



### 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.

Chevron put together a strategic plan some years ago to become a truly comprehensive provider of energy efficiency and renewable power generation solutions. Chevron acquired several legacy companies some with origins dating back to the early 70's. Chevron started building their energy services expertise under the banner of Chevron Energy Solutions (Chevron ES) with the acquisition of Pacific Gas & Electric (PG&E)'s energy services group in 1999 and the Federal Business Unit of Energy Masters International (est. 1974) in February of 2003. These purchases position Chevron ES to bring a broad background in energy management, energy efficiency, renewable energy, power systems, distributed generation, and monitoring and verification of energy consumption to its customers. Chevron ES then acquired CMS Viron Energy Services (est. 1974) in July of 2003. Viron was one of the leading engineering-based energy services companies in the U.S., and had specialized in energy performance contracting and turnkey energy efficiency projects longer than any other company (credited with implementing the first performance contract ever in 1981 at Adrian College in Michigan).

The depth of experience represented in these three legacy companies marked the beginning of one of the most innovative and experienced energy services companies in the world. Chevron ES continues its growth both organically and through acquisitions. Recent additions to the Chevron ES family include the acquisition of a portion of the performance contracting assets of FirstEnergy Solutions, a subsidiary of FirstEnergy Corporation, which provides energy and related products and services in Ohio, Michigan and Pennsylvania; and BGA, Inc. (energy performance contracting and consulting unit of Tampa Electric Company (TECO) Energy Services) which provides energy and related products and services in Florida.

#### 3.1.2 Years in the Energy Business. State the number of years the company has been involved in the energy-efficiency related business.

Together Chevron ES legacy companies have over thirty years of experience in implementing thousands of successful energy efficiency related projects. As such, Chevron ES brings to the table a deep knowledge and level of experience in all facets of performance contracting and comprehensive energy services projects unparalleled in the industry.

#### 3.1.3 Years in Performance Contracting. State the number of years the company has offered energy performance contracting services.

Through its legacy companies, as described above, Chevron ES has been providing performance based contracts since 1981.

#### 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.

Chevron ES has successfully undertaken hundreds of energy projects all over the country in the history of the company. In California alone we have a track record of over a hundred projects over five years and 98% of our nationwide projects are \$1 million and above and only 2% are 1 million and below.





**3.1.5 Summary listing of 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. If none, so state.**

Chevron Energy Solutions does not have any litigation with customers for failure to perform. This is a testament to our high level of customer service and corporate culture that believes in doing the right thing even if it means doing it at a loss.

**3.2 Financial Soundness and Stability of the Company**

**3.2.1 Financial Soundness. A description of the financial soundness and expected stability of the company. Include Moody's and/or Dunn and Bradstreet rating.**

Chevron Energy Solutions (Chevron ES), a division of Chevron U.S.A., is the energy services unit of Chevron, a \$214 billion global energy enterprise employing more than 58,000 energy professionals in 180 countries. With more than \$148 billion in assets, Chevron is a Fortune "Top Four" company, the second-largest U.S.-based energy company and the fourth largest publicly traded integrated oil and gas company in the world, based on market capitalization. The company maintains credit ratings of "Aa2" from Moody's and "AA" from Standard and Poor's. Chevron ES brings together professional talent, shared values, and a strong commitment to developing energy and facility solutions for its institutional and business customers across the U.S. Chevron ES is also recognized by Chevron as the company's "Center of Excellence" for energy efficiency. Part of Chevron ES' core mission is to seek out energy efficiency opportunities for all Chevron operating companies.

**3.2.2 Profitability. A description of the company's profitability with supporting documentation covering the past three years.**

Please see our enclosed 2007 Annual Report of Chevron Corporation. Chevron Energy Solutions Company (Chevron ES) is a division of Chevron U.S.A., which is a wholly owned subsidiary of Chevron. Chevron ES' financials are included within their statements.

A thorough Chevron 2007 Annual Report can be accessed on the web at <http://www.chevron.com/documents/pdf/Chevron2007AnnualReportSupplement.pdf>

A thorough Chevron 2006 Annual Report can be accessed on the web at <http://www.chevron.com/Investors/FinancialInformation/AnnualReports/2006/financials.asp>

A 2007, 2006, 2005 Financial Summary can be found on the following page.





## Financial Summary

Millions of dollars, except per-share amounts	2007	2006	2005	2004	2003
Net income	\$ 18,688	\$ 17,138	\$ 14,099	\$ 13,328	\$ 7,230
Sales and other operating revenues <sup>1</sup>	214,091	204,892	193,641	150,865	119,575
Cash dividends - Common stock	4,791	4,396	3,778	3,236	3,033
Capital and exploratory expenditures	20,026	16,611	11,063	8,315	7,363
Cash provided by operating activities	24,977	24,323	20,105	14,690	12,315
At December 31: Working capital	5,579	7,895	9,325	9,708	3,315
Total assets	148,786	132,628	125,833	93,208	81,470
Total debt and capital lease obligations	7,232	9,838	12,870	11,272	12,597
Stockholders' equity	77,088	68,935	62,676	45,230	36,295
Common shares outstanding (Millions) <sup>2</sup>	2,076.3	2,150.4	2,218.5	2,093.0	2,124.1
<b>Per-share data<sup>2</sup></b>					
Net income - Basic	\$ 8.83	\$ 7.84	\$ 6.58	\$ 6.30	\$ 3.48
- Diluted	8.77	7.80	6.54	6.28	3.48
Cash dividends	2.26	2.01	1.75	1.53	1.43
Stockholders' equity at December 31	37.13	32.06	28.25	21.61	17.09
Market price at December 31	93.33	73.53	56.77	52.51	43.19
- High	95.50	76.20	65.98	56.07	43.49
- Low	64.99	53.76	49.81	41.99	30.65
<b>Financial ratios<sup>3</sup></b>					
Current ratio	1.2	1.3	1.4	1.5	1.2
Interest coverage	69.2	53.5	47.5	47.6	24.3
Total debt to total debt-plus-equity	8.6%	12.5%	17.0%	19.9%	25.8%
Return on average stockholders' equity	25.6%	26.0%	26.1%	32.7%	21.3%
Return on average capital employed	23.1%	22.6%	21.9%	25.8%	15.7%
Return on average total assets	13.3%	13.2%	12.9%	15.3%	9.1%
Cash dividends/net income (payout ratio)	25.6%	25.7%	26.8%	24.3%	42.0%
Cash dividends/cash from operations	19.2%	18.1%	18.8%	22.0%	24.6%
Total stockholder return	30.5%	33.8%	11.3%	25.5%	35.2%

<sup>1</sup> Excludes \$291 and \$457 for discontinued operations for 2004 and 2003, respectively.

<sup>2</sup> Amounts in all periods reflect a two-for-one stock split effected as a 100 percent stock dividend in September 2004.

<sup>3</sup> Refer to page 67 for Financial Ratios definitions.

## Chevron Accounting Firm of Record

Name: Price Waterhouse Cooper LLP  
Address: 333 Market Street, San Francisco, CA 94105  
Phone: 415.498.5000

### 3.2.3 Financial Reports

#### 3.2.3.1 Financial statements and footnotes (audited preferred) for the proposer for the last completed accounting year within six (6) months of June 30, 2007.

We have included a copy of Chevron's 2007 Annual Report in the Appendix of our response. A thorough Chevron 2007 Annual Report can be accessed on the web at <http://www.chevron.com/documents/pdf/Chevron2007AnnualReportSupplement.pdf>

#### 3.2.3.2 Interim financial statements for the accounting period from the last audited financial statements to February 29, 2008 if the company's year end is other than December 31st.

The company's year end is December 31<sup>st</sup>.





### 3.2.3.3 Solvency ratios (Quick Ratio, Current Ratio, Current Debt to Equity, Debt to Equity, Fixed Assets to Net Worth, and Working Capital).

#### For CVX as of year end 2007

Quick Ratio	0.9
Current Ratio	1.2
Current Debt to Equity	0.01
Debt to Equity	0.08
Fixed Assets to net worth	1.02
Work Capital	\$5.6 Billion

### 3.2.3.4 Profitability Ratios (Profit margin and Return on Assets)

#### For CVX as of year end 2007

Profit Margin	8.7% net income to gross sales
Return on Assets	23.8%

### 3.2.3.5 Access to Financing (Lines of Credit and Letters of Loan Commitment)

For access to financing CVX has \$7.4 Billion in cash, plus an additional \$22.4 Billion in AR and notes receivable. CVX has multiple relationships with major money center banks. CES has executed millions of dollars of municipal tax exempt lease purchase arrangements. The following is a listing of some of the financial institutions CES has completed financing with:

- Bank of America
- De Lage Landen
- CitiCapital
- Hannon Armstrong
- California Communities Conduit Financing
- SunTrust
- AIG

Included in the Appendix are three letters of commitment from our finance partners.

## 3.2.4 Financial Reports

### 3.2.4.1 Current Bonding Rating

CES maintains an ongoing surety bonding relationship with Fidelity and Deposit Company of Maryland, a member of the Zurich Financial Services Group of underwriting companies, with an AM Best Rating of XV and with Federal Insurance Company, a member of Chubb Insurance Company, who has an AM Best Rating of XV. Both Sureties are on the U.S Treasury's Department Circular 570 listed as an approved surety and are admitted carriers in all 50 states.

### 3.2.4.2 Current Bonding Capacity

We have established Surety bonding Capacity limits of \$100,000,000 for single projects with an aggregate capacity in excess of \$800,000,000.

### 3.2.4.3 Amount or Percentage of Bonding Capacity Currently Obligated

Currently, Chevron ES has less than 50% of our bonding capacity obligated.





#### 3.2.4.4 Current Bonding Rate

The current bonding rate is \$3.00 per thousand.

#### 3.2.4.5 Confirmation that the company is bondable for 100% of a payment bond on a project.

Verbiage in bonding "good guy" letter confirms this.

#### 3.2.4.6 Confirmation that the Company is Bondable for 100% of a Performance Bond on a Project.

Verbiage in bonding "good guy" letter confirms this.

#### 3.2.4.7 Letter from a Licensed Surety as Evidence of Ability to Bond for Payment and Performance.

Included in the Appendix is the complete letter of bondability from our surety company, Aon Risk Services. On the following page is the first page of the letter describing our bonding status.





May 27, 2008

Mrs. Donn Tsurda-Kashiwabara  
Hawaii State Procurement Office  
1151 Punchbowl Street  
Kalanimoku Building, Rm 416  
Honolulu, Hawaii 96813

RE: Chevron Energy Solutions, a division of Chevron USA, Inc.

Dear Donn:

Chevron Energy Solutions, a division of Chevron USA, Inc. "Chevron Energy Solutions" is a valued surety bond client of Aon Risk Services of Northern California. The company has completed a variety of projects and has a reputation of providing quality workmanship, on-time delivery, and satisfied customers.

Chevron Energy Solutions Company maintains an ongoing surety bonding relationship with Fidelity and Deposit Company of Maryland, a member of the Zurich Financial Services Group of underwriting companies, with an AM Best Rating of XV and with Federal Insurance Company, a member of Chubb Insurance Company, who has an AM Best Rating of XV. Both Sureties are on the U.S. Treasury's Department Circular 570 listed as an approved surety and are admitted carriers in all 50 states. We have established Surety bonding Capacity limits of \$100,000,000 for single projects with an aggregate capacity in excess of \$800,000,000 with less than 50% aggregate capacity currently obligated and their current bonding rate is \$3.00 per thousand. These sureties also have additional capacity to provide Chevron Energy Solutions if needed. In the event Chevron Energy Solutions Company is awarded the project, Fidelity and Deposit Company of Maryland and Federal Insurance Company are prepared to support the 100% performance and payment bond requirements as evidenced by this letter. As is standard practice, the indication of support is conditioned upon a favorable review of the contract, bond forms, and a request from our valued client.

We highly recommend Chevron Energy Solutions to you and would be pleased to provide additional information upon request.

Sincerely,

John E. Lettieri  
Attorney-In-Fact - Fidelity and Deposit Company of Maryland and Federal Insurance Company

Aon Risk Insurance Services West, Inc. | fka Aon Risk Services, Inc. of Northern CA Insurance Services  
199 Fremont Street | Suite 1400 | San Francisco, CA 94105  
t: 415.486.7000 | f: 415.486.7029  
w: aon.com | License #0363334







**3.3 Industry Accreditations. Provide information on any accreditations by any industry organizations, such as the National Association of Energy Services 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.**

Chevron ES' dedication to the industry goes beyond implementing projects. The commitment is shown in the involvement with the industry's organizations. Being accredited from associations shown below proves we are not just an ESCO company but a company that is committed to quality and energy conservation, and sustainability, which are important factors for the State of Hawaii Clientele. Shown below are a few of the organizations we are associated with:

**National Association of Energy Services Companies (NAESCO)**

Chevron ES is an accredited member of NAESCO and has always met all the requirements to be re-accredited. We have played an active role in the development of the organization and the energy services industry. John Mahoney, Chief Operating Officer of Chevron ES, was NAESCO's President for 2002 - 2004. Previously, he was on the Board of Directors for several years.

Companies seeking NAESCO Accredited status must apply to a committee of industry experts, and undergo a rigorous examination of their technical competence and business practices. The committee carefully reviews detailed documentation and consults with selected customer references.

The committee looks at ten criteria including the precise nature of the applicant's business; the range of measures and services offered to customers; the availability of a performance-based project approach; ethical business practice commitment; project engineering and design, financing, project management, operations and maintenance capabilities; and the capability of verifying and monitoring energy cost savings.

NAESCO accreditation recognizes a company's technical and managerial competence. Accreditation is granted after careful review by an independent panel of industry experts, none of whom is affiliated with the companies under consideration. Accreditation is granted for a specific time period after which companies must seek reaccreditation and undergo a renewal review.

**Energy Services Coalition (ESC)**

The ESC was formed as a nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local level to increase energy efficiency and building upgrades through energy savings performance contracting. The forming coalition of this organization consisted primarily of members from state energy offices and energy service company's representatives. The purpose of the coalition has been to concentrate on the energy conservation needs of the Western States.

**Department of Defense / Department of Energy**

Chevron ES is an approved performance contractor for the United States Department of Defense (DoD) and the Department of Energy (DOE). We have been on their approved list for a number of years (please see the DOE/DoD Pre-qualified ESCO listing in the attachments area) and has been awarded over \$100 million in Energy Savings Performance Contracts (ESPC) and other related work.





## Rebuild America

Rebuild America is a program of the Department of Energy (DOE) that focuses on energy solutions as community solutions. Rebuild America “partners” with small towns, large metropolitan areas and Native American tribes, creating large networks of peer partnerships to help communities become more environmentally and economically sound through the application of “smarter energy use” in buildings. In July of 2005, Chevron ES was recognized as a “Premier Business Partner”. This designation recognizes the drive and commitment of Chevron ES to accelerate the adoption of energy efficiency and renewable energy technologies and practices.

## Energy Star

EPA Energy Star is a dynamic government/industry partnership that makes it easy for businesses and consumers to save money and protect the environment. Chevron ES completed all required documentation to be considered an ally for the Energy Star Building Program. Chevron ES is a partner and promotes energy efficiencies with all their customers, which is the goal of the Energy Star program.

## U.S. Green Building Council

The USGBC is the nation's foremost coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. Chevron ES is a member in good standing and is participating in the Leadership in Energy and Environmental Design (LEED<sup>™</sup>) for existing buildings initiative.

### **3.4 General Scopes 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
- 3.4.1.2 Daylighting
- 3.4.1.3 Heating systems
- 3.4.1.4 Ventilation systems
- 3.4.1.5 Indoor air quality
- 3.4.1.6 Cooling systems
- 3.4.1.7 Control and building automation systems
- 3.4.1.8 Water-consuming systems
- 3.4.1.9 Solid waste, eg., paper, plastic, glass, aluminum, recycling
- 3.4.1.10 Renewables (solar-electric, solar thermal, geothermal, wind, biomass)
- 3.4.1.11 Distributed generation
- 3.4.1.12 Central plants
- 3.4.1.13 Kitchens, laundry
- 3.4.1.14 Laboratories, laundry
- 3.4.1.15 Swimming pools and recreational facilities
- 3.4.1.16 Fuel switching
- 3.4.1.17 Energy management
- 3.4.1.18 Transportation – fleet fuel management, etc.

For sections 3.4.1.1 through 3.4.1.18, we have created a chart for all sections for better representation.







### Energy Conservation Areas of Expertise

	3.4.1.1 Lighting Systems: Indoor and Outdoor	3.4.1.2 Daylighting	3.4.1.3 Heating Systems
List of Possible Measures	<ul style="list-style-type: none"> <li>Automatic Lighting Controls</li> <li>Disconnect Ballasts</li> <li>Exit Light LED Retrofit</li> <li>Exit Light Fluorescent Retrofit Kit</li> <li>Fluorescent to Lower Wattage Fluorescent</li> <li>Fused Quartz to High Pressure Sodium (HPS)</li> <li>Metal Halide or HPS to T5 High Bay</li> <li>Incandescent to Metal Halide</li> <li>Incandescent to Fluorescent</li> <li>Incandescent/Mercury Vapor to HPS</li> <li>Specular Reflectors</li> <li>T-8 or T-5 Fluorescent Lamps and Electronic Ballasts</li> <li>Mercury Vapor to High Pressure Sodium Lights or T-5 High Bay</li> <li>T-8 or T-5 Fluorescent lamps and Power Reducing Electronic Ballasts</li> <li>T-8 or T-5 Fluorescent Lamps and Tandem Wired Electronic Ballasts</li> <li>Photocell Control of Lights</li> <li>Incandescent Ball Lights with Fluorescent Ball Lights</li> <li>Retrofit Can Fixtures with PL Fluorescent Lamps</li> <li>1. Install Room or Zone Light Switches</li> <li>2. Schedule Outside</li> <li>3. Daylighting</li> </ul>	<ul style="list-style-type: none"> <li>Install Skylights with daylight harvesting sensors</li> </ul>	<ul style="list-style-type: none"> <li>Central Plant additions or retrofits</li> <li>Add Heating/Ventilating Roof Top Units</li> <li>Automatic Oxygen Trim</li> <li>Boiler Tune-Up</li> <li>Boiler Turbulators</li> <li>Energy Efficient Furnaces</li> <li>Replace Electric Boilers with Natural Gas Fired Boilers</li> <li>Stack Gas Economizer</li> <li>Steam Traps</li> <li>Preheat Combustion Air</li> <li>Replace Domestic Hot water Boiler</li> <li>Blowdown Heat Recovery</li> <li>Install Summer Boilers</li> <li>Discontinue Idling Standby boilers</li> <li>Reduce Simultaneous Heating and Cooling</li> <li>VFD Driven Feedwater Pumps</li> <li>VFD on Combustion Air Fans for Large Boilers</li> </ul>
	3.4.1.4 Ventilation Systems	3.4.1.5 Indoor Air Quality	3.4.1.6 Cooling Systems
List of Possible Measures	<ul style="list-style-type: none"> <li>Convert Dual Duct to Variable Air Volume (VAV) System</li> <li>Convert Reheat Air Handler Systems to Variable Air Volume (VAV) System</li> <li>Install Local Override on Air Handlers</li> <li>Modify 100% Outside Air AHUs for Return Air</li> <li>Reactive Economizers</li> <li>Two Speed Motors</li> <li>Install Damper to Isolate Unoccupied Areas</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos removal or encapsulation</li> <li>Polychlorinated Biphenyl Removal</li> <li>Outdoor Air Delivery Monitoring system</li> <li>Increased ventilation</li> <li>Indoor Chemical and Pollutant Source Control</li> <li>Specific Group Controllability of Ventilation systems</li> <li>Indoor green cleaning entryway systems</li> </ul>	<ul style="list-style-type: none"> <li>Add Heating/Ventilating Roof Top Unit</li> <li>Absorption to Centrifugal Chiller</li> <li>Chiller Optimizer Control</li> <li>Install Variable Speed Drives on Cooling Tower Fans</li> <li>Variable Pumping of Chilled Water</li> <li>Ice Storage</li> <li>Schedule Use of Crankcase Heaters</li> <li>Replace CFC using Chillers with Non-CFC Units</li> <li>Evaporative Cooling</li> <li>Free Cooling with Cooling Tower</li> <li>Direct-Fired Absorption Chillers</li> <li>Natural Gas Engine Driven Chiller</li> <li>Cooling Tower Free Cooling</li> <li>Reduce Outside Air for Dual Duct Systems</li> <li>Reduce Outside Air for Multi-zone Systems</li> <li>Replace Old Centrifugal Chiller with High Efficiency Centrifugal Chillers</li> <li>Spot-Cooling</li> <li>Schedule Chillers on a Chilled Water Loop for Least Cost Operation</li> <li>Concentrated Solar Thermal Absorption Chiller</li> </ul>





	3.4.1.7 Control and Building Automation Systems	3.4.1.8 Water Consuming Systems	3.4.1.9 Solid Waste
List of Possible Measures	<ul style="list-style-type: none"> <li>365 Day Electronic Timeclock</li> <li>Domestic Hot Water Pump Timer</li> <li>Add Control to Cooling Coil</li> <li>Schedule Exhaust Fans</li> <li>Turn Off Return Air Fans</li> <li>Setback Perimeter Radiation</li> <li>Smart Thermostats</li> <li>Direct Digital Controls</li> <li>Scheduling Return Fans Separately from Supply Fans</li> <li>Heat Pump Humidity Control</li> </ul>	<ul style="list-style-type: none"> <li>Low Flow Showerheads</li> <li>Low Flow Flush Toilets</li> <li>Low Flow (or waterless) Urinals</li> <li>Low Flow Pre-Rinse Valves</li> <li>Sewer Meter</li> <li>Install Cooling Tower for Condensing Water</li> <li>Water Metering</li> <li>Below Ground Surface Watering</li> <li>Automatic weather track Irrigation</li> </ul>	<ul style="list-style-type: none"> <li>Paper, Plastic, Glass, Aluminum Recycling program</li> <li>Recycling Behavior Change Program</li> </ul>
	3.4.1.10 Renewables	3.4.1.11 Distributed Generation	3.4.1.12 Central Plants
List of Possible Measures	<ul style="list-style-type: none"> <li>Solar Photovoltaics</li> <li>Wind Farms</li> <li>Solar Thermal</li> <li>Concentrated Solar Thermal</li> <li>Solar Steam to Energy</li> <li>Geothermal Power</li> <li>Hydro-Power</li> <li>Landfill Gas to Energy</li> <li>Fat-Oil-Grease (FOG) to Energy</li> <li>Wastewater to Energy</li> </ul>	<ul style="list-style-type: none"> <li>Combined Heat and Power Cogeneration from Methane and Natural Gas Fuel cells and Microturbines</li> </ul>	<ul style="list-style-type: none"> <li>Central Plant building interface</li> <li>Two-way valve retrofits</li> <li>Optimize Building Heating Pump Operation</li> <li>Repair Heating Water Reset Controls</li> <li>Two Speed Pump Motors</li> <li>Repair Leaking Water Valve</li> <li>Variable Pumping of High-Pressure High-Temperature Water</li> <li>Trip Pump Impellers</li> <li>Central Plant additions or retrofits</li> </ul>
	Kitchens, laundry	Laboratories	Swimming Pools and Recreational Facilities
List of Possible Measures	<ul style="list-style-type: none"> <li>Strip Curtains for Walk-In Refrigerators</li> <li>Door Gaskets and Closers for Refrigerators</li> <li>Auto-Closers for Coolers or Freezers</li> <li>Clean Condenser Coils</li> <li>Set Make-Up Air Duct to 55 F</li> <li>Variable Speed Exhaust Fan Control with Optical Sensor</li> <li>Heat Recovery System for Laundry Waste Water</li> <li>Wastewater filtration system</li> </ul>	<ul style="list-style-type: none"> <li>Variable Flow Fume Hood</li> </ul>	<ul style="list-style-type: none"> <li>Indoor Swimming Pool Humidity Control Using a VFD</li> <li>Swimming Pool Covers</li> <li>Convert Constant Speed Circulating Pump to Variable Flow</li> <li>Change sand filters to Automatic Regenerative Diatomaceous Earth Filter</li> </ul>
	Fuel Switching	Energy Management	Transportation – Fleet Fuel Management
List of Possible Measures	<ul style="list-style-type: none"> <li>Natural Gas to Oil Hot Water Heating</li> </ul>	<ul style="list-style-type: none"> <li>Expand Energy Management System</li> <li>Worst Zone Temperature Reset</li> <li>Replace Existing Management System</li> <li>Set Back Nighttime Temperatures</li> <li>CO2 Control to minimize Outside Air Quantities</li> <li>Control Outside Air to Meet Needs</li> <li>Install Energy Management System</li> </ul>	<ul style="list-style-type: none"> <li>Hydrogen Fuel Fleet</li> <li>Hybrid-Gas Fuel Fleet</li> <li>Electric Fuel Fleet</li> </ul>





### 3.4.2 Project Development and Implementation

#### 3.4.2.1 Energy Auditing (identify potential energy-savings measures, determine savings projection based on standard energy engineering principles; estimate project costs; present package of measures with cash flow):

**Identify Potential Measures.** Our typical approach starts with an opportunity assessment to determine the nature and feasibility of projects that could potentially result in improvements in reliability and comfort, operating and energy costs, electrical capacity, or other issues that the County and State has identified for improvement. These projects can range from large capital projects to smaller projects typically associated with retro-commissioning a building but which offer excellent opportunities for energy and GHG reductions.

During this phase of interaction with our customers, our intent is to familiarize ourselves with the customer's goals and objectives, including their basic business drivers, their community interaction, as well as any legislative or financial commitments that are relative to their facilities and operations. This collaborative approach ensures that we develop, design and implement a project that meets County and State's technical, financial, environmental and reporting objectives as well as any external requirements related to regulatory agencies or the community at large.

We also take this opportunity to perform initial site visits and prepare some initial analyses of facility and equipment operations and condition. Chevron ES staff engineers perform an initial review of applicable drawings; utility bills including gas, electricity, water and sewer; and a review of previous energy studies performed on the facilities. Armed with this information, we conduct extensive data gathering and facility investigations to gain a good understanding of how the facilities are currently operated as well as the nature of the challenges associated with implementing any improvements. We will also evaluate the opportunity for additional, synergistic projects that could be implemented to bring greater value to the County and State. An example of this might be to evaluate the feasibility of installing telecommunication or wide-area-network upgrades while trenching for a new chilled water piping loop or using landfill gas as fuel to provide electricity for the Central Mechanical Plant using fuel cells.

**Determine Savings Projection Based on Standard Energy Engineering Principles.** Our engineering team will perform a detailed GHG reduction analysis and energy savings analysis in order to complete the "total cost of ownership" picture for the County and State that will include total benefits to be realized through the implementation of recommended projects. This net cost benefit will include energy savings, any applicable Renewable Energy Credits (RECs), and may also address reductions in maintenance and operational expenditures if the County and State so desires.

Chevron ES utilizes and performs many proven engineering methods in the estimation of energy savings. Among them are computer modeling, graphical analysis, sub-metering and testing of facility, spreadsheet analysis, bin simulation analysis, field measurement and verification and 30 plus years of experience in estimating energy savings. Chevron ES utilizes the following tools for gathering information at building sites, which are included but not limited to the following: temperature, kW, Volts, and Amps meters and loggers, light meters (and kits), flow





hoods and meters, combustion analyzer, noise dosimeter, and inductive amplifier. Chevron ES often installs sub-meters for a period of time to obtain electrical, temperature, and/or occupancy data on facility buildings.

To perform computer modeling, the model is “built” by inputting all construction, mechanical, and electrical characteristics of a building, as well as all the building operating patterns, into modeling software programs (which are based on ASHRAE fundamentals) such as: Simsys, Trane Trace 700, SRC System’s Market Manager, eQUEST, HAP, and DOE 2.2. Once the operation and construction of a facility is gathered through the building survey and input into the modeling software, the facility is then “matched” to the utility history. For a model to be “matched” means that the computer model energy consumption is similar to the utility history of the facility. Assumptions include future estimates of building use changes based on County and State input. As designs are further developed, the models are refined and updated to accurately reflect baseline and post-retrofit operating conditions.

We have our own monitoring software, Utility Vision, which has been installed at facilities to monitor process loads, HVAC loads, gas, water and electric meters, electric generation by solar or fuel cell equipment and on-site weather stations. We have also used other monitoring software and select the equipment based on site specific conditions.

These activities will help us to verify the loads and capacity of the Central Mechanical Plant (CMP) and project the impact of future planned loads. Combined with an understanding of the County and State’s growth projections and future facility needs, Chevron ES can develop a strategic approach to address this planned growth and future loads and how best the CMP can support these.

**Estimate Project Costs.** Based on the list of potential measures, our typical tools to obtain budgetary cost are through cost from previous similar projects, RS Means, and subcontractor estimates. We will also identify potential funding mechanisms that can improve project economics including available rebates and grants, as well as evaluate different approaches to financing the project(s). For example, for solar PV projects, we might evaluate the project using a third-party lease with the option to use Clean Renewable Energy Bonds (CREBs) vs financing through a Power Purchase Agreement (PPA).

**Present Package of measures with Cash Flow.** Once the list of potential measures are identified, estimated savings and project costs are calculated, a cash flow analysis is done by our in-house financial analyst team. We will model the cash flow with the latest bond rates based on 30 year US Treasury Bond rate, agreed annual escalation of utility cost and finance term in years, amount to be financed, and rebate incentive grants. The report may show the annual energy conservation measure savings, lease payments, and net savings.

#### 3.4.2.2 System Design Engineering: Mechanical, Electrical, etc

**Design Development.** Once projects are approved in concept by the County and State during the TEA phase, our engineers begin the design development phase. The desired output of this activity are the scoping documents that are suitable to prepare detailed cost estimates for the actual projects, and to adequately review the proposed scope of the project with the County and State’s personnel. Schematic drawings and plans, outlines specifications, and equipment schedules are prepared and input is revised and updated for use in our computer simulation models of the





proposed baseline and retrofit strategies incorporating systems improvements and upgrades. Our system is compatible with AutoCAD 2007, and all drawings produced will use the County and State's established conventions and layering guidelines.

**Detailed Design and Construction Documents.** Detailed engineering will begin after the projects have been approved by the County and State and the implementation contract has been executed. The first task of the project team is to review and confirm all project requirements which involve examining all engineering analyses included in reports plus drawings and other documents pertinent to the design. The constructability of preliminary designs made during the engineering analysis is assessed. If needed, modifications to the design or alternatives to meet the original objectives are then developed. The engineering design includes the preparation of drawings and specifications.

We anticipate working closely with the County and State and their architects, engineers, and project managers to ensure that throughout the technical design, close communication is maintained and all pertinent stakeholders have adequate opportunity to provide input or constructive commentary. Our goal is to achieve a solution for the County that meets their needs and strategic direction.

#### 3.4.2.3 Procurement, Bidding

As the design develops, the cost budget originally developed in the TEA Report is adjusted to reflect an increased understanding of the scope of work. Prior to submitting any financial proposal to the County and State, Chevron ES will work with subcontractors and vendors, either formally through a competitive bidding process (particularly for larger elements of a project), or informally through pre-existing negotiated arrangements (typically for smaller project components), to establish firm, fixed pricing for all proposed projects.

Since subcontractors represent a large share of the proposed project implementation, sustained high performance is essential for project quality and performance assurance. Our approach to subcontractor management is to clearly define program/project requirements, carefully and competitively select subcontractors, and thoroughly manage all subcontract activity. Quality control and assurance are an integral part of our subcontractor management process.

In our experience with similar projects, the best option has been to include local subcontractors who have worked with the County and State in the past and delivered consistently good service. We begin the process of selecting subcontractors and suppliers by obtaining lists of recommended subcontractors and suppliers from the County and State. We then evaluate performance on past projects and call on their references. In case quality local contractors are not available, we have a pool of excellent subcontractors for the most common trades.

Through competition, we will always make sure that we are getting a fair price from the subcontractors. A typical competitive process that Chevron ES manages includes developing project scope, specifications and drawings in enough detail to elicit responsible competitive prices; multiple site walks as needed; review of all bids; clarification meetings as needed; discussion and review with County and State representatives as requested; and final award. The County and State will ultimately approve the choice of subcontractors. Chevron ES requires all subcontractors to provide payment and performance bonds, current certificates of liability insurance compliance, and certified payroll documents, as applicable.







It is important to note that our Project Engineers work within the parameters of the cost budget developed for each project. *Assuming that there are no changes in County and State requirements or scope after an implementation agreement is reached to proceed with a project, **any costs not foreseen or otherwise in excess of the quoted cost for any project are absorbed by Chevron ES in their entirety.***

#### 3.4.2.4 Construction

**Construction Management.** After the design has been approved and necessary permitting has been obtained, Chevron ES manages the entire process of construction. This includes: 1) developing the construction schedule and contracting plan; 2) preparation of bid packages and selection of subcontractors; 3) Management and coordination of all construction activities; 4) developing and implementing a Construction Site Safety Plan; 5) providing all required coordination with the County and State and the County and State's designated representative (PM, architect, engineer, or consultant.) 6) calling for and coordinating inspections and permits;

To support the Chevron ES Project Manager, at least one (and in some large, complex projects, multiple) Construction Manager(s) will be assigned to the project to provide field support during construction. The role of the CM includes: providing direction to and overview of the subcontractors in the field, coordination of installation with the County and State, review and documentation of construction progress, ensuring compliance with Chevron ES' Construction Safety Plan, managing delivery of materials and equipment, tracking construction schedule, and interacting with the Chevron ES Project Manager and County and State personnel to communicate status and issues.

**Project Planning and Control.** Using a disciplined approach to project planning and control, Chevron ES will identify cost and schedule performance data, then compare the status of the project performance against a project time duration and cost performance baseline. With input from our internal accounting (the actual dollars spent or committed), contract management, and project management (the actual delivery order performance), the project time duration and cost performance baseline will be continually monitored. This will provide a timely and visible mechanism for project progress on variance analysis, forecasting, and corrective action as needed.

In addition to providing accurate project status, use of the project time duration and cost performance baseline facilitates systematic risk control and management. Consistent therefore with our emphasis on low risk and optimal payback, we will identify, assess, manage, and reduce risks associated with project cost, schedule, and technical performance. Since cost and technical performance variations are largely affected by schedule variance, we ensure all schedule milestones are flowed down to the subcontractor and material vendor level. We involve subcontractor team members in project planning and cost estimating to validate established goals and ensure low-risk project implementation.

Chevron ES has developed an extensive document control system to ensure the quality and timeliness of all submittals to the County and State. Adequate internal controls and reviewing procedures help eliminate errors or omissions and ensure technical accuracy of all output. An in-house professional engineer reviews all Chevron ES work plans before submittal to the County and State.





**Project Schedule.** After award of work we will develop a detailed project schedule, using Microsoft Project or any other software of County and State's choice, jointly with the County and State's facility staff. The project schedule will be broken down to a series of small tasks, which can be easily tracked. In the weekly project meetings, the schedule will be updated and the 3-week look-ahead schedule reviewed.

**Project Meetings.** To assure that all team partners are informed and advised as to job progress, weekly project meetings are scheduled throughout the duration of the construction/installation phase. This review cycle guarantees a quality installation. Before the weekly meeting with the County and State, we meet with our subcontractors. In the project meetings, we circulate the minutes of the last meeting; discuss new issues, problems, and concerns. Then we review the project schedule for the next week in detail.

**Subcontractor Management.** Subcontracting the majority of the installation work allows cost-effective management of varying workloads. As mentioned earlier, Chevron ES pre-qualifies subcontractors to ensure financial strength and strong past performance. Successful control of subcontractor performance is ensured through daily monitoring by the on-site Construction Manager(s) combined with weekly subcontractor task performance monitoring by the Project Manager. This weekly monitoring by the Project Manager enables the PM to exercise financial control over subcontractor task performance and monthly pay requests.

#### 3.4.2.5 Commissioning of projects and retro-commissioning of existing buildings

Commissioning is a critical process in project performance. It is the act of verifying the proper operation of the applicable system and equipment, and documenting that system performance does or does not meet design criteria.

The Chevron ES Project Team will perform commissioning in conjunction with our subcontractors and equipment providers. We have had extensive experience with commissioning with performance contracts as well as energy management systems (EMS) installations, solar projects and new construction start-ups.

In theory, there would be no need for this service if all design, manufacturing, construction, and operations were correctly executed, completely coordinated, and totally functional. However, this does not always happen, and the need for detailed commissioning is typically desired, especially if the project has an associated energy guarantee.

Point-to-point examination of all installed equipment ensures that performance standards are met 100 percent. Unless control systems are properly and thoroughly commissioned, chances are high that the system will not function properly. Our commissioning team follows-up the installation of equipment by all subcontractors to make sure it is working properly. This commissioning is accomplished during system and equipment start-up. At this time, proper operation and control is verified, as well as proper flow rates, delivered temperatures, etc. Both Chevron ES and a designated staff member need to be present at the start-up and commissioning of the equipment and systems. This process places us in the position of a third-party advocate for the program participants.

In each step along the way (development of Investment Grade Audit, engineering design, project management, construction management), there are standard procedures that are followed. The same pertains to the commissioning of all installed equipment. Along with the standard procedures for commissioning are





checklists for each ECM. For example, a point-by-point hardware and software commissioning of the EMS is performed. A copy of the ECM specification, schedules, drawings, approved submittals, and utility rebate forms are all provided to the Construction Manager for commissioning.

Not only during the construction, but also during the commissioning phase of the project, items that need attention by the participant's project team may be found by Chevron ES. As items are found, the participant will be notified. Some of these examples are as follows:

- Dirty/clogged condensing or evaporator coils
- Dirty filters
- Leaky pneumatic thermostats
- Leaky pneumatic lines
- Damaged/miscalibrated thermostats
- Loose/leaky flexible ductwork or AHU vibration joints
- Loose or missing fan belts
- Malfunctioning valves (steam or hot water)
- Leaky steam traps
- Malfunctioning EP or EPT's
- Malfunctioning/leaky/misadjusted dampers

In general, any existing equipment that, while malfunctioning, affects energy savings or proper overall system operation.

Shown below is an outline of our Commissioning Plan:

**Organization.** The Commissioning Program for all systems will be managed and implemented by the Project Manager. This person is responsible for the implementation and oversight of the program as well as all commissioning activities associated with the delivery of the project, and reports to the Project Manager for day-to-day implementation and coordination of the plan and related activities.

**Responsibilities and Authority.** The Project Commissioning Team Leader's duties include the oversight and implementation of the Commissioning Plan and related procedures and policies as applicable to a particular project. Duties include the coordination, implementation, and documentation of the project commissioning activities, ensuring the processes are performed in a timely and quality manner.

**Quality and Subcontractors.** Subcontractors are informed of commissioning requirements and are actively involved with the commissioning process as required, which assures a timely and quality installation. Installations performed by either subcontractors or self-installation are subject to the same commissioning processes.

**Inspection Process.** The Project Manager is responsible for the inspection of the Commissioning Plan.

**Testing and Inspection.** The Chevron ES Project Team will perform system start-up and commissioning per the contract requirements and manufacturers specifications. The intent is to verify the system components for which the Project Team is responsible and the operation of the systems they interact with.





**Component Testing.** The Chevron ES Project Team will perform component testing in accordance with the contract documents or manufacturers specification.

**Operational Testing.** The Chevron ES Project Team will check each system for function through the entire sequence and will verify proper operation of each item in the sequences of operation, including all hardware and software.

Documentation of the commissioning of each area will be provided. Each section will have a major checklist and any pertinent documentation and reports that show that the commissioning was completed. For example, the checkout documentation for all systems includes but is not limited to:

- The Systems Summary Checkout sheet.
- System summary from the BAS.
- Each system has its own
  - Hardware Checkout Sheet
  - Sequence of operation checkout sheet
  - Palm Pilot commissioning report from the EC

#### 3.4.2.6 Project management

Chevron ES uses an empowerment approach to develop projects. The company has a vast amount of experience and a deep reserve of engineering talent. Our projects are built one at a time and our success starts by first assigning a team to develop the project. The core team will stay with the project from start to finish. This approach ensures continuity and that the concepts that were derived in the audit are reflected in the engineering designs and actually installed at the facility.

When the main point of contact is assigned to the customer, they are responsible for the project management, contract negotiations and outside sources of funding. The core team will work to develop a project that can hold up to its stake holders as an example of how things ought to be done.

Our project management skills and experience includes bidding out work to local subcontractors and suppliers. Our engineers and construction managers are knowledgeable and well versed in the operation and maintenance of all leading equipment manufacturers' products, and are not "locked" into any one manufacturer, model or type of equipment. In our projects, owners have the ultimate decision authority on equipment. Further, we believe that standardization of equipment, where possible, maximizes the benefits associated with maintenance, employee training and parts procurement.

#### **Project Manager**

The Project Manager is responsible for the project on site. Project Managers are typically licensed engineers with construction management experience. The Project Manager is the primary customer interface for the agency or facility at which the project will be delivered, and the project manager reports to the Senior Project Manager.

The Project Manager oversees and coordinates all engineering functions, including engineering performed as part of the preliminary facility analysis, the Comprehensive Energy Audit, and the design phase. The engineering design includes the preparation of drawings and specifications. This work will be the responsibility of the Project Manager, although occasionally certain parts may be





delegated to subcontractors under certain circumstances. If such work is subcontracted, the Project Manager will be responsible for selecting the subcontractors and providing technical oversight.

Once the engineering design is accepted by the customer, the Project Manager oversees the Construction Manager for all installation concerns. The Project Manager oversees the selection of subcontractors and vendors in conjunction with Client representatives.

The Project Manager develops and administers the O&M process. If the O&M for the project requires an on-site Operation Manager, the Operations Manager would report to the Project Manager.

Additionally, the Project Manager will work with Chevron ES' Monitoring Department to set up an M&V and monitoring program for the site.

The Project Manager is also responsible for a Quality Assurance Program. Chevron ES' commissioning technician, who reports to the Monitoring Department, continually checks out systems as they are being installed. The Project Manager ensures that punch list items and deviations are cleared before final construction is completed.

Finally, the Project Manager ensures that there is open communication between site personnel and our team. The Project Manager will schedule regular progress meetings with the facility staff to keep the staff well informed on project status.

#### 3.4.2.7 Identification of Asbestos and other Hazardous Materials and Abatement, Recycling or Disposal as Applicable

On each project during the TEA stage, we ask the facilities personnel for asbestos and other hazardous materials reports. If reports are not available, CES will have a team of hazardous materials experts during the IGA phase to do a thorough study for the projects that are in the scope of work.

As part of the ESPC project, Chevron ES or our subcontractors will be responsible for the removal from the property and expense associated with the removal of:

- All normal construction debris, rubbish and non-usable material.
- All PCB-laden ballasts and transformers that are removed as part of this project shall be handled, transported, and disposed in conformance with all Local, State and Federal Agencies.
- All chemical wastes such as fluorescent lamps shall be handled, transported, and disposed in conformance with all Local, State, and Federal Agencies.

Chevron ES is not responsible for pre-existing hazardous materials. The program participant will be responsible for the removal and disposition of the hazardous material at their expense. Hazardous materials are considered as such:

The presence of asbestos, materials containing asbestos, pollutants, and/or hazardous wastes which may be encountered during the installation of equipment or if the program participant advises us of all known areas in which any of these hazardous materials are present.

If additional areas of hazardous materials are identified as a result of work by Chevron ES or our subcontractors, we will immediately stop work, take measures to reduce contractor or building personnel contamination, and immediately notify the participant's







personnel of the location and hazardous material condition. The participants may elect to reimburse Chevron ES for the expense of removing and disposing of the material in accordance with Federal, State and Local codes.

During the implementation planning phase before construction, CES will also identify materials that can be recycled and materials that need to be disposed.

### **3.4.3 Continuing Support Services**

#### **3.4.3.1 Performance guarantee for every year of the financing term**

After CES has finalized the construction, our staff engineers will work with our in-house Monitoring and Verification Managers to identify the best methodologies to apply, as defined by the International Performance Measurement and Verification Protocol, performance guarantee measurement for every year of the financing term.

#### **3.4.3.2 Insurance**

Chevron ES has been in the energy efficiency business for years and has never had a problem securing insurance policies. Customers can breathe easier knowing that Chevron ES' parent company, Chevron, is backing the deal. Chevron, with net income over \$18 billion in 2007 and more than 58,000 employees worldwide, the second-largest U.S.-based energy company and the fourth largest publicly traded integrated oil and gas company in the world, based on market capitalization, supports all aspects of Chevron ES' business endeavors. The corporation engages in all aspects of the energy industry, including exploration, production, refining, equity gas marketing and transportation, power generation and energy conservation services, and maintains credit ratings of "Aa2" from Moody's and "AA" from Standard and Poor's.

Chevron Corporation and its subsidiaries are covered for property and liability exposures through major worldwide insurance programs with large deductibles. Losses that fall within these deductible levels, including those for which a Chevron company is contractually liable, are paid through the financial resources of the Company and are administered by Chevron Corporation under its Self-Administered Claims Program, hereinafter referred to as the Program.

Like many large, publicly traded companies, Chevron is self insured through its Self Administered Claims Program ("SACP"). Chevron can accept and agree to County and State of Hawaii's insurance requirements using its SACP. Under the SACP, the County and State would be issued a SACP letter (exhibit to follow) self-assuming the insurance requirements. If, however, a Certificate of Insurance is required, Chevron can provide coverage with the types and format of coverage set forth in the attached Certificate of Insurance.

A sample Certificate of Insurance and a self insurance ("SACP") letter are included in the following pages.





**\*\*SAMPLE\*\***



James D. Lyness  
Assistant Treasurer  
Insurance Division

Treasury Department  
Chevron Corporation  
6001 Bollinger Canyon Rd., E1160  
San Ramon, CA 94583  
Tel 925 842 8136  
Fax 925 842 6007  
JDLYness@chevron.com

August 29, 2007

Dear

Chevron Corporation and its subsidiaries are covered for property and liability exposures through major worldwide insurance programs with large deductibles. Losses that fall within these deductible levels, including those for which a Chevron company is contractually liable, are paid through the financial resources of the Company and are administered by Chevron Corporation under its Self-Administered Claims Program, hereinafter referred to as the Program.

This is to advise you that the property/liability insurance requirements of the subject agreement fall within the deductible levels of Chevron's insurance programs. Therefore, losses for which Chevron is responsible under the agreement will be handled under the above-described Program. The scope of this Program is equal to the insurance requirements of the subject agreement.

We further advise you that Workers' Compensation insurance requirements for Chevron companies are satisfied through insured/self-insured programs depending upon the location of the employee's workplace. U. S. Longshore and Harbor Workers' Act coverage is self-insured.

Unless canceled earlier, this letter will remain in effect until the expiration or earlier termination of the subject agreement (or any renewal thereof). If this program is canceled or materially changed, we will provide you with 30 days' written notice.

Sincerely,

**\*\*SAMPLE\*\***





REQUEST FOR PROPOSAL  
STATE OF HAWAII  
ENERGY PERFORMANCE CONTRACTING  
QUALIFICATIONS

MARSH		CERTIFICATE OF INSURANCE		CERTIFICATE NUMBER SEA-000945501-07	
PRODUCER MARSH RISK & INSURANCE SERVICES P. O. BOX 193880 CALIFORNIA LICENSE NO. 0437153 SAN FRANCISCO 94119-3880		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES DESCRIBED HEREIN.			
025158-001--		COMPANIES AFFORDING COVERAGE			
INSURED Chevron Energy Solutions Company Attn: Vicki Durcan 12980 Foster Drive, Suite 400 Overland Park, KS 66213-2649		COMPANY A ACE AMERICAN INS CO			
		COMPANY B			
		COMPANY C			
		COMPANY D			
COVERAGES This certificate supersedes and replaces any previously issued certificate for the policy period noted below. 1					
THIS IS TO CERTIFY THAT POLICIES OF INSURANCE DESCRIBED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.					
CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input checked="" type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT	CMR G2 170263 8	03/01/07	03/01/08	GENERAL AGGREGATE \$ 1,000,000 PRODUCTS - COMPIOP AGG \$ 1,000,000 PERSONAL & ADV INJURY \$ 1,000,000 EACH OCCURRENCE \$ 1,000,000 FIRE DAMAGE (Any one fire) \$ 50,000 MED EXP (Any one person) \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	BCF H0 801306 8	03/01/07	03/01/08	COMBINED SINGLE LIMIT \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: \$ EACH ACCIDENT \$ AGGREGATE \$
A	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input checked="" type="checkbox"/> OTHER THAN UMBRELLA FORM	XLX G2 170265 1	03/01/07	03/01/08	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL	WLR C4 4466314 SCF C4 446632 6	03/01/07 03/01/07	03/01/08 03/01/08	<input checked="" type="checkbox"/> WC STATU- TORY LIMITS <input type="checkbox"/> OTH- ER EL EACH ACCIDENT \$ 500,000 EL DISEASE-POLICY LIMIT \$ 500,000 EL DISEASE-EACH EMPLOYEE \$ 500,000
	OTHER				
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS Re: Engineering Services Contract - DWCES 30417. Certificate Holder is included as an Additional Insured with respect to above.					
CERTIFICATE HOLDER			CANCELLATION		
			SHOULD ANY OF THE POLICIES DESCRIBED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.		
			MARSH USA INC. By: Wendy Sokol <i>Wendy A. Sokol</i> MM1(3/02) VALID AS OF: 1C/09/07		





### 3.4.3.3 Equipment and Material Warranties

It is our responsibility to make sure equipment CES installed or modified is in good condition and it works for the length of the warranty. At the end of construction phase, all new equipments and materials installed and modified come with a standard warranty from the product manufacturer.

### 3.4.3.4 Financing Partner with Ability to provide a Municipal, Tax Exempt Lease Purchase

Chevron ES has a strong working relationship with several premier financial institutions that focus on the guaranteed energy savings performance contracting market. In the past fifteen months, we have secured over \$250 Million in combined project financings with six different firms. These projects include Public Education, Higher Education, State, Local and Federal Government, Commercial/Industrial and Public Housing. These relationships have been strengthened over the years due to our organization's engineering focus that emphasizes strong guaranteed savings results, risk management practices, financial strength and meeting or exceeding all of our contractual obligations on each project.

Our projects have been financed using municipal tax-exempt leases with non-appropriation clauses, certificates of participation (COPs), third party ownership, standard capital leases and internal cash flow. In most cases, the financial institution deposits funds into an escrow account when financing is arranged. Monthly, during construction, we provide the customer a description of work completed and associated value for approval. Upon receiving this approval, the escrow agent disburses funds (less retention) to Chevron ES. After the customer executes the final acceptance, we receive the project retention funds. At this time finance payments begin and are funded by guaranteed savings. This describes the typical relationship, however, we are extremely flexible regarding the financial structure.

The largest single project financed to date is a \$100 million Federal government project. Due to our past project successes, operational capabilities, strong relationships with financial institutions and a financially sound company, we experience no constraints in obtaining cost effective financing for our projects.

There are several ways of financing energy services programs. Cost, speed, simplicity and prepayment requirements are the individual components that need to be considered in determining the best financial solution for a specific project. A good understanding of the participant's needs and goals is necessary to properly weight these criteria so that the optimum financing is obtained. For example, if there are serious infrastructure problems and the desire is to fund the most comprehensive program possible, then the cost of money becomes the most important factor (i.e., the lower the rate, the farther the energy savings will stretch thus allowing the maximum amount of work to be done). On the other hand, with improvement of indoor air quality a primary objective of the participant, and if the project is focused on replacing a chiller or boiler (or key air handling equipment) within a short period of time, then the speed with which the financing can be put in place becomes the most important factor with prepayment options coming second.

Chevron ES provides a guarantee of energy savings as part of its program. The guarantee provides that enough energy and operational savings will result over the term of the program to pay for all cost associated with the program including the engineering analysis, capital equipment, installation, engineering design,





construction management, commissioning, initial training, monitoring & verification, ongoing training, and debt service. This is true even if some of the excess energy savings are utilized to pay for instructional needs. If the energy savings fall short of the yearly guarantee amount, then we will provide reconciliation for the shortfall in savings. This guarantee would be detailed in our written contract with the program participant.

### ***Financing Options***

Chevron ES is actively involved in all phases of projects, including financing. We can help arrange a full spectrum of competitive corporate and public finance products. We have on staff a Project Finance Manager with significant experience in the financing field. One of the value adds by working with Chevron ES is that our Project Finance Manager has significant experience in managing formal financing bid processes. Chevron ES' Project Finance Manager will work with the customer's financing team to insure that the terms and conditions of the desired financing are most beneficial for the customer.

On a case-by-case basis, we retain the services of financial specialists. In the past, these partners have included investment bankers, financial advisors/consultants, commercial banks and equipment leasing companies. The key criteria are that the selected financing partner is familiar with energy projects and must be responsive to the complexities of each individual customer and transaction. We require these specialists to provide competitive and timely solutions that effectively meet the needs of all parties.

Chevron ES Project Finance Manager, John Bergwell, would run a financing bid on behalf of our customer. John would solicit proposals from well qualified financial firms interested in financing guaranteed energy savings projects. Our financing partners possess special strengths and serve specific markets. Most are members of the Association for Governmental Leasing & Finance (AGLF) and the Equipment Leasing Association of America (ELA). The financial proposals would have to adhere to a format developed by John that would facilitate ease of evaluation.

Invitations are extended for proposals using the attached proposal format: SCOPE OF REQUEST: Provide pursuant to a tax-exempt lease purchase agreement with Customer financing for energy and water savings measures for those certain facilities located at the participant's facility.

Properly completed responses will include:

1. A signed and dated proposal letter in the format included
2. A redlined copy of the model lease contract with explanation of any changes proposed thereto
3. A signed and completed signature sheet
4. A schedule of payments and amortization including any purchase options
5. Escrow information (contact, escrow agreement and list of all fees)

Evaluation of the financial proposals would be conducted by John Bergwell and the participant's point person for financing. By running a bid competition, the customer is assured that they will receive the best rates with the best terms.

A specific financing mechanism cannot be optimally determined prior to finalization of the scope of work and cost breakdown. Once completed, however, the goal of any financing will be to capitalize the program offering and repay the entire financial







obligation out of realized savings. We shall provide a financial solution that, at a minimum, meets the following requirements: (1) compliance with all applicable state statutes and procurement requirements, (2) no initial capital costs to be paid by the participant, (3) achievement of significant long-term guaranteed savings and (4) a budget-neutral or positive net cash flow realized by the project.

The following is a summary of the primary financing vehicles:

- Issue Bonds - Lowest rates. Highest fees. Good for large, long term projects. We understand that this may not be an option for this project.
- Tax-Exempt Lease (comparable rates, low/no fees).
- Capital Lease (subject to annual appropriations, on balance sheet only for the current year's funding).
- Energy Services Contract - Typically not a good solution for tax-exempts. We underwrite the financing, which is done at taxable rates, and then discount the payments to a bank or other financial institution at no markup. This can be a good solution for a Non-Profit if a conduit cannot be arranged.
- Customer arranges own financing - Master Lease or banking relationship is already in place. This offers speed and simplicity.
- State Financing Program (if available) – Many states offer state financing programs at below market interest rates that can fund all or parts of projects at significant savings to the market.

Our approach is to search for grants, rebates (State or Utility) and special program monies to reduce the cost of the project and then arrange financing on remaining balance. We have a dedicated Project Finance Manager, John Bergwell, who will either arrange for the financing, or be available to act as a facilitator/advisor should the customer desire to control the placement of the financing.

**Financing is not a profit center for us.** We do not mark up the financing to the customer. This is part of our commitment to service. Just as we are not tied to a single manufacturer for the purchase of the products that go into our projects, neither are we tied to a single funding source. We are involved in a wide spectrum of project types: K-12, Colleges/Universities, Municipalities, Public Housing Authorities, Non-Profit Organizations, Commercial Businesses and the Federal Government. Each of these segments has unique financing requirements. There is no single source that is the best at providing financing to each of these market segments.

With this in mind, we have built relationships with a number of leading energy project financiers so that we can match the capabilities of the financier with the needs of the Customer. These relationships include banks, leasing companies, investment bankers and securitization conduits. Our financing partners possess special strengths and serve specific markets. Most are members of the Association for Governmental Leasing & Finance (AGLF) and the Equipment Leasing Association of America (ELA). We have significant experience with the following firms:

TN County Bond Fund	CitiCapital	Zion's Bank	Hannon Armstrong
United Financial	Lehman Bros.	First Security Leasing	GE Capital
Koch Financial	Orix Financial	Stephens, Inc.	Wells Fargo
NCCC Energy	Bank of America	De Lage Landen	Bostonia Financial





Below are several examples of past customers and how they chose to finance their energy retrofit project:

- Fort Hays State University – KS Municipal Lease, CitiCapital
- Bowling Green (Kentucky) Schools - KISTA Loan Program
- Williamson County (Tennessee) Schools - GE Capital Master Lease
- Wilson College – Dalphine Bank, Chambersburg, PA (Local Bank)
- Bowie State University – State of Maryland Master lease
- Anderson University – General Obligation Bonds
- Mapleton School District – Wells Fargo Master Lease
- Multiple VA projects – PFG Energy and Crews & Associates
- US Postal Service – Hannon Armstrong and CitiCapital
- Pittsburg Schools – De Lage Landen

This approach has enabled us to build a reputation in the financial community for well-conceived projects that are implemented with well structured financing. This is evidenced by the fact that in calendar years 2001 & 2002, Chevron ES was involved in the financing of nearly \$150,000,000 of energy projects for our clients and in 2003 & 2004 well over \$100,000,000 in energy projects were financed. In 2005 over \$120 million in financing was brought to the table for 20 of our customers. In 2006 and 2007 Chevron ES brought \$300 million and \$200 million respectively to our customer's projects.

Chevron ES is also more than willing to work with the participant's preferred financial institution. Oftentimes our clients have outstanding relationships with local lending institutions and are able to obtain highly competitive rates. It would still be wise to compete a number of lenders so that the participant can obtain the most competitive quote and terms so that the most work can be done for the least amount borrowed.

#### 3.4.3.5 Hazardous Material Handling

Once the implementation plan is approved and hazardous materials are identified, CES will bring in a hazardous material handling expert and abate hazardous materials such as asbestos before beginning of construction and dispose other hazardous materials properly.

#### 3.4.3.6 Measuring and Verification of Savings

While technically not a part of the implementation phase, Chevron ES has extensive experience in developing M&V plans in accordance with the International Performance Measurement & Verification Protocol (IPMVP) standards and in performing the post-implementation M&V. This is usually done to accomplish one or both of the following:

- 1) To measure and verify system or holistic performance per the terms of a contractual Performance Guarantee with the County and State
- 2) To demonstrate performance to a third party (typically Investor Owned Utility) as a condition of an incentive or rebate program
- 3) To demonstrate to a governing body, such as a Board, the performance of a project installed as measured by energy saved, GHG emissions reduced, or other performance criteria.





If this is identified as a need through the first two phases of project development efforts, Chevron ES staff M&V managers will design an M&V approach with the County and State that will bring the best value to its management and administration while meeting all reporting requirements.

1) Economic and Financial Criteria:

Our experience with other customers embarking on a comprehensive and strategic approach to facility improvements, energy efficiency, emissions reductions, and other types of projects envisioned is that there are economic and financial drivers that must be taken into account. Our intent at a very early stage of our engagement with the County and State of Hawaii will be to understand these criteria - whether they be: i) self-funding projects/program; ii) simple payback criteria; iii) internal rate of return; iv) capital budget limited; v) cost per ton GHG reduced; vi) interest in different ownership and financial structure options, or other criteria vii) operational and Infrastructure Improvement.

Often times, due to constraints on capital and manpower, facilities infrastructure can become outdated, under-capacity, past useful life, etc. By understanding and evaluating which systems and pieces of equipment need upgrading, Chevron ES can incorporate infrastructure projects that fit within the overall program objectives, both from a strategic and economic standpoint. It will also be important to assess County and State capabilities related to operating and maintaining new equipment that could be installed as part of this project as this can have an impact on the energy savings and GHG emissions reduction performance of the project.

#### 3.4.3.7 Training: Maintenance Staff and Occupants

An important component of our comprehensive evaluation is the development of an authored, long-term maintenance and training plan based upon the type of maintenance currently being performed, the tools that are being utilized, and the maintenance goals. Before implementing the program, CES will ask the client to assess the skills of the maintenance staff in the various disciplines of their job. Based upon this evaluation, CES and Client together, will formulate a long-term training program that best suits the needs of each member of the Client's staff. The training may be a combination of on the job training at each respective location, as well as formal off-site classroom instruction.

CES will work closely with the Client's staff and build a strong relationship based on cooperation and communication. As part of the conservation program, CES will be providing formal training by qualified instructors from our Corporate Headquarters. Along with the formal training, participants will be provided Operation and Maintenance manuals. CES has been providing clients with useable O&M manuals for many years. CES feels so strongly about the value of such documents being provided as a part of the deliverable that it is a contractual obligation contained in our standard Performance Based Energy Service Agreement.

#### 3.4.3.8 Long-Term Maintenance Services on Energy Systems

To secure maximum savings, it is essential to rigorously monitor project performance and provide ongoing services. The following services are provided as part of our Program:

- a) Monthly reports are provided which indicate the facility's targeted energy consumption for the month versus the actual consumption. Variances from our





energy savings targets are analyzed. Problems are identified and corrected before they become significant.

- b) CES will call-in regularly to the facility's energy management system (EMS). The primary purpose of the call-ins is to check system operating parameters and schedules. We monitor system alarms, diagnose problems and resolve EMS software bugs. This service is provided to support the Client's maintenance and operating personnel, 24 hours per day, 365 days per year.
- c) CES provides operator training for the maintenance and operating staff as needed.
- d) CES re-commissions the EMS on an annual basis. This commissioning is similar to the startup commissioning provided at the end of construction. The purpose of commissioning is to insure the EMS continues to operate as designed through the life of the project.

We take a flexible approach towards maintenance of equipment installed during a project. We are not a maintenance service company and we do not require maintenance contracts as a condition of the energy guarantee. As part of the project, we will create operating and maintenance manuals that include, warranty information, submittals, parts lists, recommended service intervals, etc. We can also be responsible for soliciting quotes for the facility. If so desired, we can take over full service/responsibility for the installed program.

#### 3.4.3.9 Application for an Energy Star Label and LEED Certification

ENERGY STAR® is an easy-to-use certification that benchmarks energy performance energy performance within a national context. The ENERGY STAR® rating system accomplishes this objective using the following; source energy as the energy convention, consideration of the most significant drivers of energy consumption, national data sets for algorithm development, and normalization of weather impacts on energy consumption.

The certification requires a licensed professional engineer verify benchmarking of the building, as well as adhering to current industry standards for thermal comfort, outside air ventilation, control of indoor air pollutants, and illumination, as specified by American National Standards Institute, and the Illumination Engineering Society of North America. Once awarded, ENERGY STAR® Certification is conveyed by a plaque, recognizing performance excellence to building occupants and visitors.

LEED-EB/NC is a process that guarantees building environmental stewardship, a status in which it gives occupants the feeling they are inside a building that is clean and environmentally sound. Once the process is finished and the minimum credit is met, a LEED certification plaque for the building will be given which can be displayed in front of the building.

CES has many licensed professional engineers in the mechanical, civil, and electrical trades and over 30 LEED Accredited professionals in-house in disciplines including engineers, construction managers, project managers, and business development managers. They are dedicated to innovative, technological, and cost effective solutions to achieve ENERGY STAR® and LEED Certification.





#### 3.4.3.10 Calculation and Reporting of Emissions Reductions

CES calculates emissions such as green house gases (GHG) reductions using proven methods from the World Resources institute (WRI) and the Environmental Protection Agency (EPA). During the TEA phase and IGA phase, CES will do surveys such as logging the energy use of the building and record the number of people driving mid-size cars and full-size cars, and calculate the projected GHG reductions.

Once energy conservation measures have been approved by the County and State, the baseline of green house gases will be reported by organizations such as The Climate Registry, a non-profit organization that is committed to utilizing best practices in greenhouse gas emissions reporting; establishing a common data infrastructure for voluntary and mandatory reporting and emissions reduction programs; minimizing the burden on Reporters, Members, and Tribes; providing an opportunity for Reporters to establish an emissions baseline and document early action; developing a recognized platform for credible and consistent greenhouse gas emissions reporting; promoting full and public disclosure of greenhouse gas emissions while respecting business confidentiality. After measures are implemented, the organizations will measure and the GHG and a report will be created.

#### 3.4.3.11 Assistance to the Facility Owner With preparing Annual Reports for the Hawaii Energy Performance Contracting Program

Chevron ES has experience with putting together various reports for our customer's use. Chevron ES can help the State of Hawaii's program participants compile data regarding the energy savings program and formalize in a report.

