



SECTION THREE

PROPOSAL FORMAT AND CONTENT

3.01 INTRODUCTION

- A. One of the objectives of this RFP is to make proposal preparation easy and efficient, while giving Offerors ample opportunity to highlight their proposals. The evaluation process must also be manageable and effective. When an Offeror submits a proposal, it shall be considered a complete plan for accomplishing the tasks described in this RFP and any supplemental tasks the Offeror has identified as necessary to successfully complete the obligations outlined in this RFP.
- B. The proposal shall describe in detail the Offeror's ability and availability of services to meet the goals and objectives of this RFP
 - 1. Include a transmittal letter to confirm that the Offeror shall comply with the requirements, provisions, terms, and conditions specified in this RFP.
 - 2. Include signed Offer Form OF-1 with the complete name and address of Offeror's firm and the name, mailing address, telephone number, e-mail address, and fax number of the person the State should contact regarding the Offeror's proposal.
 - 3. If subcontractor(s) will be used, append a statement to the transmittal letter from each subcontractor, signed by an individual authorized to legally bind the subcontractor and stating:
 - a. The general scope of work to be performed by the subcontractor;
 - b. The subcontractor's willingness to perform for the indicated.
 - 4. Provide all of the information requested in this RFP in the order specified.
 - 5. Be organized into sections, following the exact format using all titles, subtitles, and numbering, with tabs separating each section described below. Each section must be addressed individually and pages must be numbered.
 - a. Transmittal Letter (Attachment 1, Offer Form OF-1).
 - b. ESCO Response to RFP (See 3.02 C. Specific Instructions for Response to this Request for Proposal) for format requirements.
 - c. Any Offeror exceptions



3.02 PROPOSAL SUBMITTAL AND SELECTION PROCESS

A. POLICIES

1. All submittals shall become the property of the State of Hawaii and will not be returned.
2. No individual firm is assured of obtaining any work as a result of selection for the SPO vendor list.
3. The actual extent of services required under any subsequent contract as a result of this solicitation is not known.

B. GENERAL SUBMITTAL INSTRUCTIONS

1. All submittals will be evaluated. Submittals received after the deadline will not be considered in this RFP solicitation.
2. Interested offeror (i.e. ESCO) may resubmit when resolicited after the 1st year of this RFP solicitation.
3. The State shall not be liable for any costs incurred by respondents in the preparation of submittals and proposals nor in costs related to any element of the selection and contract negotiation process.
4. Communications Regarding This RFP
 - a. Questions and requests for clarification on this Request for Proposals must be submitted *in writing*. The State will respond to written questions by the date indicated in **Section 1.04 RFP Schedule and Significant Dates (or as amended)**
 - b. No verbal inquiries will be addressed. In the event it becomes necessary to revise any part of this RFP, notification by those registered on the Hawaii electronic procurement system (HePS) will be sent via e-mail. Written modifications only will be legally binding. No employee or agent of the State may verbally alter the contents of the RFP.
 - c. Communication with other State officials, the Evaluation Committee, or others associated with the SPO and public facilities with regard to this Request for Proposals is prohibited.

C. SPECIFIC INSTRUCTIONS FOR RESPONSE TO THIS REQUEST FOR PROPOSAL

IMPORTANT: Re-state the number and question prior to your response.



- 1.0 OVERVIEW OF APPROACH TO ENERGY PERFORMANCE CONTRACTING**
Provide a stand-alone overview. For ESCOs selected for the as-needed list, this section will be posted on the SPO website www.spo.hawaii.gov as critical reading for participants to identify potential ESCOs to consider.

Introduction

Trane is pleased to offer the State of Hawaii the most innovative, cost effective and environmentally responsible Performance Contracting program available in today's energy services marketplace. As the leading global provider of comprehensive facility solutions and indoor comfort systems, we look forward to offering our world-class performance contracting services throughout the State of Hawaii.

Company Background

Trane combines leadership in service, energy efficiency, and manufacturing to offer a different approach to the way buildings work. This approach, called High Performance Building, can include facility assessments, life-cycle cost analyses and system optimization measures. The resulting plans ensure that structures will have sustainable efficiency for the life of the energy systems. By evaluating all the systems in a building, we can make recommendations based on actual performance rather than tasks or schedules.

Trane is the world's largest manufacturer of commercial heating, ventilating, air conditioning, and building management systems equipment. Thousands of organizations worldwide rely on our commercial systems to provide operational efficiency, comfort, and promote the health and safety of their occupants. A global, diversified manufacturing and services organization, Trane employs approximately 29,000 people at 104 manufacturing locations in 28 countries, and has annual sales of more than \$8 billion. With our deep commitment towards energy efficiency and sustainability, Trane has 88 LEED accredited professionals and numerous partnerships with internationally and nationally recognized energy and sustainability associations.

Market Sectors Served

Trane provides comfort, environmental control, facility management, service, maintenance and energy savings measures across all building types. Trane has also been the building solutions provider of choice for many institutions across the United States. We provide these services for highly secured federal government defense facilities, industrial facilities, pharmaceuticals, healthcare, manufacturing, education, and a wide variety of other state and municipal government organizations.



Company Strengths

Known for innovation, Trane has manufactured reliable air conditioning equipment since 1913. Our company is the leading single-source provider of equipment, controls, installation, training, and support. We offer a complete line of highly efficient, state-of-the-art heating and cooling equipment for commercial and residential use. The Earth•Wise™ CenTraVac® chiller, for example, is the most energy efficient air conditioner on the market. And Trane Integrated Comfort™ Systems feature direct digital controls and remote monitoring.

Areas of Expertise

Although Trane spans the globe, we maintain a strong local presence in each of our markets. Our company has more than 100 offices in the major metropolitan areas of the United States and Canada. Each office is staffed with experienced engineers and sales professionals who provide comprehensive service, training, and support. Trane offices also provide service, local training and parts for customers that can only be delivered effectively through a local support organization.

General Approach to Performance Contracting

Since 1994, when the Comprehensive Solutions business or ESCO services arm, also known as Performance Agreements for Comfort from Trane (PACT™), was introduced, Trane has been in the energy business. In that time, our company has provided Performance Contracting (PC) services, including total facility systems and guaranteed energy efficiency upgrades, in hundreds of buildings throughout Hawaii and North America.

Trane has successfully performed more than \$250M in guaranteed energy performance contracts, and more than \$740M per year in successful turnkey contracting projects. We have implemented successful energy conservation measures for the Mid-Pacific Institute, Honolulu, Hawaii, Sheraton Poipu, Poipu Beach, Kauai, University of Arizona, Peachtree City, Georgia, Hillsborough County, Florida, Ingham County, Michigan, Jefferson County, Texas, Oswego County, New York, Noble County, Indiana, and Wise County, Virginia.

Trane has the scale to perform projects of all sizes (ranging from under \$40,000 to \$50,000,000 bonding capacity per project) and has performed PC projects of both national and international scale. Other regional turnkey and comprehensive solutions projects include clients such as O.C. Tanner, Northrop Grumman, L-3 Communication, Wells Fargo Bank, and numerous commercial properties throughout the State of Hawaii.



Typical Project Phases

Project Development

Our first step in the process is to establish a mutually agreed upon team with members from the State of Hawaii and Trane that will jointly establish the desired goals and outcomes of the performance based contract. The team will be responsible for defining both the technical and financial objectives for the contract. The project definition phase will typically address the following areas for development:

- Define facilities/buildings to be considered in program
- Define total infrastructure items including traffic lighting and signage and irrigation systems
- Collect utility cost data
- Collect facility operating cost data
- Utility analysis of existing conditions
- Energy performance benchmarking of facilities

Energy Auditing

The initial phase of the facilities involves determining the energy, water, wastewater, operational, maintenance and other cost savings potential. This preliminary audit serves to define the savings potential of a project and to estimate the costs to perform the recommended savings measures. The information developed during this phase is designed to provide the data needed to make an informed decision concerning whether an ECM has the potential to be researched further in the more advanced phases of a project audit.

Performance/Savings Guarantee

The Trane PACT™ energy efficiency Guarantee is clear and straightforward. If your actual energy efficiency is less than Trane's guaranteed energy efficiency, we will pay the difference. We can make this promise because of our combined expertise in products, service, and performance contracting. Trane professionals can manage performance contracting projects of any scale. Because of our deep knowledge of building systems, our energy efficiency forecasts have been extremely accurate. Actual monetary savings are affected by many factors, some of which are not in the control of Trane.

Financing

Trane works with its customers to facilitate third-party performance contracting project funding, bringing a history of financial stability and success in the process. Similar to other ESCOs, Trane does not finance projects internally—but our Comprehensive Solutions team facilitates a process toward gaining funding that is transparent, seamless, timely and cost-effective. Trane has successfully used this process to assist our customers for more than a decade.

(continued)



Construction

The system design team will consist of Trane in-house local, regional, national engineers and 3rd party, local registered consulting engineers—working together closely and cross-validating design parameters to ensure the successful design-development, implementation and post validation of the project. Trane employs more than 750 degreed engineers, over 88 LEED accredited professionals and a significant number of Certified Energy Managers (CEM) in its national network. Final construction documents will be reviewed and approved by a registered professional engineer duly licensed to practice in Hawaii.

Commissioning

To validate results for your purposes and our own, Trane methodically measures and tracks building performance. This means commissioning all buildings covered under a performance contracting agreement to check that their systems are working properly. It also means regularly monitoring and adjusting building performance in order to improve facility management, reduce maintenance problems, and identify ways to improve future buildings.

Trane factory-authorized service technicians use expertise and advanced technologies to ensure that your building systems deliver many years of effective, efficient performance. When dealing with energy systems other than HVAC systems, Trane will work with the State of Hawaii to bring the best commissioning agents to ensure those systems are also performing as efficiently as technically possible.

Measurement and Verification

Trane complies with the International Performance Measurement & Verification Protocol (IPMVP) to validate your ESPC guarantee. Our accreditation by the National Association of Energy Service Companies (NAESCO) further shows our adherence to industry best practices. This approach offers you several advantages:

- Confidence. The IPMVP ensures technical rigor, so that you and we are confident in the value of information about each performance contract.
- Accuracy. We are secure in our projections for energy savings, which translates to lower risk for you, and more available money for energy conservation measures (ECMs).
- Dependability. We have the resources needed for thorough M&V, and a history of achievements that guide the Trane process. That process stands with us behind your guarantee.

Since Trane entered the performance contracting business, we have guaranteed more than \$170 million in energy savings, and have reconciled more than \$100 million of those savings.

(continued)

Client Staff/Occupant Training

We provide initial training for new and retrofitted systems during installation, and ongoing training customized for systems and equipment scheduled in the maintenance contract. This includes fundamental system orientation for your facility staff and setting up operating logs for critical reference during the first year of operation.

Post-construction Maintenance Support

Once project construction is complete, Trane will provide ongoing support, maintenance, monitoring, and management services, together called a Performance Management Program. This program can include any combination of the following activities and services:

- **Facility Maintenance.** Maintenance and repair services, assisting in identification and evaluation of outsourced and internal maintenance programs, and as-needed repair and retrofit.
- **Facility Operations Consulting.** Recommendations on how to optimally operate the facilities, identifying and solving facility problems, recommendations on future facility renovations and expansions, and assisting in identifying energy-efficient options.
- **Performance Monitoring.** Utility bill analysis, monitoring of facilities via building automation, verification of building comfort levels, and identifying operational and equipment problems.
- **Performance Reporting.** Guarantee status and reconciliation reporting, and presentations of results to customer groups.

We provide this comprehensive service because we believe that performance management is critical to your long-term success. And we want to be a part of it.



Trane has a fully staffed office with 55 employees in Hawaii, and 100 offices in major metropolitan areas throughout the United States, all supporting our Comprehensive Solutions business.



2.0 PROJECT HISTORY

2.1 Market Sector Involvement

Describe your company's expertise in each of the following market sectors.

- 2.1.1 *School districts—small (1-5 schools) or rural over 2 hours from major metropolitan area*
- 2.1.2 *School districts—large*
- 2.1.3 *Higher education facilities—universities and major colleges*
- 2.1.4 *Higher education facilities—community colleges and small/rural colleges*
- 2.1.5 *Cities/Counties—large*
- 2.1.6 *Cities/Counties—small*
- 2.1.7 *Medical/Hospital facilities*
- 2.1.8 *State Department of Defense/Military facilities*
- 2.1.9 *Correctional facilities*
- 2.1.10 *Transportation facilities (airport, harbor, highways, parking structure)*
- 2.1.11 *Sports complexes, stadiums, arenas, etc.*
- 2.1.12 *Other government entities—recreation centers, library districts, data/communication centers, etc.*
- 2.1.13 *Multifamily buildings—high-rise or large buildings*
- 2.1.14 *Multifamily buildings—smaller scale multi-plex buildings*
- 2.1.15 *Multifamily buildings—mix of building types*
- 2.1.16 *Community-wide efforts—multiple entities in partnership, or other example*
- 2.1.17 *Judicial Facilities*

Customers and Key Markets

A majority of Trane services and products are dedicated to commercial and institutional facilities, such as those listed above. For the year ended December 31, 2007, Trane had sales of \$7.4 billion and income from continuing operations of \$400.2 million.

In 2007, the sale of commercial equipment accounted for approximately 47 percent of total revenue; the sale of residential equipment accounted for approximately 24 percent of total revenue; and the remaining 29 percent of 2007 total revenue was derived from the sale of parts, services and solutions. Approximately 59 percent of the company's revenue in 2007 was from sales of equipment, parts and services to the replacement, renovation and repair market segment, and the remainder from new construction.

The company derived 27 percent of its 2007 revenue from sales outside the United States. Taken as a whole, our business is not dependent on any single customer—or any few customers. No single customer accounted for 10 percent or more of Trane's sales for the past three years.



2.2 Project Summary

List all Energy Performance Contracting projects developed and implemented by your firm within the past five years. Only include projects where work was directly conducted by your company. If it is relevant to list projects performed under contract to another firm, clearly identify the firm with overall responsibility for that project and the project's relevance to this RFP response.

Overview of Trane Performance Contracting Projects

A complete list of Trane performance contracting projects would require thousands of pages and hundreds of reading hours. Our company has the capacity to perform projects of all sizes, ranging from under \$40,000 to \$50,000,000 bonding capacity per project, and has performed PC projects on both a national and an international scale.

Over the past five years, Trane has successfully performed more than \$250M in guaranteed energy performance contracts, and more than \$740M per year in successful turn key contracting projects. Trane has implemented successful energy conservation measures for organizations in both the private and public sectors.

The following two pages contain examples of Trane Performance Contracting projects from recent years. These tables give an accurate, if incomplete, picture of the scope of our Performance Contracting business.



Trane - Prior 5 Year Performance Contracting History

Project Name	Facility Type	Location	Project Size US (\$)
MCAS Beaufort (all phases)	Government	Beaufort, SC	\$21,719,802.00
Charleston Air Force Base	Government	Charleston, SC	\$24,600,000.00
U.S. Embassy	Government	Seoul, Korea	\$5,900,000.00
8th Army	Government	Seoul, Korea	\$3,136,870.00
Ft. Drum	Government	Watertown, NY	\$6,601,190.00
Naval Air Station Oceana	Government	Norfolk, VA	\$8,230,000.00
Dam Neck Annex, Oceana NAS	Government	Norfolk, VA	\$32,554,853.00
Texas Military Institute	Government	San Antonio, TX	\$640,000.00
Ingham County	Government	Flint, MI	\$1,590,000.00
Hillsborough County	Government	Tampa, FL	\$11,720,000.00
Fort Ann Central School District	Education	Albany, GA	\$270,000.00
Santa Rosa Junior College	Education	San Francisco, CA	\$680,000.00
Bryant Schools Amend 1	Education	Little Rock, AR	\$820,000.00
Shelby County Board of Education, Ph. 5	Education	Birmingham, AL	\$930,000.00
Bryant Schools	Education	Little Rock, AR	\$990,000.00
Keuka College	Education	Rochester, NY	\$1,020,000.00
North St. Francois Phase 3	Education	St. Louis, MO	\$1,070,000.00
Wabash Schools	Education	Indianapolis, IN	\$1,120,000.00
Harlandale Independent School District Change Order 1	Education	San Antonio, TX	\$1,190,000.00
North St. Francois Cty. R-1 School District (change order)	Education	St. Louis, MO	\$1,190,000.00
Mineral Area College	Education	St. Louis, MO	\$1,250,000.00
Northwest Community Schools	Education	Flint, MI	\$1,290,000.00
Todd County Schools	Education	Louisville, KY	\$1,300,000.00
Clinton Schools	Education	Louisville, KY	\$1,300,000.00
Jonesboro Schools	Education	Jonesboro, AR	\$1,400,000.00
Linden Community Schools	Education	Flint, MI	\$1,660,000.00
North St. Francois Cty. R-1 School District	Education	St. Louis, MO	\$1,700,000.00
St. Bernard-Elmwood Place School District	Education	Columbus, OH	\$1,760,000.00
Ozark Schools	Education	St. Louis, MO	\$1,850,000.00



Trane - Prior 5 Year Performance Contracting History

Project Name	Facility Type	Location	Project Size US (\$)
Ft. Smith Schools	Education	Little Rock, AR	\$1,920,000.00
Visalia Unified School District	Education	Sacramento, CA	\$1,990,000.00
Simpson County Schools	Education	Louisville,KY	\$2,300,000.00
Wa-Nee Community Schools	Education	Indianapolis, IN	\$2,500,000.00
Shelby Board of Education Phase VI	Education	Birmingham, AL	\$2,650,000.00
Potosi R-III School District	Education	St. Louis, MO	\$2,840,000.00
Wayne County Schools	Education	Raleigh, NC	\$2,880,000.00
Keuka College - Ball Hall - Historic Building 1890	Education	Keuka Park,NY	\$3,400,000.00
Pittsylvania Schools	Education	Roanoke, VA	\$3,450,000.00
Seminole Community College	Education	Orlando, FL	\$3,600,000.00
Wise County Schools	Education	Roanoke, VA	\$3,980,000.00
Steuben Schools	Education	Indianapolis, IN	\$4,560,000.00
West Plains Schools	Education	St. Louis, MO	\$6,500,000.00
Manchester Community Schools	Education	Indianapolis, IN	\$6,790,000.00
Parkway School Dist.	Education	St. Louis, MO	\$6,860,000.00
Charlotte-Mecklenburg Schools	Education	Charlotte, NC	\$7,350,000.00
Jefferson County Bd of Education	Education	Birmingham, AL	\$8,760,000.00
Rockwood RVI-School District (change order)	Education	St. Louis, MO	\$10,290,000.00
Wise County	Education	Roanoke, VA	\$480,000.00
Noble County	Education	Indianapolis, IN	\$590,000.00
Harlandale CO	Education	San Antonio, TX	\$1,200,000.00
Oswego County	Education	Albany, NY	\$1,450,000.00
West Noble Addendum	Education	Indianapolis, IN	\$1,670,000.00
Jefferson Cty.-SE TX Entertainment Complex	Other	Houston, TX	\$2,840,000.00
North Carolina Museum of Art	Museum	Raleigh, NC	\$4,970,000.00
Lincoln General Hospital	Healthcare	Shreveport, LA	\$3,050,000.00
Covenant Healthcare	Healthcare	Flint, MI	\$5,860,000.00
200 Ross Street	Office Tower	Pittsburgh, PA	\$650,000.00

5 Year Guaranteed ESPC Project Total

\$244,862,715.00



“Best Value” Proposition

As you review our Comprehensive Solutions capabilities, we believe you will find that Trane has integrated innovative approaches to helping you achieve your efficiency goals. By leveraging energy and operating cost savings into comprehensive facility improvements, Trane provides solutions that are long-lasting and environmentally responsible. Our green building and renewable energy experience, in addition to geothermal systems and design, bring a unique blend of efficiency and power generation experience.

We fully understand and respect the need for the State of Hawaii to maintain fiscal responsibility, and we have integrated our “best value” proposition throughout our direct purchase approach. We can help eliminate unnecessary layers of overhead and markups, and recommend wise use of the project funds created by ongoing savings. We will help you gain the greatest benefits during the project construction phase, as well as during warranty and throughout the life of the energy systems.

Integrated Team Approach

Trane is providing The State of Hawaii a customized blend of local, regional and national resources with solid design and contracting professionals (internal and independent third party engineering) to support every aspect of an energy service performance contract (ESPC).

Our local team of resources is unmatched in the industry and we will provide a single source and single “point of contact” solution that you can count on for all phases of the project including: project development, design development, engineering, energy and environmental design, construction, commissioning, measurement-verification, and ongoing parts/service, training and support for years to come.

2.3 Project References

For each project listed in Section 2.2, provide detailed information on Energy Performance Contracting projects your firm completed that can be used for references. Expand on the information provided in the previous section to give details on individual projects.

About These References

The examples provided here show a range of performance contracting projects Trane has managed in the past few years. These references have been selected for their relevance to potential projects Trane might undertake for the State of Hawaii. We will be pleased to offer other references, or additional details of these references, on request.



Comprehensive Solutions Project Profile

Mid-Pacific Institute, Ice Storage

Customer Profile

Mid-Pacific Institute, a private K-12 school in Manoa Valley on the island of Oahu, had an ice storage system that provided chilled water to their Hartley Math-Science Complex and the Elementary School. But the control system left the school with an unreliable system subject to utility rate penalties.

Customer Issues

- Need to air condition existing facilities with limited energy and maintenance budget
- Repeated utility excursions on the time-of-day rate schedule with consequent penalties
- Unreliability of existing chilled water system and lack of confidence in service provider

Project Objective

Installation of a Trane Tracer Summit System gave Mid-Pacific the confidence to expand the system with a second chiller and 23 additional tanks so that air conditioning could be provided to more facilities on campus. By shifting the majority of energy consumption to off-peak hours in a central plant, Mid-Pacific saves millions of dollars over the life of the plant while reducing the operational expense of maintaining multiple pieces of equipment.

Project Scope and Results

- Plant Equipment and Services: (1) 260 ton ice-building chiller; (1) cooling tower; (1) 30HP condenser water pump with variable speed drive; (1) high-efficiency plate and frame heat exchanger; (23) ice storage tanks
- Automated central plant control system with call-out alarming and remote diagnostic response
- Ongoing service for the central plant equipment and controls
- Open dialog and consulting services regarding plant operations and best practices for plant energy reduction



Mid-Pacific Institute, Honolulu, Hawaii

Project Size

\$1,500,000

Contract Dates

March to August 2008

Contact

Hank Howlett
(808) 973-5176

Address

Mid-Pacific Institute
2445 Kaala Street
Honolulu, HI 96822-2299

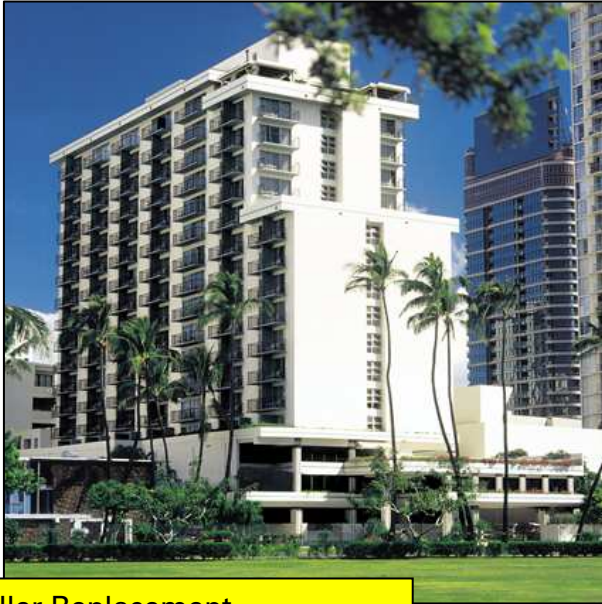
Trane Representative

Pam Roth
(808) 845-9791 ext 227

Trane Project Manager

RJ Ritter

Other Hawaii Projects



Chiller Replacement
Doubletree Alana Hotel,
Waikiki, Oahu



Cooling Tower Replacment
Kauai Marriott



Chiller Replacement
Advertiser Building,
Honolulu, Oahu



Cooling Tower Replacement
Outrigger Reef Hotel,
Waikiki, Oahu



Cooling Tower Replacement
Keahou Beach Resort,
Biq Island



Comprehensive Solutions Project Profile

Hernando County Government

Customer Issues

- High humidity levels
- Indoor air quality concerns
- Mold growth
- Maintain proper outside air requirements

QuickTime™ and a
decompressor
are needed to see this picture.

Project Objective

- Increase outside air to ASHRAE 62-89 requirements.
- Maintain humidity levels below minimum requirements.
- Upgrade building automation system to maximize both energy savings and occupant comfort.

Hernando County Courthouse, Brooksville,

Project Size

\$1,414,000

Project Scope and Results

- Facility-wide lighting retrofit
- Installation of desiccant dehumidification
- New building automation system
- Upgrade and balance air distribution systems
- Convert chilled water pumping system to primary/secondary
- Ongoing service, monitoring and training

Guaranteed Annual Savings

\$30,000

Contract Dates

November 1997 to November 2007

Contact

Craig Becker

Director of Maintenance

(352) 540-6265

Address

20 North Main Street, Room 460

Brooksville, FL 34601



Comprehensive Solutions Project Profile

Ingham County Courthouse

Customer Profile

Ingham County, the capital county of Michigan, covers 576 square miles; it is the home of General Motors and Michigan State University. The County operates eight buildings totaling more than 770,000 square feet.

Customer Issues

- Uncomfortable areas
- Ventilation and air distribution issues
- System design problems
- Poor lighting throughout facility
- Excessive energy consumption
- No centralized building monitoring system
- Controls systems in need of replacement and upgrades

Project Scope

- Individual zone control of HVAC and lighting based on occupancy and demand
- Lighting retrofits and lighting control
- Control upgrades and installation
- Facility wide building automation systems with remote access and centralized facility control
- HVAC system upgrades



Ingham County Courthouse, Mason.

Project Size

\$1,594,754

Guaranteed Annual Savings

\$143,215 energy savings

\$40,000 operational savings

Contract Dates

July 2005 to June 2015

Contact

Rick Terrill, Director

Ingham County

(517) 676-7310

Address

121 East Maple St

Mason, Michigan 48854

Charleston Air Force Base

Customer Profile

The 437th Airlift Wing, together with the Reserve associate 315th Airlift Wing, provide Air Mobility Command's global reach airlift capability. The base operates C-17 aircraft and provide airlift of troops, passengers, military equipment, cargo and aero-medical equipment and supplies.

Customer Issues

- Aging, inefficient operation of heating, cooling and ventilation systems.
- Inefficient lighting systems
- Unnecessary water usage
- Need for better energy management control and monitoring

Project Objectives

The project involved over 500 tons of high efficiency geothermal heat pump installation and over 1400 tons of high efficiency upgrades to existing HVAC systems. In addition, the project scope included:

- Water conservation upgrades of ~3,400 fixtures in 126 buildings
- Application of an energy management control system monitoring / controlling over 8400 points in 80 buildings.
- High efficiency lighting upgrades to over 2400 units in 36 buildings

Project Scope and Results

- Geothermal Heat Pumps
- High efficiency HVAC upgrades
- Building Automation Controls
- High Efficiency HVAC & Lighting



Project Size

\$24,600,000

Contract Dates

2007 to 2024

Contact

Sandy Ford
(843) 963-3502

Address

437th Contracting Squadron
101 E. Hill Blvd. Bldg 503
Charleston AFB, SC 29404-5021

Trane Account Executive

David Hayden
(361) 883-5561



Marine Corps Air Station Beaufort

Customer Profile

Marine Corps Air Station Beaufort is home to Marine Aircraft Group 31, which includes approximately 4,200 Marines and Sailors working here. Its size, combined with MAG-31's reputation for tactical proficiency, has earned the Air Station the title "Fightertown." The Air Station covers 6,900 acres within Beaufort County, South Carolina.

Customer Issues

- Comfort issues and IAQ
- Deteriorating steam distribution system
- Inefficient HVAC Systems
- Costly, ineffective hangar lighting
- No peak load demand side management
- Limited resources for facility improvement

Project Objective

- Reduce utility expense and gain reliability with geothermal heat pumps
- Provide demand side management by replacing steam plant with CHP units
- Gain better control of comfort systems and utility costs through control systems
- Reduce maintenance costs

Project Scope and Results

- Geothermal heat pumps
- CHP—power and heat generation
- New efficient chilled water plant
- Lighting retrofits
- Direct Digital Controls (DDC) upgrade



Project Size

\$21,854,442

(multiple phases of the project combined)

Contract Dates

September 2001 to September 2017

Contact

Neil Tisdale
(843) 228-6317

Address

MCAS Beaufort,
Gordon Street, BLDG 426,
PO Box 55019,
Beaufort, SC 29904-5019

Trane Account Executive

David Hayden
(361) 883-5561



Shades of Green—Phases I and II

Customer Profile

Shades of Green is a 216,050 square foot resort facility with 287 rooms. The resort is operated by the U.S. Army for the benefit of active and retired military personnel. All revenue is self-generated and the facility operates without taxpayer support.

Customer Issues

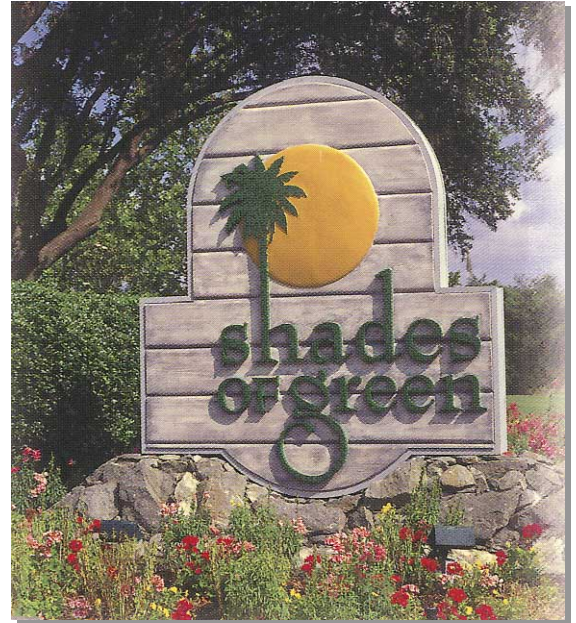
- Indoor air quality, guest comfort
- Aging infrastructure and increasing repair costs
- Executive order #12902

Project Objectives

Create a project that addressed compliance within federal government ESPC guidelines and installation of project with minimal disruption to occupied rooms.

Project Scope and Results

- Replace HVAC units in the 287 guest occupied rooms
- Duct work cleaning and application of anti-microbial coating to inhibit bacteria growth
- Replace swimming pool chemical filtration units and install ozone system
- Construction of new energy center structure, 700-ton chiller plant and heat recovery system
- Air handling replacement and lighting retrofit
- Hotel room occupancy sensors
- Indoor air quality evaluation



Project Size

Phase I \$2,466,000

Phase II \$2,108,000

Total \$4,574,000

Contract Dates

June 1997 to June 2007

Contact

Brian Japek

Director of Contracting

(407) 824-3986

Address

1950 West Magnolia Palm Drive
Lake Buena Vista, FL 32830-2789



Naval Air Station Oceana

Customer Profile

The Naval Air Station Oceana is located in Virginia Beach, Virginia. This base is a 6,000 acre home to eight F-14 Tomcat fighter squadrons and eleven F/A-18 Hornet squadrons assigned to the Atlantic and Pacific Fleets. The station also has an excellent Search and Rescue team which flies the UH-3H Sea King helicopter.

Customer Issues

- Indoor air quality
- Aging infrastructure
- Simplification of procurement
- Steam distribution leaks

Project Objectives

Create a project that simplifies the procurement process, addresses deteriorating facilities, addresses indoor air quality risk and provides a single point of responsibility.

Project Scope and Results

- Geothermal Heat Pumps
- Controls
- HVAC
- Heat Recovery
- Trane Warranty
- Service and Training



Project Size

\$8,230,000

Contract Dates

December 2002 to December 2017

Contact

Robert Harvey
(757) 492-8533

Address

Naval Air Station Oceana
953 Hornet Drive
Building 820
Virginia Beach, VA 23460

Trane Account Executive

David Hayden
(361) 883-5561



Case Studies / Project Performance Summaries

Project Name and Location	Shades of Green, United States Army – Phase 2
Number of Buildings	287 Rooms
Primary Use	Resort Facility
Total square footage	234,261
Project Dollar Amount (installed project costs) Source of Project Financing	\$2,107,525 Third Party Financing—Crestar
Primary ECMs Installed ESCO Services Provided	Lighting Chillers Energy Management System Water Conservation
Construction Start & End Dates	Aug 1999 to June 2000
Contract Start & End Dates	June 1997 to June 2007
Dollar Value and Type of Annual Operational Cost Savings (if applicable)	\$435,939
Method(s) of Savings Measurement and Verification	Continuous Metering
Contact Information	Brian Japek Director of Contracting (407) 824-3986
Roles and responsibilities of ESCO personnel associated with the identified project	The Trane team consists of a local and a Regional Project Manager, Energy Engineer, an M&V Specialist and a Sales Executive. The Team manages each project's subcontractors and consultants to make sure the customer's requirements are ensured.
ESCO Notes or Comments	The project entailed building a chiller plant, which would make them independent from buying chilled water (ton-hours) from Disney.



Case Studies / Project Performance Summaries

Project Name and Location	Shelby County Schools														
Number of Buildings	29														
Primary Use	School														
Total square footage	2.1 million														
Project Dollar Amount (installed project costs)	Combined Phase 1-5; \$9,637,254. See ESCO Notes for breakout.														
Source of Project Financing	Third Party Financing – SunTrust, ABM Amro and TransAmerica														
Primary ECMs Installed	Lighting														
ESCO Services Provided	Water cooled compressors – AC														
	Energy Management System														
	Windows														
	Air cooled compressors – AC														
Construction Start & End Dates	See ESCO Notes														
Contract Start & End Dates	See ESCO Notes														
Dollar Value and Type of Annual Operational Cost Savings (if applicable)	\$510,007														
Method(s) of Savings Measurement and Verification	Continuous Metering														
Contact Information	Tom Ferguson Assistant Superintendent of Operations Telephone (205) 682-7000 Fax (205) 682-7005														
Roles and responsibilities of ESCO personnel associated with the identified project	The Trane team consists of a local and a Regional Project Manager, Energy Engineer, an M&V Specialist and a Sales Executive. The Team manages each project's subcontractors and consultants to make sure the customer's requirements are ensured.														
ESCO Notes or Comments	Trane has completed five separate projects with this customer. <table> <tr> <th>Construction Dates</th><th>Contract Values</th></tr> <tr> <td>Phase 1: August 1995/February 1996</td><td>\$2.5M</td></tr> <tr> <td>Phase 2: June 1998/November 1999</td><td>\$4.3M</td></tr> <tr> <td>Phase 3: October 1999/August 2000</td><td>\$905,498</td></tr> <tr> <td>Phase 4: September 2001/April 2002</td><td>\$1.1M</td></tr> <tr> <td>Phase 5: August 2002/April 2003</td><td>\$920,703</td></tr> <tr> <td>Phase 6: In process</td><td></td></tr> </table>	Construction Dates	Contract Values	Phase 1: August 1995/February 1996	\$2.5M	Phase 2: June 1998/November 1999	\$4.3M	Phase 3: October 1999/August 2000	\$905,498	Phase 4: September 2001/April 2002	\$1.1M	Phase 5: August 2002/April 2003	\$920,703	Phase 6: In process	
Construction Dates	Contract Values														
Phase 1: August 1995/February 1996	\$2.5M														
Phase 2: June 1998/November 1999	\$4.3M														
Phase 3: October 1999/August 2000	\$905,498														
Phase 4: September 2001/April 2002	\$1.1M														
Phase 5: August 2002/April 2003	\$920,703														
Phase 6: In process															



Case Studies / Project Performance Summaries

Project Name and Location	Hernando County Schools
Number of Buildings	17
Primary Use	School
Total square footage	1,936,091
Project Dollar Amount (installed project costs)	\$17,421,873
Source of Project Financing	Third Party Lender - Baystone Financial Group
Primary ECMs Installed ESCO Services Provided	<ul style="list-style-type: none"> • Chillers • Water Conservation • Lighting • Piping/steam distribution • Air handling units • Exhaust fans • Energy management • Controls • Ducts/fittings • Doors • Pumps & priming • Windows
Construction Start & End Dates	February 1999 to December 2000
Contract Start & End Dates	January 2001 to January 2021
Dollar Value and Type of Annual Operational Cost Savings (if applicable)	\$839,595
Method(s) of Savings Measurement and Verification	Point Source
Contact Information	Ken Hill, Assistant Director of Operations Telephone (352) 797-7071 Fax (352) 797-7101
Roles and responsibilities of ESCO personnel associated with the identified project	The Trane team consists of a local and a Regional Project Manager, Energy Engineer, an M&V Specialist and a Sales Executive. The Team manages each project's subcontractors and consultants to make sure the customer's requirements are ensured.
ESCO Notes or Comments	



Case Studies / Project Performance Summaries

Project Name and Location	Texas Lutheran University
Number of Buildings	16
Primary Use	School
Total square footage	N/A
Project Dollar Amount (installed project costs)	\$3,367,000
Source of Project Financing	Third Party Lender—Key Bank
Primary ECMs Installed ESCO Services Provided	Lighting retrofits Chiller plant Boiler plant Controls Energy Management Services
Construction Start & End Dates	December 1997 to June 1999
Contract Start & End Dates	November 1997 to November 2007
Dollar Value and Type of Annual Operational Cost Savings (if applicable)	\$140,813
Method(s) of Savings Measurement and Verification	Point Source
Contact Information	Tom Dodgen Director of Facilities (830) 372-8150
Roles and responsibilities of ESCO personnel associated with the identified project	The Trane team consists of a local and a Regional Project Manager, Energy Engineer, an M&V Specialist and a Sales Executive. The Team manages each project's subcontractors and consultants to make sure the customer's requirements are ensured.
ESCO Notes or Comments	



Case Studies / Project Performance Summaries

Project Name and Location	Johnson City Schools
Number of Buildings	7
Primary Use	School
Total square footage	N/A
Project Dollar Amount (installed project costs)	\$823,000
Source of Project Financing	
Primary ECMs Installed	Chiller
ESCO Services Provided	Cooling Tower
	Energy Management System
	Boiler
Construction Start & End Dates	February 1999 to September 1999
Contract Start & End Dates	July 1999 to June 2009
Dollar Value and Type of Annual Operational Cost Savings (if applicable)	\$46,480
Method(s) of Savings Measurement and Verification	Point Source
Contact Information	John Mauro, School Business Executive 666 Reynolds Rd Johnson City, NY 13790 Phone: (607) 763-1218 Fax: (607) 763-8761
Roles and responsibilities of ESCO personnel associated with the identified project	The Trane team consists of a local and a Regional Project Manager, Energy Engineer, an M&V Specialist and a Sales Executive. The Team manages each project's subcontractors and consultants to make sure the customer's requirements are ensured.
ESCO Notes or Comments	



3.0 QUALIFICATIONS

3.1 History and Focus of Company

3.1.1 ***Structure and Evolution of the Firm.***

Provide information on how your company evolved, how long it has been in business under its current and any former names, and its corporate structure (corporation, partnership, sole proprietorship, joint venture, etc.) including identification of branch offices. For joint ventures include the structure of the joint venture and historical information on each member.

Introduction

Trane is a leader in performance contracting, energy conservation measures, and assessment-based energy services. The company is also the world's largest manufacturer of commercial heating, ventilating, air conditioning, and building management systems equipment. Thousands of organizations worldwide rely on our commercial systems to provide operational efficiency, comfort, and promote the health and safety of their occupants. A global, diversified manufacturing and services organization, Trane employs more than 29,000 people at 104 manufacturing locations in 28 countries, and has annual sales of more than \$8 billion.

History

Known for innovation, Trane has manufactured reliable air conditioning equipment since 1913. Our company is the leading single-source provider of equipment, controls, installation, training, and support. Trane offers a complete line of highly efficient, state-of-the-art heating and cooling equipment for commercial and residential use. The Earth•Wise™ CenTraVac® chiller, for example, is the most energy efficient air conditioner on the market. And Trane Integrated Comfort™ Systems feature direct digital controls and remote monitoring.

Trane opened a Honolulu office over 30 years ago to service the needs of a growing state and eventually opened a branch office in Guam to support the needs in the western Pacific. In the mid-1990's, the Trane Guam office became part of Trane International while the Honolulu office remained part of Trane Americas. Trane Honolulu continues to employ over 45 residents in the State of Hawaii and will continue to be a major factor in energy efficiency and the HVAC industry in Hawaii.

Expertise

Although Trane spans the globe, we maintain a strong local presence in each of our markets. Our company has more than commercial 100 offices in the major metropolitan areas of the United States and Canada. Each office is staffed with experienced



***Energy Performance Contracting Services
RFP-08-022-SW***

engineers and sales professionals who provide comprehensive service, training, and support. Trane commercial offices also provide service, local training and parts for customers that can only be delivered effectively through a local support organization.

(continued)



Performance

Today, Trane combines leadership in manufacturing, service, and energy efficiency to offer a different approach to the way buildings work. This approach, called High Performance Buildings, can include facility assessments, life-cycle cost analyses and system optimization measures. The resulting plans ensure that structures will reliably and efficiently sustain their intended functions over time. By evaluating all the systems in a building, we can make recommendations based on actual performance rather than tasks or schedules.

Outlook

Trane customers understand the strategic importance of a systems approach. By addressing facility infrastructure concerns and improving efficiencies, we help reduce energy and operational costs, as well as capital expenses. This allows our customers to focus on their core business requirements. Let us show how Trane can help the State of Hawaii achieve greater operational savings and improve performance.

Evolution of the Company

In the past year, Trane has undergone structural changes that affect the company's affiliations, but not its markets, functions, or approach. In fact, these changes have helped Trane focus on its core businesses without sacrificing depth or breadth of expertise.

Trane had been part of American Standard Companies until 2007, when the company was divided in three parts. Our energy services and HVAC manufacturing kept the Trane name, while our vehicle control systems and bath and kitchen businesses were sold or established as separate companies.

More recently, Trane agreed to be acquired by Ingersoll Rand; that process was completed on June 5, 2008. The company will continue to serve the global markets for energy services and HVAC equipment as it has for nearly a century.



3.1.2 Years in the Energy Business.

State the number of years the company has been involved in the energy-efficiency related business.

Innovation and Reliability

Trane first ventured into the energy business in 1916, three years after Reuben Trane joined his father, James, in a plumbing business. The Trane convector radiator—more efficient than common cast-iron radiators—was developed in 1925, and the first Trane air conditioner became available in 1931.

Our company became known for innovation and reliability in heating, ventilating and air conditioning equipment. Even today, after 95 years in the energy business most of our \$8 billion in annual sales is related to energy efficiency.

3.1.3 Years in Performance Contracting.

State the number of years the company has offered energy performance contracting services.

Our PACT™ with You

Trane has been in the energy business since 1994, when the Comprehensive Solutions business or ESCO services arm, also known as Performance Agreements for Comfort from Trane (PACT™), was introduced.

Our company has successfully performed more than \$250M in guaranteed energy performance contracts, and more than \$740M per year in successful turnkey contracting projects. We have implemented successful energy conservation measures for several local governments.

Trane also has performed numerous “repeat” or multiple phases of performance contracts with the same customers, including a sixth performance contract in progress. The following summary list of representative guaranteed performance projects selected from projects in recent years with total capital investments shown in units of million dollars.

Trane's PACT™ performance contracting offering combines our services into a single, customized solution that can address all of your concerns in facility infrastructure and operating efficiencies. Building on recognized, award-winning best practices, we adapt our core deliverables and techniques to craft a solution uniquely suited to your facilities and requirements. As customer needs, benchmarks, and industry standards change, we improve our PACT™ offering to continue meeting them.



3.1.4 Number of Performance Contracting Projects.

State the number of performance contracting projects completed by the company: Number under \$1 million in project cost; Number over \$1 million.

Number and Value of Contracts

Trane is committed to environmental responsibility and energy efficiency. Our worldwide Comprehensive Solutions (CS) offerings, which include Performance Contracting agreements, totaled more than \$740 million in 2007 alone. We have performed more than 100 energy savings performance contracting projects with capital costs above \$1 million. This table shows the number and value of PC contracts for recent years:

Performance Contracting History		
<i>Year</i>	<i>Number of Contracts</i>	<i>Value</i>
2007	32	\$120.04 million
2006	15	\$91.11 million
2005	17	\$94.44 million
2004	16	\$52.85 million
2003	13	\$68.09 million

3.1.5 Summary Listing of Judgments.

Any judgments or pending lawsuits or actions against; adverse contract actions, including termination(s), suspension, imposition of penalties, or other actions relating to failure to perform or deficiencies in fulfilling contractual obligations against your firm.

The long answer: Trane is a large global company that becomes involved in claims, disputes, and litigation that arise in the ordinary course of businesses. Company-wide compiled data of this scope is not readily available and this information can not be accurately ascertained without extensive and burdensome research.

The short answer: We have no relevant, current legal disputes.



3.2 Financial Soundness and Stability of the Company

3.2.1 *Financial Soundness*

3.2.2 *Profitability*

3.2.3 *Financial Reports*

3.2.4 *Bonding*

Recent Financial History

At the beginning of 2007, Trane was part of American Standard Companies. By December, the company had been separated into three businesses:

- Our vehicle control systems business became WABCO, an independent, publicly held company
- Our American Standard bath and kitchen business was sold to Bain Capital Partners, LLC.
- Our air conditioning systems and services company, our core business, became known simply as Trane.

Note: As of June 5, 2008, Trane is part of Ingersoll Rand.

These dramatic changes in company structure and ownership can make standard financial statements difficult to interpret. Figures on subjects such as profitability or bonding may even be invalid as indicators of the new company's actual financial strength.

To provide relevant and useful financial information, we have taken a page of highlights from the 2007 Annual Report and reproduced it here. The full annual report and other financial documents are available through the investor relations section of our web site: <<http://ir.trane.com/financial.cfm>>.



Financial Highlights

	Year Ended December 31,				
(Dollars in millions, except per share data. All data represents continuing operations.)	2007	2006	2005	2004	2003
Sales	\$7,449.6	\$6,758.1	\$6,014.7	\$5,345.5	\$4,974.6
Operating Income	\$717.5	\$650.0	\$514.6	\$402.2	\$404.6
Operating Income as a Percentage of Sales	9.6%	9.6%	8.6%	7.5%	8.1%
Income (Loss) from Continuing Operations	\$400.2	\$385.9	\$319.2	\$(2.5)	\$213.6
Income (Loss) from Continuing Operations as a Percentage of Sales	5.4%	5.7%	5.3%	—	4.3%
Income (Loss) from Continuing Operations per Diluted Share	\$1.96	\$1.87	\$1.47	\$(0.01)	\$0.97
Interest Expense	\$109.6	\$114.6	\$113.3	\$106.2	\$108.1
Total Debt <i>Excluding certain items (a)</i>	\$1,059.5	\$1,644.0	\$1,523.2	\$1,455.4	\$1,628.3
Adjusted Operating Income	\$720.1	\$652.1	\$540.4	\$409.9	\$413.0
Adjusted Operating Income as a Percentage of Sales	9.7%	9.6%	9.0%	7.7%	8.3%
Adjusted Income from Continuing Operations	\$405.7	\$357.1	\$283.6	\$184.0	\$199.4
Adjusted Income from Continuing Operations as a Percentage of Sales	5.4%	5.3%	4.7%	3.4%	4.0%
Adjusted Income from Continuing Operations per Diluted Share	\$1.98	\$1.73	\$1.31	\$0.83	\$0.90

(a) 2007 adjusted operating income, adjusted income from continuing operations and adjusted income from continuing operations per diluted share exclude \$2.6 million (\$2.0 million after tax) of operational consolidation expenses. In addition, adjusted income from continuing operations and adjusted income from continuing operations per diluted share exclude \$1.6 million and \$6.4 million (after tax), respectively, of separation costs and merger advisory fees. 2007 adjusted income from continuing operations and adjusted income from continuing operations per diluted share also exclude \$4.5 million of tax benefits.

2006 adjusted operating income, adjusted income from continuing operations and adjusted income from continuing operations per diluted share exclude \$2.1 million (\$1.4 million after tax) of operational consolidation expenses. 2006 adjusted income from continuing operations and adjusted income from continuing operations per diluted share also exclude \$19.9 million of tax benefits. Adjusted income from continuing operations and adjusted income from continuing operations per diluted share also exclude a \$10.3 million gain (after tax) associated with the sale of assets.

In 2005 adjusted operating income, adjusted income from continuing operations, and adjusted income from continuing operations per diluted share exclude \$25.8 million (\$17.5 million after tax) of operational consolidation expenses. Adjusted income from continuing operations and adjusted income from continuing operations per diluted share in 2005 also exclude \$53.1 million of tax benefits.

2004 adjusted operating income, adjusted income from continuing operations, and adjusted income from continuing operations per diluted share exclude job elimination expenses of \$7.7 million (\$4.9 million net of tax) and adjusted income from continuing operations and adjusted income from continuing operations per diluted share exclude \$6.4 million of tax benefits. 2004 adjusted income from continuing operations and adjusted income from continuing operations per diluted share exclude a fourth quarter charge of \$307.0 million (\$188.0 million after tax) covering estimated net payments for pending and future asbestos-related claims.

2003 adjusted operating income, adjusted income from continuing operations, and adjusted income from continuing operations per diluted share exclude job elimination expenses of \$8.4 million (\$5.4 million net of tax) and adjusted income from continuing operations and adjusted income from continuing operations per diluted share also exclude \$19.6 million of tax benefits.

Presenting results of operations excluding certain recorded amounts is not in conformity with Generally Accepted Accounting Principles (GAAP), but management analyzes the data in this manner because it is useful to them in understanding past financial performance and prospects for the future results of operations. In addition, management uses adjusted income from continuing operations and adjusted operating income to make strategic and capital investment decisions, allocate resources and report business performance to the board of directors. Management also uses data adjusted in this manner for purposes of determining incentive compensation. Accordingly, management believes that presenting the analysis in this manner is also useful to shareowners in assessing the core business operating results and trends. These additional measures are not meant to be a substitute for measurements prepared in conformity with GAAP nor are they to be considered in isolation.



3.3 Industry Accreditations

Provide information on any accreditations by any industry organizations, such as the National Association of Energy Service Companies (NAESCO). Provide information on any pre-qualifiers for your firm, such as work through the US Departments of Energy or Defense for federal projects. Briefly describe the relevance or importance to the work proposed in this RFP for State of Hawaii clientele.

A Leader Among Leaders

Trane is on the cutting edge of research, standards, benchmarks and delivery of performance contracting. Beyond the accreditations we have earned by delivering guaranteed energy savings and better facilities, we have received awards for innovation from Frost & Sullivan, a partnership distinction from the U.S. Department of Energy, and best-practices recognition from the Sustainable Buildings Industry Council.

Our company holds leadership positions in groups that write key codes and standards, such as the National Association of Energy Services Companies (NAESCO) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Trane also belongs to the U.S. Green Building Council, and contributes to coalitions such as the Clinton Climate Initiative.



One of the most important organizations for building HVAC engineering is Atlanta-based ASHRAE. This group sets key standards for energy efficiency, building comfort, and indoor air quality. It is recognized globally for leadership, and its work forms the basis for most U.S. building codes.

Of the last five national ASHRAE presidents, three have been Trane executives, a clear demonstration of Trane's leadership in building systems and energy efficiency. Our involvement has translated into effective, award-winning services and projects for our customers.

Trane Honolulu office has also provided continuous leadership with the local ASHRAE Chapter with a handful of past-Presidents, several Board of Governor members, and many Chapter Activity Chairpersons.

We are proud of the honors for our good work and our active participation in the future of energy-saving performance contracting (ESPC). This section features a few selected examples.

"Trane has shown energy efficiency to be a smart business strategy. Trane's partnership with the EPA also serves as a remarkable example of environmental leadership."

—Maria Tikoff Vargass, co-director, EPA Energy Star program



Trane and NAESCO



Demonstrating core competencies in all technical and business aspects of performance contracting, Trane earned accreditation as an Energy Services Company (ESCO) in May 2004 from the National Association of Energy Services Companies (NAESCO).

Trane proudly displays this official recognition of good standing with NAESCO. It assures our new customers that standard contracting business practices through Trane's PACT™ performance contracting offering meet or exceed the high quality standards established by the industry's most recognized leader.

A committee of NAESCO members accredited Trane following a rigorous evaluation of our capabilities, track record, policies and practices. While this is not an endorsement or a guarantee of results, it does show that Trane provides its customers with demonstrated competency and accepted industry practices proven to deliver successful projects.

How It Works

The NAESCO committee, comprising industry experts unaffiliated with any ESCO, reviewed detailed documentation submitted by Trane and investigated customer references. They reviewed several areas of Trane ESPC operations, including: (1) the precise nature of our business; (2) the range of measures and services offered to customers; (3) the availability of a performance-based project approach; (4) our commitment to ethical business practices; (5) capabilities for project engineering and design, financing, project management, operations, and maintenance; and (6) the capability of verifying and monitoring energy cost savings.

What It Means

NAESCO offers three kinds of accreditation: Energy Service Company (ESCO), Energy Service Provider (ESP), and Energy Efficiency Contractor (EEC). Trane earned ESCO accreditation, which means that Trane's performance contracting group, Comprehensive Solutions, possesses the following key attributes:

- The technical and managerial competence to develop comprehensive energy-efficiency projects including lighting, motors/drives and HVAC
- The technical and managerial competence to provide a full range of energy services, such as energy audits, design engineering, arranging project financing, O&M services, and verification of energy savings
- The regular business practice of developing performance-based projects, defined to mean projects for which the developer's compensation is contingent on real, verified cost savings



Benefits for You

NAESCO Accreditation simply means you're working with a company that is recognized for competence as an ESCO. It's an indispensable tool for immediately summarizing our qualifications. Think of it as a benchmark for performance contracting, too.

Trane is proud of our NAESCO review and acceptance by an independent panel of industry experts. We work hard on honing our technical and managerial competence every day—so it's an honor to be recognized for that effort.

Trane and U.S. Department of Energy



Trane is currently a U.S. Department of Energy (DOE) qualified Energy Service Company (ESCO), and is actively engaged in proposal work in conjunction with the DOE. The company is in the performance period for Super ESPC Technology Specific contracts in locations such as Beaufort Marine Corps Air Station, Beaufort, SC; Charleston Air Force Base, Charleston, SC; Oceana Naval Air Station, Norfolk, VA; and Dam Neck Annex, Oceana Naval Air Station, Norfolk, VA.

Trane and U.S. Environmental Protection Agency



Trane is also an EPA EnergyStar Ally and a manufacturer of EnergyStar compliant products. Some of Trane's newest manufacturing facilities are EnergyStar award facilities. The Trane experience in delivering numerous guaranteed performance project solutions, to meet aggressive energy conservation goals, using a multitude of different technologies will allow Trane to survey, develop and deliver a solution optimized to meet, or exceed, the facility owner's expectations and conservation goals.

(continued)



1. Performance Contracting

Involvement: Trane holds several distinguished approvals, including a certificate of accreditation from NAESCO. The company is also a member in good standing. And the director of Trane's Comprehensive Solutions business, Dane Taival, is a NAESCO board member.

Trane is recognized for ESPC work in the public sector as well. We are qualified as an Energy Service Company by the U.S. Department of Energy (DOE), actively engaged in proposals and projects in conjunction with the department. Trane DOE projects include "Super ESPC" Technology Specific contracts, which are indefinite-delivery, indefinite-quantity (IDIQ) contracts for work with federal agencies. According to DOE, these "practical, cost-effective" projects have been endorsed both by the U.S. Congress and by President Bush. Trane is currently in the performance period on Super-ESPCs for the Beaufort Marine Corps Air Station, the Charleston Air Force Base, and the Oceana Naval Air Station, Norfolk.



Awards: The U.S. Environmental Protection Agency (EPA) named Trane an EnergyStar Building "Ally of the Year" in 1998. This national award for saving energy emphasizes profitable investment opportunities created by implementation of proven energy-efficiency technologies.

Trane received the "Commander in Chief's Special Recognition for Installation Excellence," recognizing outstanding and innovative efforts to operate and maintain U.S. military installations, in 2002. According to the Department of Defense, "Excellent installations enable better mission performance and enhance the quality of life for military men and women and their families."

In 2003, Trane won the "BTU Smackdown Award" from the Louisiana Department of Natural Resources for our project work. And in 2005, the DOE named Trane a "Premier Allied Partner" for the agency's highly successful Rebuild America program. This citation honored Trane for excellence in promoting energy-efficiency and renewable-energy technologies and practices.

Following a run of awards over the last two decades, Trane was named as a Partner in the Clinton Climate Initiative—a high-profile, global effort to reduce greenhouse gas emissions in cities. This honor was based on Trane's unique blend of building knowledge, ESCO experience, and leadership in energy-efficient HVAC equipment, controls and services that optimize building energy performance.



2. Energy Efficiency

Involvement: As a large, vertically integrated ESCO, Trane has enjoyed the opportunity to assume a leadership position in U.S. energy-savings efforts. Key standards and codes for energy efficiency have been developed with involvement from Trane personnel who have volunteered or been nominated to those groups.

In the public sector, Trane is actively involved with EPA and DOE through their Energy Star initiative. We are active in ESPC projects with DOE, several federal agencies, and with all branches of the U.S. military.

Trane leads the field in the engineering and manufacture of energy-efficient HVAC products, automated controls, and comfort systems. And our Trace® 700 software for the energy modeling of facilities has become an industry standard. Many ESCOs, including most of our competitors, use Trace® to verify the effectiveness of upgrade and retrofit strategies.

Awards: Trane has earned recognition for helping individuals, companies, and governments save energy—from official citations to blue ribbons in industry competitions. These prizes have come from diverse sources, including engineering groups like ASHRAE, trade associations like Air-Conditioning & Refrigeration Institute, and end-user organizations such as Building Owners and Managers Association. Globally, Trane was honored at the China International Real Estate & Architect Fair in 2005, earning an award for “Best Model of China Construction, Energy Saving Series.”

Frost and Sullivan honored Trane with a “Product Innovation of the Year Award” in 2006 for the Trane CDQ™, a desiccant dehumidifier. This followed a “Market Engineering Product Innovation Award” for the Integrated Comfort System, another Trane product. Customers have agreed, as shown by our “Reader’s Choice” awards from publications like Today’s Facility Manager and Buildings.

For our work as an ESCO, Trane earned a national energy-saving award—the EPA Energy Star Building Ally of the Year—In 1998. The program, which emphasizes the profitable investment opportunities created by implementation of proven energy-efficiency technologies, was hailed as a “remarkable example of environmental leadership.” Many Trane ESPC projects developed by our Comprehensive Solutions group or with PACT™ now bear the Energy Star label. And many others are certified by the Leadership in Energy and Environmental Design (LEED) building rating system created by the U.S. Green Building Council (USGBC).

We also practice what we preach. Some of our newest manufacturing facilities have earned awards for energy efficiency. Our plants are ISO certified for compliance with best environmental practices, and meet or exceed all EPA and environmental regulations. Throughout our company culture and operations, Trane takes environmental sustainability to heart.



3. Sustainability



Involvement: The leading national and global organization promoting and verifying the sustainability of facilities is the U.S. Green Building Council (USGBC). Trane has supported this group and participated in its many activities and programs, both on a local and national level. We dedicate our technical expertise to the LEED New Construction Core Committee and the USGBC Technical Committee, among other council groups.

Our USGBC involvement affects every facet of Trane's Comprehensive Solutions delivery and our PACT™ services. We have been involved in numerous building projects that have applied for or earned LEED certification. Our central and local field offices employ close to 100 LEED Accredited Professionals. This designation is a new but recognized benchmark for competency and knowledge of green building techniques.

Trane products can provide points toward LEED Silver, Gold and Platinum project ratings: Our centrifugal chillers have such low refrigerant leak rates that USGBC will provide a credit toward the project LEED rating if that equipment is used.



Awards: Trane is recognized for supporting sustainability and environmentally sound practices. After earning a "Best Practice Award" from the Sustainable Buildings Industry Council (SBIC) in 2001 for our Earth-Wise™ chiller system, we earned the SBIC "Best Sustainable Practice" award for three years running, in 2003, 2004, and 2005. These prizes reflect our efforts to create sustainable products, promote sustainable facilities design and operation, and employ environmentally sound practices in our own company operations.

Among our most prestigious honors is our recent inclusion in the Clinton Climate Initiative (CCI), which aims to reduce greenhouse-gas emissions in America's cities. By joining this elite group as a CCI Partner, Trane was publicly recognized for our unique blend of knowledge of building systems and energy services and performance contracting.

Trane earned an "EPA Climate Protection Award" in 1998 for our leadership in engineering super-efficient chillers, which use refrigerants that deplete less ozone. Our products also effectively protect against refrigerant leaks, allowing us to offer Trane's "Leak Tight" Guarantee. This capability was formally recognized recently when the USGBC allowed a LEED credit toward project certification based on our low leak rates.

Trane's projects have also earned awards, including three buildings that attained "Earth Day Building Award" status from a coalition including the EPA. The World Wildlife Fund has bestowed a "Gifts to the Earth" Award to Trane, too. But while these laurels are important to us, we don't rest on them. We work every day to advance the industry through our ESPC projects—and achieve better results for our customers.



Industry Awards—2007

Our commitment to environmental responsibility, and our half-billion dollars of annual contracting revenue in contracting services, reflect our long-term views on energy efficiency. Our worldwide comprehensive solutions offerings continue to grow, along with the recognition we receive for our work. Here are some recent examples:

- Design Star Award for Trane's Zone Sensor received from the Agency for the Promotion of Industrial Creation (APCI) in coordination with the Observateur du design in France. The zone sensor is a state-of-the-art module acting as a human-machine interface for piloting fan coil units equipped with ZN523 Trane zone controllers. (October 2007)
- Frost & Sullivan Emerging Company of the Year to Trane in India for building technologies excellence, energy management services category. (October 2007)
- Best of the Best Award for Trane's CenTraVac™ by the U.S. Environmental Protection Agency (EPA). Selected from a field of past Strategic Ozone Protection Award winners. (September 2007)
- 2007 HVAC Product of the Year to the 15 SEER (Seasonal Energy Efficiency Ratio) Precedent from Consulting & Specifying Engineer magazine. (September 2007)
- 2007 Excellence in Design Silver Award to Trane CleanEffects® by Appliance Design Magazine. It was the only HVAC product to receive recognition. (June 2007)
- 2007 Silver Dealer Design Award for Trane Integrated CleanEffects. Presented by the Air Conditioning, Heating & Refrigeration News trade publication based on judging by an independent panel of judges. The judges were impressed that the one-inch filter that fits in the existing air handler removes up to 99% of airborne allergens from the air. (July 2007)
- Building of America Plaque of Honor to Trane's St. Louis district office for its work on Busch Stadium by Real Estate and Construction Review magazine. Trane supplied comfort systems for the new stadium, including a Tracer Summit™ building automation system and 1,800 tons of air-conditioning. (April 2007)
- Frost & Sullivan Product Innovation of the Year to Trane's Custom Climate Changer™ with CDQ™ (Cool, Dry, Quiet). Presented to the company demonstrating excellence in new products and technologies within their industry. (March 2007)
- 2007 "Best of Show" for our XV90i variable-speed gas furnace with integrated CleanEffects™ from Residential Architect at the International Builder's show. (March 2007)



3.4 General Scope of Services

Provide a brief comment (25 words or less is preferred) for each of the items listed to illustrate the company's capability in each area.

3.4.1 Energy Systems in Buildings:

3.4.1.1 Lighting Systems: Indoor and Outdoor

Trane achieves significant savings by re-lamping, re-ballasting, re-fixturing to more efficient products, adjusting lighting levels, and applying lighting/scheduling controls.

3.4.1.2 Daylighting

Skylights, light pipes and lighting panels will be examined. Evaluations include analysis of cooling load introduced to conditioned facilities for optimal application of daylighting.

3.4.1.3 Heating Systems

Centralized/distributed heating plants and heat recovery/heat exchanger technologies will be analyzed to determine opportunities to reduce energy consumption.

3.4.1.4 Ventilation Systems

Trane examines opportunities for improved ventilation using efficient fan/motor/drive technologies. Possible heat recovery applications will also be examined.

3.4.1.5 Indoor Air Quality

Systems will be analyzed to ensure introduction of appropriate outside air levels. Air filtration methods will also be evaluated along with humidification levels.

3.4.1.6 Cooling Systems

Equipment is evaluated via payback analysis for efficiency upgrades. Systems will be examined for motor upgrades, and application of modulation technologies or building automation controls/strategies.

3.4.1.7 Control and Building Automation Systems

Trane will examine opportunities for energy saving controls and control algorithms/strategies to optimize energy savings opportunities for the facility owner.

3.4.1.8 Water-Consuming Systems

Trane examines water consuming systems and makes recommendations for fixture upgrades and retrofits, such as flushometer valves, pressure independent flow controls, and sink aerators.



3.4.1.9 Solid Waste, e.g., Paper, Plastic, Glass, Aluminum, Recycling

As a member of the U.S. Green Building Council, Trane incorporates best practices for environmentally sound material handling methods, such as LEED guidelines.

3.4.1.10 Renewables (Solar-Electric, Solar Thermal, Geothermal, Wind, Biomass)

Trane has successfully implemented geothermal heating and cooling technologies with ESPC projects at Beaufort MCAS, Oceana NAS, and other locations.

3.4.1.11 Distributed Generation

Trane is experienced in distributed generation, operating microturbines that use waste heat to generate electricity, meeting local energy needs cost effectively.

3.4.1.12 Central Plants

With unmatched experience with centralized boiler and chiller plants, Trane has the expertise to design optimized central plants, plus provide long-term support services.

3.4.1.13 Kitchens, Laundry

Trane develops efficient methods for kitchen ventilation, space comfort, commercial cooking equipment, laundry facilities and steam/hot water supplies.

3.4.1.14 Laboratories, Laundry

Trane has worked extensively with laboratory facilities and is experienced in energy optimizing lab systems, including specialized filtration/clean room environments.

3.4.1.15 Swimming Pools and Recreational Facilities

Maintaining swimming pool operations at Beaufort MCAS, Trane is experienced in both energy efficient pump/piping systems and pool maintenance.

3.4.1.16 Fuel Switching

Trane examines opportunities for switching to more energy/cost effective fuel sources, also considering which sources are greener (reduce greenhouse gas emissions).

3.4.1.17 Energy Management

Trane brokers the purchase of cost-effective energy commodities to facilitate rebates and incentives. Trane's energy management system can also sub-meter systems.

3.4.1.18 Transportation—Fleet Fuel Management, etc.

NA



3.4.2 Project Development and Implementation

3.4.2.1 Energy Auditing

Trane uses preliminary audits to establish baseline cost profiles for included facilities, perform initial building surveys, verify previous studies, investigate new ECM opportunities, and more.

3.4.2.2 System Design Engineering

In addition to engineering resources on staff, Trane relies on independent engineering consultants to validate design components and ensure best value for customers.

3.4.2.3 Procurement and Bidding

Based on existing government contracts, this proposal is aligned and in compliance with the Federal Procurement Guidelines for Energy Services (DEO/FEMP Super ESPC model).

3.4.2.4 Construction

Trane provides comprehensive construction services, system installation capabilities, and ongoing maintenance and operating cost saving services—and has trusted, local third-party engineering partners as well.

3.4.2.5 Commissioning and Retro-commissioning

Our service technicians are factory-authorized to assess building performance as part of our regular commissioning and recommissioning processes.

3.4.2.6 Project Management

Trane assigns a local project team, and commits additional resources to stay on schedule and within budget, while meeting your performance expectations.

3.4.2.7 Identification and Handling of Hazardous Materials

Under normal conditions, Trane does not handle hazardous materials; exceptions are made only under the terms of a Trane Scope of Services document.

3.4.3 Continuing Support Services (Post Construction):

3.4.3.1 Performance Guarantee for Financing Term

The Trane PACT™ Performance Guarantee is monitored monthly, reported quarterly, and reconciled annually throughout the term of the agreement.

3.4.3.2 Insurance

Third-party lenders generally require the customer to provide insurance on the equipment financed for the lender's benefit. Trane does not assume credit risk.



3.4.3.3 Equipment and Material Warranties

Contractor will be responsible for new and modified equipment and new for the length of the warranty.
Equipment will be warranted per the warranty terms of the respective manufacturer. Trane's installation of the equipment will carry a one year workmanship warranty.

3.4.3.4 Financing Partner with Ability to Provide a Municipal, Tax-exempt Lease Purchase

Trane provides a transparent approach to financing. We will bring qualified third-party lenders to provide the financing to our customers.

3.4.3.5 Hazardous Material Handling

Unless specifically contracted, Trane shall not perform any identification, abatement, cleanup, removal, transport, treatment, storage, or disposal of hazardous materials.

3.4.3.6 Measurement and Verification of Savings

We will partner with the State to develop a specific project-oriented M&V plan and assemble an M&V team that is dedicated to your project.

3.4.3.7 Training: Maintenance Staff and Occupants

Trane provides customized on-site training appropriate to the client needs, skill level, and system complexity. Off-site training is also available by separate arrangement.

3.4.3.8 Long-Term Maintenance Services on Energy Systems

Once construction is complete, Trane will provide ongoing support, maintenance, monitoring, and management services unless directed otherwise. These services can include training, operations, reporting, and more.

3.4.3.9 Application for Energy Star and LEED Credentials

Trane is actively involved with the EnergyStar initiative, and has helped customers achieve EnergyStar status for their facilities. Trane also supports LEED initiatives and can assist with obtaining certification.

3.4.3.10 Calculation and Reporting of Emissions Reductions

Trace® 700 software provides energy modeling of facilities, including an Environmental Impact Analysis designating CO₂, SO₂, and NO_x impact on the environment.

3.4.3.11 Assistance to Facility Owner Preparing Annual Reports for HEPC

Regular monitoring and reporting in a PACT™ project will include the necessary data to meet annual HEPC information requirements.



4.0 TECHNICAL APPROACH

Knowledge Based on Assessments

The audit of any facility helps us establish baselines, determine project scope, and verify results. The goal is simple: to apply our knowledge of facility operations to better your organization. To get there, we analyze the built environment holistically, studying every aspect of energy use, comfort requirements, environmental performance, and operating efficiency. Then we deliver a plan that responds to your unique needs.

The Audit Process

The first step involves benchmarking your facilities against a large industry database using a proprietary, industry-leading analysis tool called TRACE®. We'll compare your performance with literally thousands of other similar facilities, and assess the baseline energy performance of your buildings and systems. Then, working closely with your appointed in-house team, we'll find ways for you to do better.

Like our industry-leading tools, Trane's audit processes are best in class. For example, all the models we create will be calibrated to the actual utility rates your organization is now paying. We also provide a dynamic analysis rather than a static analysis, meaning we can evaluate the many interrelated effects of various and complex facility upgrade projects.

In addition, Trane integrates the International Performance Measurement & Verification Protocol (IPMVP) during the audit process which allows for simple validation of your ESPC guarantee. Our accreditation by the National Association of Energy Service Companies (NAESCO) further shows our adherence to industry best practices. This detailed technical approach offers you several advantages:

- **Confidence.** Industry Standard "Trace 700" Building Modeling software and compliance with the IPMVP ensures technical rigor, so that you and we are confident in the value of information about each performance contract. (see sample technical audit)
- **Accuracy.** We are secure in our projections for energy and dollar savings, which translates to lower risk for you, and more available money for energy conservation measures (ECMs).
- **Dependability.** We have the resources needed for thorough Measurement and Verification (M&V), and a history of achievements that guide the Trane process. That process stands with us behind your guarantee.



Phase 1: Project Definition

We establish a mutually agreed upon team with members of your organization and from Trane. This team is charged with jointly establishing the desired goals and outcomes of the project. Working together, we will collect baseline information and define the contract's technical and financial objectives.

Preliminary Audit

The preliminary audit allows us to determine potential cost savings related to energy, water, and wastewater use, as well as overall facilities operations and maintenance. This initial phase defines the savings potential of the project, and provides an estimate of the costs to undertake recommended savings measures.

The information developed during this initial phase should provide enough data for the State, with the assistance of Trane, to make an informed decision together on which energy-conservation measures (ECMs) should be researched further in more advanced audit phases.

Preliminary Project Verification

Successful projects require committed teams that thoroughly understand its scope and demands. That's why the initial phases of project development involve frequent team meetings and communications to continuously confirm the direction of the team's efforts. Our team will seek verification and agreement in such key areas as the general direction and goals of the project; the scope of ECMs and savings strategies; baseline utility and operating cost profiles; and the funding and financial approach.

Preliminary Audit Report/Proposal

Based on specific choices, we will prepare useful, easy-to-understand deliverables outlining the preliminary findings. In addition to the reports or presentations, we will send preliminary project proposal documentation in hard copy or electronically about 30 days after the technical audit contract has been approved.

Phase 2: Detailed Project Scope Development

In this part of the process, the team brings together all information required to evaluate and design new ECMs and related work. By this point, you will have an excellent working relationship with Trane, and all team members will clearly be focused on the program goals.

Typical accomplishments in this stage include verifying and expanding on the preliminary survey scope, developing designs, and gathering detailed building and equipment information. We will also verify facility operating conditions and assumptions, and begin to engage subcontractors needed to perform the work.



Detailed Study with a Consulting Engineer

In this detailed study phase, Trane will typically team with a third-party consulting engineer, duly registered to provide independent professional engineering services, and licensed in the State of Hawaii. The engineer is tasked with developing the final savings measures as well as providing assurances of fundamental amounts that form part of the Guaranteed Energy Savings Contract between Trane and the customer.

Working with a third-party engineer is common practice, and we believe it serves your best interest. As an outside expert, the engineer provides independent validation of the design work during the preliminary phase, and confirms the accuracy of the savings measures and estimates identified.

Studies will generally include a detailed facility survey, utility bill analysis, detailed energy analysis, report generation, and technical site analysis.

Phase 3: Detailed Energy Study

Once we receive a letter of commitment from you, or are selected by RFQ or RFP process, our detailed study and analysis can start. Working with your organization, a team uses the TRACE and Energy Analyzer programs to create complete building surveys and analysis, and then delivers final project designs.

Information collected in this phase includes:

- Data loggers and meters for historical analysis and energy consumption modeling
- Hours of operation to verify when building equipment is actually running
- Lighting systems, including quantities, wattages, and lighting system types
- Building occupancy statistics to determine actual rather than theoretical usage
- Operation and maintenance needs for all building equipment, including controls
- Utility bills for identifying trends in resource consumption
- Occupant surveys regarding the facilities and indoor environments

Trane team members will also investigate potential retrofit options.

Using the Trane System Analyzer™ and TRACE 700 programs, we will calculate building loads and model utility consumption. Various strategies incorporating a range of energy conservation measures, or ECMs, will be modeled using the Trane software to calculate impact on building loads and utility consumption.

Analysis and Report

All this study produces volumes of data. We apply our expertise and analytical skills to interpret this information, creating a report that clearly shows the current functions of your facility, and which measures will bring the greatest benefits—now and over the long term. A report generated at this stage usually includes the following items:



- Executive summary
- Facility overview
- Highlights of opportunities and solutions
- Physical description of facilities
- Operating systems: heating and cooling, electrical service, water and sewer, etc.
- Building utility data
- Predicted energy baseline and savings
- Recommendations for ECMs

Once you see the current status and recommendations for improvement, you can make cost and savings projections, set priorities, and choose a plan of action. And Trane will be ready to help.

4.1 Samples: Preliminary Technical Energy Audit (TEA) and Final Investment Grade Audit (IGA)

Under separate cover, provide representative SAMPLE audits of a preliminary TEA and a final IGA that is applicable for an energy performance contracting project in a government facility. (See RFP for proper delivery media.)

For a sample preliminary technical energy audit, see Attachment A; for a final investment grade audit, see Attachment B. And for a table that shows sample Energy Conservation Measures (ECMs), see Attachment C.

4.2 Standards of Comfort

A description of the standards of comfort the company generally uses for light levels, space temperatures, ventilation rates, etc. in the facilities intended for this RFP and any flexibility for specific Facility Owner needs. Note any changes that will be made to comply with requirements.

Standards of comfort can vary dramatically depending on the application specifics and the activity levels of occupants. Trane typically designs to current American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) listed standards for temperature and ventilation rates for a given application but is flexible to design to a customer's desired comfort standard as it relates to design dry bulb, wet bulb, humidity, IAQ metrics and NC sound levels (within the requirements dictated by applicable / local codes).

For lighting levels, the company generally follows the recommended lighting levels of the Illuminating Engineering Society of North America (IESNA) Handbook. Lighting fixtures are chosen based on energy efficiency, cost and color rendition capabilities (where true color rendition is critical to performance of tasks).

4.3 Baseline Calculation Methodology

A detailed description of the methodology normally used by the company to compute the baseline of energy, water and solid waste, etc. use for a facility. Include a discussion of how the Facility Owner is engaged for development of



and agreement on the baseline. Note any changes that will be made to comply with requirements for this RFP.

Baseline energy use is defined as the monthly and annual usage of each energy source used at each facility that is representative of usage with pre-retrofit equipment, operating schedules, and operational methodology. There will be a baseline determined for each form of energy, including electricity, fuel gas, fuel oil, water and/or other utilities. When determining a baseline, we analyze energy usage patterns for the three most recent years, taking into account any changes in facility equipment and operations that would alter the usage during that three-year period.

This analysis, and underlying assumptions, are developed in close coordination with the facility owner / designed agent of the State of Hawaii. The baseline is developed during the investment grade energy audit phase. The baseline documents the pre-retrofit conditions and serves as the basis for savings measurement of post-retrofit energy usage.

We utilize utility bill analysis software including Faser 2000® or Metrix® to perform the baseline analysis. The software program is selected based on the type of utility data available and any previous software utilized by the Customer. The baseline is a statistical model created from a multi-year utility history or "tuning period". The utility bill analysis program utilizes a multi-variable regression model to identify the statistical dependency of utility consumption and demand on occupancy, heating degree-days, cooling degree-days, and other variables as required.

4.4 Adjustments to Baseline

A discussion of typical factors that can impact the calculated baseline and the company's general approach to adjusting the calculated baseline if one or more of these factors are present. Include how the Facility Owner is involved for agreement on any adjustments. Note any changes that will be made to comply with requirements for the RFP.

Baselines may need to be modified in order to account for equipment and operational changes made at the facility. Baseline adjustments account for abnormal conditions that occurred during the guarantee year.

Possible Baseline Adjustments

- Changes in square footage of the facility
- Changes in occupancy
- Changes in building function
- Changes in technology
- Changes in ambient environment
- Off-normal weather events
- Changes in building schedule
- Additional utility load or equipment installed in the facility
- Additional energy conservation measures



Baseline adjustment will be performed only to accurately represent changes in facility use. We will not claim savings caused by improvements or events caused by others. We will indicate the energy savings impact associated with each from baseline adjustment and negotiate with the State of Hawaii. The Adjusted Baseline becomes the new pre-retrofit condition, representing the energy use that would have occurred if no energy conservation measures were performed.

5.0 MANAGEMENT APPROACH

5.1 Project Management and Coordination

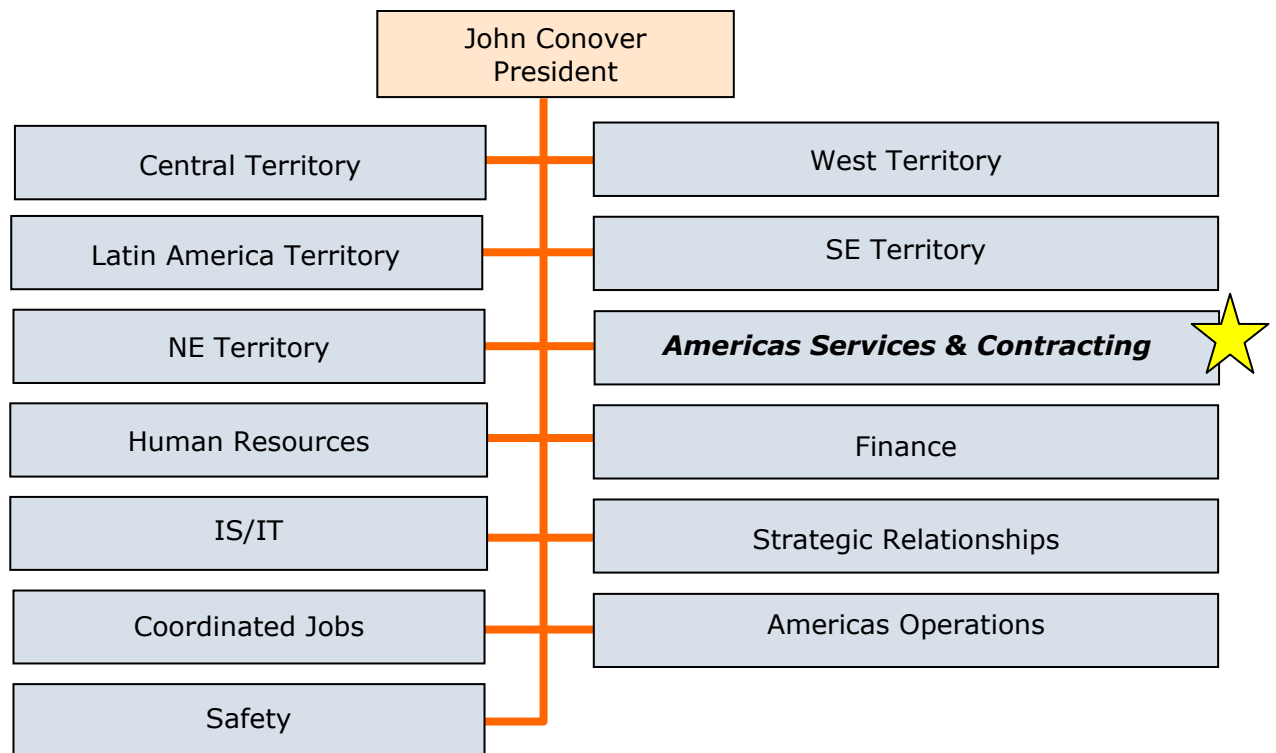
5.1.1 Organizational Structure

Show a typical/generic organization chart for implementing and managing a project.

Management and Coordination

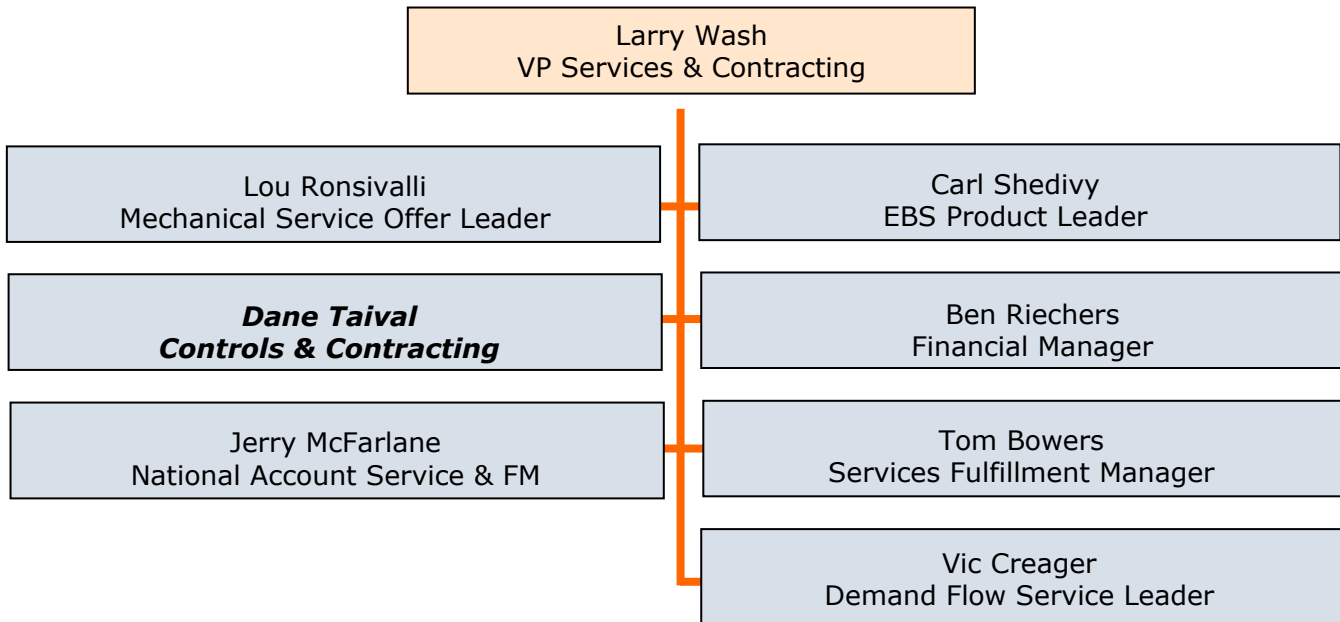
The organization charts below show the high-level structure of Trane's Performance Contracting business. At every level in this hierarchy, Trane is committed to energy efficiency.

Americas Sales & Distribution

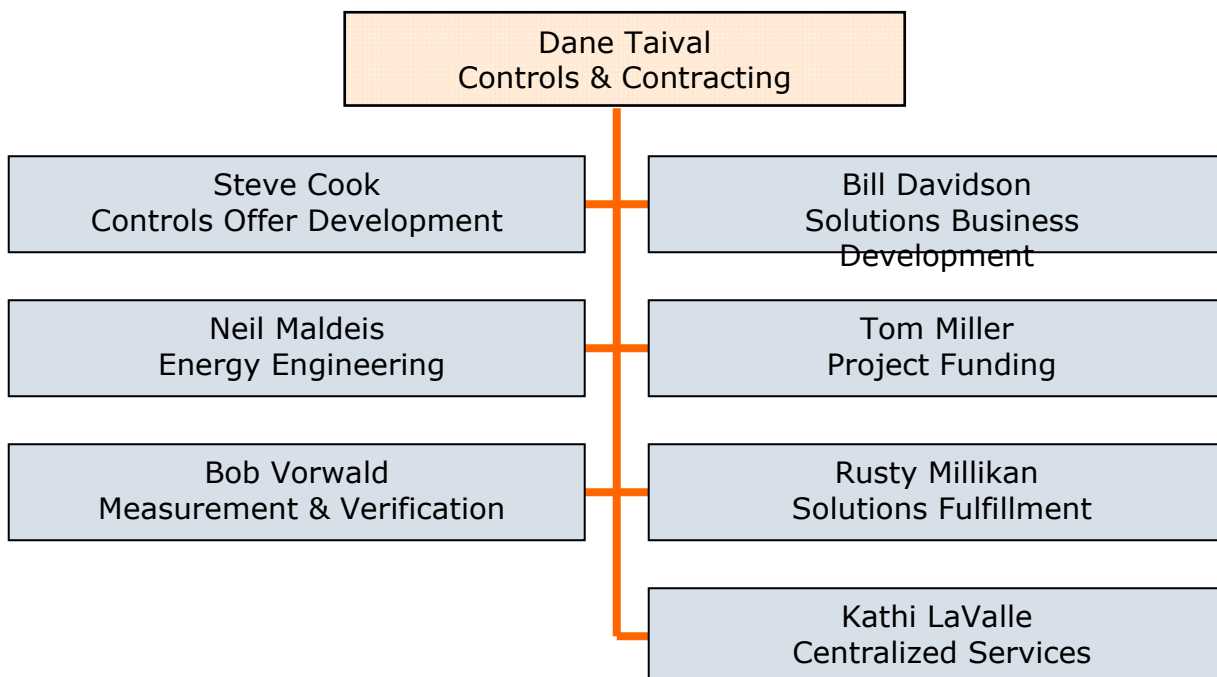




Americas Services & Contracting Team



Controls & Contracting Team





Local Staffing and Support

List the office location (city and state) for personnel proposed for projects under this RFP. Describe the extent of local staffing and support for the each phase of a typical project.

The matrix in section 5.2 shows both our local presence within Hawaii and some of the resources available to us, both through regional and national Trane experts and selected third parties.

5.1.2 Approach to Subcontracting

Describe the types of services (both professional and construction services) that your company offers in-house and the services typically offered through subcontractors.

Process and Performance Monitoring

Trane has many years of subcontracting experience and will begin the subcontracting management process by following the steps outlined in the Trane “Contracting Handbook”. The handbook, developed through years of project management experience, combined with the experienced Trane Project Managers who have both local and national resources at their disposal, will help ensure a project that proceeds on time, on specification and on budget.


Trane will also apply its time-tested, proven project management system and process to the management of subcontracted project activities. The PACT™ process uses a stepwise approach to work in partnership with the customer to define and refine the customer’s needs and requirements, over the course and dynamics of the ESPC project, and to support the customer through a tailored post-implementation support program. The process begins prior to project execution with validation of customer expectations and finishes with a methodical close-out of each aspect of the project. The six sub-processes are as follows:

- Validation: Verification of project and contract requirements
- Administration: The systematic control of project documentation and communication
- Planning: Development of a detailed execution plan and control of project resources
- Execution: Installation and checkout of the proposed scope of work
- Close-Out: Continuous focus on customer acceptance of completed improvements
- Change Management: The systematic handling of all potential changes and deviations



5.2 Personnel and Staffing

Provide a table to show your personnel pool of individuals who will potentially be assigned responsibility for each task and phase of a project under this RFP. Also include any added expertise and capability of staff available through other branch offices, subcontracts, etc., that can provide back-up strengths.

Honolulu Trane Local/Regional Capabilities Matrix			
 Process Steps	West Territory Trane Employees and/or Resources Dedicated to Serving the Honolulu Market	Honolulu Center of Excellence Supporting the Honolulu Office	Local Expertise Located in Honolulu
Initial Client Relationship	(280) Employees	X	60
PC Interest Development and Client Education	(39) Dev. Engrs	X	2
Energy Benchmarking (Mechanical/Electrical)	(22) Degreed Engineers	X	2
Mechanical and Controls (Turn Key Services)	(12) Project Managers	X	2
Controls (Turn Key Services)	(12) Technicians	X	3
Service & Ongoing Support Organization	(75) Trucks/Tec	X	15
Parts Offices	(34) Employees	X	4
LEED Certified Engineers	(3) Employees	X	WTT
Experienced Trane Trace Modeling and Energy Engineering	(33) Employees	X	3
Experienced Technical Audits/Sr. PM Engineers	(5) Employees	X	WTT
Energy Engineers/Energy Managers	(8) Employees	X	2
Project Engineers/Management	(10) Employees	X	2
Water/Wastewater Project Development	(2) Employees	X	WTT
Measurement and Verification	(2) Employees	X	WTT
Commissioning	(14) Employees	X	4
Sub-Consultant Management Experience	(17) Employees	X	2
M/E Contractor Management Experience	(34) Employees	X	4
Outside/Other Contractor Management Experience	(24) Employees	X	4
Project Financing	(5) Employees	X	2
Safety and Human Resources Management	(15) Employees	X	4
Energy Guarantee and Performance Assurance	(2) Employees	X	WTT

WTT: West Territory Team of Dedicated Resources



Vincent Canino

Director of Sales, Trane West Territory

Proposed Roles on Contract

- Project & Operations Management
- Sales & Accounting Management

Education

- Master of Science – Engineering Mechanics
Pennsylvania State University
- Bachelor of Science – Mechanical Engineering
New York State University at Binghamton

Areas of Expertise

- Performance Contracting
- Project Financing
- HVAC & Central Plant
- Electrical & Lighting Systems
- Cogeneration & CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety
- Resource Conservation Management

15 Years of Experience

- Mechanical Design Engineering, Project Management, Operations Management, Sales & Account Management, General Management – 20 Years

Vincent Canino has over fifteen years of Energy Industry experience including: Mechanical Design Engineering, Project Management, Operations Management, Sales and Account Management and General Management

The total value of all projects successfully closed, installed and/or implemented in the past 15 years are over \$2 billion in value.

Mr. Canino's current duties include direct P&L responsibility for the West Territory Contracting and Service business for Trane Commercial Systems

Vincent has 10 years experience integrating Sales and Operations in the development, implementation and execution of cogeneration projects and central plants.

His most recent projects include: Own and Operate Portland District Cooling Company, Own and Operate 1.5MW cogeneration project for Church of Scientology, Development of an Auto Shredder Fluff waste to energy project, completion of 1.5MW cogeneration project using Kawasaki gas turbines.



Craig Howe

Contracting Solutions Developer, Texas Trane

Intended Roles on Contract

- Technical Analysis & Senior Project Management

Education

- Bachelor of Science – Mechanical Engineering & Aerospace Systems
The US Military Academy at West Point

Areas of Expertise

- Complex Turnkey Contracting
- Performance Contracting
- Project Financing
- HVAC & Central Plant
- Electrical & Lighting Systems
- Cogeneration & CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety/CCTV
- Resource Conservation Management

Years of Experience

- Complex Turnkey Contracting – 5 Years
- Performance Contracting – 20 Years
- The Energy Industry – 25 Years

Client / Project Highlights

- YMCA of Dallas - \$2.7M
Developer – 18 locations throughout metro
- Tarleton State University - \$1.3M
Developer – Central plant expansion,
- Midwestern State University - \$6M
Developer – Central plant expansion
- City of Duncanville - \$35K
Developer – HVAC, DDC & Lighting

Craig Howe manages the internal and external technical and financial resources in the project development of multi-million dollar energy retrofit design-build construction projects.

Mr. Howe provides project development leadership and support to Trane district offices throughout the Trane Western Region which spans from Texas to California, to include northwestern Canada and Hawaii.

Craig has fully developed over 18 million dollars of energy retrofit / asset modernization projects and created a comprehensive life-cycle modeling tool in MS Excel to help optimize project scope of work based on site specific financial and technical requirements.

Mr. Howe averages over 25 million dollars per year in potential construction projects at varying stages of project development.

Previously, Craig was selected to manage internal and external engineering resources to provide TXU Energy marketing a comprehensive energy audit program for small buildings (under 1000 kW) aimed at enhancing brand loyalty.

His primary focus was to develop energy saving and/or asset renovation projects in both healthcare and industrial vertical markets. Projects developed included feasibility studies of cogeneration applications, backup power installations, traditional design-build HVAC projects, and customer-owned electrical substations.



James Knutson

Comprehensive Solutions Director, Rocky Mountain Trane

Areas of Expertise:

- Performance Contracting
- Project Financing
- HVAC & Central Plant Development & Construction
- Electrical & Lighting Systems
- Cogeneration and CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety/CCTV
- Resource Conservation Management Training

Years of Experience

- 22 yrs. Performance Contracting 25 yrs. In The Energy Industry

Education

- BA/Business Administration 1982/Concordia College, MN
- Forum and Advanced Course, Landmark Education
- Variety of Industry Accredited Courses and Education

Client/Project Highlights: (partial list)

- Project Director, State of Colorado Capitol Complex, \$14M
- Project Director, Arapahoe County, CO, \$10M
- Consultant, University of Denver, CO \$5M
- Regional Director, University of Utah, UT, \$47M
- Project Director, Mapleton SD, CO \$3.25M
- Project Director, Mesa County SD #51, Grand Junction, CO, \$2M
- Project Director, Laramie County SD#1, Cheyenne, WY, \$1M
- Project Director, Gunnison County, CO \$4.3M

Overview

Jim Knutson has over 25 years of experience in Energy Efficiency and Performance Contracting solutions for clients. He has been serving building owners with a wide array of energy efficiency programs, water conservation efforts, environmentally responsible solutions and operating cost reduction opportunities.

Mr. Knutson has developed, managed & directed over \$150 million of Energy Efficiency Programs resulting in over \$100 million of energy savings throughout his career. Current and past projects have been developed and managed throughout the U.S. for federal, state and local government, K-12/higher education, commercial, and industrial clients. Many of these solutions have included energy efficient building upgrades, operational improvements, renewable energy systems, central plant installations, and utility supply/demand side services.

Jim was awarded an Intermountain Region "CHP Champion" award for the Combined Heat and Power Association in conjunction with the Department of Energy's (DOE) Denver Region and he is a current Board Member of the Energy Efficient Business Coalition. Additional industry memberships include the Energy Services Coalition, Association of Energy Engineers, and the Cogeneration & On-Site Power Association.

Mr. Knutson served on the Board of Directors and is a Past President of the Rocky Mountain Association for Energy Engineers. He has served on the National and Local Board of the Energy Services Coalition and was the first Co-Chair of the State of Colorado Energy Services Coalition Chapter. He has been on the Board of Directors and spokesperson for the Colorado Energy and Indoor Air Coalition (CEIAC) and has played a key role in drafting Energy legislation in 10 states over the past 15 years. Jim has also assisted in the development of the Energy Performance Contracting M&V Protocol used now as the standard in many states.

As Director of Comprehensive Solutions (CS) for Trane, Jim leads the (NAESCO Accredited) Rocky Mountain Trane CS team by providing Sustainable & Environmentally Responsible solutions for clients in existing buildings and for new construction. This includes guaranteed savings, LEED/GBI Accreditation, Utility Demand Side Management, EPACT incentives, and complete Financing/Lease Purchase options.

Work and Personal History Highlights over his 25 year career:

2007 - Rocky Mountain Trane, Comprehensive Solutions Director
2005 - URS Corporation, National Director of Performance Contracting
2000 - Viron/Chevron Energy Solutions, Director-Intermountain Region
1996 - Long Building Solutions, (Founder - Energy Solutions Group)
1985 - Honeywell Inc., Sr. Account Representative
1984 - Jim is married with four children and is active in youth sports coaching, church and community service.

Address: 445 Bryant St., Denver, CO 80204 Email: jim.knutson@trane.com
C: 303-263-9818 O: 303-209-3224 Fax: 303-228-2828



Neil Maldeis

National Energy Engineering Leader, Trane America

Potential Role on Contract

- Energy Engineering

Education

- Bachelor of Science – Mechanical Engineering
University of Minnesota

Areas of Expertise

- Performance Contracting
- Project Financing
- HVAC & Central Plant
- Electrical & Lighting Systems
- Cogeneration & CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety/CCTV
- Resource Conservation Management

Years of Experience

- Engineering & Energy Industry – 26 Years

Professional Memberships

- Professional Engineer (License #24081)
- Certified Energy Manager (CEM)
- Association of Energy Engineers (AEE)

Neil Maldeis is responsible for the planning and achievement of comprehensive solutions business objectives for projects generated through Trane district offices located in the Southeast United States. He is also responsible for the technical development, support and review of performance based contracting solutions and activities on a national basis for Trane.

Mr. Maldeis' responsibilities include identifying, verifying, and approval of energy conservation measures including calculations and guarantees. His post installation activities include participation and training in post audit procedures and monitoring of guarantee results.

Neil has over 22 years of experience as a mechanical/project engineer in the building construction and energy conservation fields. His most recent experience was supporting the development of energy conservation/savings programs in wide range of customer environments including commercial, industrial and institutional facilities.

His responsibilities included defining/developing the scope of the energy conservation/savings solutions, determining the engineering content of the solutions, identifying/incorporating customer requirements and analyzing the financial feasibility of the program measures.

Neil's past experience in facility engineering and project management positions included responsibilities ranging from mechanical engineering design for plant facility projects to complete project management on major construction projects. The project's scope included HVAC systems and mechanical systems in the office, lab, data processing, manufacturing, and clean room spaces.



Robert Vorwald

Energy Engineer, Trane America

Potential Role on Contract

- Energy Engineer

Education

- Master of Science – Organizational Management
University of Phoenix
- Bachelor of Science – Mechanical Engineering Technology
Purdue University
- Associate of Applied Science – Mechanical Engineering Technology
Purdue University

Areas of Expertise

- Performance Contracting
- Project Financing
- HVAC & Central Plant
- Electrical & Lighting Systems
- Cogeneration & CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety
- Resource Conservation Management

Years of Experience

- Engineering & Energy Industry – 24 Years

Professional Memberships

- Association of Energy Engineers, Senior Member
- Certified Energy Manager (CEM)

Robert Vorwald provides support and analysis for PACT™ (Performance Agreement for Comfort from Trane). His responsibilities include maintaining energy saving guarantee data from installation throughout the guarantee period, providing annual reporting to customers on the status of performance guarantees and provide support for local offices on training and developing personnel to track and manage performance guarantees.

Robert's past experience includes coordinating energy audits for federal government, commercial, and institutional facilities, along with responsibility for all energy calculations, and cost estimating. He managed performance guarantees in a four-state area and coordinated and managed the installation of facility management systems.

Robert also managed an engineering department for temperature control and facility management systems, including the design of automatic temperature control and facility management systems.



Thomas Miller

Manager of Finance, Trane America

Proposed Roles on Contract

- Financial Management

Education

- Bachelor of Science – Accounting
Southwestern University
- In-House MBA – Management
Development Program
ServiceMasters Industries

Areas of Expertise

- Performance Contracting
- Project Financing
- HVAC & Central Plant
- Electrical & Lighting Systems
- Cogeneration & CHP
- Utility Supply Side Services
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Wastewater Treatment
- Bio-fuels, Boilers & Generation
- Ice Storage and District Cooling
- Plant Decentralization
- Building Automation
- Fire/Life Safety/CCTV
- Resource Conservation Management

Years of Experience

- Finance, Management & the Energy
Industry – 35 Years

Professional Memberships

- Equipment Lessors Association (ELA)
- AMA

Thomas Miller is currently responsible for developing and maintaining third party financial services relationships. Also, he is responsible for developing Trane's equipment leasing capabilities ensuring that Trane's projects that require financing are managed to the best benefit of the customer and Trane.

Thomas is the developer of financial project alternatives and aid long-term projects to profitable closure. He is the key source for providing financial training to the field selling organization.



Robert S. Hann

District Manager, Honolulu Trane

Areas of Expertise:

- Contract Management
- HVAC & Central Plant Development
- Ice Storage systems
- Service and repair of HVAC equipment
- Service maintenance agreements
- Building Renovation & Remodeling
- Licensed contractor

Years of Experience

- 37 years in Hawaii HVAC industry
- 6 years, officer, USN

Education

- BA Chemistry, University of Southern California
- NROTC Program, USC
- Variety of Industry Accredited Courses and Education
- Trane Graduate Training Class

Overview

Bob Hann has over 37 years of experience with Trane in the air conditioning industry in Hawaii. He has served in the various capacities of sales engineer, sales manager, service manager, and finally for the last 9 years as district manager, managing the entire Trane operation in Hawaii with approximately 55 employees.

During these various sales and management positions, he has directed either the acquisition or the fulfillment of most of the projects accomplished by Trane in Hawaii during this period. Under his direction Trane became a local turnkey contractor specializing in chiller and cooling tower replacement, and chiller room retrofits. He also gave leadership to a crew of over 20 service technicians during his role as Service Manager.

Bob has been a member of ASHRAE for 37 years, and served the Hawaii Chapter in numerous positions, including President in 1980-81. He is also a member of the Board of Directors of the Plumbing and Mechanical Contractors of Hawaii (PAMCAH), and served as its President from 2005-2007. Additionally he has been a member of the Joint Apprenticeship Training Committee for the last 8 years, which directs the training program for plumbers, pipefitters, and air conditioning technicians in UA Local 675. In 2007-08 he served on an advisory task force to make recommendations to the State legislature for energy management in State buildings.

He is married with a son and daughter in high school and college. Much of his spare time is devoted to Boy Scouts, where he is a member of the Executive Board of the Aloha Council, BSA, and currently serves as Council Commissioner, the top volunteer position in the adult leadership of over 17,000 youth. He is also an active member of St. Clements Episcopal Church, having served as Treasurer, Junior Warden, and Senior Warden.

As the District Manager he is directly responsible for the successful execution of all facets of Trane's business in Hawaii.

Professional Highlights over his career:

2007-08	Member Advisory Committee for State Energy Management
2001-08	Member Joint Apprenticeship Training Committee
2005-07	President, PAMCAH
1999	Trane Hawaii District Manager
1988	Trane Hawaii Service Manager
1982	Trane Hawaii Sales Manager
1971	Trane Hawaii Sales Engineer
1971	Trane Graduate Training Class, LaCrosse, WI
1965-71	US Navy submarine service



Rick Schnarr

*General Sales Manager / Equipment Solutions Manager, Honolulu
Trane*

Areas of Expertise:

- Performance Contracting
- HVAC & Central Plant Development
- Ice Storage and District Cooling
- Lighting Systems
- Cogeneration and CHP
- Demand Side Management
- Building Renovation & Remodel

Years of Experience

- 23 yrs. In The Air Conditioning Industry

Education

- BS/Engineering Technology 1985/University of Southern Indiana
- Associates Degree – Business Development and Management/ University of Southern Indiana
- Dale Carnegie Leadership/Sales Programs
- Trane Company Sales Managers Leadership Development Program
- US Navy First Line Leadership Development Program
- US Navy Advanced Leadership Development Program
- Variety of Industry Accredited Courses and Education

Client/Project Highlights: (partial list)

Overview

Rick Schnarr has over 23 years of experience in the air conditioning business in a variety of management positions, covering a wide range of programs and accounts that spans the entire industry. In his current position, he has managed over \$27 million of business.

In past positions, Mr. Schnarr had been responsible for the daily development and direction of 15 account managers, sales engineers, and service managers covering new equipment sales, service contracts, comprehensive solutions and contracting. He had also developed a HVAC controls program that increased cost-effective service to the customers, was responsible for corporate engineering sales and sales support for 55 district offices in the US and Europe, provided sales training for district offices, developed specialist programs for district offices, and expanded a remote access marketing program in Europe and the US.

Rick served in the US Navy in the Submarine Service and distinguished himself in the following areas of expertise: HVAC Specialist – Hydraulics, Air Systems, Atmosphere Control Systems, Air Conditioning and Refrigeration Systems as well as attended the US Navy's Air Conditioning and Systems College. During his military service, he also completed several AT SEA Engineering and Systems Programs. He earned the US Navy Achievement Award and two Navy Citations for Performance and Leadership.

Rick has three children and three grandchildren. He is currently on the Board of Governors for the Hawaii Chapter of ASHRAE, Member of the Steering Committee for the DBIA (Design/Build Institute of America), and a Member of the USGBC Hawaii Chapter. Rick previously held a Builders License and a Mechanical Contractors License in the State of Florida.

Professional Highlights over his career:

2006 - Honolulu Trane, General Sales Manager / Equipment Solution Manager

2004 – Seattle Trane, Acquisition Leader for New Equipment, Control and Owner Direct Sales

1991 – Cincinnati Carrier, Commercial Sales Manager and Sales Eng

1986 – Jacksonville (FL) Carrier, Manager, Engineering Sales and Distribution

1985 – BS Engineering Technology, University of Southern Indiana

1975-1980 – US Navy Submarine Service



R.J. Ritter, Jr.

Contracting Solutions Manager, Honolulu Trane

Areas of Expertise:

- Turnkey Contracting
- Ice Storage and District Cooling
- HVAC Controls
- Demand Side Management

Years of Experience

- 23 yrs. In The Engineering and Air Conditioning Industry

Education

- BS/Electrical Engineering
1991/University of Hawaii
- Honeywell H316R Training, Ft. Meade 1986, MD
- US Air Force Computer Technical School 1984, Keesler AFB, MS
- Variety of Industry Accredited Courses and Education

Overview

Rudolf "R.J." Ritter, Jr. has over 23 years of experience in the engineering and air conditioning industry as a manager and technician in The Trane Company, Lacayo Architects (Hawaii), and M & E Pacific, Inc. (Hawaii). In his current position, RJ is responsible for managing all turnkey contracting and digital controls projects; providing engineering support for local architects and mechanical/electrical engineers including control specifications, system design drawings and design review; reviewing and approving estimates and bids for all contracting projects; managing the design of all digital control projects; providing training seminars to building owners, managers, architects and engineers, both private and military; managing project engineers responsible for the programming and commissioning of the digital control systems; and maintaining, upgrading and supporting Trane's Windows NT based Local Area Network and associated workstations.

In past positions, Mr. Ritter produced architectural construction documents under the direction of registered architects using Prime Medusa and AutoCAD; introduced the first AutoCAD workstation and eventually increased the system to over 30 networked workstations at a local (Hawaii) architectural company; created 3D architectural models in AutoCAD and exported them to Autodesk 3D Studio for rendering and animation; was responsible for all computer-related matters including Novell network administration at a local (Hawaii) architectural company. He had also installed testing and measuring instrumentation in wind tunnel models, maintained various computer systems, and served as a quality control inspector.

Professional Highlights over his career:

1992 - Honolulu Trane, Contracting Solutions Manager
1991 – BS Electrical Engineering, University of Hawaii
1989 – Lacayo Architects, Engineering Technician
1986 – M & E Pacific, Inc., Engineering Technician
1985 – Fort Meade NSWC, White Oak, MD, Engineering Technician
1978 – US Air Force, Computer Technician



Kevin Saito, P.E.

Comprehensive Solutions Account Manager, Honolulu Trane

Areas of Expertise:

- Performance Contracting
- HVAC & Central Plant Development
- Ice Storage and District Cooling
- Lighting Systems
- Cogeneration and CHP
- Solar Thermal Water Heating Systems
- Demand Side Management
- Building Renovation & Remodel
- Renewable Energy Systems
- Water Conservation
- Resource Conservation Management Training

Years of Experience

- 25 yrs. In The Engineering and Energy Industry

Education

- BS/Mechanical Engineering 1983/University of Hawaii
- Naval War College 2003
- Variety of Industry Accredited Courses and Education

Client/Project Highlights: (partial list)

- Energy Manager, NAVFAC HI, Lighting Retrofit, \$5M
- Energy Manager NAVFAC HI, ESPC Delivery Order 1, \$3M
- Energy Manager, NAVFAC HI, Photovoltaic System, Building 54, Ford Island, Pearl Harbor, \$2M
- Energy Manager, NAVFAC HI, Fuel Cell Project, PMRF, Kauai, \$8M
- Project Developer, NAVFAC HI, Pearl Harbor District Cooling, \$300M
- Project Developer, NAVFAC HI, Pearl Harbor Sea Water Air Conditioning, \$400M
- Project Developer, NAVFAC HI, 5MW Photovoltaic Projects, \$35M
- Project Developer, Landfill Gas CHP Study, PMRF, Kauai \$2M

Overview

Kevin Saito has over 25 years of experience in mechanical engineering as a consultant, federal engineer, mechanical engineering branch manager for a military base in Japan, energy manager for the Navy at Pearl Harbor, and now provides Energy Efficiency and Performance Contracting solutions for clients. He extensive experience in all areas of facilities management and specializes in energy/water efficiency projects, renewable energy systems, combined heat and power systems, fuel cells, waste heat recovery, solar thermal water heating, sustainability, environmentally responsible solutions and operating cost reduction opportunities.

Mr. Saito has developed, managed & directed hundreds of Energy Efficiency projects resulting in tremendous energy savings throughout his career. Current and past projects have been developed and managed in Hawaii and Japan for federal, state and municipal government, commercial, hospitality lodging, and industrial clients. Many of these solutions have included energy efficient building upgrades, operational improvements, renewable energy systems, and an ESPC project with the Navy.

Kevin is the current president of Rebuild Hawaii, a member of ASHRAE Hawaii, and has been nationally recognized by the Navy's energy program for excellence of the Pearl Harbor energy program. Under Kevin's direction, the Pearl Harbor energy program won several national awards including the Platinum Award, the highest honor for achievement by the Navy and a Department of Energy Water Conservation award. One of his lighting retrofit projects was also the recipient of the International Illumination Design Award.

Kevin is married, has two sons, 19 and 17 years old, is active in the Boy Scouts of America, Aloha Council as an Assistant Scout Master of Troop 123 (Kaimuki) and a Venture Crew Advisor of Crew 123 (Kaimuki). He has served as a trainer of Boy Scout leaders, on the staff of Woodbadge (executive training for Boy Scout leaders), and is the recipient of the District Award of Merit for service to the Kapiolani District.

As Account Manager of Comprehensive Solutions (CS) for Honolulu Trane, Kevin leads the Honolulu Trane office in providing Sustainable & Environmentally Responsible solutions for clients in existing buildings and for new construction. This includes development of energy/water efficiency projects, advice on utility incentives, and complete Financing/Lease Purchase options.

Professional Highlights over his career:

2007 - Honolulu Trane, Comprehensive Solutions Director
2007 – Modern Day Technology Leader Award
2001 – Energy Manager, Navy Facilities Engineering Command, Hawaii
2000 – Navy Facilities Engineer of the Year, Pacific Division
1995 – Mechanical Engineering Branch Manager, MCAS Iwakuni, Japan
1993 – Mechanical Engineer, Navy Facilities Engineering Command, Hawaii
1989 – Mechanical Engineer, Ferris and Hamig Hawaii
1989 – Professional Engineer License, State of Hawaii
1984 – Mechanical Engineer, Cedric Chong and Associates



COST AND PRICING

5.3 Markups

Provide your company's proposed maximum allowable markups in the schedule below for each category listed on the schedule. This format is required and must be completed in its entirety.

Markups represent a percentage added to the base cost for the project (the use of margins in lieu of markups is not acceptable). Use only the categories provided. Ranges for markups are not acceptable.

Clearly describe how self-performed work will be charged (billed hourly, billed as a markup of equipment and labor costs, etc.). If self-performed work will be billed hourly, include markups proposed to be applied to the hourly rate.

If a proposal is from a joint venture partnership, include proposed maximum allowable markups in the schedule format above for each participating company.

Category of Markup	Markup Application	% Markup
Overhead	—	13%
Profit	—	8%
Labor—Internal	Trane Labor	GSA Pricing
Equipment Purchased	Trane Equipment	GSA Pricing
Materials Purchased	Non-Trane	22%
Subcontract Labor	Non-Trane	22%
Subcontract Material	Non-Trane	22%

Trane has adopted a “best value” philosophy through the GSA pricing model to reduce markups and costs to the State of Hawaii while providing quality service and single-source comprehensive solutions. This GSA pricing method will allow the State of Hawaii to achieve a direct purchase advantage on all Trane manufactured equipment, controls, labor and services. By adopting direct manufacturer-to-customer GSA pricing and distribution practices, Trane can reduce first cost allowing more dollars to be available for projects, improve the project’s ROI and help shift practices from urgent repairs to preventive maintenance.

Trane will use local engineering and contracting resources, if available, for their specific background knowledge of ECMs, systems, local relationships, or other advantages. Any subcontractors hired to install non-Trane projects or equipment will be expected to meet Trane construction standards; Trane assumes responsibility for the success of the project.



5.4 Fees

Provide your company's proposed maximum allowable fees in the schedule below for each category listed on the schedule. This format is required and must be completed in its entirety. Use only the categories provided. Ranges for fees are not acceptable. If a proposal is from a joint venture partnership, provide proposed maximum allowable fees in the schedule format below for each participating company.

Category of Fee	How Determined and Used	Years Applied
Investment Grade Energy Audit and Project Development	\$0.10 per square foot	One Time
Solicit & Evaluate Project Financing Proposals	State of Hawaii financing RFP firm price proposals from third party	N/A
Design/Engineering	Est. 6 % of project cost	One Time
Contingency	Recommend 7.5% of project cost	One Time
Permits	At direct cost	One Time
Performance Bond	At direct cost	One Time
Project Management	Est. project management at 5% of project	One Time
Commissioning	2% of project	One Time
Training	<ul style="list-style-type: none"> On-site training scope to be determined on each job by client needs, skill level, and system complexity, and will be included in direct project cost category Off-site Trane courses and training will be provided at GSA training costs 	One Time
Monitoring and Verification	5% of annual savings	Annual
Warranty Service	1% of project cost and/or at direct manufacturer's price for extended manufacturer warranty fees	Annual
Maintenance on Installed Measures	<ul style="list-style-type: none"> Maintenance to be priced and performed on case by case basis Systems to be maintained to manufacturer specifications 	Annual

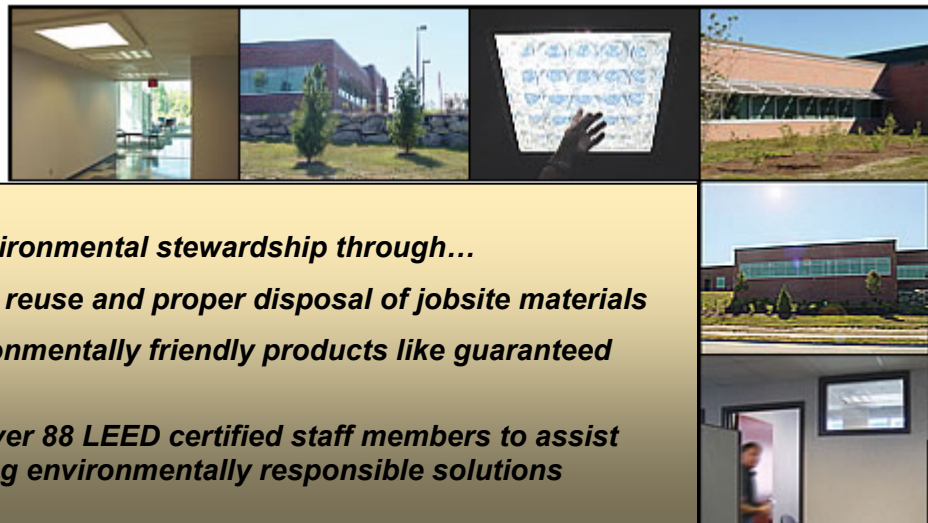
5.5 Contingency

Describe your company's typical level of contingency budget for lighting, electrical, mechanical, controls projects, and other projects and how it proposes to apply contingency to cover changes in work scope and subcontractor change orders. Note that all unused contingency funds will revert to the Facility Owner or be applied to additional work scope through a change order approved by the Facility Owner.

Trane Contingency Practices

Trane's approach to determining the contingency amount for any project will be in conjunction with the owner or agency of the project during the planning phase. Changes in work scope and/or subcontractor change orders are addressed, documented and communicated to the contractual parties. All unused contingency funds will revert to the Facility Owner or be applied to additional work through a change order.

Trane has listed a maximum suggested contingency of 7.5%. The contingency range for a project is based on the complexity and unknown and unforeseen events that can occur, and is ultimately the client's decision to appropriately budget for unforeseen project costs. Leftover or unused contingency funds will be returned to the State of Hawaii for use at its discretion. Typically, these unused funds are put toward additional ECMs that enhance savings and return to State of Hawaii agencies and clients.



Trane is proactive about environmental stewardship through...

- ***Construction—recycling, reuse and proper disposal of jobsite materials***
- ***Manufacturing—of environmentally friendly products like guaranteed “leak tight” chillers***
- ***LEED—Trane employs over 88 LEED certified staff members to assist customers in co-authoring environmentally responsible solutions***



5.6 Equipment/Labor Cost Competition

Describe your company's process to solicit bids on equipment/labor or to ensure price/cost competition and the best value for the Facility Owner.

The market for performance contracting is competitive. As one of the most experienced, largest, and oldest companies in the industry, though, Trane usually sets the benchmark against which other vendors are measured.

Our comprehensive services, global reach, and product range provide exceptional value through energy conservation measures (ECMs). We also hire independent third-party evaluators, and recommend the equipment that is best for your facility. As the world leader in air conditioning, Trane provides the lowest overhead cost directly to our customers where other ESCOs must add (multiple) layers of overhead in their purchasing process. When the State determines another manufacturer is a better value, Trane will secure the appropriate number of quotes to assure the best price is attained. While we are proud of Trane products, our goal is to help you get the best results possible—regardless of the source. Trane will also work with local unions as much as possible to secure qualified, experienced labor to provide excellent value to the projects.

DOE GHP Super ESPC

In 1999, Trane acquired a Department of Energy (DOE) master contract, or IDIQ (Indefinite Delivery Indefinite Quantity) contract to perform Energy Savings Performance Contracts (ESPC) for the federal government. Since most of the contractual work has been done in acquiring the IDIQ contract, delivery orders placed against the contract can be done more quickly and with less “red tape.”

Our contract is global in nature; it can be used by any federal government agency. One of its goals is to promote the use of geothermal heat pump (GHP) technology. Therefore, each project must include a GHP component. The rest of the scope of a project can address a number of other ECMs, including HVAC equipment, lighting, controls, building envelope, etc.

Because of the complexity of these projects (baseline determination, pricing guidelines, third party financing, M&V requirements, etc.), Trane's Federal Sector Team will provide a wealth of experience and value to the ESPC process. With the many ESPC projects as their basis, you can be assured to receive the best guidance and information with which to make an informed decision. A Trane Federal Sector ESPC Account Executive will take an active role in any of these projects.

Interesting Facts:

- ESPC investments to date have saved the federal government 17.4 trillion BTUs; this is the equivalent to the energy use of 172,000 U.S. households



- These projects will save \$4.7 billion in energy costs - net savings after investments paid back = \$1.5 billion (taxpayer savings!)
- ESPC has been used by 18 different federal agencies and in 46 states

5.7 Open Book Pricing

As a company policy, Trane believes and welcomes open book pricing such that all costs, including all costs of subcontractors and vendors, are fully disclosed. Trane's accounting records are kept in compliance with Trane policies as well as local, state, and federal regulations.

As a leading global provider of indoor comfort systems, we can provide financial advantage to customers who chose to install Trane manufactured systems as part of a project. By involving you early in the decision-making process and co-authoring equipment providers, contractor selection, and subcontractor choices, Trane maintains the "transparency" that allows you to make the choices that best suit your specific needs. To ensure that you are receiving the best value, we will present an Open Book Project Pricing proposal as per State of Hawaii guidelines.

We do this by providing linked spreadsheets that show:

- Trane Direct project costs
- Pricing
- Mark-ups
- Major equipment pricing
- Pro forma detail
- Savings estimates
- Termination implications

Trane also typically provides an Amortization Engine, Construction Draw Schedules and Rate Calculations within the spreadsheets. Additionally the Selection Memorandum, Investment Deal Summary and Standard Financing Offer (when applicable) are contained within this section of the Trane proposal.

3.03 EXCEPTIONS AND SUBSEQUENT REQUESTS TO AMEND THE RFP

- A. *Any exception to the RFP and subsequent request from Offeror to amend the requirements of the RFP as a result of the exception, shall only be considered prior to proposal due date, and as follows:*
1. *If an Offeror takes exception to any requirement of the RFP, and desires to amend the requirement, the Offeror shall identify the RFP section being addressed by the exception and subsequent amendment and provide written justification for the request.*
 2. *Exception(s) shall be submitted by the proposal due date specified in Section 1.04, RFP Schedule and Significant Dates, or as amended.*



3. *Written exception(s) and the subsequent request(s) to amend the RFP shall be reviewed by the State. Any changes to the RFP shall be made through the issuance of a written Addendum to the RFP at least five (5) working days prior to proposal due date.*
 4. *Any exception taken to any requirement of the RFP that was not submitted by the date and time specified shall be considered as a condition to Offeror's proposal, which may negatively affect the evaluation of Offeror's proposal or result in the disqualification of that proposal.*
- B. Offeror shall not submit their organization's terms and conditions, standard contracts, or other agreements. General references to such items or attempts at complete substitution for such items may result in disqualification of Offeror's proposal.*

No exceptions or amendments requested.