

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2021, by and between the County of Lake, hereinafter called "OWNER" and Trane U.S. Inc., hereinafter called "CONTRACTOR".

WHEREAS, COUNTY desires to explore the feasibility of implementing a comprehensive range of energy conservation measures; and

WHEREAS, in accordance with County policy, COUNTY solicited a Request for Qualifications from companies capable of planning, designing, and implementing an energy conservation program, and an evaluation committee determined CONTRACTOR to be the most qualified respondent; and

WHEREAS, CONTRACTOR warrants that it is specially trained, experienced, and competent to perform such services.

NOW, THEREFORE, it is mutually agreed by the parties as follows:

TERMS

1. CONTRACTOR shall perform the following services: Completion of a Preliminary Audit as described in the project proposal related to an energy conservation project for the County of Lake.
2. CONTRACTOR shall complete said services no later than June 30, 2022.
3. The complete contract shall include the following Exhibits attached hereto and incorporated herein: Exhibit A: Request for Qualifications; Exhibit B: Statement of Qualifications; Exhibit C: Feasibility Analysis Authorization.
4. Subject to CONTRACTOR'S satisfactory and complete performance of all the terms and conditions of this Agreement, and upon CONTRACTOR'S submission of an appropriate claim, COUNTY shall pay CONTRACTOR no more than a total amount of \$0.00.
5. CONTRACTOR, at his sole cost and expense, shall obtain and maintain throughout the entire term of this Contract, the insurance set forth in Exhibit A attached hereto.
6. To the fullest extent allowed by law, CONTRACTOR shall defend, indemnify, and hold harmless the COUNTY, its officers, officials, employees and agents from any and all claims, demands, liability, damages, cost or expenses (including but not limited to attorney fees) in law or equity that may at any time arise or be asserted based in whole or in part upon any negligent or other wrongful act or

omission of the CONTRACTOR, its officers, agents, or employees. CONTRACTOR/SUBCONTRACTOR responsibility for such defense and indemnity obligations shall survive the termination or completion of this agreement for the full period of time allowed by law. The defense and indemnification obligations of this agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this agreement.

7. Any SUBCONTRACTOR agrees to be bound to CONTRACTOR and COUNTY in the same manner and to the same extent as CONTRACTOR is bound to COUNTY under the Contract Documents. SUBCONTRACTOR further agrees to include the same requirements and provisions of this agreement, including the indemnity and Insurance requirements, with any SUB-SUBCONTRACTOR to the extent they apply to the scope of the SUB- SUBCONTRACTOR's work. A copy of the COUNTY's Contract Document Indemnity and Insurance provisions will be furnished to the SUBCONTRACTOR upon request.
8. CONTRACTOR shall comply with all applicable laws and regulations, including but not limited to any, which are promulgated to protect the public health, welfare and safety or prevent conflicts of interest. CONTRACTOR shall defend COUNTY and reimburse it for any fines, damages or costs (including attorney fees) that might be incurred or assessed based upon a claim or determination that CONTRACTOR has violated any applicable law or regulation.
9. This Agreement is subject to the County, the State of California and the United States appropriating and approving sufficient funds for the activities required of the Contractor pursuant to this Agreement. If the County's adopted budget and/or its receipts from California and the United States do not contain sufficient funds for this Agreement, the County may terminate this Agreement by giving ten (10) days advance written notice thereof to the Contractor, in which even the County shall have no obligation to pay the Contractor any further funds or provide other consideration and the Contractor shall have no obligation to provide any further services under this Agreement.
10. If CONTRACTOR fails to perform any part of this Agreement, the COUNTY may notify the CONTRACTOR of the default and CONTRACTOR shall remedy the default. If CONTRACTOR fails to do so, then, in addition to any other remedy that COUNTY may have, COUNTY may terminate this Agreement and withhold any or all payments otherwise owed to CONTRACTOR pursuant to this Agreement.
11. Attached are licenses &/or certificates required by CONTRACTOR's profession (Indicating type; No.; State; & Expiration date), and CONTRACTOR certifies that he/she/it shall maintain them throughout this Agreement, and that CONTRACTOR's performance will meet the standards of licensure/certification.

12. CONTRACTOR shall understand that he/she is not an employee of the COUNTY and is not eligible for any employee benefits, including but not limited to unemployment, health/dental insurance, worker's compensation, vacation or sick leave.
13. CONTRACTOR will hold in confidence all information disclosed to or obtained by CONTRACTOR which relates to activities under this Agreement and/or to the COUNTY's plans or activities. All documents and information developed under this Agreement and all work products, reports, and related data and materials shall become the property of the COUNTY. CONTRACTOR shall deliver all of the foregoing to the COUNTY upon completion of the services hereunder, or upon earlier termination of this Agreement. In addition, CONTRACTOR shall retain all of its own records regarding this Agreement and the services provided hereunder for a period of not less than four (4) years, and shall make them available to COUNTY for audit and discovery purposes.
14. This Agreement constitutes the entire agreement of the parties, and no other agreements or representations, oral or written, have been made or relied upon by either party. This Agreement may only be amended in writing signed by both parties, and any other purported amendment shall be of no force or effect. This Agreement, including all attachments, shall be subject to disclosure pursuant to the California Public Records Act.
15. This Agreement shall be deemed to be executed within the State of California and construed in accordance with and governed by laws of the State of California. Any action or proceeding arising out of this Agreement shall be filed and resolved in a California State court located in Lakeport, California.

[illegible]

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement on the date first above written.

COUNTY OF LAKE

CONTRACTOR

By: _____
Chair, Board of Supervisors

By:  _____

ATTEST: CAROL J. HUCHINGSON
CLERK OF THE BOARD
OF SUPERVISORS

Name: Robert Wax

Title: Regional Director - Comprehensive Solutions

By: _____

Mailing Address: _____

4145 Delmar Avenue

Rocklin CA 95677

APPROVED AS TO FORM:
ANITA L. GRANT
County Counsel

By:  _____

EXHIBIT A

(Lake County Request for Qualifications)



Notice of Request for Qualifications (RFQ)
For
Energy Conservation Performance Contract

Responses Due:
3:00pm
Thursday, February 27, 2020

Lake County Public Services Department
333 Second Street
Lakeport, CA 95453

RFQ Coordinator: Lars Ewing
(707) 262-1618

Energy Conservation Performance Contract RFQ

Section	Section Title	Page
I.	Scope of Work	3
II.	RFQ Schedule of Events	7
III.	General Instructions & Information	8
IV.	Terms and Conditions	12
Exhibit A	Insurance Requirements	

SECTION I. SCOPE OF WORK

A. STATEMENT OF PURPOSE:

The County of Lake (County) is requesting Statements of Qualifications (SOQs) from Energy Services Companies (ESCOs) capable of planning, designing, and implementing an energy conservation project for the County according to the Scope of Work (SOW) outlined in this RFQ.

Offerers who submit a response to this RFQ must have the ability to meet the requirements, including the terms and conditions contained in this RFQ.

B. SCOPE OF WORK

1. GENERAL DESCRIPTION:

The County is exploring the feasibility of implementing a comprehensive range of energy services and energy related capital improvements using a performance-based contract with guaranteed savings or similar type of approved agreement per the requirements of California Government Code 4217.

The annual savings from the Energy Conservation Measures (ECMs) proposed by the offer shall be capable of financing the project at a term that is favorable to the County. The County reserves the right to pay for the project from local funds, grants, bonds, or in a manner that the County prefers. It may be necessary for the successful ESCO to either provide funding or arrange third party funding for the performance-based contracting project. The cost savings achieved by the installed improvements need to be sufficient to cover all project costs including annual maintenance and/or monitoring fees over the life of the equipment and/or the financing term. The County may require the annual energy savings to be financially guaranteed by the installing ESCO.

The selected ESCO shall perform a comprehensive energy analysis listing ECMs for consideration with estimated cost benefit analyses, financing services, design development preliminary scope, an implementation plan including Monitoring & Verification (M&V) plan and an energy program financial proforma. The County intends to use County staff to complete construction of as many of the identified ECMs as possible, with the anticipation that larger projects such as solar photovoltaic systems and associated battery storage will be constructed by the ESCO.

A point of emphasis is the preparation of applications for the Self Generation Incentive Program (SGIP). This includes project planning necessary to identify suitable projects for SGIP.

The anticipated scope of services includes the following:

a. **Audit and Project Development Phase**

The selected ESCO will be expected to perform a technical energy audit and project development planning. This phase will include an evaluation of the estimated costs and potential energy savings of a variety of energy conservation and alternative energy generation measures. The ESCO will recommend projects to the County on the basis of the audit.

After consultation with the County as to which projects the County desires to undertake, the ESCO will develop a project plan that will be the basis for the next phase. The County prefers that the costs of this phase be incorporated in the overall project costs, and that the County be invoiced separately for this phase of work only if a decision is made not to proceed with the recommended projects.

b. **Financing Phase:** Identify and secure financing for the project, or cooperate with the County to secure financing. Consideration shall be given for Direct Purchase, Power Purchase Agreement (PPA), and Lease/Purchase, including all costs, fees, operation and appropriate maintenance. The County prefers Direct Purchase, when possible, but due to budgetary constraints must consider all options. For photovoltaic or other alternative energy systems,

pricing must include all aspects of providing turnkey systems. Production estimates shall accurately reflect location and shall be performed for each site being proposed.

The following information shall be submitted with this phase:

- i. Describe the buyout process for the PPA and Lease/Purchase options, including earliest available date of buyout and total cost of buyout of entire system as installed, per site.
- ii. Identify the firm's assumptions of escalation, panel output degradation and any other factors that may impact the total cost of this work.
- iii. If applicable, alternative financing option(s) beyond Direct Purchase, PPA, or Lease/Purchase. Describe terms and conditions, and indicate costs and benefits to Participants of proceeding with alternative financing.

c. Construction and Implementation Phase

- iv. Design and specification of energy efficient equipment and systems.
- v. Equipment procurement.
- vi. Construction management.

d. Commissioning/Guarantee Monitoring Phase:

- i. Commissioning of all installed equipment and systems.
- ii. Staff training on routine maintenance and operation of installed systems.
- iii. Monitoring and verification for measurement and reporting of the performance and savings from improvements.
- iv. Monitoring and reporting of emissions reductions.

e. A registered professional engineer in each trade must, at a minimum, review, approve, and sign/seal design work done under the contract.

f. The ESCO will be required to work with the County's building management and maintenance personnel in order to coordinate construction and provide appropriate training to County personnel. No equipment shall be installed which would necessitate the County hiring additional personnel.

g. The ESCO must provide three (3) sets of record drawings of all existing and modified conditions associated with this project, conforming to typical engineering standards. These should include architectural, mechanical, structural, and control drawings and operating manuals. Drawings must be provided to the County within 30 days of the completion of installation.

h. The ESCO will provide maintenance manuals and manufacturer product data for each installed system.

i. The ESCO shall advise County of available rebates and incentives as well as additional sources of federal, state, and other funding that may be available to the County.

j. Upon completion of the final contract, the ESCO shall provide the County a single five (5) year comprehensive schedule of necessary preventative maintenance for all installations.

3. CONTENT OF STATEMENT OF QUALIFICATIONS (SOQ):

The format and content of the SOQ shall be as follows. SOQs must be submitted in the legal entity name of the organization or individual submitting and signed by an authorized agent, as outlined. Unsigned SOQs will be disqualified.

a. Qualifications & Experience:

- 1) Provide information that describes your company's experience with providing the services described in this request for qualifications.

- 2) Describe the technological services/solutions provided by your company. Describe some of the technologies the County might expect would be implemented under the project.
 - 3) Describe your firm's expertise in applying for and securing financing and funding for projects. Include the methodologies that may be used to verify and guarantee the County's realized energy savings & information on the financial soundness and stability of ESCO.
 - 4) Demonstrate experience and capacity to partner with the County through all phases of any contracted projects, to include possession of the necessary skills to meet the Technical Specifications listed in this RFQ.
 - 5) Submit Resumes and any other information describing the capabilities and experience of the people who will be involved in this project.
- b. **References:** Provide a list of at least three (3) project references implemented by your company for local California public agencies in the last five (5) years. The below format & information shall be used when describing each project. Limit your responses to no more than one page per project.
- 1) Project title and location
 - 2) Nature of firm's responsibility
 - 3) Name, address, and telephone number of contact person
 - 4) Current Status
 - 5) Energy conservation opportunities implemented
 - 6) Describe guarantee performance for portfolio of projects.
- c. **Development, Management and Implementation:**
- 1) Describe your company's proposed management approach to this project. Include information on project management and scheduling. Address areas that are self-performed.
 - 2) Describe your ability to locally manage the project.
 - 3) Describe your history and capabilities in the State of California and focus on solutions for Counties.
- d. **Demonstrated Competence/Responsibility:**
- 1) Describe any unique qualities and/or capabilities of your firm that would benefit the County and its projects including but not limited to risk and/or safety.
 - 2) Describe ongoing training, maintenance and operation services.
 - 3) Have you ever defaulted on a contract? If yes, where and why.
 - 4) Has your firm ever been suspended or debarred by any government agency? If yes, please explain.
 - 5) In the past five (5) years has any claim against your company concerning your company's work on a project been filed in court or arbitration?
 - 6) Preference shall be given to U.S. Department of Energy qualified ESCOs or National Association of Energy Services Companies (NAESCO) accredited ESCOs
- e. **Fee Schedule** Provide your company's cost proposal for the Audit and Project Development Phase only. Include approach to project fees, current hourly rates and all other information about service fees or other billable costs.

C. DEADLINE FOR STATEMENT OF QUALIFICATIONS (SOQ):

SOQs shall be submitted no later than the deadline time and date detailed in the Section II, RFQ Schedule of Events. Offerers shall respond to the written RFQ and any exhibits, attachments, or amendments. An Offerer's failure to submit as required before the deadline shall cause the SOQ to be disqualified. Late SOQs shall not be accepted nor shall additional time be granted to any potential Offerer.

D. SUBMITTING STATEMENT OF QUALIFICATIONS (SOQ):

Send one (1) original and (4) identical copies of your SOQ signed in ink, sealed, and received by the due date and time at **County of Lake Public Services Department, 333 Second Street, Lakeport, CA**

95453 ATTN: Lars Ewing, with the markings on the outside of the sealed envelope “Energy Conservation Performance Contract”. Faxed submissions are not acceptable.

Offerors who send SOQs by mail or by other delivery service are cautioned to allow adequate delivery time to ensure timely receipt of their SOQ. The County is not responsible for any delays caused by the Offeror’s chosen means of SOQ delivery. Late SOQs shall not be accepted nor shall additional time be granted to any potential Offerer.

E. ADDENDA:

Any additional information not included in this solicitation which the County finds necessary and material to responding to the RFQ will be posted as an addendum on the County of Lake Bids & RFP’s page, <http://www.lakecountyca.gov/Business/WithCounty/RFP.htm>.

SECTION II. RFQ SCHEDULE OF EVENTS

The following RFQ Schedule of Events represents the County's best estimate of the schedule that shall be followed. Unless otherwise specified, the time of day for the following events shall be between 8:00 a.m. and 5:00 p.m., Pacific Time.

The County reserves the right, at its sole discretion, to adjust this schedule as it deems necessary. Notification of any adjustment to the Schedule of Events shall be provided through the County of Lake Bids & RFP's page. The County is not responsible for failure of the prospective Offerers to check for any RFQ document updates, changes, or answers to questions posted at the website. Failure to periodically check the website will be at the Offeror's sole risk.

	EVENT	DATE	TIME
1	County Issues RFQ	1/27/2020	
2	Deadline for Written Comments	2/14/2020	5:00pm
3	County Issues Responses to Written Comments	2/19/2020	5:00pm
4	Deadline: Statement of Qualifications Due	2/27/2020	3:00pm
5	County Completes Evaluations	Early March	

III. GENERAL INSTRUCTIONS AND INFORMATION

A. RFQ COORDINATOR

The following RFQ Coordinator shall be the main point of contact for this RFQ:

Lars Ewing, Lake County Public Services Director
333 Second Street
Lakeport, CA 95453
Phone: (707) 262-1618

B. COMMUNICATIONS REGARDING THE RFQ

Upon release of this RFQ, all communications concerning this procurement must be directed to the RFQ Coordinator named above. Unauthorized contact regarding the RFQ with other County employees of the procuring county agency may result in disqualification.

Questions concerning this RFQ, including specifications, requirements, terms and/or conditions of a solicitation, etc. should be submitted solely in writing via email to facilities@lakecountycalifornia.gov no later than the date and time noted above in the Section II.

Any oral communications shall be considered unofficial and nonbinding on the County.

Any irregularities or lack of clarity in the RFQ should be brought to the attention of the County for correction or clarification.

C. SOQ PREPARATION COSTS

The County shall not pay any costs associated with the preparation, submittal, or presentation of any SOQ.

D. SOQ WITHDRAWAL

To withdraw a SOQ, the Offeror must submit a written request, signed by an authorized representative, to the RFQ Coordinator. After withdrawing a previously submitted SOQ, the Offeror may submit another SOQ at any time up to the deadline for submitting SOQs.

E. SOQ AMENDMENT

The County shall not accept any amendments, revisions, or alterations to SOQs after the deadline for SOQ submittal unless the County formally requests such in writing.

F. SOQ ERRORS

Offerers are liable for all errors or omissions contained in their SOQ. Offerers shall not be allowed to alter SOQ documents after the submittal deadline.

G. ASSIGNMENT AND SUBCONTRACTING

The Contractor may not subcontract, transfer, or assign any portion of the contract without prior, written approval from the County. The County must approve each subcontractor in writing. The substitution of one subcontractor for another may be made only at the discretion of the County and with prior, written approval from the County.

Notwithstanding the use of approved subcontractors, the Offeror, if awarded a contract under this RFQ, shall be the prime contractor and shall be responsible for all work performed.

Contractor shall require each of its subcontractors of any tier to carry the coverage specified herein, or Contractor may insure subcontractors under its own policy.

H. PROPOSAL OF ADDITIONAL SERVICES

If an Offeror indicates an offer of goods or services in addition to those required by and described in this RFQ, these additional goods or services may be added to the contract before contract signing at the sole discretion of the County.

I. INSURANCE

The successful Contractor will be required to provide and maintain insurance as required and listed in Exhibit "A" before commencing work on the contract.

J. LICENSURE

Before a contract pursuant to this RFQ is signed, the Offerer must hold all necessary, applicable business and professional licenses. The County may require any or all Offerers to submit evidence of proper licensure.

K. RFQ AMENDMENT AND CANCELLATION

The County reserves the unilateral right to amend this RFQ in writing at any time. The County also reserves the right to cancel or reissue the RFQ at its sole discretion. If an amendment is issued it shall be provided to all Offerors through the County's Bids and RFP's website. Offerors shall respond to the final written RFQ and any exhibits, attachments, and amendments.

L. RIGHT OF REJECTION

The County reserves the right, at its sole discretion, to reject any and all SOQs or to cancel this RFQ in its entirety.

Any SOQ received which does not meet the requirements of this RFQ may be considered to be nonresponsive, and the SOQ may be rejected. Offerors must comply with all of the terms of this RFQ and all applicable State and County laws and regulations. The County may reject any SOQ that does not comply with all of the terms, conditions, and performance requirements of this RFQ.

The County reserves the right, at its sole discretion, to waive variances in proposals provided such action is in the best interest of the County. Where the County waives minor variances in proposals, such waiver does not modify the RFQ requirements or excuse the Offerer from full compliance with the RFQ. Notwithstanding any minor variance, the County may hold any Offerer to strict compliance with the RFQ.

M. DISCLOSURE OF SOQ CONTENTS

To the fullest extent allowed by law, SOQs will not be public record until discussion and negotiations with Offeror have been completed, as such premature disclosure would jeopardized the County's and the Offerors negotiating interests. If any SOQ contains trade secrets or other information that is confidential or proprietary by law, Offeror shall label all such pages with a stamped annotation such as: "CONFIDENTIAL-PROPRIETARY TRADE SECRETS, DO NOT DISCLOSE", and further, provide written notification to the County of its request to keep said information confidential. An Offeror's request for confidentiality must be made in writing and enclosed in the envelope containing the SOQ. The proprietary or confidential data must be readily separable from the SOQ in order to facilitate eventual public inspection of the non-confidential portion of the SOQ.

N. SOQ EVALUATION PROCESS

The County has designed this procurement process to adhere to the intent and processes of California Government Code 4217. The evaluation process is designed to identify the Offeror with the best combination of attributes for that process. A Consultant Selection Board maybe convened to review,

discuss and rank the SOQs. Prior to final selection, a short list of qualified and responsive Offerors may be requested to participate in an interview. The purpose of the interview will be to provide an opportunity for each Offeror to present their qualifications in person and/or to answer any questions that County staff may have regarding the SOQ. If interviews are to be held, the time and place of the interview will be arranged after the short list is completed. Typically a minimum of three (3) Offerors will be selected for the Short List; however, the County may, at its option, choose to interview more or less than three (3) qualified Offerors or select consultants based solely on evaluating SOQs.

If an agreement cannot be reached with the top ranked Offeror(s), the County will then contact the next highest ranked firm and attempt to negotiate a contract scope of work and fee. This process will be continued until a contract scope of work and fee is successfully negotiated, or until the County determines to cease negotiations with any firm.

County reserves the right to select multiple contractors.

The County reserves the right, at its sole discretion, to request clarifications of SOQs or to conduct discussions for the purpose of clarification with any or all Offerors. If clarifications are made as a result of such discussion, the Offeror shall put such clarifications in writing.

O. SELECTION OF ESCO

The Offeror offering the most advantageous qualifications after consideration of all evaluation criteria set forth below may be selected for an Energy Conservation Performance contract. Criteria are not listed in accordance with relative importance. The County reserves the right to establish relative weight of the criteria depending on the order of importance. The County shall not be obligated to select the ESCO proposing the apparent lowest costs, but will make an award in the best interests of the County after all factors have been evaluated.

Award Evaluation Criteria:

- a. Comprehensive Energy Conservation Project Experience [25 points]
 - 1) Quantity and quality of energy conservation projects in California
 - 2) Proven track record of completing successful projects
 - 3) Strength of California County references
- b. Solar Project Experience [25 points]
 - 1) Quantity and quality of solar energy projects in California
 - 2) Proven track record of completing successful projects
 - 3) Strength of California County references
- c. Proposed Project Team's Experience [25 points]
 - 1) Overall experience in successfully completing solar energy projects
 - 2) Breadth of capabilities to support successful implementation of project
- d. Financial Strength and Stability [10 points]
 - 1) Overall financial strength of firm
 - 2) Bonding capacity
- e. Project Financing Expertise
 - 1) Project financing experience
 - 2) Experience with different financing methods
- f. Public Relations Expertise

- 1) Experience with community outreach

P. APPEAL PROCEDURE

Recommendations or decisions may be appealed by writing a letter to the Board of Supervisors or Purchasing Agent, as applicable, detailing the basis of the appeal. Appeals must be filed within 72 hours of receiving notification of the Recommendation for award of the contract, or prior to an actual contract award by the Board of Supervisors, whichever occurs first. Any appeal will be heard before the Board of Supervisors on the same day as the approval of the proposed contract with the recommended Offeror.

IV. TERMS AND CONDITIONS

A. NON-WAIVER:

The County's failure to address errors or omissions in a SOQ shall not constitute a waiver of any requirement of this RFQ by the County.

B. FEDERAL, STATE, AND LOCAL LAWS:

The successful Offerer must operate in conformity with all applicable, federal, state, and local laws, ordinances, orders, rules, and regulations pertaining to work. It is the responsibility of the awarded offerer to ensure that all permits and/or licensees required for operation are valid and current. Failure to comply with this provision may be cause to cancel any contract awarded, and award may be made to the next lowest, responsive, responsible Offerer.

C. GOVERNING LAW:

If an award is made, the contract will be made in the County of Lake and shall be governed and construed in accordance with the laws of the State of California. Any action relating to the Contract shall be instituted and prosecuted in the courts of Lake County, California.

D. COMPLIANCE:

Late, incomplete, incorrect deliveries or excessive backorders will be documented, and performance evaluated when considering contract continuation or extension. Inaccurate or erroneous billing will also be documented and monitored for the purpose of evaluating performance when considering continuation or extension of contract. Failure to meet quoted delivery timeframes, or inaccurate or erroneous invoices (as determined by the County) may be cause for the County to cancel the balance of the awarded purchase order and award will be made to the next lowest offerer. Failure to receive County concurrence for substitutions or alternates will be documented and considered when evaluating continuation or extension of contract.

E. DEFAULT:

In case of default by the awarded offerer, the County may procure the goods or services from another source and may recover the loss occasioned thereby from any unpaid balance due the selected offerer, or by any other legal means available to the County. The County may also ban selected offerer up to two years from future solicitations for default.

F. TERMINATION FOR CONVENIENCE:

The County reserves the right, in its best interest as determined by the County, to cancel any contract by giving written notice to the Contractor thirty (30) days prior to the effective date of such cancellation.

G. CANCELLATION FOR UNAPPROPRIATED FUNDS:

The obligation of the County for payment to a Contractor is limited to the availability of funds appropriated in a current fiscal period, and continuation of the contract into a subsequent fiscal period is subject to appropriation of funds, unless otherwise authorized by law.

H. ASSIGNMENT/TRANSFER/SUBCONTRACTING:

Awarded Contractor shall not assign, transfer, or subcontract any portion of the contract without the express written consent of the department. Any award issued pursuant to this RFQ, and the monies, which may become due hereunder, are not assignable without the prior written approval of the County.

I. EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

The County of Lake is an Equal Opportunity/Affirmative Action Employer and the successful Consultant(s) will be required to comply with the provisions of Federal Executive Order 11246 and applicable state and federal laws. Consultants should be familiar with the Employers' Practical Guide to Reasonable Accommodations under the Americans with Disabilities Act as published by the Job Accommodation Network, a service of the U.S. Department of Labor's Office of Disability Employment Policy.

INSURANCE REQUIREMENTS

- (A) **Compensation Insurance:** Contractor shall procure and maintain, at Contractor's own expense, during the term hereof, Workers' Compensation Insurance and Employer's Liability Insurance as required by the State of California, for all employees to be engaged in work. In case any such work is sublet, Contractor shall require subcontractor similarly to provide Employer's Liability and Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by Contractor's Workers' Compensation Insurance. Employer's Liability Insurance shall be in an amount not less than \$1,000,000 per occurrence
- (B) **Commercial General Liability:** Contractor shall procure and maintain, at Contractor's own expense during the term hereof, upon himself and his employees at all times during the course of this Contract, Commercial General Liability Insurance (Occurrence Form CG 00 01), for bodily injury, personal injury and property damage, in an amount of not less than one million dollars (\$1,000,000) combined single-limit coverage per occurrence including but not limited to endorsements for the following coverages: premises-operations, products and completed operations, property damage, bodily injury and personal & advertising injury blanket contractual, and independent contractor's liability.
- (C) **Automobile Liability Insurance:** Contractor shall procure and maintain, at Contractor's own expense during the term hereof, Comprehensive Automobile Liability Insurance, both bodily injury and property damage on owned, hired, leased and non-owned vehicles used in connection with Contractor's business in an amount of not less than one million dollars (1,000,000) combined single-limit coverage per occurrence.
- (D) **Subcontractors:** Contractor shall include all subcontractors as insureds under the aforesaid policies or shall furnish separate certificates and endorsements for each subcontractor to County for review and approval. All coverages for subcontractors shall be subject to all of the requirements hereinabove and contain the additional insured endorsement required by Contractor hereinafter.
- (E) **Additional Insured Endorsement:** The Commercial General Liability and automobile policies are to contain, or be endorsed to contain, the following provisions:
1. The County, its officers officials employees, agents and volunteers are to be covered as additional insureds and shall be added in the form of an endorsement to Contractor's insurance at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used. All coverage available to the Contractor shall also be available and applicable to the County. Any available insurance proceeds in excess of the specified minimum limits and coverage shall be available to the County. Contractor shall not commence work under this Contract until he has had delivered to County the Additional Insured Endorsements required herein.
 2. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.
- (F) **Other Insurance Provisions:**

1. For any claims related to this contract, the Contractor's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the County, its officers officials employees, agents and volunteers. Any insurance or self-insurance maintained by County, its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with Contractor's insurance. Any excess insurance by Contractor shall contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the County before the County's own primary Insurance policy or self-insurance shall be called upon to protect the Contractor.
2. Any deductibles or self-insured retentions must be declared to and approved by County. At the option of County, either: Contractor shall reduce or eliminate such deductibles or self-insurance retentions; or Contractor shall provide a financial guarantee satisfactory to County guaranteeing payment of losses and related investigations, claim administration and defense expenses.
3. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII.
4. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor shall it preclude Contractor from taking other actions as is available to it under any other provision of the Contract or law. Failure of County to enforce in a timely manner any of the provisions of this section shall not act as a waiver to enforcement of any of these provisions at a later date.
5. If any insurance coverage required by the Contract is provided on a "Claims Made", rather than "occurrence" form, Contractor agrees to maintain required coverage for a period of three years after the expiration of this Contract (hereinafter, "Post Agreement Coverage") and any extensions thereof. Contractor may maintain the required Post Agreement Coverage by renewal or purchase of prior acts or tail coverage. This subprovision is contingent upon Post Agreement Coverage being both available and reasonably affordable in relation to the coverage provided during the term of this Contract. For purposes of interpreting this requirement, a cost not exceeding 100% of the last annual policy premium during the term of this Contract in order to purchase prior acts or tail coverage for Post Agreement Coverage shall be deemed to be reasonable.
6. Contractor agrees to waive all rights or subrogation against County, its officers, officials, employees, agents, and volunteers for losses arising from work performed by Contractor under this Contract.

EXHIBIT B

(Trane Statement of Qualifications)



Trane U.S. Inc.
4145 Delmar Avenue
Rocklin, CA 95677
(916) 849-2911

February 27, 2020

Lars Ewing
RFQ Coordinator
Lake County Public Services Department
333 Second Street
Lakeport, CA 95453

RE: RFQ for Energy Conservation Performance Contract

Dear Mr. Ewing and Selection Committee:

Trane U.S. Inc. is pleased to submit the enclosed qualifications to Lake County for an Energy Conservation Performance Contract. This proposal will demonstrate that Trane has the technical qualifications, highly experienced local team, and strong backing of a global \$16.5 billion corporation to fully support your project.

By virtually any measure, the state of the energy market is changing faster in California right now than at any time in recent memory. From Time of Use period change, to Public Safety Power Shut-offs, to PG&E's bankruptcy and the rise of Community Choice Aggregators, changes are both widespread and deep. For a customer considering an energy project, broad and deep partner experience is paramount. Our ESCO group brings not only their own considerable expertise, but that of the whole Trane team, including finance, technology, regulatory affairs, wholesale energy market participation and grant writing, just to name a few. Harnessing this broad experience gives Lake County the best chance for a great project today – and tomorrow.

Trane has been helping customers keep their facilities comfortable and cost-effective since 1913. For the past 25 years, we have been offering performance contracting services that align with this solicitation. Trane offers the full range of energy services, including traditional energy and water conservation measures, renewable technologies, energy procurement and utility management services, power generation, and remote monitoring of your critical building systems. We'll provide whatever level of support you need.

Thank you for your consideration in reviewing our response to this RFQ. We look forward to discussing your needs in detail and being selected as your energy partner for this new initiative.

Sincerely,

Reggie Ingram
Regional Executive-Comprehensive Solutions
(916) 751-0853
Reggie.Ingram@trane.com



Trane U.S. Inc.
4145 Delmar Avenue
Rochester, CA 95677
(888) 849-2911

Full Access Only



Table of Contents

A. Qualifications and Experience	1
California Public Sector Energy Services Projects	2
1. Trane's Performance Contracting Experience	3
2. Technological Services and Solutions	15
3. Project Financing Expertise	29
4. Trane-Lake County Partnership	34
5. Project Team Resumes	37
B. References	45
C. Development, Management and Implementation	51
1. Proposed Management Approach	51
2. Local Management Ability	58
3. Trane's California History and Capabilities	58
D. Demonstrated Competence / Responsibility	61
1. Unique Qualities and Capabilities	61
2. Training, Maintenance and Operation Services	79
3. Contract Defaults	84
4. Suspension or Debarments	84
5. Court Claims or Arbitration	84
6. NAESCO Accreditation	85
E. Fee Schedule	87
Contract Comments	89
Award Evaluation Criteria Matrix	91





A. Qualifications and Experience

Trane is uniquely qualified to partner with Lake County as an Energy Services Contractor (ESCO) because of the integrated and multifaceted capabilities of our team. The basic concept of an ESCO project for a public sector client is to harness cash flow from energy-related financial impacts to pay for needed capital upgrades independent of the budget. However, with the California energy marketplace undergoing enormous and rapid change, the traditional ESCO model faces increased uncertainty.

California energy market changes directly impact the ability of any energy project to cash-flow positive today and to remain profitable into the future, but it also opens significant new opportunities as well. Just as technology measures that were profitable for many years may suddenly be less so in the future, other options that have not made sense in the past may be the right answer going forward. It is only by partnering with an ESCO that understands all aspects of this evolving market and available technologies that a customer like Lake County can examine its many available options, and provide decision-makers the understanding they need to make an informed, optimized and risk mitigated choice.

Trane's hard-won, cross-functional knowledge is neither an accident nor easily replicated. Trane has been an innovator in multiple different energy technologies for decades. Our staff [REDACTED]

All of these areas of knowledge are then combined with traditional ESCO contracting capabilities to convert theory to cash flow opportunities, and to convert opportunities to completed projects. This combination of deep market, technology and contracting knowledge is what differentiates Trane as an ESCO, and is described in much greater detail in Section D.1: Unique Qualities and Capabilities of this response.

While it is important to note that choosing Trane as an ESCO allows access to tremendous depth and breadth of market and equipment knowledge, it is just as important to note that the process of developing an ESCO project with Trane is collaborative. Our projects are built from the ground up – by working closely with the customer's team – not forced from the top down. The solutions we develop through teaming with our customers are specific to their needs, not a one-size-fits-all solution imposed from above.

The essential point when considering the broad experience of our team is not that we know in advance that a [REDACTED] is the best choice for Lake County before the analysis even begins; it is to say that the interests of Lake County are best served by partnering with an ESCO that has the ability to analyze all available options, and a unified spectrum of energy capabilities is what we bring to our ESCO customers.

As an ESCO contractor, Trane brings the reliability that comes from having completed [REDACTED] just the last few years, decades of ESCO experience,



and the balance sheet of a major, international, energy-focused firm. In our ESCO projects, we typically provide all required analysis, engineering, finance, procurement, construction and start-up services needed to deliver self-funded turn-key energy projects, all while maintaining a single point of contact and guaranteeing performance.

In addition to showing we know how to successfully complete projects to public sector standards in general, our California team has the specialized expertise, local experience, licensing and personnel needed to complete any type of work likely to be appropriate for Lake County – from basic efficiency and [REDACTED]. For example, there are hundreds of firms that could complete the relatively simple paperwork needed to request interconnection for a carport solar PV project, but there are far fewer firms that would know how to participate in the much more involved process around connecting a [REDACTED] the grid, should that asset be a good choice for Lake County.

California Public Sector Energy Services Projects

Project	Type	Date booked	Value	Notes



1. Trane's Performance Contracting Experience

Provide information that describes your company's experience with providing the services described in this request for qualifications.

For more than a century, Trane has been synonymous with technology that maximizes the comfort and energy efficiency of commercial buildings.

Founded in 1913, the company quickly expanded from a heating systems manufacturer to an air conditioning pioneer. Trane entered the building automation system market in 1978 and was the first to offer integrated controls for all of its products.

We significantly broadened our HVAC and controls system expertise in 1995 by offering a comprehensive range of energy services. Since then, Trane has implemented thousands of facility upgrade initiatives for clients throughout North America. Actual savings from our performance contracting projects exceed the guaranteed amount [REDACTED] and these extra savings flow directly to our customers.

Our engineers, project managers and other professionals are well-versed in all traditional energy and water conservation measures, as well as [REDACTED]. In addition to reducing costs, we improve the reliability or expand the capability of your existing infrastructure and building systems.

We can also help optimize [REDACTED] large organizations. And, we support our customers for life through expert maintenance services and HVAC parts support.



NAESCO Accreditation

Trane earned accreditation as an Energy Services Company (ESCO) in 2004 from the National Association of Energy Services Companies (NAESCO) and has retained accreditation every year since then. NAESCO has determined that Trane provides its customers with demonstrated competency and accepted industry practices proven to deliver successful projects. This is a testament to our core competencies in all energy-related technical and business disciplines.



US DOE Qualified

Trane is a qualified U.S. Department of Energy ESCO. We have managed energy services performance contracting (ESPC) programs for several federal government agencies, including the Department of Energy, Department of State, Navy, Army, Air Force, and the General Services Administration. Trane's Federal ESPC portfolio includes [REDACTED] million in DOE ESPC projects. We are delivering more than [REDACTED] in annual guaranteed savings – [REDACTED] million in guaranteed savings over the life of all [REDACTED] contracts.

Under the scope of these projects, we have saved the federal government more than [REDACTED] in energy, with an average reduction of [REDACTED] from the baseline. Our projects have received multiple awards, including the Federal Energy Management Program Award of the Year and the Presidential Award for Leadership in Federal Energy Management.





Other Industry Participation

Trane is well represented in the majority of professional organizations within the heating, ventilation and air conditioning (HVAC) industry. ASHRAE, BOMA, IFMA and ASME are among the prominent organizations in which Trane maintains a leadership position in promoting and developing quality standards. We are also active participants in the U.S. Green Building Council and the U.S. Environmental Protection Agency's Energy Star program.

Multi-Phase Performance Contracting Projects

Trane has been implementing performance contracting projects similar to this opportunity since 1995. The vast majority of these contracts have been with public agencies. Many customers have engaged Trane in multiple ESPC projects because they were satisfied that we lived up to our promises. These [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Award-Winning Performance Contracting Projects

Several of Trane's performance contracting projects have won awards from external sources. Here are just a few [REDACTED]

[REDACTED]



The table below includes a representative sample of our Local Government performance contracting projects since 2015:

[illegible]



Renewable Energy and Power Solutions

Trane's Renewable Energy and Power Solutions team is highly skilled at designing and implementing renewable energy technologies that can protect your organization against fluctuating fossil fuel prices. These include solar photovoltaic, solar thermal, cogeneration systems, geothermal heat pumps, biomass, biogas and wind power technologies.

A growing number of building owners are also increasing their electric load flexibility, energy independence or resiliency by implementing distributed energy resources (DER) and energy storage solutions. Our professionals can help you evaluate the benefits of a microgrid, or using thermal or electro-chemical batteries to store energy for use when electric rates are at peak.



Trane will thoroughly explore all possibilities for incorporating renewable energy and power solutions into this project. We have helped many clients throughout North America reduce operating costs and increase their energy independence, including these:

- Solar PV - [REDACTED]
- Solar Hot Water Heating - [REDACTED]
- Geothermal Heat Pumps - [REDACTED]
- Cogeneration - [REDACTED]
- Biomass Heating Plants [REDACTED]
- Biogas - [REDACTED]
- Trane Thermal Battery™ Cooling Systems [REDACTED]



When looking to integrate renewable energy and distributed energy resources (DERs) into your strategic plan, there are many factors to take into consideration: use scenarios, current utility rates, local legislation, incentive programs, and fuel choices driven by geography. Trane can help advance your sustainability goals with an energy solution that lowers your environmental footprint and maximizes financial benefits that may be available through local, state and federal programs such as the Investment Tax Credit (ITC) and accelerated depreciation.

Alternative Fuel Service Vehicles

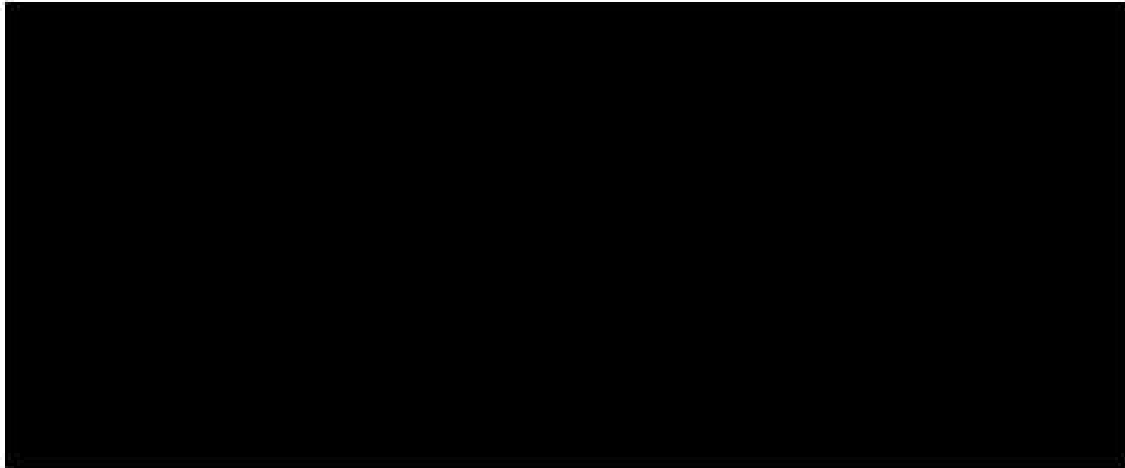
Trane is highly experienced in evaluating the impact of switching from diesel or petroleum to cleaner fuels, including electric vehicles and charging stations. Fleet fuel management is routinely investigated as part of our performance contracting audit process. Here are two examples of how we've implemented alternative fuels for service vehicles.

As part of a performance contract with the [REDACTED], Trane investigated the feasibility of converting their existing fleet of trucks from gasoline to propane. At the time, propane was less than half the cost per gallon of gasoline. As a first step to a phased approach, [REDACTED] converted eight vehicles from gasoline to propane, which has saved more than \$5,000 in annual fuel costs for these vehicles.

Trane designed and installed the US Army's first operational [REDACTED] station, at [REDACTED]. This station serves 55 CNG vehicles and four buses. The project was completed in two phases and received a Secretary of the Army Energy and Water Management Award for Innovative/New Technology in 2018.



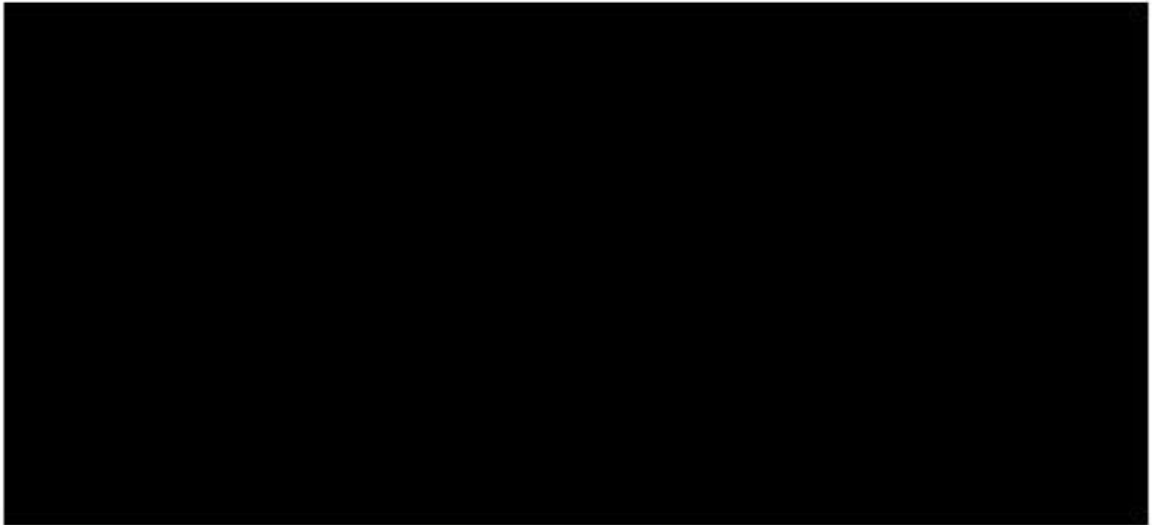
California Solar Power Projects

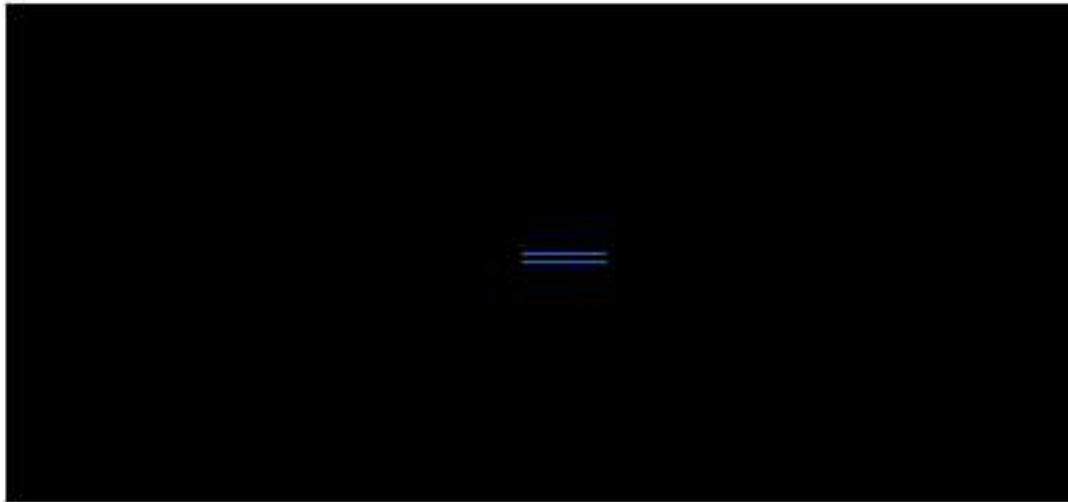




National Solar Power Experience

Following are summaries of selected solar power projects in other states:





Current California Projects

Our California-based team has been responsible for more than \$500 million in performance contracting work since 2009. We have a wide range of clients, including Municipalities, Higher Education, Hospitals and School Districts. We average more than \$50 million in new performance contracting business each year, with custom solutions based on client needs

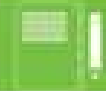
Trane is currently working with multiple cities and counties in California, including [REDACTED] to name a few.

Energy Performance Contracting Approach

Because energy performance contracting projects have a high degree of complexity, we have developed a streamlined process that encourages customer collaboration at every stage – thereby avoiding surprises down the road. **Together, we will make decisions regarding all improvement measures**, how they will be financed, which products and systems will be implemented, and how the results will be measured and reported for the duration of the contract.

The table that follows illustrates Trane's step-by-step approach to developing, implementing and supporting a performance contracting program.

Performance Contracting Services



Initiation

Initiation

Before the start of any project, we work with a broad range of customer stakeholders to determine the customer's wants, needs and issues. Meetings with Facilities staff brings out latent organizational knowledge on equipment status, performance issues, and anticipated capital replacement budgets / timelines. Interaction with Finance personnel identifies issues that they are trying to address – from avoiding upcoming capital expenses, to improving cash flow, to issues that could influence how a project is financed.

Finally, it is sometimes desired to have a working session with senior leaders to discuss what the overall project goals are that we should keep in mind as we develop the project. Examples of goals that we have been directed toward include capital expenditure avoidance, maximizing positive cash flow to the organization, improving resilience, reducing greenhouse gas emissions, or improving local power quality just to name a few.

Defining both the ultimate goals and the current status in advance allows a focused analysis process to start with the foundation that is needed to guarantee an optimized result.



Preliminary Audit

Preliminary Audit

The Preliminary Audit will give our engineers a good indication of the potential for facility improvements and the savings they are likely to generate. These will be subjected to greater scrutiny in the Investment Grade Audit phase.



Preliminary Report

Preliminary Report

The Preliminary Report summarizes the results of the Preliminary Audit and sets the goals for the next phase. Results include measures that are being considered for the final project, anticipated first and operational costs, anticipated savings or revenue, and estimated non-financial metrics such as resilience or GHG impacts.

An important note is that all expenditures up through the Preliminary Report are at Trane's risk, and the customer has no contractual obligation. A positive directive is needed from the customer to move forward with the subsequent Investment Grade Audit, and from this point forward the customer does take on some cost responsibility under certain circumstances.

**Investment
Grade Audit*****Investment Grade Audit***

Once the list of potential improvements identified in the Preliminary Report are authorized to move forward, a more detailed audit – called an Investment Grade Audit (IGA) – will determine which measures best fit the project's financial payback criteria, and which ones should be postponed for future consideration.

**Selection of
ECMs*****Selection of Energy Conservation Measures (ECMs)***

Our engineers have a wealth of experience designing and developing energy and water conservation measures, renewable energy and other technologies, IT infrastructure, fleet management and many others. Together, we will select the ECMs that meet your financial and operational criteria.

**Project
Financing*****Project Financing***

Trane works with strong lenders who understand performance contracting and can obtain the lowest interest rates and most advantageous loan terms. We can help customers secure grants, rebates and other forms of alternative funding for major energy projects.

**Installation
of ECMs*****Installation of ECMs***

You will approve all new equipment, systems and subcontractors long before we mobilize our construction team. We are very experienced in making sure that our installation activities have minimal impact on day-to-day operations.

**Training
Your Staff*****Training Your Staff***

As soon as the final improvement measures are selected, we begin working with your operations management team to structure a training program that will allow your staff to effectively operate the new equipment. We also offer skills enhancement training in other areas, if desired.

**Commissioning*****Commissioning of Systems and Equipment***

Together, we will develop a commissioning plan that will ensure all new systems and equipment are performing as designed. Trane can utilize an in-house or a third-party commissioning agent.

**Turnover
to Owner*****Turnover to Owner***

Once the commissioning process is completed to your satisfaction, Trane receives a signed certification of completion. Our team will then deliver Operations and Maintenance manuals for the new systems and equipment.

**Measuring
Results*****Measuring the Project's Results***

After making a large investment in a wide range of facility improvements, you will want assurance that they are delivering the expected savings. Our measurement and verification (M&V) process is transparent and agreed upon during the project development phase.

**Reporting
Savings*****Reporting the Actual Savings***

Our engineers take periodic measurements of the equipment performance and issue quarterly reports, comparing the actual savings to the guaranteed amount. These figures are reconciled annually. Any excess savings are yours to keep. If actual savings fall short of the guarantee for that year, we will write a check for the difference or provide equivalent services or products (at your discretion).

**Maintenance of
Equipment*****Maintenance of Equipment***

Regular maintenance must be provided on new equipment as long as the performance guarantee is in place. This service can be provided by your staff, by Trane or by a third-party firm. Trane offers one of the HVAC industry's largest and most experienced force of service technicians, who know how to optimize the performance of facility equipment from most manufacturers.

**Additional
Support*****Additional Support***

Our local offices are fully staffed to provide ongoing support for additional HVAC, building automation and control systems, as well as parts and other services that you identify. We are also able to provide a wide range of energy and operational consulting services.

**Advanced Energy
Project Elements*****Advanced Energy Project Elements***

In many ways an Advanced Energy Project (AEP) works like a traditional measure within an overall ESCO project, but there are important differences. It is similar in that an AEP follows a familiar



development path: Preliminary Audit, Preliminary Report, Investment Grade Audit, etc. However, there are several differences that need to be mentioned.

[REDACTED]

[REDACTED]

Ultimately, though, the analysis and development any Advanced Energy Project is similar to our traditional ESCO work in the most important way possible: partnership. Like everything else in our process, we are focused on working together with our partners to achieve energy-related goals. Whether that is a simple project that can be completed in 30 days or an AEP that takes 30 months, our commitment is to be there every step of the way.

2. Technological Services and Solutions

Describe the technological services/solutions provided by your company. Describe some of the technologies the County might expect would be implemented under the project.

As mentioned elsewhere in this document, Trane draws on a vast array of energy-related capabilities when developing ESCO projects. The result of this integrated, broad spectrum analysis effort is the ability to use our unmatched energy market and technology domain knowledge for our clients. To partner with Trane means you will be able to uncover and thoroughly examine technical opportunities most other providers do not even know exist. The Trane way of building an ESCO project is one that involves teaming with the client, starting with a solid foundation of traditional ESCO measures, adding [REDACTED] appropriate, and proposing an individualized unified project package that includes finance, warranty and continuing support.

Foundational Energy Efficiency: The foundation of an ESCO project always starts with an analysis of existing energy-consuming equipment. This involves looking at basic energy



systems such as HVAC, lighting, controls, motors and pumps, just to name a few. In each of these areas, we help our customers analyze many of the financial metrics associated with the current state of their existing energy equipment, including the energy and repair bill savings associated with each measure, the current age of the equipment and expected useful life for equipment of that type, the anticipated cost of replacement, and even the greenhouse gas implications of replacement. Together, these savings and cost data points are combined into a financial analysis for presentation to senior management.

Several points noted elsewhere in this response are included here, as well:

Equipment Manufacturer Neutrality: Although we are proud of the equipment we manufacture, our development process is dedicated to choosing the equipment that is right for each customer and each facility. For example, at Western Placer Unified School District, we replaced over 100 HVAC units with equipment manufactured by Bard instead of equipment manufactured by Trane for a simple reason – the openings in classroom walls were set up for Bard units instead of Trane units.

Delivery Flexibility: Each project is developed individually with a customer, and each project takes into account local capabilities. This can result in substantially different delivery methods for the same measure. For example, in several projects over the last few years we have recommended the installation of LED retrofit kits for indoor lighting due to the savings they can deliver both operationally and on utility bills, but even for the same measure the delivery can be different.

In some cases, the measure was not included in the Trane contract because the customer chose to procure and install the equipment themselves, but relying on Trane to complete and file the incentive paperwork as part of our overall energy project scope. In other cases, the customer wanted to leverage Trane's bulk purchasing power to procure the equipment and further to include it in their finance package, but relied on their own labor for installation. In yet other cases, customers wanted a turn-key solution from Trane, including procurement, installation, finance and warranty. Each of these approaches is supported by the general Trane concept of crafting an ESCO project that is optimized for the situation and capabilities of that specific customer.

[REDACTED]



[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]

Advanced Energy Technologies

At the other end of the spectrum are opportunities classified as Advanced Energy. In Advanced Energy Projects, normal energy systems are modified so that they [REDACTED] performing both a basic function and also delivering a [REDACTED]. All Advanced Energy Projects also involve finding ways to [REDACTED] deliver to the [REDACTED] through one of the many possible variations on this approach.

Often an Advanced Energy project involves the addition of energy storage capacity, which

[REDACTED]

[REDACTED] increases the amount of energy stored.

[REDACTED] by [REDACTED] increasing the amount of energy in the system.

[REDACTED]





[REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]



The case of one of our [REDACTED] clients is instructive. The customer has a [REDACTED] at the end of its useful life and needs to [REDACTED] they were to go with a [REDACTED] they would be lucky to break even over a 20-year period, as [REDACTED] are unlikely to cover [REDACTED]. If the local government instead converts the facility to [REDACTED] project, it is estimated that revenue will exceed [REDACTED] over that same period. Even better, by providing [REDACTED] this project will provide far more benefit to [REDACTED] project than it would as a [REDACTED].

Finally, a word [REDACTED] seems to be in order. As mentioned in far greater detail in the section on Risk Mitigation, [REDACTED] projects suffer from significant issues regarding economics because of [REDACTED]. However, the challenges faced in making economic sense of [REDACTED] does not mean that it is a discredited technology. [REDACTED] is a mature clean technology, it demonstrates reliable performance even when the [REDACTED].

This is even more true when resilience and continuity of operations is a key or even the principal goal of the energy projects at a given site. Instead, what the data shows is that while [REDACTED] choice faces challenges, it is an integral part of an economically viable and risk mitigated solution, particularly when integrated with [REDACTED] and other elements of [REDACTED] project.



Wide Range of Energy Conservation Measures

The table below shows the most common energy conservation measures that Trane explores when developing performance contracting projects. These are among the technologies that Lake County may expect to be included in our project:

Cooling Systems <ul style="list-style-type: none"> • Chiller Replacements • Gas-Fired Centrifugal Chillers • Cooling Towers • Tower-Free Cooling • Thermal Energy Storage • Reclaim A.C. Heat Rejection • Commercial Refrigeration • Pumping Modifications • Data Center Cooling • Distributed Cooling • Chiller-tower optimization • Pressure-independent control valves 	HVAC Systems <ul style="list-style-type: none"> • Air Handler Replacements • Variable Frequency Drives • Variable Air Valve Systems • High-Efficiency Motors • Demand Control Ventilation • Heat Recovery Systems • Exhaust Fans • Fan Coils • Kitchen and Lab Hoods • De-stratification Fans • Convert Constant Flow to Variable Flow • Variable Refrigerant Flow Systems
Heating Systems <ul style="list-style-type: none"> • Boiler Replacements • High-Efficiency Modular Boilers • Condensing Boilers • Geothermal Heat Pumps • Water Source Heat Pumps • Burner Stack Heat Reclaim • Steam Trap Retrofits • Steam Pressure Control • Electric-to-Gas Conversion (fuel switching) • Pumping Modifications • Distributed Heating • Pressure-independent Control Valves • Fuel Switching 	Controls Systems <ul style="list-style-type: none"> • Building Automation Systems • Pneumatic-to-Digital Conversion • Multi-System Integration • Demand Based Ventilation • Demand Limiting • Recommissioning and retro-commissioning • Plug Loads • Walk-in Cooler / Freezer Controls • Air Compressors • Trane Intelligent Services (building performance, energy assessment, remote monitoring, etc.)
Lighting Systems <ul style="list-style-type: none"> • Interior LED Retrofits • Exterior LED Retrofits • Occupancy Sensors • Lighting Controls • Daylight Harvesting • Street Light Retrofits • Exit Signs • High Bay Retrofits 	Renewable Technologies <ul style="list-style-type: none"> • Solar Photovoltaic (PV) • Solar Thermal • Cogeneration • Landfill Gas • Biomass • Wind Turbines
Water Savings <ul style="list-style-type: none"> • Low-Flow Toilets, Urinals and Faucets • Sink Aerators / Flow Restrictors • Flush Valve Fixture Commissioning • Water and Sewage Treatment • Dishwasher Retrofits / Replacements • Side-stream Filtration for Cooling Towers • Ozone Treatment for Laundry • Rain Sensors for Irrigation Systems • High-efficiency Domestic Water Heater • Irrigation Wells 	Other Solutions <ul style="list-style-type: none"> • Central Plant Construction • Central Plant Renovation • Green Roofs • Thin Film Solar Roofing • Emergency Generators • Fleet Management (conversion to compressed natural gas) • Energy Supply Services (demand response, energy procurement, etc.) • Power Factor Correction • Pipe and Tank Insulation • Building Envelope (windows, roofs, weather-stripping, window film, etc.) • Energy Awareness and Behavior Modification



Detailed Process Approaches

The following technological services and solutions will be critical to the success of your project and are detailed in this section:

- Building Auditing Approach
- Project Development Process
- Vendor-Neutral Manufacturer

Building Audit Approach

Preliminary Audit

Auditing a building for energy and operational efficiencies is a highly collaborative process. Our thorough method for collecting information is augmented by your team's insights regarding the building's history and critical needs. Together, we'll develop a solution that achieves your operational priorities and financial criteria.

Many counties face obstacles such as aging infrastructure, making the most of limited funding, shortage of manpower to maintain buildings, indoor air quality concerns, and increasing technology demands. We will start the audit process by taking time to understand your specific goals for this project and the challenges they may present. Our team will evaluate all of these factors and any others that surface in our interviews.

Trane and Lake County will jointly develop a solution that fully achieves the goals set forth for this program.

A Preliminary Audit allows our team to determine potential cost savings related to energy, water and wastewater use, as well as the operations and maintenance of your building systems. We study energy use, comfort requirements, operating efficiency and environmental impact. The information gathered during this initial phase should provide enough data for both of our teams to make an informed decision regarding which energy conservation measures (ECMs) should be researched further in a more detailed audit.

The auditing process involves frequent team meetings and communications to accurately define and confirm the project's scope and direction. Our team members will seek verification and agreement in these key areas:

- General direction and goals of the project
- Scope of ECMs and savings strategies
- Baseline utility and operating cost profiles
- The funding and financial approach



Based on the audit findings, we will provide documentation for your team to review and offer suggestions that will be more fully explored in the Investment Grade Audit phase.

Investment Grade Audit

The next step is to drill deeper and either validate or modify the recommendations presented in the Preliminary Audit report. This is the Investment Grade Audit (IGA), which features an engineering analysis of each building. *An IGA is sometimes referred to as a detailed energy audit.*

All mechanical, electrical and plumbing systems – as well as the building envelope – will be examined in more detail. We will identify the current condition of each facility, the urgency of any necessary improvements, potential for structural envelope changes, financial viability of each improvement measure and potential operational efficiencies that can be captured.

The final IGA report will incorporate feedback from your management team and facility staff so that the project will fully achieve your operational and financial goals.

During the IGA, Trane relies on our customers to provide the following:

- Assist in gathering necessary information as detailed in the table below, including, but not limited to, copies of current utility bills
- Access to contracts in place with utilities for evaluating whether to pursue more favorable terms
- Access to all facilities and escorts, if necessary
- Access to building automation and energy management systems
- Time for interviews with building occupants, maintenance personnel and janitorial personnel to better understand your facilities, how they operate, inherent issues with operation, hours of operation, etc.
- Availability of personnel for strategic meetings

The following information is collected during the Investment Grade Audit...

IGA Categories	Examples of Information Collected
General	<ul style="list-style-type: none">• Obtain copies of building and controls drawings• Interview key building personnel• Review existing energy savings program
Building Envelope	<ul style="list-style-type: none">• Collect building floor plans• Note window, roof types, conditions and age• Note general, readily observable building condition and/or problems
Lighting and Water Systems	<ul style="list-style-type: none">• Detailed room-by-room lighting audit with light level measurements• Detailed room-by-room audit of all water-consuming devices



IGA Categories	Examples of Information Collected
HVAC Systems	<ul style="list-style-type: none">• Inventory all equipment, including nameplate information• Investigate existing direct digital controls (DDC) system and available trend data• Document existing system setpoints• Measure power draw from equipment (fans, pumps, etc.)• Identify existing performance issues with equipment
General Building Equipment	<ul style="list-style-type: none">• Inventory all equipment, including nameplate information• Document equipment schedules• Identify existing performance issues with equipment
Non-Building Equipment Loads	<ul style="list-style-type: none">• Identify all major loads not associated with the building operation, such as computer equipment, kitchen equipment and heat recovery equipment
Utility Bill Analysis	<ul style="list-style-type: none">• Acquire all customer utility billing for the past 36 months• Acquire utility rate schedules• Review utility billing for conformance with rate schedule• Identify opportunities to change rate schedule or utility provider• Provide comparison of energy <u>usage-to</u> similar facilities in the same geographic area
Hazardous Materials Assessment	<ul style="list-style-type: none">• Interview customer staff to identify any known hazmat conditions• Collect and review any previously completed assessments or studies conducted for customer• Complete assessment of facilities (define/identify areas of potential concern)• Create an agreed upon plan to handle situations

Upon acceptance of the IGA results, Trane will finalize the project design in partnership with Lake County. We will work closely with your team to prioritize needs and determine areas of concentration. At this point, the engineering and design criteria for all potential facility improvement measures are determined. All engineering and construction drawings, as well as software engineering, will be completed in accordance with standard industry practice.



Project Development Process

Building Modeling

As an HVAC systems manufacturer, we understand the challenges of designing the most efficient, lowest cost HVAC solution for each facility. That's why we developed Trane Air Conditioning Economics, or TRACE™ – a design-and-analysis software program that helps HVAC professionals optimize the design of a building's heating, ventilating and air-conditioning system based on energy utilization and life-cycle cost.

TRACE™ 700 has been a mainstay of the engineering design community for decades. TRACE™ 3D Plus is the newest design tool and produces a three-dimensional image of the building under consideration.

TRACE™ 700 and TRACE™ 3D Plus meet the requirements for simulation software set by ASHRAE Standard 90.1-2004-2010 and the LEED Green Building Rating System. They are among the U.S. Department of Energy's approved building modeling software packages.

Many of Trane's competitors use TRACE™ 700 to develop energy efficiency projects because it's recognized as one of the industry's leading building modeling tools.

Both versions are recognized by the U.S. Internal Revenue Service as a Tax Deduction Qualified Software, which calculates energy and power cost savings that meet federal tax incentive requirements for commercial buildings.

Depending on the project requirements, we use TRACE™ 3D Plus or TRACE™ 700 for building energy simulation analysis, and the resulting simulation models are the basis for our energy savings guarantee. These building modeling tools provide the power to analyze many different building aspects, systems, controls and equipment. Building simulation software determines building energy consumption using data such as:

- Building square footage, construction and orientation
- Climate
- Occupancy rates and schedules
- Lighting fixtures and schedules
- Equipment efficiencies and schedules
- Temperature setpoints
- Utility rate structures

ECM Interactions to Consider

When ECMs are analyzed to predict savings, care must be taken to account for the interaction between ECMs. Buildings are comprised of dynamic systems, and when a single change is made to one system, others may be affected.

An example ECM to illustrate this point is a lighting retrofit:

Installing more energy-efficient lighting systems reduces the electrical load, but results in less internal heat gain. While cooling costs will decrease, heating costs will rise. The cooling savings typically will outweigh the higher heating costs. The interactive effects of lighting retrofits are relatively well understood and the expected savings can be quantified with engineering formulas. Other ECMs may require computer simulations to accurately quantify savings.

Demand and Consumption Profiles

Once the building model has been created, the monthly and annual demands along with the consumption profiles for each facility and energy type are simulated. Using actual utility rate structures, the projected monthly and annual utility dollars are calculated and compared to the actual utility consumption data.

The simulation model provides a profile of energy use by building function and can be used to model proposed improvements. After the design specifications are completed, the building model incorporates both the recommended and desired facility improvements. Computer modeling allows a precise determination of the projected energy savings achieved by the combination of all proposed improvements.

Baseline Calculation Methodology Savings are calculated by comparing actual energy usage after project completion with a baseline – defined as the amount of energy the facility would have used if the project had not been implemented. The baseline is a 12-month period of pre-project utility consumption typically determined from the building's utility bills.

Building simulation software determines building energy consumption using data such as: building square footage, building construction, building orientation, climate, occupancy rates and schedules, lighting fixtures and schedules, equipment efficiencies and schedules, temperature setpoints, and utility rate structures. A baseline will then be established by using the information calculated in the building modeling and utility bill analysis.

Our approach to creating a baseline involves the following steps:

- Choose a baseline year
- Determine relevant variables for each facility
- Collect data on energy and water consumption for each facility
- Use regression analysis to normalize the data (if applicable)
- Compute changes in energy and water intensity from the baseline
- Determine total and new energy and water savings





Energy Savings Calculations

Dollar Savings Calculations: The savings projections generated through software modeling are then correlated to dollars by examining the appropriate utility rates, consumption and demand for a given facility and/or meter.

Utility Rate Structure: Applying the appropriate utility rate structure to the energy consumption calculated from TRACE™ 700 or TRACE™ 3D Plus gives the operating cost of the building. This operating cost is compared to the actual cost obtained from the utility bills. The resulting model is then used as the base model from which energy and cost savings are computed. This report sequentially adds (cascades) the recommended energy conservation measures (ECMs) to the base model to show ECM interaction.

Weather Conditions: The building's existing envelope, internal conditions and schedules, and energy-using systems as described above are input into the TRACE™ 700 or TRACE™ 3D Plus program. The input is interlaced with Typical Meteorological Year (TMY) weather data to calculate annual energy consumption and cost representative of existing conditions. Because weather conditions vary from year to year, the calculated annual energy consumption and cost will not (and should not) exactly match the actual energy consumption over the past year. However, the calculated results should be close in value to the actual consumption and cost.

Mutually Agreed Upon Savings: Another customary practice is to agree upon values for savings parameters, such as occupancy hours or operating conditions. For example, we will sample a lighting fixture's power draw *before* and *after* the ECMs are installed. Trane and Lake County will agree upon the facility's operating hours based on data from the site survey. All agreed upon values need to be verified. This is accomplished by comparing *actual conditions* observed during site inspections with the *operating profiles* generated in our computer models.





Operational Savings Calculations

Operational savings may be a significant contributor to the economic benefits of a performance contracting project. These savings are generally realized from replacing aging, high-maintenance equipment with newer, more reliable equipment, as well as from applying new technology to more efficiently manage plant operations.

There are three categories to consider when quantifying operational, or non-energy, savings:

1. Direct Cost Avoidance: Reduction or elimination of existing or planned service contracts, as well as material, supply and labor expenditures.
2. Indirect Cost Avoidance: Customer valuation, including such items as redeployed labor resources and reduction in overhead. These are sometimes referred to as "soft savings" and can be included at your direction.
3. Future Capital Cost Avoidance: Future replacement expenditures avoided as a result of new equipment installed.

Operational savings are determined and agreed upon by both parties and will not be measured or verified during the guarantee period of the contract. As is standard in the energy services industry, operational savings are stated (or stipulated) in the performance contract document.





Vendor-Neutral Manufacturer

Many energy efficiency projects involve the upgrade of heating, ventilating and air conditioning (HVAC) systems, as well as new building automation systems for more precise control of energy consumption. Trane is a leading manufacturer of both comfort and controls systems. Therefore, we can deliver a significant price advantage over ESCOs that do not manufacture these essential systems. Their pricing includes equipment mark-ups that Trane ~~is able to~~ avoid.

Although we manufacture these systems, we never insist that they be installed as part of an energy services project. In fact, Trane has installed HVAC systems from these manufacturers, among others: Carrier, Lochinvar, Raypak, Hydrotherm, Energy Logic, Marley/Evapco, Pool Pac and Multistack. We have installed controls systems produced by Johnson Controls, Siemens, Tridium Niagara, Automated Logic, Alerton and many others.

Competitive systems will be thoroughly evaluated and the products that offer Lake County the greatest value will be selected. All products, equipment and subcontractors involved in this project will be approved by Lake County before any work commences.

The visual below illustrates the cost advantages of Trane's best value approach.

Independent ESCO Approach



Trane Unique Cost Advantage



3. Project Financing Expertise

Describe your firm's expertise in applying for and securing financing and funding for projects. Include the methodologies that may be used to verify and guarantee the County's realized energy savings & information on the financial soundness and stability of ESCO.

Project finance is an integral part of any Energy Conservation Performance Contract process, and for Trane that is no exception. As with other areas of our ESCO work, however, our standard industry finance experience with traditional ESCO projects is augmented by [REDACTED]

Incentive Application

The best finance for any project [REDACTED] are often an important part of ESCO projects. What sets Trane apart in this space is [REDACTED]

Experience as an actual contracted [REDACTED] has provided our team with deep knowledge of the internal processes that govern how [REDACTED] From [REDACTED] to [REDACTED] this inside [REDACTED] helps our customers in numerous ways. Trane is able to [REDACTED] early in the project development process, neither bypassing available funds nor wasting time on applications that will be later rejected.

[REDACTED] helps our clients through [REDACTED] means that our team is far less likely to [REDACTED] Finally, years of experience in this space and attendance [REDACTED] means that our team has long-term relationships with senior personnel at the current [REDACTED]. In the unlikely event that a dispute arises, we have the capability to use those relationships to get a quick and unbiased review.

Self Generation Incentive Program

One incentive program of particular note to keep in mind is the Self Generation Incentive Program (SGIP). The SGIP program offers substantial incentives to local governments and has undergone two significant revisions in just the last six months. These changes involved the increase of incentive levels for certain applications, the advent of GHG reporting requirements, and the development of the Equity Resilience Budget. Further changes promulgated in December / January included extension of the program for five years, the shift of segregated funds to the Equity Resilience account, and the addition of more than \$800 million from SB 700.



can come from an almost bewildering number of sources. Some are available for application within the federal government, from the Department of Energy, to name a few. The state also has various programs that can also be utilized on projects. The legislature. Finally, an important source of funding is the state's general fund. In our ESCO projects, we are also able to help the local government secure some form of grant funding.

When we work with our customer to prepare the necessary application materials and submit them on their behalf. This work is included in our scope. Trane does not charge local governments for this work. If the project is successful, the funds help pay for the project. If the project is not successful, the risk is on Trane.

Standard ESCO Energy Finance

As an ESCO since 1995, traditional project finance has been part of our business for a quarter century. With offices in New York and other major financial centers, and ongoing relationships with dozens of institutional investors, Trane has dedicated finance professionals whose sole purpose is to process ESCO-related debt vehicles. Trane has successfully financed over \$1 billion dollars of ESCO projects in recent years, and arranges hundreds of millions of dollars in project financing per year. Beyond this national capability, our California team also regularly works with California-specific municipal finance professionals.

In keeping with the concept that every project is unique, Trane has utilized many different finance structures for ESCO projects in recent years. Some projects are best served by accessing tax equity finance structures, where tax credits and depreciation that are unusable to a local government are instead capitalized to reduce net project cost. In other cases, the right answer for a customer was an equipment lease or Power Purchase Agreement, while in others it was low or zero interest finance from a State or Federal finance program. In each case, the decision is made in consultation with the local government to select what is best for the customer.

One item of note here is that Trane's ESCO arm is under no mandate to only use Trane's own finance arm. Unlike some energy firms that effectively only act as marketing arms for their in-house finance products, the Trane ESCO team is under no pressure to produce deal flow through our in-house finance products. When the Trane finance product is in the best interest of





the customer, that is what we use; when a different finance vehicle is better suited to the needs of our customer, then we use that tool. As with so much else that we do, the focus of the Trane ESCO team is solely and exclusively on putting together a project that is best for the customer.

Advanced Energy Project Finance

Advanced Energy Projects are similar to traditional ESCO finance projects, but different in others. Advanced Energy Projects are usually both [REDACTED] [REDACTED] which can lead to different [REDACTED]. Also, Advanced Energy Projects usually have an [REDACTED]. This can considerably ease the path to developing project financing. It is easier to borrow money when you already have [REDACTED] make the [REDACTED] contract in hand where [REDACTED] the technical performance of the installation.

Advanced Energy Projects are also an area that is [REDACTED] [REDACTED] These finance professionals [REDACTED]. They are familiar with [REDACTED] and have the experience needed to properly evaluate an opportunity that might seem exotic to others.

Measurement and Verification

A final element that is intimately tied up in any discussion of a guaranteed ESCO project is the methods used for Monitoring and Verification. In general, Trane adheres to the IPMVP, or the International Performance Measurement and Verification Protocol, but there are exceptions. For example, for projects funded with Self Generation Incentive Program (SGIP) incentives, a specific M&V protocol must be followed by a registered Performance Data Provider in order to collect the Performance Based Incentive portion of the SGIP incentives. These PDP reports on M&V must be provided for 10 years. The M&V requirements for SGIP are similar to, but different than, the IPMVP process.

Similarly, [REDACTED] also have a specialized M&V process [REDACTED] are set by the CPUC, CAISO and other agencies, and are again similar to but slightly different than IPMVP rules.

While there are many options available on which method and protocols to use, two overarching concepts are clear. First, because the appropriate form of M&V to use is intimately tied to the technologies and business models selected for use in the final project, the selection of an M&V method in advance is effectively impossible. Second, it is equally clear that no matter what measures are selected, there will be an M&V methodology that will fit that selection.

The answers to questions around project finance capabilities and M&V methodologies are the same answers that apply to many other questions in developing ESCO projects. By examining the largest number of available options and recommending what is best for the customer, we both help the customer in the near term and help our own business in the long term.



Trane's Financial Stability

You will have a financially solid corporation to support this project throughout all stages – and well into the future as your needs evolve. Trane U.S. Inc. is a wholly owned subsidiary of Ingersoll Rand, a \$16.6 billion global leader whose 45,000 employees create comfortable, sustainable and efficient environments. Ingersoll Rand is the 16th oldest company and the 12th oldest continuously listed company on the New York Stock Exchange (symbol: IR).

Our people and our family of brands – including Trane®, Ingersoll Rand®, Thermo King® and Club Car® – work together to enhance the quality and comfort of air in homes and buildings, transport and protect food and perishables, and increase industrial productivity and efficiency. Our 2019 financial results have just been released:

Full-Year 2019 Results (all comparisons against the full-year 2018 unless otherwise noted)

Financial Comparisons - Full-year Continuing Operations

\$, millions except EPS	2019	2018	Y-O-Y Change
Bookings	\$16,327	\$16,650	(2)%
Net Revenues	\$18,569	\$18,668	6%
GAAP Operating Income	\$2,018	\$1,917	5%
GAAP Operating Margin	12.2%	12.2%	-
Adjusted Operating Income	\$2,234	\$2,011	11%
Adjusted Operating Margin	13.5%	12.8%	70 bps
GAAP Continuing EPS	\$5.61	\$5.43	3%
Adjusted Continuing EPS	\$6.37	\$5.61	14%

Balance Sheet, Cash Flow and Capital Allocation

\$, millions	2019	2018	Y-O-Y Change
Cash from Continuing Operating Activities (Y.T.D.)	\$1,256	\$1,475	\$401
Free Cash Flow (Y.T.D.) ^a	\$1,329	\$1,145	\$606
Working Capital/Revenue ^a	1.8%	4.2%	40 bps decrease
Cash Balance 31 December	\$1,394	\$903	\$491
Debt Balance 31 December	\$5,573	\$4,091	\$1,482



Ingersoll Rand Named one of America's Most JUST Companies

Ingersoll Rand has earned a place on America's Most JUST Companies report, compiled by JUST Capital and Forbes. The report explores which companies are "the best at doing right by America." More than 81,000 Americans shared what they wanted from the biggest businesses in the United States:

- Fair pay
- Treat customers well and protect their privacy
- Produce quality products
- Minimize environmental impact
- Give back to the communities they operate in
- Commit to ethical and diverse leadership
- Create abundant job opportunities



JUST Capital and Forbes evaluated nearly 900 of America's largest publicly traded companies with those seven priorities in mind. They used the results to create the 2019 JUST 100 list of companies that are addressing public interest and generating better returns for themselves and society.

Separation of Ingersoll Rand and Trane

Effective March 2, 2020, Trane will no longer be owned by Ingersoll Rand. The split was announced in April 2019. Trane Technologies plc will be the new parent company for Trane and Thermo King, which manufactures transport temperature control systems for trucks, trailers, shipboard containers and railway cars, as well as HVAC systems for bus, shuttle and passenger rail applications. The new Trane Technologies name elevates our market-leading Trane brand and celebrates the power of technological innovation.

4. Trane-Lake County Partnership

Demonstrate experience and capacity to partner with the County through all phases of any contracted projects, to include possession of the necessary skills to meet the Technical Specifications listed in this RFQ.

Trane brings an unmatched set of cross-functional skills to the partnership needed to help Lake County develop an optimized energy project that serves the unique needs of your community. Both Trane and Lake County bring capabilities that are vital to the successful development of an optimized project outcome, and the absence of any of these capabilities would inevitably result in a less-than-desirable outcome.

This process begins with the Leadership and Staff of Lake County itself. Some of the data that Lake County as an organization can bring to the survey, analysis and measure selection process will make the project flow more efficiently, such as equipment lists, repair costs, and



existing concerns over comfort or functionality. Other elements that Lake County will bring to the process can only come from your organization. What is most important to Lake County:

- Increasing resilience of County facilities to the impact of PSPS events?
- Creating positive cash flow?
- Eliminating upcoming capital expenditures?
- Reducing County GHG emissions?
- Or something else entirely?

Focusing on optimizing any of these individual goals can often come at the expense of another. For example, a project that provides the maximum level of resilience at the largest number of sites may also do very well in terms of reducing GHG emissions, but would probably look different than a project that is focused on maximizing positive cash flow. How should those competing priorities be balanced?



It is only through establishing an understanding of the goals of the project at the outset that a truly optimized project can be developed. This is where Trane can help. For some customers, when they get to the point of developing an energy project, they already have in mind a clear and narrow set of goals. For those customers, Trane stands ready to use the power of the ESCO process to help them reach those goals in the best way possible.

Other customers are less certain at the beginning as to what options are available, so their goals are more general. In these situations Trane can help at the beginning of the process by facilitating discussions, pointing out what is available – and the pros and cons of each option. The output of these facilitated discussions is an informed crystallization of goals by Lake County itself that will serve as a guide to the Trane team when developing the project.

Another area where Lake County has invaluable knowledge is the facility staff's technical capabilities and bandwidth for self-installation of some energy measures. While some of the measures that Trane is likely to identify will almost certainly require the services of a specialized contractor, some of the measures may also be amenable to installation by County staff. Self-installation can be a powerful tool, combining the energy analysis, engineering, bulk purchase, and finance capabilities of the Trane team with the existing construction capabilities of the County to produce a very cost-efficient option.

To gauge this Trane will need to work deeply with senior facilities and other staff to answer certain questions. What specific specialty skills (electrician, HVAC, carpenter, etc.) do your staff members have? How much of the work would the County want to take on directly? Measures



installed by Trane under an ESCO contract always come with a warranty, while those that are self-installed usually do not. How does the County weigh the value of warranty (or its absence)?

The range of possibilities that Trane has employed in this area is quite broad – from excluding measures that could be self-installed all together, to a teaming approach where Trane finances the equipment purchase and the customer installs, to the measure being completely left to outside contractors even though it could be installed by customer staff. Trane knows that the right answer on self-installation for any customer is always dependent on too many factors to be known beforehand. Therefore, it must-to be discovered through the ESCO development process, not prescribed in advance.

Trane also brings essential capabilities to the partnership to find the best possible project for Lake County. The area where Trane ~~integrates with the customer's~~ and specifically how our ESCO team harnesses those capabilities to find the best possible set of solutions for our customers. It is in the integration of subject matter knowledge through the ESCO process that possibilities are converted to projects.

Tapping into this vast base of energy knowledge, but making the process smooth and easy for the customer, is where the science of energy is transformed into the art of Performance Contracting. The process to look comprehensively at energy opportunities is iterative, but it does not need to be overwhelming – and this is where the art of the Trane ESCO team comes in. In choosing Trane as your energy contracting partner, Lake County will have a dedicated set of ESCO development professionals to work with.

The ESCO team dedicated to Lake County will act as the interface between all of the different supporting parts of the Trane organization and those on the Lake County staff assigned to this partnership. The result is that the burden on Lake County staff is reduced, but access to broad industry knowledge is maintained. Project development options start as broad as possible in the market, but are always guided by members of the Trane team who have taken the time to learn the way that Lake County sees the world.



5. Project Team Resumes

Submit Resumes and any other information describing the capabilities and experience of the people who will be involved in this project.

Proposed Project Team

Trane's local management structure is shown in the organizational chart below. This is a very similar structure that we have employed to manage our previous Energy Conservation and Proposition 39 projects across California. Reggie Ingram will be responsible for Lake County's complete satisfaction with all aspects of this project. He will be supported by highly experienced experts in the various performance contracting phases.

Org Chart Removed



Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none"> ■ ■ ■ ■ ■ 	<ul style="list-style-type: none"> ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
Function			



TRANE

Lake County
Request for Qualifications for
Energy Conservation Performance Contract

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			



TRANE

Lake County
Request for Qualifications for
Energy Conservation Performance Contract

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			

Name, Title and Location		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			



TRANE

Lake County
Request for Qualifications for
Energy Conservation Performance Contract

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">	<ul style="list-style-type: none">
Function			



Name and Title	Qualifications and Experience	Relevant Experience
	<ul style="list-style-type: none"> ■ ■ ■ ■ 	<ul style="list-style-type: none"> ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
Function		

Name and Title	Qualifications and Experience	Relevant Experience
	<ul style="list-style-type: none"> ■ ■ ■ ■ ■ ■ 	<ul style="list-style-type: none"> ■ ■ ■ ■ ■ ■ ■
Fraction:		



TRANE

Lake County
Request for Qualifications for
Energy Conservation Performance Contract

Name and Title		Qualifications and Experience	Relevant Experience
		<ul style="list-style-type: none">■■■	<ul style="list-style-type: none">■■■■■■■■■■■
Function			





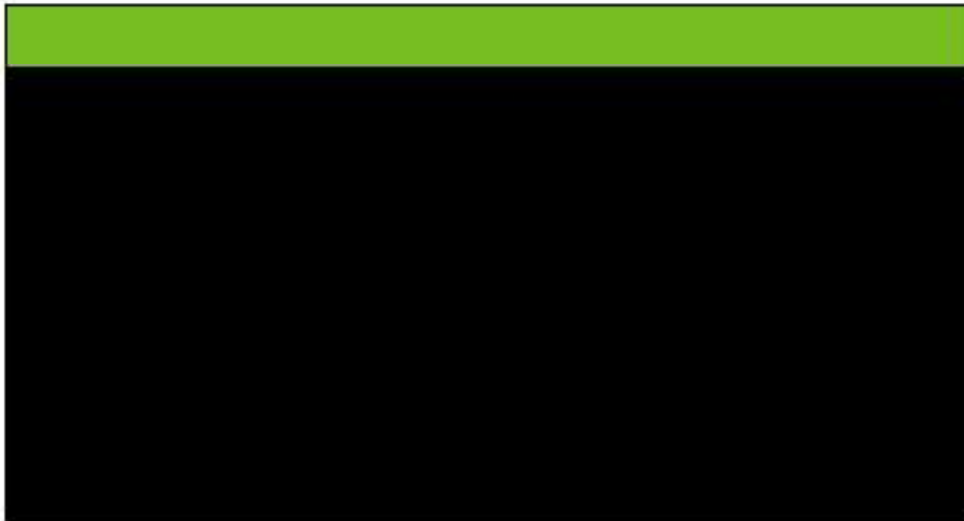
B. References

Provide a list of at least three (3) project references implemented by your company for local California public agencies in the last five (5) years. The below format & information shall be used when describing each project. Limit your responses to no more than one page per project.

- 1) Project title and location*
- 2) Nature of firm's responsibility*
- 3) Name, address, and telephone number of contact person*
- 4) Current Status*
- 5) Energy conservation opportunities implemented*
- 6) Describe guarantee performance for portfolio of projects.*

The following California references will demonstrate that Trane has the qualifications to deliver successful performance contracting services to Lake County

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]





A cantilevered solar PV system at the [REDACTED] provide shade for spectators, in addition to replacing fossil fuels.







	100%







C. Development, Management and Implementation

1. Proposed Management Approach

Describe your company's proposed management approach to this project. Include information on project management and scheduling. Address areas that are self-performed.

Project Management Process

Trane's long-standing success in implementing performance contracts is tied directly to the expertise of our professionals and the bullet-proof processes that are in place. From managing construction in a fully occupied building to addressing a customer emergency, our project managers, site superintendents and administrators play a vital role in every project. They are focused on complete customer satisfaction.

We have established the following processes to provide a seamless transition from the green light to proceed through the project closeout and turnover of as-built drawings:

Construction Management



1. Management Tools



Trane utilizes Oracle's Primavera Unifier software suite of document control and scheduling tools to manage construction projects from estimating to closeout. This cloud-based tool tracks progress from any web-enabled device, allowing:

- Instant access to all project-related information, including the most current versions of linked documents
- A platform to communicate with the broader team and highlight the most important updates, thereby reducing scheduling delays
- Accurate and detailed cost management capability to help stay within the project budget
- Real-time risk assessment, which will provide red flags whenever issues arise during implementation that require prompt attention

2. Communication



Our performance contracting success springs from the high importance placed on communication between our project management team, the customer's team, and the subcontractors who perform the installation. We are skilled at avoiding the common pitfalls of poor communication, which may result in scheduling conflicts or delays in resolving issues. A **customer kickoff meeting** establishes the communication hierarchy between all entities. Weekly team meetings are held throughout the installation phase to continue the planning and coordination effort, and to inform all team members of the project status.

A focal point of these meetings is to closely coordinate the building's operations – and the needs of its occupants – with the construction activities. Trane's project manager and on-site superintendent will manage all installation subcontractors to ensure minimal interruption in day-to-day operations.

3. Planning and Scheduling



The project schedule is broken down into small manageable and measurable components, called a **work breakdown structure**. Each individual activity is then sequentially arranged and connected to other dependent activities to establish the project's critical path. This monitors progress to ensure that the project remains on target. The project management team also acts as a liaison between your personnel and the on-site subcontractors. Any conflicts in scheduling that arise during the installation phase are easily resolved through effective communication.

4. Field Validation



After Trane has been given a Notice to Proceed, the preliminary findings outlined in our proposal will need to be field-verified for "constructability," which means identifying obstacles that could cause errors, delays or cost overruns. This field



validation will be incorporated into our final construction design. A set of engineered stamped documents will be established for the project's scope of work. To provide full transparency, a third-party engineer will stamp the construction documents. The final documents will be reviewed with your team and then submitted for construction permits.

5. Mobilization



Upon completion of the construction documents, each component of the project will be organized into **sub-trade packages**. Each sub-trade package will be validated with our proposed design, schedule and pricing structure. Sub-trade packages will be bid to local subcontractors, in most cases.

We will team with local subcontractors to develop our baseline pricing structure and anticipated scopes of work. This will minimize risk and any surprises after final engineering and design is completed. Upon the completion of the validation and engineering process, the sub-trades will be contracted and will begin to mobilize. **Material and equipment will be ordered and expedited** in conformance with the project schedule.

6. Implementation



The project schedule will be finalized and reviewed with your team prior to implementation. Along with the weekly customer team meetings noted above, Trane holds **weekly construction progress meetings** with all subcontractors and major suppliers. This ensures that the construction progress remains in compliance with the project schedule.

Each subcontractor is required to maintain and submit daily logs documenting manpower, areas worked, tasks completed, and any safety issues or concerns. These are reviewed by the project manager and site superintendent in order to **monitor manpower requirements** and maintain accurate records for future reference. The site superintendent will closely coordinate the work of all trades involved in the project.

Trane requires all subcontractors to hold **weekly safety meetings** to address any anticipated safety concerns or any outstanding safety issues that need to be addressed. Trane's safety department requires strict compliance with the company's safety policies and all OSHA requirements. Our parent company, Ingersoll Rand, enjoys an excellent Safety Experience Modification Rate (EMR) of 0.55, compared to the industry average of 1.00 – which means we have a much stronger safety track record than our peers.

Sets of **as-built drawings** will be updated on a daily or weekly basis as required, according to progress made by each subcontractor. This enables our customers to maintain an accurate record of the construction after project completion. The as-built drawings are submitted at the end of the project with the equipment installation, as well as operations and maintenance (O&M) manuals of all installed components.



7. Commissioning



Upon the completion of construction, our team will **identify a list of deficiencies or incomplete components** in the scope of work. Each subcontractor is required to complete all outstanding items within a reasonable timeframe and within the project schedule. Subcontractors also are required to submit final as-built drawings, which will be incorporated into a final record set of documents prepared by the project engineering and design team. These drawings are packaged with all other construction installation documentation, equipment O&M manuals, warranties and any other documentation from the construction phase.

Trane can utilize an in-house or a third-party commissioning agent to perform functional testing and verify that all systems are working to specification. Whichever you choose, the results will be reported directly to your team, and Trane will be held accountable for the results.

8. Construction Closeout



Project Closeout involves both a legal and transitional component. All commissioning documents described above, as well as other contract documents, are turned over for a complete and accurate record of the performance contracting project's construction phase. Trane then receives a **signed certificate of completion** from Lake County, acknowledging that all project requirements to date have been achieved. The warranty start dates and terms for each newly installed piece of equipment or system are established and communicated. The project is then transitioned to Trane professionals who will provide any contractually required maintenance, measurement and verification (M&V) or other services.

Bonding Capacity

Trane has a bonding capacity of \$100 million per project and \$300 million aggregate. This ensures that your project will not be terminated or delayed due to financial constraints.

Insurance Coverage

Trane exceeds the insurance requirements listed in the RFQ.

	RFQ Requirement	Trane Coverage
General Liability	\$1,000,000	\$7,500,000
Automobile	\$1,000,000	\$5,000,000
Employer's Liability (Workers' Compensation)	\$1,000,000	\$3,000,000

Mitigating Disruptions to Daily Operations

Virtually all of our performance contracting projects feature construction activities across multiple buildings and work in occupied spaces. Our local team is experienced in scheduling work activities and implementing ECMs in a way that minimizes disruption to daily operations. We will work with your team to develop an effective project schedule and coordinate all implementation activities with project site representatives. For work in occupied areas – such as lighting and water conservation upgrades – we will attempt to schedule work during low-occupancy times, as well as publish work schedules and estimated completion times well in advance.

Based on input from each building manager, we will develop a detailed phasing plan for each facility for your team's review prior to the start of construction. This phasing plan will include allowable work hours, days of the week that work is to be completed, and acceptable shutdown times for each occupied space.

To keep your project on track and to minimize disruption to day-to-day activities, our team will:



Trane Self-Performed Work

Trane has in-house capabilities to self-perform all auditing, project development, design, energy engineering, project management, building automation installation, and measurement and verification. We will use local mechanical, structural and electrical engineers as needed – and qualified partners for installing HVAC units and wiring as required. A Trane Project Manager will oversee all installation and be your direct point of contact during implementation.

The following table shows which of the services identified above are provided directly by Trane through in-house resources, and which services are partially subcontracted:



	Trane In-House Services	Subcontracted Services
Auditing	X	
Design	X	X
Procurement/supply of equipment	X	
Engineering	X	X
Construction management	X	
Lighting	X	X
HVAC	X	X
Controls	X	X
Measurement and verification	X	
Staff training	X	
Ongoing maintenance of building equipment	X	

We have business relationships with many mechanical and electrical subcontractors throughout California who we can draw from for resources to supplement our own technical capabilities.

Subcontractor Selection

Here are the key steps in our subcontractor selection process:

- Trane will solicit suggestions of subcontractors that have demonstrated a strong record of performance within your facilities. We will be cognizant of any targets that you may have for the project, including utilization of small businesses, minority-owned or women-owned business enterprises.
- All potential subcontractors will be evaluated and qualified to ensure adequate licensing, bonding, insurance, etc. They will also be screened based on safety ratings.
- Together with your team, Trane will identify a list of firms that will be invited to bid on specific scopes of work.
- Subcontractor proposals will be reviewed jointly with your team, and final selection also made together and agreed upon by Lake County. Selection will be based on the overall value.
- Trane will then develop a detailed subcontracting plan.



Subcontractor Evaluation Processes

Trane scrutinizes potential subcontractors on their success meeting the following criteria:

Cost	Cost should be considered, but not at the sacrifice of quality.
Subcontractor Reputation	What do your peers say about the subcontractor's job performance? What has been their <u>past experience</u> working on Trane projects?
Proper and Comprehensive Response to Your Proposal	Do the subcontractors respond to your technical proposal with understanding and comprehension?
Adequate Manpower Resources	Does the subcontractor have adequate manpower available to meet the schedule of this particular <u>project</u> . Will subcontractor have to pull resources from other subcontracts of trade organizations to meet project schedule?
Good Financial Condition	Does the subcontractor have the required financial strength to complete the project on time?
Insurance and Bonding Abilities	Both of these illustrate the financial stability of the company. Obtain documentation regarding the subcontractor's insurance <u>status, and</u> be named as an additional insured on their policy.
Health & Safety Program	Make sure subcontractors have their own program and will not just rely on your organization for health and safety information, direction and correction.
Certifications / <u>Licenses</u>	Ensure that the subcontractors are properly certified or licensed to provide their services.
Quality Assurance Programs/Standard Operating Procedures	How does the subcontractor ensure quality services?



2. Local Management Ability

Describe your ability to locally manage the project.

The majority of the work involved during the analysis and construction phase will be performed by professionals based in Trane's fully staffed, company-owned Sacramento office located at 4145 Delmar Avenue in Rocklin. This 120-person office will be supported by our Los Angeles team as required to keep your project on schedule and on budget.

We currently have more than 100 Trane technicians dedicated to promptly serving customers throughout California on a 24-hour basis.

3. Trane's California History and Capabilities

Describe your history and capabilities in the State of California and focus on solutions for Counties.

Trane has been serving California customers since 1940 and currently has 300 employees based in the state. Our Sacramento office serves central and northern California.

Trane has a dedicated California-based ESCO organization, as well as Equipment, Controls System, HVAC Service, and Parts offices in several California cities. These are not satellite offices – they are fully staffed Trane offices ready to serve California clients by California residents.

Our ESCO team is comprised of [REDACTED]

The project team, led by [REDACTED] will coordinate the interaction between the Trane team and Lake County staff, reducing your staff workload, ensuring access to the best sources of knowledge in the business, and constantly bringing the view of Lake County into the process.

As a leading HVAC manufacturer, Trane works with virtually every mechanical contractor and design engineering firm in California. This gives us a significant advantage of other ESCOs because we know which firms are the best at their specialized scope of work. This assures our clients that each Trane energy services project will include superior subcontractors in every discipline.



California County Customers

We serve many counties with Trane HVAC and controls systems, as well as services for our systems and many other manufacturers. Among them are:

1. [REDACTED]
 2. [REDACTED]
 3. [REDACTED]
 4. [REDACTED]
 5. [REDACTED]
 6. [REDACTED]
 7. [REDACTED]
 8. [REDACTED]
 9. [REDACTED]
 10. [REDACTED]
 11. [REDACTED]
 12. [REDACTED]
 13. [REDACTED]
 14. [REDACTED]
 15. [REDACTED]
 16. [REDACTED]
 17. [REDACTED]
 18. [REDACTED]
 19. [REDACTED]
 20. [REDACTED]
 21. [REDACTED]
 22. [REDACTED]
 23. [REDACTED]
 24. [REDACTED]
 25. [REDACTED]
 26. [REDACTED]
 27. [REDACTED]
 28. [REDACTED]
 29. [REDACTED]
 30. [REDACTED]
 31. [REDACTED]
 32. [REDACTED]
 33. [REDACTED]
 34. [REDACTED]
 35. [REDACTED]
 36. [REDACTED]
 37. [REDACTED]
 38. [REDACTED]
 39. [REDACTED]
 40. [REDACTED]
 41. [REDACTED]
 42. [REDACTED]
 43. [REDACTED]
 44. [REDACTED]
 45. [REDACTED]
 46. [REDACTED]
 47. [REDACTED]
 48. [REDACTED]
 49. [REDACTED]
 50. [REDACTED]
 51. [REDACTED]
 52. [REDACTED]
 53. [REDACTED]
 54. [REDACTED]
 55. [REDACTED]
 56. [REDACTED]
 57. [REDACTED]
 58. [REDACTED]
 59. [REDACTED]
 60. [REDACTED]
 61. [REDACTED]
 62. [REDACTED]
 63. [REDACTED]
 64. [REDACTED]
 65. [REDACTED]
 66. [REDACTED]
 67. [REDACTED]
 68. [REDACTED]
 69. [REDACTED]
 70. [REDACTED]
 71. [REDACTED]
 72. [REDACTED]
 73. [REDACTED]
 74. [REDACTED]
 75. [REDACTED]
 76. [REDACTED]
 77. [REDACTED]
 78. [REDACTED]
 79. [REDACTED]
 80. [REDACTED]
 81. [REDACTED]
 82. [REDACTED]
 83. [REDACTED]
 84. [REDACTED]
 85. [REDACTED]
 86. [REDACTED]
 87. [REDACTED]
 88. [REDACTED]
 89. [REDACTED]
 90. [REDACTED]
 91. [REDACTED]
 92. [REDACTED]
 93. [REDACTED]
 94. [REDACTED]
 95. [REDACTED]
 96. [REDACTED]
 97. [REDACTED]
 98. [REDACTED]
 99. [REDACTED]
 100. [REDACTED]



As noted in the References section, we have just signed a \$10 million contract with [REDACTED] to improve their facilities. This is a guaranteed savings project, similar to the one envisioned for Lake County. We will begin mobilization for construction in February 2020, with an estimated completion date of March 2021.



California General Contractor's License

Trane is licensed by the State of California in eight different trade categories, under license number: 561796, as shown below:

Contractor's License Detail for License # 561796

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

CSLB complaint disclosure is restricted by law (S&P 7124.6) if this entity is subject to public complaint disclosures, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.
Per S&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.
Additions are not listed unless the contractor fails to comply with the terms of the arbitration.
Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

Business Information

TRANE U.S. INC.
DBA TRANE

3253 E IMPERIAL HWY
BREA, CA 92621
Business Phone Number: (800) 849-2911

Entity Corporation
Issue Date 03/24/1989
Release Date 03/05/1998
Expire Date 03/31/2018

License Status

This license is current and active.

All information below should be reviewed.

Classifications

C30 - WARM-AIR HEATING, VENTILATING AND AIR-CONDITIONING
B - GENERAL BUILDING CONTRACTOR
C36 - PLUMBING
C10 - ELECTRICAL
C-2 - INSULATION AND ACOUSTICAL
C38 - REFRIGERATION
C-4 - BOILER, HOT WATER HEATING AND STEAM FITTING
A - GENERAL ENGINEERING CONTRACTOR



D. Demonstrated Competence / Responsibility

1. Unique Qualities and Capabilities

Describe any unique qualities and/or capabilities of your firm that would benefit the County and its projects including but not limited to risk and/or safety.

As mentioned throughout this response, what differentiates the capabilities of Trane as an ESCO partner for Lake County is the tremendous breadth and depth of knowledge and capabilities that we bring to energy contracting. There are many threads of experience that are woven together to form the tapestry of Trane's capabilities as an ESCO. Here is a brief review of a few of these capabilities, as well as notes on how these capabilities work together in getting our customers the best possible outcome from an ESCO project.

The truly unique element of Trane as a partner in developing an ESCO project is not any one of the following capabilities, it is how all of them are harnessed to work together in delivering unmatched service.

ESCO Experience

As an ESCO contractor, Trane brings the reliability that comes from having completed hundreds of millions of dollars of ESCO projects in just the last few years, decades of ESCO experience, and the balance sheet of a major global energy-focused firm. In our ESCO projects, we typically provide all required analysis, engineering, procurement, construction and start-up services needed to deliver self-funded turnkey energy projects, all while maintaining a single point of contact and guaranteeing performance.

In addition to showing we know how to successfully complete projects to public sector standards in general, our California team has the specialized expertise, local experience, licensing and personnel needed to complete any type of work likely to be appropriate for Lake County, from basic efficiency and solar PV projects to energy storage and Advanced Energy Projects. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Market Participant

California, like most areas of the country, has a [REDACTED] that significantly impacts the economic viability of ESCO projects, and [REDACTED] our understanding of what is technically required for [market participation] is used in several different ways.



One important way wholesale energy expertise is leveraged is [REDACTED]
[REDACTED]
[REDACTED] We are also aware through
market postings of the [REDACTED]
[REDACTED] from a project in Lake County. This [REDACTED]
[REDACTED] gives us valuable [REDACTED] of where the
economics of any given energy measure are [REDACTED] to be in the future, not just where they have
[REDACTED] past.

Another area where the experience of Trane Energy Supply Services helps is experience
[REDACTED] Many of the most lucrative energy opportunities
available to local governments involve [REDACTED]
[REDACTED] can be an important element in an optimized
ESCO project. These [REDACTED] project revenue beyond [REDACTED]
[REDACTED] and favorable contract structures offer customers reduced risks. Put simply, [REDACTED]
[REDACTED]
[REDACTED] This means that more capital expenditure gets taken off the regular County
budget, more money flows back to the general fund, or in some cases both.



To [REDACTED] though means adhering to a host of rules needed to [REDACTED]
[REDACTED] Whether it is understanding of [REDACTED]
[REDACTED] Trane's [REDACTED] venue opportunities to our ESCO project
development process that would not be possible without [REDACTED] knowledge.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]



[REDACTED]

Energy Technology Leadership

Trane is a global leader in both the manufacture and installation of building controls. This brings experience integrating Trane systems with existing building controls from almost any other manufacturer. It also means experience in the commissioning of the resulting systems – knowledge that is equally important to both economic and comfort performance.

All of the preceding contracting and controls domain experience is sharpened by our experience as a manufacturer of end-use heating, ventilation, and air conditioning (HVAC) equipment. For over a century, Trane has led in the research and manufacture of some of the most reliable and energy-efficient HVAC equipment in the world. This end-use technology leadership is best demonstrated by how Trane has had a dominant market share in the HVAC equipment market for decades. It also provides us with unequalled knowledge of what can be accomplished with equipment from an energy perspective while still maintaining space comfort.

Beyond energy technology like HVAC and controls, Trane is also at the forefront of developing the specific tools needed for the emerging Advanced Energy Economy. Examples include integrated storage technologies to allow utilities and other LSEs to interact with distributed networks of behind the meter assets. Trane is using its early leadership in areas like the peaking use of bio-methane to develop to significantly improve the economics of Advanced Energy Projects.

Trane has also [REDACTED]
[REDACTED] like our cross-functional teams increase the knowledge base of available opportunities for our ESCO clients, our [REDACTED] when assembling an overall portfolio of energy measures.

An important point to note is that the ESCO arm of Trane is not at all restricted in which company manufactures the energy equipment we use on a given project. While Trane is rightfully proud of the equipment we make ourselves, we also regularly find that the best solution in a given circumstance is a machine manufactured by others, such as what is needed to fit existing ductwork and curbs. As an ESCO focused on what is best for our partner clients, we have a complete commitment to using the units that are right for a given project, even if they are manufactured by others.

Integrated Finance

Almost all ESCO projects require some form of finance. Finance is inherent in the ESCO business model, where some form of loan or other finance instrument pays for the first cost of



the project, debt service payments are made over time, and the savings/new revenue cover some or all of those payments. However, the best form of finance is the dollar a customer does not need to borrow in the first place. This concept of integrated finance, where utility incentives and grants buy down project costs prior to borrowing money, is central to how Trane has done business for many years.

Grants

[REDACTED]

Utility Incentives

[REDACTED]

Tax Equity Finance

Local governments cannot use depreciation or tax credits, while private industry certainly can. Trane harnesses this differential in some local government projects to reduce the net amount financed. However, private industry usually wants a higher return on investments than those who fund public infrastructure, so care must be taken in analysis to ensure that the net result is positive for the local government.

Another way that Trane differentiates itself is this search for an optimized finance package. Aggressively searching for available grant and incentive dollars is absolutely in the interest of our customers, and is a central part of what differentiates Trane in the ESCO market.

Policy Leadership

Both directly, and through work with organizations, Trane is at the forefront of policy discussions. Examples of groups we work with include NAESCO, the California Energy Storage Alliance (CESA), and the Representatives of California's Rural Communities (RCRC). Policy areas where Trane is actively engaged, include multiple proceedings at the California Public Utilities Commission (CPUC), California Energy Commission (CEC) and California Independent System Operator (CAISO), as well as at the state and federal legislature.



This direct participation experience in the regulatory and legislative process delivers specific and enduring benefits to ESCO projects developed by Trane. Whether it is incentive programs approved by the CPUC, grants becoming available from the CEC, or pilot funding available



Participation in regulatory and legislative processes is another way by which Trane helps our partner customers choose solutions that work for the long run. Understanding trends also helps Trane design ESCO solutions that avoid issues in the future. These issues are often visible to those involved in the regulatory process, but less well-known to others. A good example of this experience involves the impact of regulatory change on the economics of solar projects, which is described in greater detail in the Risk Mitigation section below.

Whether the goal is maximizing cash flow, eliminating large capital expenses from future budgets, ensuring critical resilience in the face of power shut-offs, or making the largest possible contribution to a de-carbonized future, the unique capability of the Trane team is to bring this unparalleled wealth of experience to the development of a potential ESCO project. By harnessing knowledge that extends beyond the traditional boundaries of ESCO work, Trane makes the final product better.

Risk Mitigation is a critical and often overlooked element in analyzing, evaluating and selecting any set of energy project measures for an overall ESCO project. It goes without saying that a focus on worker safety in contracting is an absolute requirement, and Trane has dedicated Environment, Health and Safety personnel for whom this is a sole focus.

[illegible]



The solution decided upon by the CPUC took several forms, but the biggest change was a revision in the way that retail rates worked, and a shift in time-of-use (TOU) periods to later in the day. These changes fundamentally transformed the basic fact is that the CPUC decision meant that the cost of electricity when the sun is up was going to decline, and this was going to have a very direct negative impact on the future value of solar PV systems. However, the impact was not immediate. The relevant CPUC proceedings were held in 2016, but the new rates were phased in across the state over time. In fact, PG&E (the final utility to make the change) will not transition to the new rates until November 2020.

Delayed or not, the impacts of these rate changes on the economics of standalone PV are dramatic. In the case of San Diego Gas & Electric for example, electricity generated during the peak PV mid-day output period (10 a.m.-2 p.m.) is now classified as being "super off-peak" for most of the year. Because of this, the value of electricity generated during this period in some cases dropped from over 20¢/kWh to under 8¢/kWh. For local governments that had signed long-term agreements with PV companies, this became a significant issue. Before the TOU period change, they may have been paying 15¢/kWh to save 24¢/kWh; after the change, they are now paying 15¢/kWh to save 6.5¢/kWh. Worse, the 15¢/kWh rate was the starting point in many of these contracts.



Many of these PV finance contracts had mandatory annual rate increases, where the amount charged to the local government will continue to rise even if the value of the electricity they are producing has dropped dramatically. In extreme cases, we have seen smaller local governments locked into contracts where they are now paying more than 35¢/kWh for electricity, even though the cost of buying that power from the utility has dropped (or is about to drop) to a fraction of that amount. Fundamentally, this was an issue of risk. Local governments were at risk for higher energy costs if rate structures changed, but this risk was underappreciated by local government PV buyers – and often either underplayed or completely ignored by energy companies focused on selling PV systems.

For those customers interested in installing new solar PV projects, we helped them understand the economic value of these projects under future rates to demonstrate the probable change in value.

The decision remained theirs, but they had better information, and many changed direction once they understood it. Sometimes customers chose to cancel PV projects outright, sometimes they took a higher short-term rate but negotiated "make whole" provisions with financiers so that their net cost could never be worse than buying energy from the utility. In all cases however,



Beyond simply looking at known potential future impacts, risk mitigation can take other forms as well. For example, in several cases we are working on ~~combination renewable energy~~ ~~projects~~ for local governments where impacts are ~~mitigated~~. Under these agreements the grid impacts are usually sold on a ~~contract~~.

Contracts like this feature both fixed debt service payment and ~~are~~ guaranteed by Trane. This arrangement removes down-side risk, but does come at the cost of losing potential upside if the ~~market~~. However, for most local governments, avoiding potential negative outcomes like the ones suffered by many in the standalone PV projects mentioned above are far more important than potential ~~losses~~.

Another area where Trane regularly helps our customers mitigate risk is through energy supply contracts. Trane Energy Supply Services procures future contracts for electricity and natural gas for both private and public sector clients from wholesale energy suppliers. This is an effective way to hedge against the impact of energy cost volatility on budgets. This volatility hedge risk mitigation mechanism can be used in ESCO projects in multiple ways. Direct access to natural gas providers and long-term agreements can deliver near-term savings and protect against future price increases, while hedge strategies can be used to make a project whole if commodity prices decline.

While this is a sophisticated strategy that has not often been used by smaller public sector clients, it is available to those that choose Trane as an ESCO partner due to the integrated nature of our energy contracting business.

In addition, the participation of the ~~customer~~ in a way that is ~~critical~~. For example, this ability to ~~separate~~ ~~the~~ ~~customer~~ critical to our customers who were ~~at~~ the time. Many customers who entered ~~into~~ at looked good at the time now wish they'd access to ~~information~~ making their decision.

Regulatory, legislative, hedging and market participation experience cannot eliminate or mitigate all risk, but it is certainly better to navigate to the future looking forward through a windshield than it is to navigate to the future only looking through a rear view mirror.

Safety Approach

A rock-solid safety plan is the best way to protect people and building occupants during a construction project of this nature. It also keeps unforeseen schedule delays to a minimum. Trane will publish a site-specific safety plan for your review prior to mobilization of resources. The plan includes a mandatory orientation session for all on-site personnel.

Trane pre-screens and qualifies subcontractors to fully vet their safety records and ratings, citation history for the last five years, OSHA logs for the past three years, history of payment to vendors, financial viability, bonding capacity, proof of insurance, review of their company safety policy including employee commitment and involvement, worksite analysis, hazard control and training.

This in-depth subcontractor screening and selection process reduces the risk of safety issues and poor performance during the construction phase. Fortunately, Trane already has excellent relationships with numerous California subcontractors who have passed our screening based on their safety records and have performed well on past projects.

We always ensure that our employees and subcontractors have the proper safety training for the tasks they will perform – and meet all local, state and federal requirements, as well as our own. Failure of any site personnel to follow the site-specific safety plan will result in their immediate removal from the project.



Safety Planning Summary

Following is a summary of the safety planning that Trane implements for each project:

- **Hazardous Material Exposure:** For some facility upgrade projects, workers may be exposed to hazardous materials such as lead paint, mold, PCBs and mercury. Before work begins, we obtain hazmat inventories/assessments that the building owner has completed. We also identify hazardous materials that may need to be disturbed during the work, and which are reasonably observable during our energy audit and other walk-throughs. Prior to the start of construction, any identified hazardous materials that would need to be disturbed during the work will be fully abated as agreed between Trane and Lake County. Documentation shall be submitted to Trane prior to work commencing.
- **Chemical Exposure:** In addition to any chemicals currently in use at the facilities, it may be necessary to use chemicals during construction. Trane can provide the Lake County and a Chemical Declaration form for chemicals proposed to be used during construction, along with a detailed safety plan, and a spill prevention and cleaning protocol.
- **Fall Protection:** We will develop a site-specific fall protection work plan for all operations where workers are exposed to fall hazards greater than four feet. Trane



requires that all site employees maintain 100% fall protection when exposed to a fall hazard. If work at 10 feet or above is required, a written Site-Specific Fall Protection Plan will be submitted to Lake County for approval before project mobilization.

- **Electrical Work, Lockout/Tagout and Power Shutdowns:** Trane prohibits work on live electrical systems, excluding troubleshooting or testing. For troubleshooting, testing or exposure to live electrical systems within four feet of electrical hazards of 50v or more, Trane will follow NFPA-70E guidelines. This includes proper qualification, authorization, training and required personal protective equipment (PPE). Trane will gain approval from each facility representative before shutting down power. Trane and/or its subcontractors will follow OSHA lockout/tagout procedures when shutting down power. Isolated power sources will be installed with a lockout device and lock to prevent inadvertent startup.



- **Hot Work:** Trane and its subcontractors will comply with hot work permitting procedures for any welding, cutting, burning or spark-producing operation. Trane on-site supervision will track and monitor daily permits. Trane will follow fire prevention procedures while performing hot work, including the acquisition of a hot work permit (if required) and providing a fire watch for the duration of the work and for 30 minutes after completion.
- **Confined Spaces:** Trane and each contractor working in a confined space will review the construction plans, existing spaces, regulatory requirements, and classification of each space as either permit-required or an alternative space to develop a site-specific confined space procedure. Trane will list specific oversight and entry procedures in a written plan. Trane will develop a site-specific job hazard analysis (JHA) that covers the work in the confined space and the associated confined space procedures. The site-specific safety plan and JHAs must be approved by Trane and your organization before work begins.
- **Occupant Safety:** Trane will escort off the project anyone who does not adhere to the No Smoking and No Substance Abuse policy. We will provide dust and physical protection to workers and building occupants as needed where work is being performed.



Trane and/or its subcontractors will at all times seek to protect facility employees, pedestrians, third parties and property from injury or damage. Trane and/or its subcontractors will provide a means of safe and legal extraction of any and all noxious fumes generated – and provide barricades, warning signs, spotters, etc. as needed to block off any excavations,

obstructions, overhead hazards or other potentially hazardous areas in order to protect facility and construction personnel, equipment and materials.

- **Abrasion, Cutting and Blunt Trauma:** All workers are provided with and required to wear personal protective equipment (safety glasses, hard hats, footwear and high-



visibility clothing) and other tools or equipment as appropriate for the type of work. Trane performs regular safety inspections to verify that all safety equipment is maintained, used and in proper working order.

- **Use of Cranes:** Any crane lift will comply with Trane's Crane Policy and all applicable state and federal regulations. Trane and/or its subcontractors will ensure that the crane provider submits a lift plan for the operation, which must be approved by Trane and Lake County before mobilization.
- **Use of Forklifts:** Any forklift use will comply with all California and OSHA forklift policies, as well as our own. Specific forklift type and model will be listed in the Equipment Declaration Form and will be submitted to Lake County for approval prior to mobilization.



Trane Intelligent Services

Your building has data streaming through it that is ready to be deciphered and translated into usable information. The Trane Intelligent Services offering connects you and your buildings to our expert advisors, who use facility data to make operational improvements that are aligned with your core mission.

What can Intelligent Services do for you? Provide real-time performance insight. Improve system and energy efficiency. Offer greater visibility and control over your buildings, making them more comfortable and energy efficient.

Intelligent Services provide a process for continuous building improvement: Identify opportunities, prioritize work, implement the projects, validate the results...and repeat. We'll start at the level and scope of support you need now, then easily add services or loop in more facilities in the future. We are your partners for the life of your building.



GOALS

To start, Trane collaborates with you to determine business needs, timelines, budget and objectives.



ANALYTICS

Through monitoring and analytics, we identify how key building systems are using energy: efficiently or inefficiently.



PRIORITIZATION

Next, we help you prioritize and complete projects to capture the energy cost savings.



IMPLEMENTATION

Then Trane can do the work to install the solutions. Trane is a leading energy service provider and a DOE qualified Energy Services Company (ESCO) for over 20 years.



VALIDATE

You'll see proof of the progress you're making on sustainability goals, energy cost reduction and other key performance indicators (KPIs) through documentation, dashboards and some of the industry's most sophisticated visualization tools.

Trane Intelligent Services has four major components



Building
Performance



Energy
Performance



Active
Monitoring

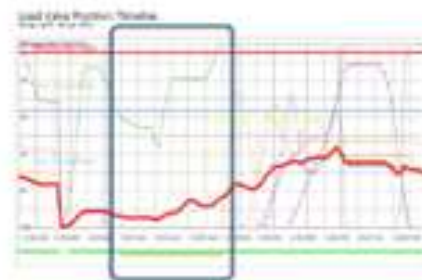


Energy
Optics

Building Performance

Trane building professionals analyze data and equipment behavior in the context of the overall system, discovering hidden information and opportunities for improvement.

- System-wide initial assessment
- Data-driven analytics
- Prioritized recommendations for improvement
- Follow-up consultation and reports, identifying next steps



Active Monitoring

Trane professionals maintain 24/7 watch over your critical building systems, proactively detecting issues and analyzing alarms, and initiating responses according to your specific rules of engagement.

- Detailed analysis of alarms and issues
- Remote resolution, if possible
- Initiation of on-site service, if necessary, giving the Trane team information that will expedite the repair

Energy Performance

This cloud-based building energy management system (BEMS) service uncovers energy waste in every corner of your building.

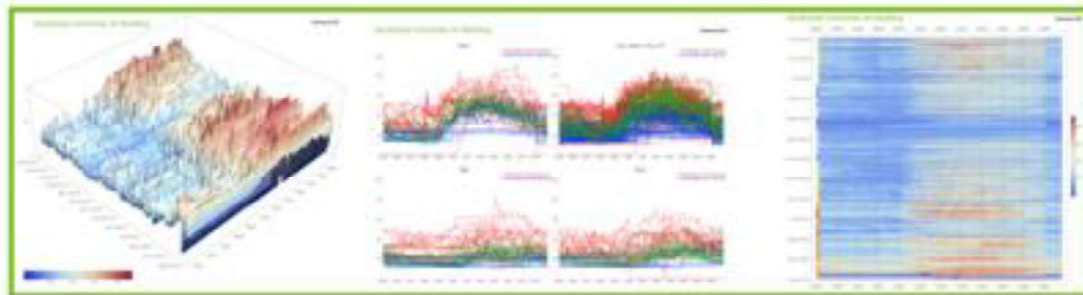
- Real-time energy monitoring
- Robust energy baselines, ongoing analysis and powerful visualization tools
- Centralized tracking and reporting
- Ongoing professional Trane advisory services



Energy Assessment

Two advanced tools—Trane Energy Optics® and Trane Energy Analyzer—illustrate your building's energy use. Because if we can see a problem, we can change it.

- Snapshot and analysis of your building's energy profile
- Action plans and recommendations
- Trane professional insights into cost savings and sustainability
- Ongoing expertise and support from Trane





Energy Supply Services

Energy management is a major contributor to the success of your operations. So, it's important to manage it strategically. This requires a comprehensive approach that not only examines the way buildings consume energy, but also how energy is procured. Trane Energy Supply Services provides strategic energy procurement and management to help organizations realize savings, manage risk and achieve business results.

Backed by more than 100 years of industry leadership in building and energy management expertise, HVAC systems, and a dedicated nationwide supplier network, Trane offers a complete energy management perspective no one else can match.

Energy Procurement and Management

Trane leverages more than a quarter century of strategic energy procurement and management services for clients of all sizes, who together spend billions of dollars on energy each year. Our offerings provide measurable results that will maximize your energy spend and help meet your business objectives.

Industry expertise: We have the long-standing industry relationships and expertise to manage all of your needs, from energy source to point of end use.

Breadth of services: Our broad capabilities and customer-centered approach allow us to develop a solution specific to your needs – from simple procurement to full-service energy management.

Tools and information you can use: We interpret complex data and provide you with actionable, easy-to-understand information you can use to make energy decisions and take full advantage of energy market opportunities.

Whatever level of energy service you require, we can deliver it. From energy consulting and bill management to procurement and energy auditing, we give you with the tools to meet your energy needs as cost-effectively as possible.

Your energy spend can have tremendous impact on your bottom line. Look to Trane for the industry expertise to power your energy needs.

Best practice strategies for **purchasing renewable energy** vary based on your specific goals, geographic area, local regulations, and state and local incentives. We have deep expertise in all facets of renewable energy procurement and we'll help you navigate the terrain.

Managing Your Energy Costs

Trane offers the cost-savings potential that comes from working with proven energy procurement and management professionals who stay alert to opportunities with 24/7 energy market vigilance. A dedicated account executive will be assigned to you to oversee the strategic development and tactical execution of your account.



Demand Response	Demand response ensures that your building's energy use is fully optimized and monetized without any adverse effects on tenant comfort or operations. We partner with clients to understand demand response opportunities in their local utility market and develop an equipment-specific plan for automated participation.
Risk Management	We help you strategically time your energy purchases to lock in pricing when markets are favorable. This helps you stabilize cash flow and stay within budget targets.
Lower Energy Costs	We analyze usage and leverage an understanding of national, state and local market dynamics, supplier relationships, and local/state regulatory expertise to help you maximize your energy dollars.
Cost Savings through Annual Budgeting	We help you set next year's energy budget based on historical usage, changes in market pricing or forecasted utility rates. This can save you time and money, while ensuring greater budget accuracy.

Strategic Energy Management

Energy savings are achieved through careful analysis of several factors. Trane has the people and industry relationships to formulate a complete energy supply strategy that takes into account supply, demand and sustainable solutions that will help you achieve your energy goals.

Knowledge Really Is Power

Improving your energy management and realizing positive business outcomes begins with energy awareness. Our Energy Supply Services offering empowers customers with the knowledge they need to maximize energy savings and leverage the markets to procure energy at the best terms possible.

Helping you understand the energy supply: We help you become more energy savvy through webinars and seminars covering market overviews, regional outlooks, and in-depth analysis of key energy topics.

Energy market publications: We invest in information-gathering so you don't have to. We'll provide literature with data and discussions surrounding energy market fundamentals, including forward pricing in key regions, weather, peak demand and input fuel pricing.

Industry-leading energy supply and demand capabilities: Our analyses of buildings and energy systems can turn data into dollars. Together, these services enhance supply procurement by ensuring optimal pricing and contract terms from energy suppliers.



Informed energy planning: Trane Energy Supply Services can create a strategic energy plan for you that incorporates proprietary data and forecasts, risk tolerance assessments, and purchasing strategies. This can reduce your price risk and exposure to market volatility.

Storage-Backed Distributed Energy Resources

Trane offers **thermal energy storage systems** that can provide financial and environmental benefits to help meet your operational goals. **Thermal energy storage** reduces a building's electricity **consumption** periods. Our **thermal energy storage** system can help overcome pricing volatility and the intermittency of renewable generation by enabling load flexibility. Load flexibility offers rate mitigation and supports renewable generation.

A Trane controlled air- or water-cooled chiller charges Ice Bank® energy storage tanks when excess or inexpensive energy is available – at night, for example. The energy storage tanks discharge when electric demand and electricity prices are high, or when the utility asks for the discharge to occur. Just one Ice Bank tank can store 18 kW over six hours to cool more than 7,400 sq. ft. That's 108 kWh/day per tank.

Thermal energy storage in a 500,000 sq. ft. commercial building can typically shift up to 1 MW a day of peak load. The systems generally include Trane air- or water-cooled chilled water systems, along with ice tanks or stratified chilled water tanks. Trane controls systems allow flexible operational times to keep up with the changing rates from utilities and allow electricity market participation. Project paybacks can range from 2-4 years, depending on the difference in demand charges.

Smart Electric Vehicle Charging: Trane is committed to continuous technology development programs that embrace ideas new to the industry. These development teams work **hand-in-hand** with industry experts to bring these technologies to fruition. We will work with clients to implement a smart electric vehicle charging solution when it fits the project scope and financial expectations.



Public Relations and Community Outreach

Trane will collaborate with your staff to craft a public relations plan to help Lake County receive positive recognition for your energy savings program. Here are a few examples of publicity that have resulted from similar projects.

Trade Publication Example

Our performance contracting project for [REDACTED] was showcased in Healthcare Executive, a publication of the American College of Healthcare Executives (ACHE):

Local Newspaper Example

Our work with [REDACTED] resulted in this local newspaper article:



Web Site Article Example

Trane's exterior lighting upgrade for the City of Vestavia Hills, AL resulted in this web site article. Trane presented the City with an Energy Efficiency Leader Award since the project cut energy consumption in half.

•



2. Training, Maintenance and Operation Services

Describe ongoing training, maintenance and operation services.

Training Services

New equipment will achieve a substantial part of the savings that you expect from a performance contract. Proper training of your staff on how best to operate that equipment will complete the picture. Furthermore, an investment in boosting the skills of your facility staff will keep your buildings at peak operating efficiency.

Trane provides complete training resources to help you achieve these goals, including both technical competency and behavior modification training to underscore the importance of energy conservation.

To begin with, we'll assess the skills of the people who operate and maintain your buildings. This will involve interviews with facility managers and staff. Once we understand their competency levels, we'll recommend a training plan to upgrade their skills in order to maximize the energy savings promised by the new equipment. **The selected training program will be mutually agreed upon by both of our organizations.**

Several Training Options

Trane offers a variety of training programs to choose from. These can be conducted at your location, at a nearby Trane office, at our national training centers, or through training manuals. We can include any combination of these resources, depending on your preference. This project includes on-site training; the other training options below are available for an additional cost.

Our course instructors have strong controls and HVAC service backgrounds. They draw on the expertise of Trane applications engineers, product engineers, technical support engineers and product development teams to provide the best training possible.

Select the Training Method That Works for You



On-Site Training
(your facilities)



Office Training
(Trane local office)



Trane University
(factory training)



Air Conditioning
Clinics (manuals)



On-Site Training: This training is designed around applications specific to your facilities. Examples include:

- System training to understand chillers, dehumidification, and rooftop variable air volume units
- Controls training to obtain the best performance from your building automation system
- Boiler plant efficiency and maintenance, lighting, and water conservation measures
- Shadowing Trane technicians while we provide contracted maintenance services

Office Training: Trane has the ability to customize training for your employees at our offices. This includes the material covered in our Trane University courses listed below.



Trane University: Trane University offers Building Systems and Controls training in St. Paul, MN and Technical Service training in La Crosse, WI. These courses also can be conducted at Trane offices throughout North America. In either case, our instruction will further advance your staff's understanding of systems and the interaction between various components. Well-trained facility managers and technicians will minimize service costs by efficiently identifying and correcting problems.

Building System and Controls training offers a comprehensive portfolio of technical courses to help you effectively monitor and coordinate your HVAC equipment and systems using your Trane building automation system.

Technical Service training offers factory training for commercial systems service, maintenance and operation. These courses are designed to increase technician competence and confidence when servicing HVAC and controls systems.

Trane A/C Clinics: Trane has developed several training manuals to support our in-person training efforts, including an A/C Clinic. This comprehensive course covers the fundamentals of heating, ventilating, and air conditioning. Each clinic includes a student workbook, with corresponding quiz questions/problems.



Trane University is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU

Staff Involvement

An important, but sometimes overlooked aspect of a performance contract is the impact of building occupants on the project's overall success. In addition to facility staff, your employees should understand the importance of energy conservation and how their day-to-day actions can contribute to the project's total savings. Through this type of education, we are working to change the *culture*, not just the *building*. The goal is to provide your staff with no-cost or low-cost strategies that they can implement quickly, thereby increasing the program's overall savings.

Maintenance and Operation Services

Trane provides a wide range of offerings that enable you to enjoy the highest levels of performance from the systems in your facilities. Whether you're installing new equipment, maintaining an existing system or completely upgrading your infrastructure, we can provide the expertise to match your specific needs.

Choose from among the following services

- **Repair Services** – Trane technicians can service all brands and types of HVAC units
- **Scheduled Agreement** – Periodic maintenance of systems to ensure peak operating performance
- **Select Agreement** – Added protection against unexpected equipment failures
- **Remote Diagnostics** – Ability to monitor your critical building systems remotely and quickly troubleshoot as necessary

Repair Services

Trane is a global leader in repair, replacement and maintenance services for all brands and types of HVAC units. When you choose Trane technicians, you can be confident that you're receiving dependable service from highly trained industry professionals.

Our local technicians can perform repair services for a wide range of indoor comfort systems, including:



- Air filtration
- Air handlers
- Chillers (air-cooled and water-cooled)
- Chilled water and condenser water pumps
- Controls (digital and pneumatic)
- Cooling towers and evaporative coolers
- Condensing units
- Fans
- Humidification
- Motors and motor starters
- Rooftop and unitary HVAC units (electric and gas-fired)
- Variable frequency drives



Knowledgeable Trane technicians will troubleshoot your equipment using data compiled from experiences with clients around the world. Your Trane technician will look beyond the immediate failure, identifying weaknesses or potential areas of unreliability.

Scheduled Agreement

Under our Scheduled Agreement offering, factory authorized service technicians perform the periodic maintenance required to keep your systems operating at their peak, so you no longer have to plan, schedule or manage routine maintenance. We're fully trained to perform maintenance on Trane HVAC equipment and other brands within your facilities.

Under a Scheduled Agreement, your building systems are maintained by our knowledgeable service technicians using Six Sigma maintenance procedures to deliver the highest level of quality. **Clients often experience lower maintenance costs under a Scheduled Agreement** because impending equipment failures can be identified and resolved before they become major problems.

Select Agreement

Here, Trane takes scheduled HVAC maintenance to the next level. With a Select Agreement, you receive all of the benefits of a Scheduled Agreement, plus parts and labor coverage for maintainable equipment selected by your team – and approved by Trane.

We'll work with you to select the major components and systems in your facility that you want Trane to maintain. **We cover the cost of repairing your system or replacing the pre-selected components, should they fail.** We'll help you consider acceptable performance ranges, reliability and risk tolerance to determine the level of coverage you require for your HVAC maintenance needs.



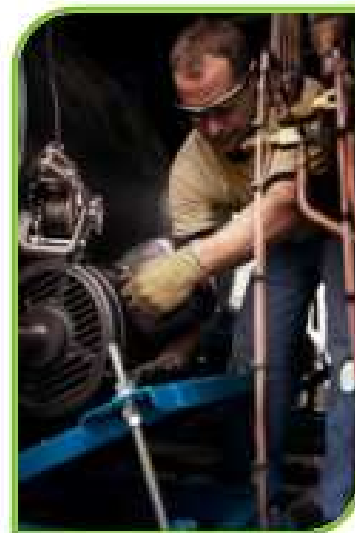
Remote Diagnostics

Quickly detect failures in your building with round-the-clock monitoring from the Trane Intelligent Services center, where our building professionals provide support 24 hours a day, 365 days a year. Beyond alarm detection, Trane building professionals with deep industry expertise analyze each incoming alarm and initiate action to resolve the issue, thereby maintaining efficiency and peak performance. The ability to address some problems remotely can reduce the need for service calls – and the amount of time your staff spends on facility-related problems.

Local Office Service Capabilities

Lake County will be supported by our Sacramento office, which has 75-truck-based service technicians who can promptly respond to any request. Their experience level ranges from journeymen to experienced senior technicians and supervisors – some of whom possess decades of HVAC industry experience. Our service technicians are skilled in maintaining and repairing not only Trane equipment, but nearly every manufacturer in the industry.

While an increasing amount of diagnostics can now be done remotely, Trane still believes in a local service component. We have factory technicians who reside in neighboring Yolo and Sonoma Counties. While it cannot be guaranteed in advance, past experience shows that it is highly likely that Trane's interest would be well served to hire local staff if we were to develop a significant project in Lake County.



Our local team also has the expertise to perform system upgrades and replacements, including major mechanical equipment such as chillers, cooling towers, air handlers, pumps and coils. Trane's local offices, including Sacramento, have dedicated professionals in each of the following areas:

- **Contracting Solutions:** Total comprehensive solutions, including guaranteed energy savings performance contracting and large turnkey installation projects.
- **Trane Equipment:** Energy-efficient, environmentally friendly HVAC equipment for both comfort and process applications.
- **Controls:** State-of-the-art building automation systems. Our local offices are complete with dedicated Controls Demonstration Centers for client education and training.
- **Service:** Our service technicians are skilled in maintaining and repairing not only Trane equipment, but HVAC systems from nearly every manufacturer in the industry.
- **Supply:** Full line of Trane parts, non-Trane parts, maintenance supplies, safety equipment, refrigeration, and maintenance/service tools warehoused locally.
- **Training:** Fully equipped training facilities for seminars and training on industry issues and technical information critical to your operation.



3. Contract Defaults

Have you ever defaulted on a contract? If yes, where and why.

No.

4. Suspension or Debarments

Has your firm ever been suspended or debarred by any government agency? If yes, please explain.

No.

5. Court Claims or Arbitration

In the past five (5) years has any claim against your company concerning your company's work on a project been filed in court or arbitration?

Trane is a multi-billion-dollar company that enters into hundreds of transactions on an annual basis and, as such, becomes involved in claims and disputes that arise in the ordinary course of its businesses. As a large company, claims and suits are numerous as many claimants are hoping to tap the deep pockets of a large company. Many of these are unwarranted claims, which often result in dismissal.

Company-wide compiled data of this scope is not readily available and this information cannot be accurately ascertained without extensive and burdensome research. It is the policy of our company to settle claims and disputes amicably and to the satisfaction of our customers. Due to the large volume and because information related to settlements are confidential, we are unable to disclose detailed information on all litigation and claim matters. However, no such dispute or litigation is likely or expected to adversely affect Trane's ability to perform hereunder.

Since becoming an ESCO in 1995, Trane has only been involved in three lawsuits involving performance contracting projects. All three have been resolved by both parties, the most recent one occurring in 2012.



6. NAESCO Accreditation

Preference shall be given to U.S. Department of Energy qualified ESCOs or National Association of Energy Services Companies (NAESCO) accredited ESCOs.

Trane earned accreditation as an Energy Services Company (ESCO) in 2004 from the National Association of Energy Services Companies (NAESCO) and has retained accreditation every year since then. NAESCO has determined that Trane provides its customers with demonstrated competency and accepted industry practices proven to deliver successful projects. This is a testament to our core competencies in all energy-related technical and business disciplines.







E. Fee Schedule

Provide your company's cost proposal for the Audit and Project Development Phase only. Include approach to project fees, current hourly rates and all other information about service fees or other billable costs.

Trane uses open book pricing with the belief that cost transparency gives clients a clear understanding of the full project scope, as well as its financial and operational impact. By involving the client early in the decision-making process – from choosing equipment to selecting subcontractors – Trane maintains the transparency that results in the optimal project solution.

We do this by providing linked spreadsheets that represent a breakdown of project costs, pricing, mark-ups, pro-forma details, savings, and contract termination implications.

Our Northern California team has extensive experience with open book pricing through the high volume of work that we perform for state and local government public entities. In addition, as an ESCO authorized to serve federal government clients, we have completed many projects that incorporate the federal ESCO open book pricing methodology. We will conform to the pricing transparency methodology that Lake County desires.



Cost Considerations and Components

Best Pricing Assurance – Any piece of equipment that can be procured utilizing Trane's national joint purchasing agreements, such as OMNIA Partners (formerly US Communities), can be purchased at the associated reduced price. Due to our \$16.6 billion annual corporate revenue, we have significant buying power in the marketplace for all types of construction-related products and services. By working together, we will leverage our considerable buying power to benefit Lake County.

Manufacturer Neutrality – Trane recommends equipment solely based on a best value methodology, including customer preference. Rest assured that we will not include Trane-manufactured equipment or controls when it's not in your best interests.

Labor Neutrality – Our typical process for a performance contracting project includes procuring quotes from at least three installing subcontractors for each aspect of the project. If you agree with this methodology, the selection of these subcontractors will be a joint effort between Lake County and our team. You will make the final determination of all subcontractors.

Project Management Costs – Our management costs include all engineering, permits, full-time project supervision, site costs, commissioning and training for this project. These costs vary depending on the scope and duration of the project.

Preliminary Audit and Project Development Costs – These phases are performed by Trane with no cost to our clients, as they are part of our overhead. Once we define the scope of work

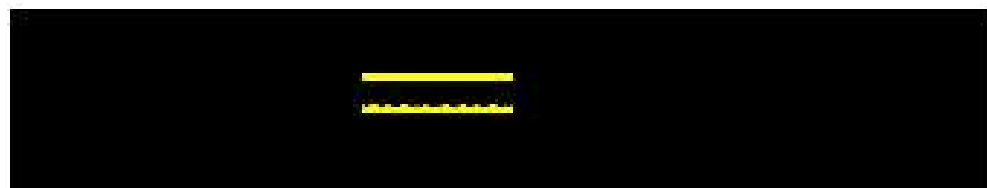


for each site, we will provide preliminary costing and ask for authorization to move forward at that site, which may require engineering or other services. Upon authorization, you will know the agreed upon costs for that site.

Investment Grade Audit Costs – Costs to complete the Investment Grade Audit (IGA) are determined by using internal estimating tools. The project development team assigns their time to an IGA project through the PeopleSoft® system for time sheet tracking and auditing. For this IGA undertaking, we will track and manage schedule progress using the Microsoft Project® scheduling software. During the IGA, the Construction Manager and team are accountable for tracking costs and taking the appropriate corrective action if necessary.

Hourly Fees, Mark-ups and Overhead

We will use the following mark-ups, overhead percentages and rates, and maintain 100% pricing transparency with Lake County.



Once we complete the final open book estimate, subcontractors are confirmed, and equipment selections are finalized, we will commit to the total price shown in the open book pricing estimate after all mark-ups and profit. This will become our firm fixed price for the defined scope of work. Any change orders for modified or additional scope must be requested in writing by Lake County.

NO CHANGE ORDERS

Unless you request them. This is Trane's standard policy for construction projects



Contract Comments

Trane is suggesting the following changes (in redlined text) to the Insurance Requirements of a contract with Lake County resulting from this RFQ. The comments are preliminary and based on the introductory information we have been provided to date. As Trane strives to provide the best service specifically tailored to our individual customers, we will work with your team after award to customize and craft the final scope, corresponding price and mutually agreeable contract that addresses the Construction and Implementation Phase.

Redacted



Redacted



Award Evaluation Criteria Matrix

As summarized in the table below, we believe that this response clearly demonstrates our ability to provide the requested services to ensure a successful Energy Conservation Performance Contract for Lake County facilities.



Award Evaluation Criteria	Location of Trane's Response
a. Comprehensive Energy Conservation Project Experience [25 points]	
1) Quantity and quality of energy conservation projects in California	Pages 2-3
2) Proven track record of completing successful projects	Pages 2-3 and 45-49
3) Strength of California County references	Pages 45 and 59
b. Solar Project Experience [25 points]	
1) Quantity and quality of solar energy projects in California	Page 9
2) Proven track record of completing successful projects	Pages 10-11
3) Strength of California County references	Page 9 (Madera Community Hospital)
c. Proposed Project Team's Experience [25 points]	
1) Overall experience in successfully completing solar energy projects	For solar energy projects, our local offices are supported by subject matter experts from our Renewable Energy and Power Solutions group, which is explained on pages 7-8
2) Breadth of capabilities to support successful implementation of project	Pages 38-43
d. Financial Strength and Stability [10 points]	
1) Overall financial strength of firm	Page 33
2) Bonding capacity	Page 54
e. Project Financing Expertise	
1) Project financing experience	Pages 29-32
2) Experience with different financing methods	Pages 29-32
f. Public Relations Expertise	
1) Experience with community outreach	Pages 77-78



EXHIBIT C

(Feasibility Analysis Authorization)



12/4/2020

County of Lake
255 N. Forbes Street
Lakeport, CA, 95453
Attention: Lars Ewing

Subject: Feasibility Analysis Authorization (Energy Conservation Performance Contract)

The Trane Energy Services team is committed to taking the first step and qualifying that an opportunity exists in your facilities to produce county infrastructure improvements that are paid for through facility energy, operational efficiency cost reductions and/or revenue enhancements. We understand that moving forward with this Feasibility Analysis Authorization at this time does not warrant any financial obligation by (**County of Lake**).

The purpose of this analysis is for the parties to understand your facilities needs and opportunities, time and resources commitment at each project phase, and steps to move forward to arrive at a mutually agreeable project that supports your business goals.

Trane agrees to the following:

- ✓ Complete a Feasibility Analysis that identifies potential building and infrastructure improvements that will improve facility efficiency and decrease operating costs;
- ✓ Present our findings from the Feasibility Analysis and provide recommendations for building and infrastructure improvements that result in facility efficiency and cost reduction.

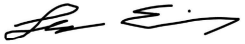
Client agrees to the following:

- ✓ Provide Trane access to the building, drawings and appropriate operating and capital budget information needed to assist in completion of the Feasibility Analysis, (to include major repair bills, service agreements, and operating data);
- ✓ Provide Trane with any site specific safety plans or safety plans outlining COVID-19 procedures. Trane "Trane U.S. Inc." will provide its current safety procedures and follow the more stringent.
- ✓ Provide Trane with 12 to 36 consecutive months of all utility bills, (gas, electric, fuel oil, water, etc.)
- ✓ Allow Trane to present findings to the committee that would be involved in the decision-making process.


The attached "Project Event Timeline" provides shared milestones for the completion of the next steps that can be expected should both parties decide to continue towards a Detailed Facility Analysis after the Feasibility Analysis is completed.

We look forward to working with your staff and gaining your trust.

County of Lake

By: Lars Ewing
Signature: 
Title: Public Services Director
Date: 12/4/2020

Trane U.S. Inc.

By: Robert Wax
Signature: 
Title: Regional Director - Comprehensive Solutions
Date: 12/4/2020

Project Event Timeline – Comprehensive Solutions Guarantee

