.com/warranty](http://www.solarworld.com/warranty)

• Qualified, IEC 61215  
• Safety tested, IEC 61010  
• Short-circuit and reverse, IEC 60088-3-10  
• Amperage resistance, IEC 61718  
• Salt stress corrosion, IEC 61701  
• Predictive inspection

• Predictive inspection  
• Power controlled

• Home Innovation  
• 9999 9999 9999 9999

• Predictive inspection  
• Power controlled

solarworld.com



# Sunmodule<sup>®</sup>

## SW 340-350 XL MONO



### PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)\*

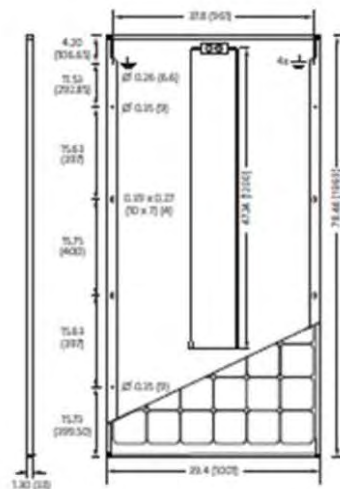
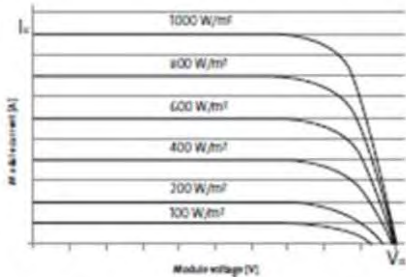
		SW 340	SW 345	SW 350
Maximum power	$P_{max}$	340 Wp	345 Wp	350 Wp
Open circuit voltage	$V_{oc}$	47.6 V	47.8 V	48.0 V
Maximum power point voltage	$V_{mp}$	38.0 V	38.2 V	38.4 V
Short circuit current	$I_{sc}$	9.69 A	9.75 A	9.82 A
Maximum power point current	$I_{mp}$	9.01 A	9.10 A	9.17 A
Module efficiency	$\eta_m$	17.04 %	17.29 %	17.54 %

\*STC: 1000 W/m<sup>2</sup>, 25°C, AM 1.5

### PERFORMANCE AT 800 W/M<sup>2</sup>, NOCT, AM 1.5

		SW 340	SW 345	SW 350
Maximum power	$P_{max}$	259.3 Wp	263.8 Wp	267.2 Wp
Open circuit voltage	$V_{oc}$	41.5 V	41.8 V	42.0 V
Maximum power point voltage	$V_{mp}$	34.9 V	35.2 V	35.4 V
Short circuit current	$I_{sc}$	8.05 A	8.10 A	8.16 A
Maximum power point current	$I_{mp}$	7.42 A	7.50 A	7.56 A

Minor reduction in efficiency under partial load conditions at 25°C at 200 W/m<sup>2</sup>; 100% of the STC efficiency (1000 W/m<sup>2</sup>) is achieved.



All units provided are imperial. SI units provided in parentheses.  
 SolarWorldAG reserves the right to make specification changes without notice.

### COMPONENT MATERIALS

Cells per module	72	Front	Low-iron tempered glass with ARC (3N 1275Q)
Cell type	Monocrystalline	Frame	Clear anodized aluminum
Cell dimensions	6.37 in x 6.37 in (16.175 x 16.175 mm)	Weight	47.6 lbs (21.6 kg)

### THERMAL CHARACTERISTICS

NOCT	46 °C
$TCI_{oc}$	0.042 % / °C
$TCV_{mp}$	-0.304 % / °C
$TCP_{mp}$	-0.43 % / °C
Operating temp	-40 to +85 °C

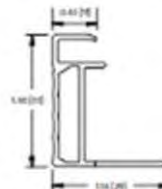
### ADDITIONAL DATA

Power sorting	-0 Wp/+5 Wp
J-Box	IP65
Connector	PV wire per UL4703 with H4/UTX connectors
Module fire performance	(UL 1703) Type 1

### PARAMETERS FOR OPTIMAL SYSTEM INTEGRATION

Maximum system voltage NEC	1000 V or 1500 V - Specify when ordering
Maximum system voltage SC II	1000 V
Maximum reverse current	25 A
Number of bypass diodes	3
Design loads*	Two rail system 113 psf downward, 64 psf upward
Design loads*	Edge mounting 178 psf downward, 23 psf upward

\*Please refer to the Sunmodule installation instructions for the details associated with these load cases.



- Compatible with both "Top-Down" and "Bottom" mounting methods
- Grounding Locations:
  - 4 locations along the length of the module in the extended flange.

SW-01-7540US-11500V 160419

## Solar Model Support Products



### Industry-Leading Installation Time

- Still the fastest installation time
- Top-down assembly of PV modules
- Integrated fasteners allowing one common bolt for all joints
- Integrated panel grounding
- Only 3 part numbers to order

### Cost-competitive

- Once again, the industry price leader
- Available in a variety of configurations

### AET Engineered

- Fully galvanized steel
- Wind tunnel tested to 120mph
- ETL listed to UL2703 (pending)
- 15-year limited warranty

### AET Customer Service

- Engineering support from conception to completion
- Full layout and loading analysis for every project
- Online and onsite installation training available



*Fits most modules available*



*One common bolt for all joints*



*Panel clamps with integrated grounding*



**100% on time. 100% on budget.  
Zero warranty claims.**

AETenergy.com

Sales: 586.466.5073

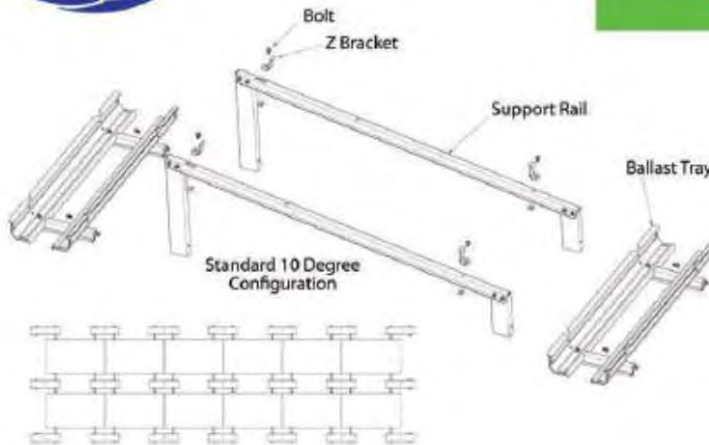
Info@AETenergy.com

AET-RAYPORT-B-V2 2014





# RAYPORT™ • B



## Specifications

Spacing: Adjustable down to 51.1"

Panel tilt: 5 or 10 degrees;  
others available on request

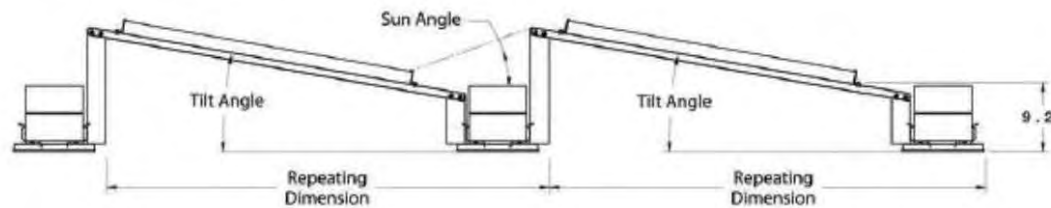
Module layout: Standard landscape  
configuration

Optional wind deflector available

Contact surface: EPDM

Grounding: Integrated into clamp

Can be shipped unassembled for  
additional savings



## Parts List

Part Name	Part Number	Tilt Angle	Standard		Narrow		Narrow (new)		Wide	
			Rep Dim. (Inches)	Sun Angle (Inches)	Rep Dim. (Inches)	Sun Angle (Inches)	Rep Dim. (Inches)	Sun Angle (Inches)	Rep Dim. (Inches)	Sun Angle (Inches)
Standard Parts										
Support Rail	80295 - 80x	0 degree	Proj. Specific	0	n/a	0	X	X	n/a	0
Support Rail	80450	5 degree	59.3	9.6	47.05	21.4	X	X	n/a	n/a
Support Rail	80687	8 degree	X	X	3	7	50.6	16.44	n/a	n/a
Support Rail	80263	10 degree	58.65	10.5	47.07	21.4	X	X	66.62	13.65
Support Rail	80044	10 degree	n/a	n/a	n/a	n/a	51	29	n/a	n/a
Support Rail	80038	10 degree	n/a	n/a	n/a	n/a	35.5	21.8	n/a	n/a
Support Rail	80271	15 degree	61	25.5	n/a	n/a	X	X	69	18.4
Support Rail	80273	20 degree	n/a	n/a	n/a	n/a	X	X	75.67	20
Support Rail	80368	30 degree	Proj. Specific	Proj. Specific	X	X	X	X	Proj. Specific	Proj. Specific
Ballast Tray - Standard	80009									
Ballast Tray - Narrow (new)	80674									
Ballast Tray - Wide	80198									
Z-Bracket	80454 - 8x		Suffice (in millimeters) determined by module thickness.							
Box	80013									
Retainer Nut	80025									
Clamp Tool	80034		For panels 970mm x 1743mm							
Clamp Tool (large panels)	80160		For panels 1743mm x 2603mm							
Accessories										
Kit - Seismic Clip	80129		For use in high seismic areas. 2 kits per tray required.							
Low Profile Hard Mount Bracket	80133		For hard mounts less than 2" tall. (50 Panels)							
High Profile Hard Mount Kit	80706		For hard mounts greater than 2" tall.							
Pad - Ballast Tray	80054 - 413		4" x 12" x .75"							
Pad - Ballast Tray	80054 - 686		6" x 16" x .75"							
Pad - Ballast Tray	80054 - 80x		Custom size pad - .75" thick							
Kit - Microinverter	80672		1 per Enphase M190/210, D380, M215. Includes grounding.							
Slope snow load brace kit			Use 1 per rail							

Custom racking options available for: Miasole, First Solar and other thin-film modules (minimum orders apply),  
Silicon Energy modules, and high leading-edge module applications

[AETenergy.com](http://AETenergy.com)

Sales: 586.466.5073

[Info@AETenergy.com](mailto:Info@AETenergy.com)
**AET-RAYPORT-B-V2 2014**





## Solar Software Products



# Taking Energy Storage from Pencil Out to Power-On™

Pason Power provides an end-to-end software solution for solar + storage projects. Our solution enables our customers to answer fundamental questions and zero-in on opportunities, so they can move seamlessly from planning to execution and deploy confidently knowing their system is operating intelligently in a warranty compliant fashion.



### Plan

#### Storage Architect

Zero-in on opportunities.  
Deploy with confidence.



### Execute

#### iEMS

Maximize the value of your  
energy storage assets.



### Support & Maintain

#### Energy DataHub

Monitor your systems,  
anytime, anywhere.

## Built on a history of success

Backed by Pason Systems' 40 years of market-leading energy monitoring and control systems, Pason Power has the experience, support, and service to get the job done, and get it done safely.

### Bankable

Backed by one of the strongest balance sheets in the industry.

### Reliable

Our systems are built with a 40-year history of excellence in remote sensing and data collections technology.

### Consistent

One platform for planning and operating means a greater degree of accuracy in performance and financial returns.

### Customer-Focused

Our multilingual, 24/7 call center works closely with our distributed network of field technicians to ensure maximum uptime for all our products.

### Innovative

Our continuous improvement approach means you are always using the best technology available.

### Invested in Success

We are deeply invested in our partner and customer success, it is why we hire success managers and not sales managers.



- Demand Charge Reduction
- PV Self-consumption
- Time of Use Arbitrage
- Back-up Power
- ...and more

## Execute

## iEMS

Intelligent Energy Management System (iEMS) takes projects from Storage Architect and turns them into reality. Our iEMS system uses advanced machine learning and artificial intelligence to feed an optimization engine that generates forecasts and discharge schedules for your storage system.

## Specifications

- Advanced machine learning and AI for best results
- System reacts to real-time data every 10 seconds
- Forecasts are recreated every 15 minutes
- Supports industry standard communication protocols
- Hardware agnostic
- Fully integrated with trusted ESS suppliers
- Provides warranty compliant operations for battery storage systems



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 PasonPower.com

## Plan

## Storage Architect

Storage Architect empowers users to quickly and easily model their storage or solar + storage projects. Right size your equipment, quantify your value proposition, and deploy with confidence.

## Specifications

- Quickly import interval load data
- Imports PV data via HeliScope
- Up-to-date tariff information using industry leading Genability
- Highly configurable hardware and financial parameters
- Modern, easy to use interfaces
- Responsive charts and graphs
- Easily export results

## Support &amp; Maintain

## Energy DataHub

Energy DataHub offers the convenience of remote system monitoring so you can be sure your systems are operating as expected no matter where you are or what time it is. Energy DataHub also easily provides the necessary detailed operational data required by suppliers and insurance companies if and when claims need to be placed.

## Specifications

- Access to real-time system and equipment data
- Monitor all your sites from one place
- Provides data management and reporting necessary for warranty claims
- Track savings in real-time
- Advanced HTML 5 platform accessible via browsers and mobile devices

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## Plumbing Products

# SLOAN®

### Retrofit Washdown Urinal Fixture Model SU-1209

► **Code Number**

1101209

► **Description**

Vitreous china washdown retrofit urinal

► **Flush Cycle**

0.125 to 0.5 gpf/0.5 to 1.9 Lpf

Flush volume is determined by the flushometer used with fixture

► **Fixture Specifications**

- White Vitreous China
- Large footprint to cover old caulk lines
- 3/4" I.P.S. top spud inlet
- 2" NPT outlet flange
- All mounting hardware included
- Integral flushing rim
- Vandal resistant strainer assembly included
- 100% factory flush tested
- Washdown flushing action

► **Plumbing System Requirements**

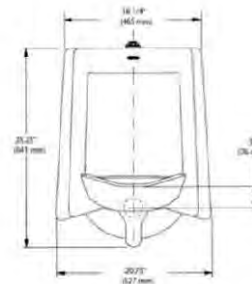
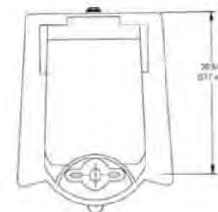
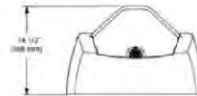
- Minimum Flow Rate: 18 GPM
- Maximum Static Pressure: 80 PSI
- Minimum Flowing Pressure: 25 PSI

► **Product Specification**

- Washdown urinal shall be made of vitreous china with a 3/4" top spud. Urinal shall have a 2" NPT outlet flange. Urinal shall include a removable strainer, inlet spud and hanger. Urinal shall be Sloan Model SU-1209.

► **Notes**

- This model is fully interchangeable with Models SU-1200, SU-1202 & SU-1205 and matches all dimensional and performance parameters.
- All information contained in this document subject to change without written notice
- NOTE: All vitreous china dimensions shown in these drawings are nominal and not to scale. Dimensions can vary within the tolerances established in the governing ASME A112.19/CSA B45.1 standard. It is important to consider this when planning rough-in and plumbing layouts.



► **Compliance & Certifications**



CALGreen



HEU  
10111209/01



This space for Architect/Engineer Approval

SLOAN 10500 SEYMOUR AVE. • FRANKLIN PARK, IL 60131

Ph: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • <http://www.sloan.com>

2018-07-06

Page 1 of 1



Model

**SU-7009-A Universal High Efficiency Urinal**  
 Top Spud Vitreous China Wash Down Urinal
**DESCRIPTION**

Complete vitreous china top spud small urinal

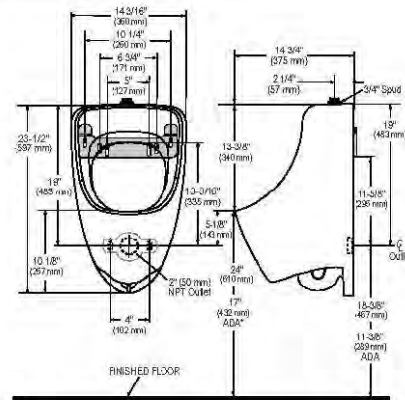
**FLUSH CYCLE**

- ☐ SU-7009-A Universal High-Efficiency  
 (0.125 to 0.5 gpf/0.5 to 1.9 Lpf)

Flush volume is determined by the flushometer used with the urinal.

**SPECIFICATIONS****Urinal**

- Wall hung vitreous china
- Washdown flushing action
- 3/4" I.P.S. top spud inlet
- 2" NPT outlet flange included
- All mounting hardware included
- Integral flushing rim
- 100% factory flush tested
- Carrier not included
- Vandal resistant strainer assembly included
- Compliant to the applicable sections of ASME A112.19.2/CSA B45.1



**NOTE:** All vitreous china dimensions shown in these drawings are nominal. Dimensions can vary within the tolerances established in the governing ASME A112.19.2/CSA B45.1 standard. Please take this into consideration when planning rough-in and plumbing layouts.

**Product Specification**

Washdown urinal shall be made of vitreous china with a 3/4" top spud. Urinal shall have a 14 3/4" rim from finished wall. Urinal shall include a vandal resistant strainer, inlet spud, and hanger. Urinal shall be Sloan Model SU-7009-A-0.125 to 0.5 gpf (0.5 to 1.9 Lpf).



This fixture meets or exceeds the following specifications:  
 The American Disabilities Guidelines and ANSI A117.1 when installed according to these requirements.

NOTE: Plumbing System Requirements

- ✓ Minimum **Flowing** Pressure: 25 PSI  
 ✓ Maximum Static Pressure: 80 PSI

This space for Architect/Engineer approval

Job Name	Date
Model Specified	Quantity
Variations Specified	
Customer/Wholesaler	
Contractor	
Architect	

The information contained in this document is subject to change without notice.



Sloan Valve Company is buying renewable energy certificates to meet 100% of the company's purchased electricity use at its Franklin Park, Illinois facility.



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[www.sloanvalve.com](http://www.sloanvalve.com)

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 SLHSS-VF/SU7009A - Rev. 1a (02/13)



## Lighting Products

### RAIL185W

**RAB**  
 LIGHTING


LED High Bay fixture ideal for large indoor spaces, including warehouses, gymnasiums and distribution centers that require mounting heights from 15 to 50 feet. Available in 95, 150, 185 and 225 Watt versions with equivalencies from 200 to 400 Watt metal halide fixtures.

Color: White

Weight: 23.2 lbs

Project:

Type:

Prepared By:

Date:

#### Driver Info

Type: Constant Current  
 120V: 1.60A  
 208V: 0.92A  
 240V: 0.80A  
 277V: 0.69A  
 Input Watts: 183W  
 Efficiency: N/A

#### LED Info

Watts: 185W  
 Color Temp: 5000K (Cool)  
 Color Accuracy: 75 CRI  
 L70 Lifespan: 100,000  
 Lumens: 23,503  
 Efficacy: 128 LPW

#### Technical Specifications

##### Listings

##### UL Listing:

Suitable for damp locations

##### IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

##### DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

##### LED Characteristics

##### Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

##### LEDs:

Long-life, high-efficiency surface mount LEDs

##### Color Stability:

LED Color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

##### Color Uniformity:

RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2008.

##### Electrical

##### Drivers:

Two Drivers, Class 2, Constant Current, 100-277VAC, 50-60Hz, 1.1A

##### THD:

4.8% at 120V, 11.3% at 277V

##### Power Factor:

99.6% at 120V, 95.1% at 277V

##### Construction

##### Ambient Temperature:

Suitable for use 12 hours a day, 5 days a week in 50°C. Suitable for 24/7 use in ambient temperatures up to 30°C. For questions related to fixture operation in high ambient temperatures, contact RAB tech support at 888-722-1000.

##### Housing:

Extruded aluminum

##### Lens:

High-transmittance polystyrene

##### Reflector:

Specular, high-reflectance aluminum with 95% reflectivity

##### Mounting:

V hooks (chain by others)

##### Gaskets:

High temperature silicone gaskets.

##### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

##### Green Technology:

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

##### Recommended Mounting Height:

Up to 40 ft.

##### Other

##### Equivalency:

RAIL High Bay 185W LED is equivalent to 320W metal halide fixtures

##### Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

##### California Title 24:

See RAIL with Multi-Level sensor (WS2 or WS4) for a compliant California Title 24.



Project:

Part#:

Type:

# SPECFIT 6"

## Retrofit Downlight



**Mechanical** – SPECFIT retrofits existing commercial housings. Spring action clips to accommodate 1½" to 2" ceiling thicknesses. Fixture with remote driver installs and is accessible from below the ceiling.

**Electrical** – Universal 120-277V, 50/60 Hz driver. Three selectable lumen outputs using SelectDrive technology. 0-10V dimmable to 5% with low end cutoff. 12V auxiliary port with stand by power functionality for additional dimming and shut-off of field installed sensors and control systems.

**Optical** – Self flanged spun aluminum reflector, 45° optical cutoff. Field interchangeable optical lenses. Four beam distributions. Wall wash field installed accessory. COB technology ensures 3-step SDCM color uniformity in 2700K, 3000K, 3500K or 4000K CCT. Minimum 90 CRI. 97 CRI available in 3000K only.

**Thermal** – Die cast heat sink, L70 lifetime of 100,000 hours. Ambient temperature rated from -13°F to +95°F (-25°C to 35°C).

**Compliance and Warranty** – ETL Classified and Listed for damp locations. 5 year parts warranty for complete fixture.



### PRODUCT ORDERING INFORMATION

Light Engine and Driver								Reflector	
Series	Light Engine	CRI	CCT	Driver	Voltage	Optical Distribution	Options <sup>1</sup>	Reflector Shape	Finish
AD6 Specfit 6"	LES 500-700-1000lm	90 90+ CRI	27 2700K	DIM010 <sup>2</sup> 0-10V Dim to 5%	UNV 120-277, 50/60Hz	MD <sup>3</sup> Medium	SD347 347V Transformer	ADR6 6" Round Reflector	CC Clear Diffuse Trim and Flange
	LEM 1500-2000-2500lm	97 <sup>4</sup> 3000K only	30 3000K			VN Very Narrow	SD480 480V Transformer		CW Clear Diffuse Trim, White Flange
	LEL 3000-4000-5000lm		35 3500K			NR Narrow	EM <sup>5</sup> Emergency Backup		WH Matte White Trim and Flange
			40 4000K			WD Wide			BL Matte Black Trim and Flange

<sup>1</sup> Dim to 5% with low end cutoff. Dimmer compatibility available on website / <sup>2</sup> Medium Lume Optic comes standard, if other optic distribution selected the lens will ship separately and require field installation / <sup>3</sup> CRI97 is made to order in 3000K only and is not Energy Star listed / <sup>4</sup> Options are factory installed and come with the Light Engine and Driver / <sup>5</sup> EM cannot be combined with SD347 or SD480 option

### Selection\*

Ex: AD6-LES-9040-DIM010-UNV-MD-ADR6-CC

AD6				DIM010	UNV			ADR6	
-----	--	--	--	--------	-----	--	--	------	--

\* A complete fixture consists of one light engine and driver and one reflector



## ACCESSORY ORDERING INFORMATION

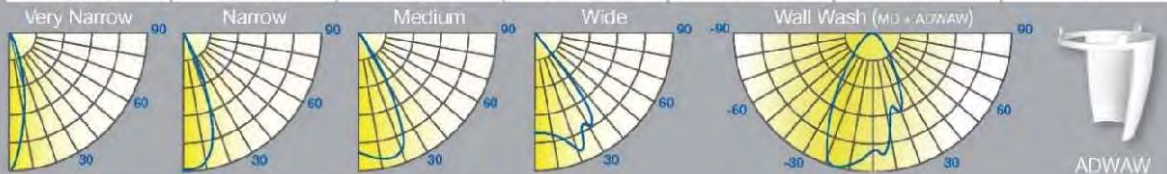
Model	Description
ADAW	Wall Wash Accessory
NCPLATE/T	New Construction or Remodel Plate for T-grid Ceilings
NCPLATE	New Construction Plate for Stud / Joist Mounting

## BEAM DISTRIBUTION\*

VN	25°
NR	40°
MD	60°
WD	75°

## ELECTRICAL SPEC

Light Engine	Input Voltage	Input Frequency	Input Current	Input Power	THD Power	Power Factor
LESXXX	120 / 277V	50 / 60Hz	0.115 / 0.047A	13W	<20%	>0.9
LEMXXX	120 / 277V	50 / 60Hz	0.270 / 0.114A	31.5W	<20%	>0.9
LELXXX	120 / 277V	50 / 60Hz	0.530 / 0.217A	60W	<20%	>0.9



\* Beam angles are only indicative, they may vary based on reflectors and light engine.

## LES (Small Light Engine and driver) - High / Medium / Low - 12.5 / 8.5 / 6.5W

CCT	2700K						3000K						3500K						4000K					
Output**	High		Medium		Low		High		Medium		Low		High		Medium		Low		High		Medium		Low	
	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW
Clear Diffuse	1000	80	700	82	500	77	1050	84	735	86	525	81	1100	88	770	91	550	85	1150	92	805	95	575	88
White	990	79	693	82	495	76	1040	83	728	86	520	80	1089	87	762	90	545	84	1139	91	797	94	569	88
Black	880	70	616	72	440	68	924	74	647	76	462	71	968	77	678	80	484	74	1012	81	708	83	506	78

## LEM (Medium Light Engine and driver) - High / Medium / Low - 31.5 / 25.5 / 18W

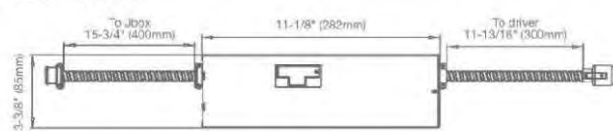
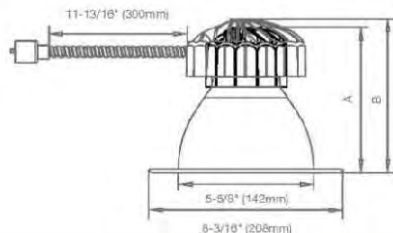
CCT	2700K						3000K						3500K						4000K					
Output**	High		Medium		Low		High		Medium		Low		High		Medium		Low		High		Medium		Low	
	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW
Clear Diffuse	2500	79	2125	83	1600	89	2550	81	2169	85	1632	91	2600	83	2210	87	1664	92	2650	84	2253	88	1696	94
White	2475	78	2104	82	1584	88	2525	80	2147	84	1616	90	2574	82	2188	86	1647	91	2624	83	2230	87	1679	93
Black	2200	70	1870	73	1408	78	2244	71	1909	75	1436	80	2288	73	1945	77	1464	81	2332	74	1983	77	1492	83

## LEL (Large Light Engine and driver) - High / Medium / Low - 60 / 48.5 / 37.5W

CCT	2700K						3000K						3500K						4000K					
Output**	High		Medium		Low		High		Medium		Low		High		Medium		Low		High		Medium		Low	
	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW	lm	LPW
CC / CW	4750	79	4085	84	3325	89	4800	80	4080	84	3360	90	5000	83	4250	88	3500	93	5200	87	4420	91	3640	97
White	4703	78	4044	83	3292	88	4752	79	4039	83	3326	89	4950	82	4208	87	3465	92	5148	86	4376	90	3604	96
Black	4038	67	3472	71	2826	78	4080	68	3468	71	2856	77	4250	71	3613	75	2975	79	4420	74	3757	77	3094	82

\*\* Lumen output are based on rated lumens, for exact value please refer to the IES files.

## LINE DRAWINGS



Trim aperture: 5-5/8" (142mm)  
 Flange Diameter: 8-3/16" (208mm)  
 Height: A (LES & LEM)= 6-3/16" (158mm); B (LEL)= 6-9/16" (167mm)  
 Minimum Ceiling opening: 5-13/16" (147mm)



# WALL-NUTS™

Connect Stranded and  
Solid Wire

600 V building wiring  
1000 V fixtures and signs  
Current rating: Largest conductor used  
105° C rated (221° F)

Fast - Safe - Easy



File: E69654

Clear housing allows visual confirmation of connection  
Test port for easy continuity testing



File: LR46759



**773-162**

Yellow 2-conductor, 100 pc/box.  
For 500 piece bag, order:  
**773-102/VE00-0500**  
For 2500 piece bag, order:  
**773-102/VE00-2500**  
• 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)  
• 12-18 AWG Solid Copper



**773-112**

Ground 2-conductor, 100 pc/box:

- 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)
- 12-18 AWG Solid Copper



**773-164**

Orange 4-conductor, 100 pc/box.  
For 500 piece bag, order:  
**773-104/VE00-0500**  
For 2500 piece bag, order:  
**773-104/VE00-2500**  
• 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)  
• 12-18 AWG Solid Copper



**773-114**

Ground 4-conductor, 100 pc/box:

- 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)
- 12-18 AWG Solid Copper



**773-124**

Lt. Gry Special 4-cond. 100pc/box.  
For 2500 piece bag, order:  
**773-124/VE01-0000**  
• 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)  
• 12-18 AWG Solid Copper

(Special opening)

- 18 AWG Stranded Copper  
(Stranding pattern less than or  
equal to 16)
- 18 AWG Solid Copper



**773-166**

Black 6-conductor, 50pc/box.  
For 500 piece bag, order:  
**773-166/VE00-0500**  
For 2500 piece bag, order:  
**773-166/VE00-2500**  
• 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)  
• 12-18 AWG Solid Copper



**773-116**

Ground 6-conductor, 50 pc/box:

- 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)
- 12-18 AWG Solid Copper



**773-168**

Dark Grey 8-conductor, 50pc/bg.  
For 2500 piece bag, order:  
**773-108/VE00-2500**  
• 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)  
• 12-18 AWG Solid Copper



**773-118**

Ground 8-conductor, 50 pc/bg

- 12-16 AWG Stranded Copper  
(stranding pattern less than or  
equal to 19)
- 12-18 AWG Solid Copper

WAGO Corporation N120 W19129 Freistadt Rd., P.O. Box 1015, Germantown, WI 53022  
Tel.: 262 / 255-6222 Fax: 262 / 255-3232 Toll Free: 1-800-DIN RAIL (346-7245)  
[www.wago.com](http://www.wago.com) [info.us@wago.com](mailto:info.us@wago.com)




**Type of Service:**

- **Brief description:**
- **Process from setup to completion:**
- **Measurable baseline:**
- **Performance matrix:**
- **Reporting matrix:**
- **Attach case studies:**
- **Personnel available for support (internal or subcontracted):**
- **Special terms and conditions for this service:**

Midstate Energy's service offering is a set of comprehensive solutions surrounding high-performance building consulting, utility management, smart technology and related services. Below are multiple case studies with personnel supporting the projects, providing context into some of our core offerings and energy conservation measures (e.g., Utility Data Management, Controls, HVAC, Lighting, Water, Weatherization, Solar, Battery Storage) for school districts.



***Sunnyside School District Energy Performance Project***

Project Detail	Response				
Project Identification	<b>Owner Name:</b> Sunnyside School District, Phases I, II, III & IV				 <b>SUNNYSIDE</b> Unified School District
	<b>City/State:</b> Tucson, AZ				
	<b>Facility Type:</b> Public School District				
Project Dates					
Baseline Period: July 2009 to 2010					
Variable	Phase 1	Phase 2	Phase 3	Phase 4	Total
Contract Value	\$ 1,378,127.00	\$ 3,490,000.00	\$ 6,980,000.00	\$ 13,616,676.00	\$ 25,464,803.00
Project Start	September 2011	July 2012	May 2013	October 2016	
Project Completion	March 2012	May 2013	June 2014	Ongoing	
M&V Options	Option B	Option A	Option A	Option A	
Guaranteed Savings	\$ 128,239.00	\$ 249,554.00	\$ 480,212.00	\$ 696,580.00	\$ 1,554,585.00
Stipulated Operational Savings	\$ 8,000.00	\$ 30,000.00	\$ -	\$ -	\$ 38,000.00
Project Size	<b>Number of Sites:</b> 25 sites				
	<b>Total Square Footage:</b> 2,004,010 SF				
Project Dollar Amount	<b>Total Contract Amount:</b> \$25,464,803.00				
Source of Funding	<b>Description:</b> Capital from the District, and Tax-Exempt Municipal Lease				
	<b>Company’s Role:</b> Company worked with clients to review multiple Tax-Exempt Lease quotations from market.				

Project Detail	Response
<b>Contract Terms</b>	Since 2011, Midstate Energy has completed three phases of work and the fourth phase is in process. By agreement with the client, all M&V activity is to be include in Phase 4 performance. 15-year repayment term, following the construction period.
<b>Technical Design Personnel</b>	<p>John Hobbes, Chief Executive Officer, Phase III and Phase IV</p> <p>Donovan Stevens, Relationship Management</p> <p>Randy Falconer, Energy Sales</p> <p>Ben Madsen, Energy Sales</p> <p>Tom Emanuelson, Project Development</p> <p>Don Calahan, Senior Project Manager</p> <p>Scott Conner, Operations Manager</p> <p>Amy Flores, Safety Manager</p>
<b>Project Schedule</b>	First three projects were completed on time and Phase Four is currently under construction.
<b>List of Improvements:</b>	<p><b>Phase I:</b></p> <ul style="list-style-type: none"> <li>• Mechanical improvements</li> <li>• Lighting upgrades</li> <li>• Building automation system upgrades</li> <li>• Fenestration improvements</li> <li>• Demand control ventilation</li> </ul> <p><b>Phase II:</b></p> <ul style="list-style-type: none"> <li>• Lighting Interior</li> <li>• HVAC Controls</li> <li>• HVAC Central Plant Modernization</li> </ul> <p><b>Phase III:</b></p> <ul style="list-style-type: none"> <li>• Lighting- Interior/Exterior</li> <li>• HVAC Controls</li> <li>• HVAC Equipment Replacement</li> </ul> <p><b>Phase IV:</b></p> <ul style="list-style-type: none"> <li>• LED Lighting</li> <li>• Domestic Water Modernization</li> <li>• Irrigation</li> <li>• Mechanical Upgrades</li> <li>• Restroom Renovations</li> </ul>

Project Detail			Response					
Project Annual Savings/ Guaranteed Savings/Actual Annual Savings								
Units	Phase 1	Phase 2	Phase 3	Phase 4	Guaranteed Annual Energy Savings	Actual Energy Savings Year 1	Actual Energy Savings Year 2	Actual Energy Savings Year 3
Year				Under Construction		2014/15	2015/16	2016/17
kWh	1,341,545	1,854,682	3,300,915		6,497,142	7,026,362	7,237,153	7,562,825
kW	0	0	0		0	Not Measured	Not Measured	Not Measured
MMBTU						Not Measured	Not Measured	Not Measured
Gallons						Not Measured	Not Measured	Not Measured
Stipulated	\$8,000	\$30,000	-	-	\$38,000	\$38,000	\$39,140	\$40,314
Comments			<b>Measurement Methodology:</b> Option C for all ECM’s The total annual savings for each performance period always met or exceeded the total guaranteed project savings. <b>Agreement Term:</b> Phase 4 is 15 years <b>Project Status:</b> Ongoing M&V					
References			<b>Name/Title:</b> Cindy Bova, Project Manager and District Energy Manager <b>Phone:</b> 520.545.2102 <b>Mobile:</b> 520.405.2390 <b>Email Address:</b> cindyb@susd12.org					

### *Tucson Unified School District Solar Project*

Project Detail	Response
<b>Project Identification</b>	<b>Owner Name:</b> Tucson Unified School District (TUSD) Solar Portfolio (3 phases) <b>City/State:</b> Tucson, AZ <b>Facility Type:</b> Public School District  
<b>Project Dates</b>	Original award in 2013, portfolio remains ongoing through May 2019.

Project Detail	Response
<b>Project Size</b>	<p>Awarded for turnkey design, development, installation, and financing of solar energy systems at District campuses. Resulted in Phase 1 (completed 2014), Phase 2 (completed 2015), and Phase 3 (ongoing, anticipated completed May 2019) solar portfolio encompassing 82 project sites and over 73,000 panels (23.8 MW).</p> <p>Press release and ribbon cutting ceremony available here for further detail:  <a href="http://www.tusd1.org/Information/Resources/Solar-Project">http://www.tusd1.org/Information/Resources/Solar-Project</a></p>
<b>Project Dollar Amount</b>	<b>Total Contract Amount:</b> \$59,500,000
<b>Source of Funding</b>	<p><b>Description:</b> Outside financing through Constellation Energy</p> <p><b>Company's Role:</b> Midstate Energy and Natural Power and Energy's role included procurement of financing through competitive solicitation to ensure the best value for TUSD – Constellation was selected for the best long-term value and bankability.</p>
<b>Contract Terms</b>	Contract length for each phase of the project (three separate financing contracts) is 20 years
<b>Technical Design Personnel</b>	<p>John Mitman, Director – Engineering and Development</p> <p>John Hobbes, Chief Executive Officer</p> <p>Ben Garrett, Director – Operations (NPE)</p> <p>Shannon Roepke – Project Manager</p> <p>Jeremiah Medlin – Operations Manager</p> <p>Laksh Muchhal – Project Development Engineer</p>
<b>Project Schedule</b>	Significant complexity of strategic planning for 82-site portfolio project – while shuffling of sites did occur due to operational challenges, each project phase was completed on-time and in accordance with provided schedules.
<b>List of Improvements:</b>	Resulted in Phase 1 (completed 2014), Phase 2 (completed 2015), and Phase 3 (ongoing, anticipated completed May 2019) solar portfolio encompassing 82 project sites and over 73,000 panels (23.8 MW).

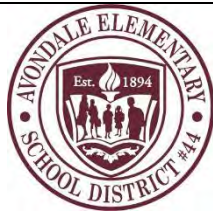
**Project Annual Savings/ Guaranteed Savings/Actual Annual Savings**

Units	Guaranteed Annual Energy Savings	Actual Energy Savings Year 1	Actual Energy Savings Year 2	Actual Energy Savings Year 3
<b>Year</b>		2014/15	2015/16	7/16-3/17
<b>kWh</b>	90%	10,789,141 (100% of Guarantee)	21,107,865 (100% of Guarantee)	15,541,066 (100% of Guarantee)




Project Detail	Response
<b>Comments</b>	<p>The total annual savings is exceeded the total guaranteed project savings.</p> <p>Dr. Gabriel Trujillo TUSD Superintendent -</p> <p>“I am very proud of the District’s commitment over the last five years to install the solar arrays at our schools and facilities. They not only produce energy to run our schools while reducing our carbon footprint, they also provide wonderful shaded areas for our playgrounds and parking areas.”</p>
<b>References</b>	<p><b>Name/Title:</b> Tina Cook, Energy Projects Manager</p> <p><b>Phone:</b> 520.225.4673</p> <p><b>Email Address:</b> tina.cook@tusd1.org</p>

### *Avondale Elementary School District*

Project Detail	Response
<b>Project Identification</b>	<p><b>Owner Name:</b> Avondale Elementary School District</p> <p><b>City/State:</b> Avondale, AZ</p> <p><b>Facility Type:</b> Public School District</p> 
<b>Project Dates</b>	Phase I commenced in 2016 and completed in 2017
<b>Project Size</b>	<p><b>Number of Sites:</b> 11</p> <p><b>Total Square Footage:</b> 716,661</p>
<b>Project Dollar Amount</b>	<b>Total Contract Amount:</b> \$6,474,552.00
<b>Source of Funding</b>	<p><b>Description:</b> Capital from the district and Qualified Zone Academy Bonds</p> <p><b>Company’s Role:</b> Worked with client to review rates from competitive process to select lender.</p>
<b>Contract Terms</b>	10-year repayment term, following the construction period.


Project Detail	Response																														
Technical Design Personnel	John Hobbes, Chief Executive Officer Donovan Stevens, Relationship Management Randy Falconer, Energy Sales Ben Madsen, Energy Sales Tom Emanuelson, Project Development Don Calahan, Senior Project Manager Scott Conner, Operations Manager Amy Flores, Safety Manager																														
Project Schedule	The project was completed on schedule.																														
List of Improvements:	<ul style="list-style-type: none"><li>• Lighting- Interior/Exterior</li><li>• HVAC Controls</li><li>• HVAC Equipment Replacement</li><li>• Domestic Water Modernization</li><li>• Roofing</li><li>• Green Behavior Management</li></ul>																														
Project Annual Savings/ Guaranteed Savings/Actual Annual Savings																															
	<table><tr><th></th><th>Guaranteed Annual Energy Savings</th><th>Actual Energy Savings Year 1</th><th>Actual Energy Savings Year 2</th><th>Actual Energy Savings Year 3</th></tr><tr><td>Units</td><td></td><td></td><td></td><td></td></tr><tr><td>Year</td><td></td><td>2018</td><td></td><td></td></tr><tr><td>kWh</td><td>2,635,500</td><td>2,759,053</td><td></td><td></td></tr><tr><td>Therms</td><td>3,397</td><td>2,096</td><td></td><td></td></tr><tr><td>kgals</td><td>4,520</td><td>3,921</td><td></td><td></td></tr></table>		Guaranteed Annual Energy Savings	Actual Energy Savings Year 1	Actual Energy Savings Year 2	Actual Energy Savings Year 3	Units					Year		2018			kWh	2,635,500	2,759,053			Therms	3,397	2,096			kgals	4,520	3,921		
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kWh	2,635,500	2,759,053																													
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kgals	4,520	3,921																													
Comments	The total annual savings is exceeded the total guaranteed project savings.																														
References	Name/Title: Jill Barragan/ Executive Director of Business Services Phone: 623.760.5274 Email: <a href="mailto:jbarrag@avondale.k12.az.us">jbarrag@avondale.k12.az.us</a>																														

### Peoria Unified School District

Project Detail	Response
<b>Project Identification</b>	<b>Owner Name:</b> Peoria Unified School District <b>City/State:</b> Peoria, AZ <b>Facility Type:</b> Public School District 
<b>Project Dates</b>	Phase IA commenced in 2013, completed in 2013 Phase IB commenced in 2015, completed 2015 Phase II commenced in 2017, completed 2018
<b>Project Size</b>	<b>Number of Sites:</b> 52 <b>Total Square Footage:</b> 9,973,827
<b>Project Dollar Amount</b>	<b>Total Contract Amount:</b> \$22,254,063.00
<b>Source of Funding</b>	<b>Description:</b> Tax Exempt Lease Purchase and Qualified Zone Academy Bond (QZAB) <b>Company's Role:</b> Worked with client to review rates from competitive process to select lender.
<b>Contract Terms</b>	10-year guaranteed term, following the construction period.
<b>Technical Design Personnel</b>	John Hobbes, Chief Executive Officer Donovan Stevens, Relationship Management Randy Falconer, Energy Sales Ben Madsen, Energy Sales Tom Emanuelson, Project Development Don Calahan, Senior Project Manager Scott Conner, Operations Manager Amy Flores, Safety Manager
<b>Project Schedule</b>	The project was completed on schedule.
<b>List of Improvements:</b>	<ul style="list-style-type: none"> <li>• HVAC System Components</li> <li>• HVAC Central Plan Redesign &amp; Modernization</li> <li>• Control Replacement &amp; Modernization</li> <li>• Lighting- Interior/Exterior</li> <li>• Domestic Water Modernization</li> </ul>

Project Detail	Response			
Project Annual Savings/ Guaranteed Savings/Actual Annual Savings				
Project Annual Savings Unit	Guaranteed Energy Savings	Actual Energy Savings		
		Year 1	Year 2	Year 3
kWh	7,118,299	8,107,522		
kgals	39,889	39,889		
\$	\$1,299,491	\$1,461,594		
Comments	The total annual savings is exceeded the total guaranteed project savings. For our energy conservation efforts Midstate Energy have won the Peoria Unified School District Education Visionary Award in 2017 and 2018.			
References	Name/Title: Ken Hicks/Chief Financial Officer Phone: 623.521.7779			

### *Santa Cruz Valley Unified School District*

Project Detail	Response
<b>Project Identification</b>	<b>Owner Name:</b> Santa Cruz Valley Unified School District <b>City/State:</b> Rio Rico, AZ <b>Facility Type:</b> Public School District 
<b>Project Dates</b>	Phase I commenced in 2013, completed in 2013 Phase II commenced in 2017, completed 2018
<b>Project Size</b>	<b>Number of Sites:</b> 15 <b>Total Square Footage:</b> 860,096
<b>Project Dollar Amount</b>	<b>Total Contract Amount:</b> \$6,463,376
<b>Source of Funding</b>	<b>Description:</b> Tax Exempt Lease Purchase and Qualified Zone Academy Bond (QZAB) <b>Company's Role:</b> Worked with client to review rates from competitive process to select lender.
<b>Contract Terms</b>	20-year term, following the construction period.



Project Detail	Response																												
Technical Design Personnel	John Hobbes, Chief Executive Officer Donovan Stevens, Relationship Management Randy Falconer, Energy Sales Ben Madsen, Energy Sales Tom Emanuelson, Project Development Don Calahan, Senior Project Manager Scott Conner, Operations Manager Amy Flores, Safety Manager																												
Project Schedule	The project was completed on schedule.																												
List of Improvements:	<ul style="list-style-type: none"><li>• HVAC System Components</li><li>• HVAC Central Plan Redesign &amp; Modernization</li><li>• Control Replacement &amp; Modernization</li><li>• Lighting- Interior/Exterior</li><li>• Domestic &amp; Exterior Water Modernization</li></ul>																												
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Comments	The total annual savings is exceeded the total guaranteed project savings.																												
References	Name/Title: David Verdugo/Superintendent Phone: 520.2418319 Email: <a href="mailto:dverdugo@scv35.org">dverdugo@scv35.org</a>																												

The associates showcased below have worked together in the completion of numerous projects equating to millions in energy savings. Many were listed in the aforementioned case studies.

### **JOHN HOBBS**

Chief Executive Officer

John Hobbes is the Chief Executive Officer of Midstate-Energy, LLC, a leading energy services company with offices in Tucson, Phoenix, and Colorado. As CEO, he has created a dynamic scalable culture of associate collaboration, innovation and process improvement leading to year-over-year record growth and the development of outstanding client relationships.



Beyond MSE, John has held executive leadership positions with multiple Fortune 100 companies including Honeywell and United Technologies. Over his 31 years in the energy services industries, he has implemented over a billion dollars in energy saving projects both domestically and internationally.

John studied architecture at Texas Tech University and has completed multiple executive level courses surrounding leadership, sales and strategic relationships.

### **RON STALICA**

VP of Business Growth

Ron Stalica is a Vice President of Business Growth. He currently working to expand our national footprint, specifically in school districts and cities across Texas and Arizona. His 25 years of construction industry and energy optimization building improvements brings deep industry knowledge to NCPA and Region 14.



Ron holds a Bachelor of Science degree in Management from State University of New York (SUNY).

### **RANDY FALCONER**

Senior Account Executive

Randy Falconer is a Senior Account Executive. He continues to work directly with school and municipal leadership and operations to educate and present consultative energy optimization strategies and solutions. He brings years of achievement in multiple markets including, private and public finance, building automation systems, energy optimization strategies and LEED buildings.



Randy has been successfully marketing ESCO projects for over two decades and has been responsible for over \$100 Million in direct guaranteed energy saving performance contracts, with dozens of school districts throughout the United States. He holds a Bachelor of Science degree from Western Michigan University.

**SCOTT CONNER**

Operations Manager

Scott Conner is Midstate Energy's Operations Manager. As the MSE Operations Manager, his responsibilities include construction management, field coordination and negotiating contracts with subcontractors. He has 34 years of experience in HVAC and electrical construction services, including project management, field coordination and quality control program implementation.



Scott holds the Universal CFC License, OSHA 510 certification and multiple professional contracting licenses. He attended the State University of New York at Oswego.

**TOM EMANUELSON, PE**

Director Project Development

Tom Emanuelson is responsible for project development and local support for pre- and post-construction projects. Tom is a Professional Engineer (PE) with more than 30 years of experience in designing and constructing mechanical systems. He holds a Bachelor of Science in Mechanical Engineering from the University of Minnesota.

**JOHN MITMAN, CEM**

Solar Engineering Director

John brings 12 years of sustainability industry experience to the project. He is responsible for managing, directing and coordinating design disciplines in the development and active project stages for MSEs corporate, non-profit and municipal clients. John's area of expertise includes solar energy and energy storage solutions, as well as lighting and other energy conservation measures.



John holds a Bachelor of Science in Mechanical Engineering and a Professional Science Masters in Solar Engineering and Commercialization from Arizona State University. He is also a Certified Energy Manager (CEM).

**TOM JENNINGS, LEED**

Account Executive/Project Principal

Tom Jennings brings over 28 years of achievement in multiple markets including: building automation systems, security, energy optimization programs and LEED buildings. He has worked with academic institutions, cities and private developments across the United States. Tom's account management skills will support design team dynamics and the change management programs required for a successful ECM implementation.



Tom holds a Bachelor of Science in General Engineering from The University of Illinois and a Master of Science in Organizational Management from the University of Colorado Denver.

**ROBERT COY, CEM, LC, CALT**

## Lighting Project Manager

Rob's 16 years of construction experience specifically in lighting, brings expert knowledge to guaranteed energy savings projects. He is responsible for designing energy efficient lighting solutions and the calculations associated with their savings. He also manages all lighting client rebates with utility and government programs.



Rob holds a Bachelor of Science in Accounting from the University of Phoenix. He is also a Certified Energy Manager (CEM), and Lighting Certified by NALMCO.

**BRANDEN MORHOUS**

## Lead Energy Engineer

Branden Morhous brings MSEs team experience in energy engineering functions and analysis, including energy audits and analysis, identifying and quantification of energy-efficiency opportunities and savings. Branden is highly innovative and proficient in the field of heat transfer and alternative energy as it applies to energy.



Branden works as an Energy Engineer to develop the initial project IGAs using surveys, complex spreadsheet analysis, modeling of building energy consumptions using simulation software, and technical assessment. Branden provides further support for EPC project quality control, energy-efficiency measures, and Measurement & Verification of implemented projects.

Branden holds a Bachelor of Engineering – Mechanical Engineering (Thermal-Fluids) from San Jose State University.

**DON CALAHAN**

## Senior Project Manager

He is our senior project manager. He is responsible for overall project scope execution, subcontractor coordination, scheduling coordination, client communications, project closeout and ultimately, Tucson Unified School Districts satisfaction. He has been a technical project manager with more than 17 years of management and team leadership, and more than 30 years in the construction industry.



He is a veteran of the United State Navy and holds multiple professional certificates in leadership and project management.



**BEN GARRETT**

Director of Operations – Solar Construction Manager

As the Director of Operations, Ben Garrett works to develop the initial renewable project IGA through the use of surveys, spreadsheet analysis, modeling of building energy consumptions using simulation software, and local utility assessment. Ben provides installation support for EPC project construction, quality control of industrial, commercial, and utility measures as a construction manager for the client team on the renewable energy offering. Ben has designed and developed over 80MW of commercial solar installations. He is responsible for the coordination and scheduling of installation subcontractors in the field.



He holds a Bachelor of Science in Agricultural Economics from Texas State University. He is also North American Board of Certified Energy Practitioner (NABCEP) Certified.

**AMY FLORES**

Safety Manager

Amy Flores is the Human Resources and Safety Manager for MSE. Amy has over 11 years' experience in the construction and risk-management industries. In addition to onsite safety inspections, she has educated hundreds of associates around safety and OSHA related curriculums. Under her safety management, the company's total recordable incident rates have been exceptional, with rates 54% lower than the national average.



Amy and has completed professional education courses in employment law and human resources. She is also a National Center for Construction Education and Research (NCCER) certified training administrator, OSHA 500 Authorized Trainer, ICTP Proctor and Management Education Instructor and CPR/First Aid Instructor.

## Tab 8 – Value Added Products and Services

**Include any additional products and/or services available that vendor currently performs in their normal course of business that is not included in the scope of the solicitation that you think will enhance and add value to this contract for Region 14 ESC and all NCPA participating entities.**

Beyond consulting and utility management solutions, Midstate Energy, LLC specializes in facility improvements, modernization of existing building systems and sustainable energy design, including geothermal, solar and battery storage solutions. The focus of our efforts is aimed at reducing energy usage and the total cost of facility ownership for Region 14 and NCPA clients. Our scope of services includes performance contracting, controls, heating, ventilation, air conditioning, piping, plumbing, service/maintenance, retrofits, renovations and pre-construction services. Our team of tenured professionals have multiple industry certifications (e.g., LEED, CEM, PE) and licenses in skilled trades such as General Contractor, Electrical, Boilers, Steamfitting and Process Piping, Plumbing and Air Conditioning and Refrigeration Licenses. Midstate Energy's areas of self-performing expertise correspond with the life cycle of typically public buildings and fall into the following categories:

### Renewable Offering

Off Grid Solutions

- Solar - PPA/SSA
- Battery Solutions
- Micro Grid
- Geothermal
- Structured/Financing

### Energy Master Plan

- Condition Assessment
- Energy Efficiency Projects
- Performance Contracting
- Capital Planning/Bond
- Design Build
- Financing



### Construction

- Engineering Design
- Controls as Professional Service
- Trade Specific Subcontracting
- Technology Engineering:  
Communication/Video/Network/IT cabling

### Solutions/Building Services

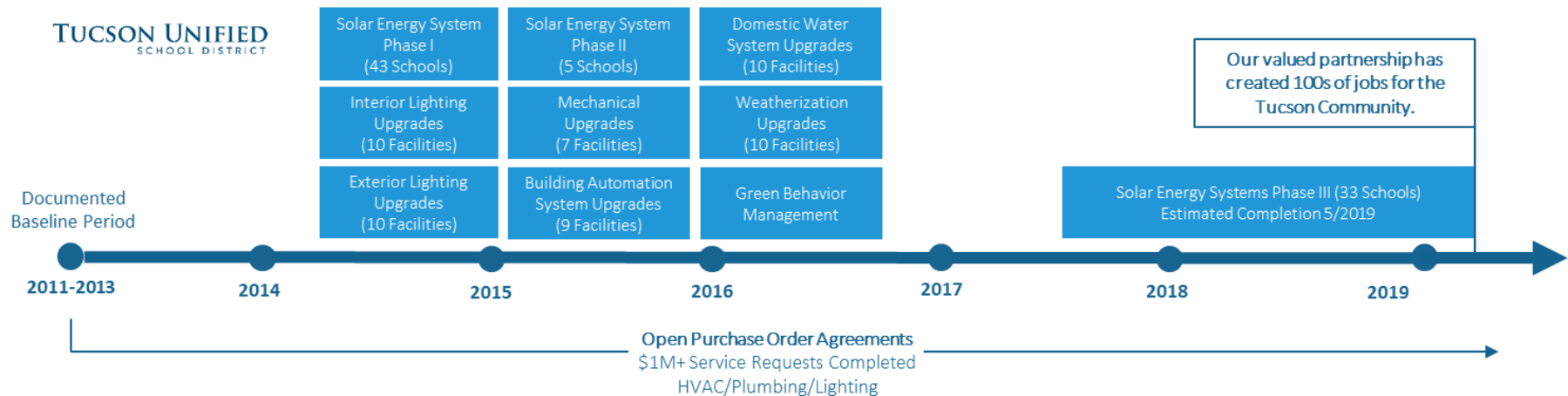
- Truck Based Service: HVAC, Electrical, Controls, Plumbing
- Energy Efficiency Projects: HVAC, Lighting, Controls, Commissioning, Monitoring Controls, Plumbing
- Utility Data & Electrical Demand Management
- Solar Services
- Facility Management

## *Building Long-Term Relationships with Academic Institutions*

We have a long and successful track record in the specialized area of high-performance building consulting, energy conservation, solar, electrical, plumbing and facility renewal for many school districts across the southwest. Our company focus is to optimize energy efficiency and system performance while managing implementation costs, ensuring efficient high-quality installations and creating jobs. The illustration below highlights our track record of success with one of our clients.

### *Our relationship with* **Tucson Unified School District**

*“Demonstrated Performance Over Time”*



*“Midstate Energy is an asset, supportive and a true partner to Tucson Unified School District. Because of these reasons, we would not hesitate to recommend Midstate Energy to anyone looking for a partner to investigate energy performance contracting.”*

- TUSD 2017 -

## Tab 9 – Required Documents

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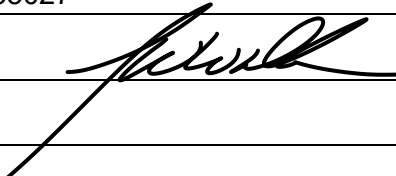
- ◆ Clean Air and Water Act / Debarment Notice
- ◆ Contractors Requirements
- ◆ Antitrust Certification Statements
- ◆ Required Clauses for Federal Funds Certifications
- ◆ Required Clauses for Federal Assistance by FTA
- ◆ State Notice Addendum



## **Clean Air and Water Act & Debarment Notice**

I, the Vendor, am in compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act of 1970, as Amended (42 U.S. C. 1857 (h), Section 508 of the Clean Water Act, as amended (33 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15 as required under OMB Circular A-102, Attachment O, Paragraph 14 (1) regarding reporting violations to the grantor agency and to the United States Environment Protection Agency Assistant Administrator for the Enforcement.

I hereby further certify that my company has not been debarred, suspended or otherwise ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension", as described in the Federal Register and Rules and Regulations

Potential Vendor	<u>Midstate, CTS, UES, JMS, Dynamix, Veregy</u>
Print Name	<u>Wes Walker</u>
Address	<u>23325 North 23rd Ave, Suite 120</u>
City, State, Zip	<u>Phoenix, AZ 85027</u>
Authorized signature	<u></u>
Date	<u>06-25-2021</u>

# **Contractor Requirements**

## **Contractor Certification Contractor's Employment Eligibility**

By entering the contract, Contractor warrants compliance with the Federal Immigration and Nationality Act (FINA), and all other federal and state immigration laws and regulations. The Contractor further warrants that it is in compliance with the various state statutes of the states it is will operate this contract in.

Participating Government Entities including School Districts may request verification of compliance from any Contractor or subcontractor performing work under this Contract. These Entities reserve the right to confirm compliance in accordance with applicable laws.

Should the Participating Entities suspect or find that the Contractor or any of its subcontractors are not in compliance, they may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.

The offeror complies and maintains compliance with the appropriate statutes which requires compliance with federal immigration laws by State employers, State contractors and State subcontractors in accordance with the E-Verify Employee Eligibility Verification Program.

Contractor shall comply with governing board policy of the NCPA Participating entities in which work is being performed

### **Fingerprint & Background Checks**

If required to provide services on school district property at least five (5) times during a month, contractor shall submit a full set of fingerprints to the school district if requested of each person or employee who may provide such service. Alternately, the school district may fingerprint those persons or employees. An exception to this requirement may be made as authorized in Governing Board policy. The district shall conduct a fingerprint check in accordance with the appropriate state and federal laws of all contractors, subcontractors or vendors and their employees for which fingerprints are submitted to the district. Contractor, subcontractors, vendors and their employees shall not provide services on school district properties until authorized by the District.

The offeror shall comply with fingerprinting requirements in accordance with appropriate statutes in the state in which the work is being performed unless otherwise exempted.

Contractor shall comply with governing board policy in the school district or Participating Entity in which work is being performed

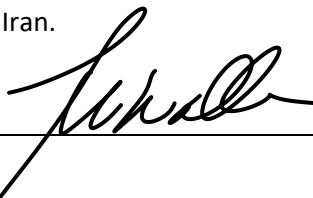
### **Business Operations in Sudan, Iran**

In accordance with A.R.S. 35-391 and A.R.S. 35-393, the Contractor hereby certifies that the contractor does not have scrutinized business operations in Sudan and/or Iran.

Authorized signature

Date

06-25-2021



## **Antitrust Certification Statements (Tex. Government Code § 2155.005)**

I affirm under penalty of perjury of the laws of the State of Texas that:

- (1) I am duly authorized to execute this contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;
- (2) In connection with this bid, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;
- (3) In connection with this bid, neither I nor any representative of the Company has violated any federal antitrust law; and
- (4) Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this bid to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

Company name Midstate, CTS, UES, JMS, Dynamix, Veregy

Address 23325 North 23rd Ave, Suite 120

City/State/Zip Phoenix, AZ 85027

Telephone No. 800.460.0995

Fax No. \_\_\_\_\_

Email address wwalker@veregy.com

Printed name Wes Walker

Position with company CEO

Authorized signature 

## **Required Clauses for Federal Funds Certifications**

Participating Agencies may elect to use federal funds to purchase under the Master Agreement. The following certifications and provisions may be required and apply when a Participating Agency expends federal funds for any purchase resulting from this procurement process. Pursuant to 2 C.F.R. § 200.326, all contracts, including small purchases, awarded by the Participating Agency and the Participating Agency's subcontractors shall contain the procurement provisions of Appendix II to Part 200, as applicable.

### **APPENDIX II TO 2 CFR PART 200**

(A) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 CFR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

Pursuant to Federal Rule (C) above, when a Participating Agency expends federal funds on any federally assisted construction contract, the equal opportunity clause is incorporated by reference herein.

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision



for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended— Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401- 7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee

of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

#### **RECORD RETENTION REQUIREMENTS FOR CONTRACTS INVOLVING FEDERAL FUNDS**

When federal funds are expended by Participating Agency for any contract resulting from this procurement process, offeror certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The offeror further certifies that offeror will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

#### **CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT**

When Participating Agency expends federal funds for any contract resulting from this procurement process, offeror certifies that it will comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18).

#### **CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS**

To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, offeror certifies that its products comply with all applicable provisions of the Buy America Act and agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.

# **Required Clauses for Federal Assistance provided by FTA**

## **ACCESS TO RECORDS AND REPORTS**

Contractor agrees to:

- a) Maintain all books, records, accounts and reports required under this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract or any extensions thereof except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case Contractor agrees to maintain same until Public Agency, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.
- b) Permit any of the foregoing parties to inspect all work, materials, payrolls, and other data and records with regard to the Project, and to audit the books, records, and accounts with regard to the Project and to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed for the purpose of audit and examination.

*FTA does not require the inclusion of these requirements of Article 1.01 in subcontracts. Reference 49 CFR 18.39 (i)(11).*

## **CIVIL RIGHTS / TITLE VI REQUIREMENTS**

- 1) Non-discrimination. In accordance with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d, Section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, Section 202 of the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. § 12132, and Federal Transit Law at 49 U.S.C. § 5332, Contractor or subcontractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, marital status age, or disability. In addition, Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
- 2) Equal Employment Opportunity. The following Equal Employment Opportunity requirements apply to this Contract:
  - a. Race, Color, Creed, National Origin, Sex. In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal Transit Law at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable Equal Employment Opportunity requirements of U.S. Dept. of Labor regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor, 41 CFR, Parts 60 et seq., and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of this Project. Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, marital status, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, Contractor agrees to comply with any implementing requirements FTA may issue.
  - b. Age. In accordance with the Age Discrimination in Employment Act (ADEA) of 1967, as amended, 29 U.S.C. Sections 621 through 634, and Equal Employment Opportunity Commission (EEOC) implementing regulations, "Age Discrimination in Employment Act", 29 CFR Part 1625, prohibit employment discrimination by Contractor against individuals on the basis of age, including present and prospective

employees. In addition, Contractor agrees to comply with any implementing requirements FTA may issue.

- c. Disabilities. In accordance with Section 102 of the Americans with Disabilities Act of 1990, as amended (ADA), 42 U.S.C. Sections 12101 *et seq.*, prohibits discrimination against qualified individuals with disabilities in programs, activities, and services, and imposes specific requirements on public and private entities. Contractor agrees that it will comply with the requirements of the Equal Employment Opportunity Commission (EEOC), "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR, Part 1630, pertaining to employment of persons with disabilities and with their responsibilities under Titles I through V of the ADA in employment, public services, public accommodations, telecommunications, and other provisions.
  - d. Segregated Facilities. Contractor certifies that their company does not and will not maintain or provide for their employees any segregated facilities at any of their establishments, and that they do not and will not permit their employees to perform their services at any location under the Contractor's control where segregated facilities are maintained. As used in this certification the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin because of habit, local custom, or otherwise. Contractor agrees that a breach of this certification will be a violation of this Civil Rights clause.
- 3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations, either by competitive bidding or negotiation, made by Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by Contractor of Contractor's obligations under this Contract and the regulations relative to non-discrimination on the grounds of race, color, creed, sex, disability, age or national origin.
  - 4) Sanctions of Non-Compliance. In the event of Contractor's non-compliance with the non-discrimination provisions of this Contract, Public Agency shall impose such Contract sanctions as it or the FTA may determine to be appropriate, including, but not limited to: 1) Withholding of payments to Contractor under the Contract until Contractor complies, and/or; 2) Cancellation, termination or suspension of the Contract, in whole or in part.

*Contractor agrees to include the requirements of this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.*

### **DISADVANTAGED BUSINESS PARTICIPATION**

This Contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, "*Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*", therefore, it is the policy of the Department of Transportation (DOT) to ensure that Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in the performance of DOT-assisted contracts.

- 1) Non-Discrimination Assurances. Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out all applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or other such remedy as public agency deems appropriate. Each subcontract Contractor signs with a subcontractor must include the assurance in this paragraph. (See 49 CFR 26.13(b)).



- 2) Prompt Payment. Contractor is required to pay each subcontractor performing Work under this prime Contract for satisfactory performance of that work no later than thirty (30) days after Contractor's receipt of payment for that Work from public agency. In addition, Contractor is required to return any retainage payments to those subcontractors within thirty (30) days after the subcontractor's work related to this Contract is satisfactorily completed and any liens have been secured. Any delay or postponement of payment from the above time frames may occur only for good cause following written approval of public agency. This clause applies to both DBE and non-DBE subcontractors. Contractor must promptly notify public agency whenever a DBE subcontractor performing Work related to this Contract is terminated or fails to complete its Work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. Contractor may not terminate any DBE subcontractor and perform that Work through its own forces, or those of an affiliate, without prior written consent of public agency.
- 3) DBE Program. In connection with the performance of this Contract, Contractor will cooperate with public agency in meeting its commitments and goals to ensure that DBEs shall have the maximum practicable opportunity to compete for subcontract work, regardless of whether a contract goal is set for this Contract. Contractor agrees to use good faith efforts to carry out a policy in the award of its subcontracts, agent agreements, and procurement contracts which will, to the fullest extent, utilize DBEs consistent with the efficient performance of the Contract.

### **ENERGY CONSERVATION REQUIREMENTS**

Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plans issued under the Energy Policy and Conservation Act, as amended, 42 U.S.C. Sections 6321 *et seq.* and 41 CFR Part 301-10.

### **FEDERAL CHANGES**

Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Contract between public agency and the FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

### **INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS**

The provisions include, in part, certain Standard Terms and Conditions required by the U.S. Department of Transportation (DOT), whether or not expressly set forth in the preceding Contract provisions. All contractual provisions required by the DOT, as set forth in the most current FTA Circular 4220.1F, dated November 1, 2008, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Contract. Contractor agrees not to perform any act, fail to perform any act, or refuse to comply with any public agency requests that would cause public agency to be in violation of the FTA terms and conditions.

### **NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES**

Agency and Contractor acknowledge and agree that, absent the Federal Government's express written consent and notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to agency, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.

*Contractor agrees to include the above clause in each subcontract financed in whole or in part with federal assistance provided by the FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.*

#### **PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS**

Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§ 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to this Contract. Upon execution of the underlying Contract, Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Contract or the FTA assisted project for which this Contract Work is being performed.

In addition to other penalties that may be applicable, Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on Contractor to the extent the Federal Government deems appropriate.

Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307 (n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

*Contractor agrees to include the above clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.*

In addition to other penalties that may be applicable, Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on Contractor to the extent the Federal Government deems appropriate.

Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307 (n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

*Contractor agrees to include the above clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.*

### **State Notice Addendum**

The National Cooperative Purchasing Alliance (NCPA), on behalf of NCPA and its current and potential participants to include all county, city, special district, local government, school district, private K-12 school, higher education institution, state, tribal government, other government agency, healthcare organization, nonprofit organization and all other Public Agencies located nationally in all fifty states, issues this Request for Proposal (RFP) to result in a national contract.

For your reference, the links below include some, but not all, of the entities included in this proposal:

[http://www.usa.gov/Agencies/Local\\_Government/Cities.shtml](http://www.usa.gov/Agencies/Local_Government/Cities.shtml)

<http://nces.ed.gov/globallocator/>

<https://harvester.census.gov/imls/search/index.asp>

<http://nccsweb.urban.org/PubApps/search.php>

<http://www.usa.gov/Government/Tribal-Sites/index.shtml>

<http://www.usa.gov/Agencies/State-and-Territories.shtml>

<http://www.nreca.coop/about-electric-cooperatives/member-directory/>

<https://sos.oregon.gov/blue-book/Pages/state.aspx>

<https://portal.ehawaii.gov/government/>

<https://access.wa.gov/government/agencies.html>