

Final Narrative Progress Report

Technical Assistance for

Energy Efficiency Buildings Program

FINAL SUBMITTAL

Submitted by:

InSynergy Engineering Services, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

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FINAL NARRATIVE PROGRESS REPORT
TECHNICAL ASSISTANCE
FOR
ENERGY EFFICIENCY BUILDINGS PROGRAM

1.0 EXECUTIVE SUMMARY:

Contract 59499 for The State of Hawaii, Department of Business, Economic Development, and Tourism (DBEDT), Strategic Industries Division (SID) commenced on July 29, 2010. It originally ended on April 30, 2012 but under Supplemental Contract No. 1 the completion date was extended to December 20, 2012. Funding was provided by the American Recovery and Reinvestment Act of 2009 (ARRA) which provided funding to the U. S. Department of Energy which awarded a grant under the Hawaii State Energy Program.

The goal of this program was to accelerate adoption of high performance energy-efficient buildings. Strategies included providing technical assistance and training to building owners, developers, design professionals, and county building code officials to ensure that new and renovated buildings are designed and built with high efficiency and do not compromise our energy future. The program targeted bringing buildings to a high level of energy efficiency.

The task orders accomplished under this contract are included in Appendix 1.0. The tasks included the following items:

- 1) Solar Water Heating Assessment of the State of Hawaii.
- 2) Preliminary Energy Assessment Reports for HHSC's Maui Memorial Hospital, Hilo Medical Center, Kona Community Hospital and Kauai Veteran's Hospital.
- 3) Training and Technical Assistance for Implementation of IECC 2009 in Hawaii.
- 4) Stringency Assessment and Savings Forecast for Hawaii Energy Code.
- 5) Solar Photovoltaic Training for Building Code Officials.
- 6) Private Sector Technical Training To Implement IECC 2009 in Hawaii.
- 7) Event Services for Code Training on Kauai.
- 8) Event Services for Code Training on Oahu, Maui, Hilo, and Kona.

- 9) Engineering Services to DAGS for Energy Savings Performance Contracting.
- 10) Engineering Services to DOT-Airports for Energy Savings Performance Contracting.
- 11) Technical Assistance for Energy Efficiency and Renewable Energy – ESPC. Department of Transportation
- 12) Technical Assistance for Energy Efficiency and Renewable Energy, ESPC University of Hawaii-Hilo.
- 13) Technical Assistance for Development of Life of Contract Plan Template.
- 14) Technical Assistance for Energy Performance Contracting for Board of Water Supply (BWS) Honolulu.
- 15) Technical Assistance for Energy Performance Contracting to Develop Frequently Asked Questions (FAQS) List.
- 16) Final Narrative Progress Report.

Technical assistance for all task orders was provided by InSynergy Engineering, Inc.; Kolderup Consulting; Synchronous Energy Solutions, Inc.; and/or the Hawaii Solar Energy Association.

2.0 COMPARISON OF ACCOMPLISHMENTS BY TASK:

The scope of work encompassed technical assistance services and training to bring buildings to a high level of energy efficiency. The following tasks were included:

- (1) Energy assessments and analyses, training, and other information.
- (2) Assistance and training to building code officials on latest code elements, as well as new code opportunities under IECC (2009 ICC) and on renewable energy technologies.
- (3) Assistance to state agencies/non-profits/small businesses in assessing energy efficiency improvements.

Table 1 summarizes the comparison of accomplishments by task:

TABLE 1 COMPARISON OF ACCOMPLISHMENTS BY TASK		
Task Order No. Goals and Objectives	Accomplishments	Additional Remarks
1.A. SOLAR WATER HEATING ASSESSMENT (1) Determine the number of solar water heating systems installed in the State of Hawaii and the savings in fossil fuels and electricity. (2) Determine by island the number of solar water heating systems installed and the direct amount of energy savings in electricity and from avoided electric heater use, and the equivalent savings in fossil fuels resulting from their installation.	(1) Final assessment submitted 12/18/12. .	(1) Goal achieved. (2) Unable to extrapolate the information from the data we received.
1.B. PREPARE PRELIM ENERGY ASSESSMENT REPORTS FOR HHSC'S FOUR PRIMARY HOSPITALS (1) Define and identify feasible ECO's to develop future IFP's for the Implementation of Add Energy Performance Contracting Projects for the HHSC at Maui Memorial Hospital, Hilo Medical Center, Kona Community Hospital and Kauai Veteran's Hospital.	(1) Final reports submitted 12/20/20.	(1) Goal achieved.

<p>2.B. TRAINING AND TECHNICAL ASSISTANCE FOR IMPLEMENTATION OF IECC 2009 IN HAWAII</p> <p>(1) Training on latest code elements as well as new code opportunities under IECC 209 and Hawaii revisions to State Energy Conservation Code for private sector design professionals, building professionals and public sector officials state wide.</p> <p>(2) Technical support on code issues.</p> <p>a. Develop content for DBEDT web page for energy codes</p> <p>b. Provide technical assistance to Code officials and others on request.</p> <p>c. FAQ regarding differences between IECC 2006 and IECC 2009 and Hawaii revisions.</p> <p>d. Develop a detailed log on which to record technical assistance for Code specific questions.</p> <p>e. Residential Analysis for energy savings.</p> <p>f. Commercial Buildings Analysis for energy savings.</p> <p>g. Discuss analysis with the Pacific Northwest National Laboratory.</p> <p>h. Provide technical assistance via the Technical Assistance Log.</p>	<p>(1) Eleven sessions were held on four islands with a total of 260 attendees from 2/21/12 through 2/28/12.</p> <p>(2) Submitted content for DBEDT web page for energy codes on 6/12/12.</p> <p>Edited the compiled list developed by DBEDT. Submitted 3/26/12.</p> <p>Detailed log developed and submitted 5/18/12.</p> <p>Worked on draft</p> <p>Worked on draft.</p> <p>Technical assistance provided and noted on the Technical Assistance Log.</p>	<p>(1) Goal achieved.</p> <p>Goal achieved</p> <p>Goal achieved</p> <p>Goal achieved.</p> <p>Due to funding limitations final report submitted under Task 2.F. Due to funding limitations final report submitted under Task 2.F. Goal achieved.</p> <p>Goal achieved.</p>
<p>2.E SOLAR PHOTOVOLTAIC TRAINING FOR BUILDING CODE OFFICIALS</p> <p>(1) Training for building code officials and the solar industry on solar photovoltaics.</p> <p>(2) Compilation of FAQs of all sessions.</p>	<p>(1) Five sessions were held on 4 islands from 2/15/12 to 2/27/12 totalling 619 attendees.</p> <p>(2) Compiled FAQ submitted 4/11/12 with Summary Report.</p>	<p>(1) Goal achieved.</p> <p>(2) Goal achieved.</p>
<p>2.F PRIVATE SECTOR TECHNICAL TRAINING TO IMPLEMENT IECC 2009 IN HAWAII</p> <p>(1) Training on latest code elements as well as new code opportunities under IECC 209 and Hawaii revisions to State</p>	<p>(1) Six sessions were held on 4 islands from 11-13-12 through 11-30-12 totalling 268 attendees.</p>	<p>(1) Goal achieved.</p>

<p>Energy Conservation Code for private sector design professionals, building professionals and public sector officials statewide.</p> <p>(2) Training on Design Strategies for Code Compliance for private sector design professionals, building professionals and public sector officials statewide.</p> <p>(3) Residential Stringency Analysis</p> <p>(4). Non-Residential Stringency Analysis</p> <p>(5) Revised FAQ's based on training and log</p>	<p>(2) Six sessions were held on 4 islands from 11-13-12 through 11-30-12 totalling 268 attendees.</p> <p>(3) Hawaii Building Energy Code Residential stringency analysis submitted 12-10-12.</p> <p>(4) Hawaii Building Energy Code Non-Residential stringency analysis submitted 12-10-12.</p> <p>(5) FAQ submitted and accepted 12-17-12..</p>	<p>(2) Goal achieved.</p> <p>(3) Goal achieved.</p> <p>(4) Goal achieved.</p> <p>(5) Goal achieved.</p>
<p>2.G EVENT SERVICES FOR CODE TRAINING ON KAUAI</p> <p>(1) Event services support for Task 2.F training on latest code elements as well as new code opportunities</p> <p>(2) Event services support for Task 2.F training on Design Strategies for Code Compliance</p>	<p>(1) & (2) Arranged for lunch, beverages and audio visual equipment. Provided marketing & communications for the event including announcements & press releases. Provided registration services.</p>	<p>(1) Goal achieved.</p> <p>(2) Goal achieved.</p>
<p>2.H EVENT SERVICES FOR CODE TRAINING ON OAHU, MAUI, HILO AND KONA</p> <p>(1) Event services support for Task 2.F training on latest code elements as well as new code opportunities</p> <p>(2) Event services support for Task 2.F training on Design Strategies for Code Compliance</p> <p>(3) Participant and Mailing List Preparation.</p>	<p>(1) and (2) Arranged for lunch and beverages and audio visual equipment. Provided marketing and communications for the event including announcements and press releases and provided registration services including setting up the registration software.</p> <p>(3) Prepared and submitted to the State an excel spreadsheet of the list of participants. Prepared and submitted a list of all the people who were notified in order to develop a mailing list.</p>	<p>(1) and (2) Goal achieved</p> <p>(3) Goal achieved.</p>
<p>3.A.1 ENGINEERING SERVICES TO DAGS FOR ENERGY SAVINGS PERFORMANCE CONTRACTING</p> <p>(1) Site visit to the buildings.</p> <p>(2) Tech support to DAGS during the IFP solicitation process.</p>	<p>(1) Site visits conducted on July 11 to 18, 2011 on the islands of Maui, Kauai, Hawaii and Oahu.</p> <p>(2) Reviewed and summarized the proposals and participated in ESCO's oral interviews.</p>	<p>(1) Goal achieved.</p> <p>(2) Goal achieved.</p>

(3) Tech support to DAGS during the IGA process.	(3) Provided technical review comments for Final IGA	(3) Goal achieved.
3.B. ENGINEERING SERVICES TO DOT-AIRPORTS FOR ENERGY SAVINGS PERFORMANCE CONTRACTING (1) Tech support for DOT-A during the IFP solicitation process. (2) Tech support for DOT-A during the TEA document review process.	(1) Limited field surveys for DOT facilities – Airports, Harbors and Highways. Report submitted 12/22/11. (2) Proposal comparison submitted 12/22/11.	(1) Goal achieved. (2) Goal achieved.
9.A. TECHNICAL ASSISTANCE FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY – ESPC (1) Provided technical assistance to City & County of Honolulu, Dept of Environmental Services for RFP for Kailua WWTP ESPC (2) Provided technical assistance to the State of Hawaii, Department of Transportation, Airports Division RFP for ESPC. (3) Provided technical assistance to City & County of Honolulu, Dept of Environmental Services for RFP for Honouliuli WWTP ESPC.	(1) Reviewed RFP, provided assistance in scoring criteria, reviewed TEA, BAFO, IGA contract, IGA report, and GES contract. (2) Participated in oral interviews for performance contracts. Submitted Global Summary and Evaluation comments on 12/23/11. Provided evaluation of IGA. (3) Reviewed ESPC contract, addendums and proposals. Participated in selection interviews.	(1) Goal achieved. (2) Goal achieved. (3) Goal achieved
9.B. TECHNICAL ASSISTANCE FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY, ENERGY SAVINGS PERFORMANCE CONTRACTING UH-HILO (1) Provided technical assistance to University of Hawaii, Hilo for Energy Performance contract.	(1) Reviewed RFP and commented on items to be considered for inclusion in the Energy Performance Contract.	(1) Goal achieved
9.C. TECHNICAL ASSISTANCE FOR REVIEW OF LIFE OF CONTRACT PLAN TEMPLATE (1) Provide Life of Contract Plan template and matrix/checklist. (2) Post Life of Contract Plan template and matrix/checklist to DBEDT website.	(1) Final document ESPC Life of Contract Plan (LOC) (Document management and checklist for ESPC) submitted 12/19/12.	(1) Chose not to have developed in website format.

9.E. TECHNICAL ASSISTANCE FOR ENERGY PERFORMANCE CONTRACTING FOR BOARD OF WATER SUPPLY(BWS) HONOLULU (1) Provided technical assistance to Board of Water Supply for Energy Performance contract.	(1) Assisted BWS with the development of an IFP solicitation package.	(1) Goal achieved.
9.F TECHNICAL ASSISTANCE FOR ENERGY PERFORMANCE CONTRACTING TO DEVELOP FREQUENTLY ASKED QUESTIONS (FAQS) LIST (1) Developed a list of FAQs for a basic understanding of ESPC organized by categories and subheadings for STATE use.	(1) Final version of list of FAQ submitted on 12/14/12.	(1) Goal achieved.
12. FINAL NARRATIVE PROGRESS REPORT (1) Final narrative progress report.	(1) Final submitted 12/20/12.	(1) Goal achieved.

3.0 DISCUSSION OF ACCOMPLISHMENTS:

1. Task Order 1.A. Solar Water Heating Assessment:

This task order provided engineering support to DBEDT to assess the penetration and energy savings realized from the solar water heating systems that have been installed in the State of Hawaii. The Report on this effort determined that since 1977 there have been 103,305 solar water heating systems installed in the State of Hawaii. The savings in fossil fuels and electricity realized by their installation is 1,791, 810 barrels of oil and 1,237,356 kwh.

2. Task Order 1.B. Prepare Preliminary Energy Assessment Reports for HHSC's Four Primary Hospitals:

This task order provided engineering support to the DBEDT by conducting energy feasibility assessment reports for:

- a. Maui Memorial Hospital
- b. Hilo Medical Center
- c. Kona Community Hospital
- d. Kauai Veterans Hospital

The reports defined and identified feasible Energy Conservation Opportunities (ECO's)

to develop future IFP's for the implementation of additional energy performance contracting projects for HHSC as follows:

- a. Maui Memorial Hospital
- b. Hilo Medical Center
- c. Kona Community Hospital
- d. Kauai Veterans Hospital

3. Task Order 2.B. Training and Technical Assistance for Implementation of IECC 2009 in Hawaii.

This task order provided training and technical assistance to implement IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), "State Energy Conservation Code," hereinafter HAR 3-181, for private sector design and building professionals statewide. Eleven training sessions were held to explain the 2009 International Energy Conservation Code (IECC) with Hawaii amendments on four islands from February 21, 2012 through February 28, 2012. There were 260 attendees including building officials and other public employees, and architects and engineers from the private sector.

Technical support on code issues was also provided as follows:

- a. Developed content for DBEDT web page for energy codes
- b. Provided technical assistance to Code officials and others.
- c. Edited FAQ regarding differences between IECC 2006 and IECC 2009 and Hawaii revisions.
- d. Developed a detailed log on which to record technical assistance for Code specific questions.
- e. Began working on the calculations for the Residential Analysis for energy savings. Due to funding limitations the report was completed under Task 2.F.
- f. Began working on the calculations for the Commercial Buildings Analysis for energy savings. Due to funding limitations the report was completed under Task 2.F.
- h. Provided technical assistance via the Technical Assistance Log.

4. Task Order 2.E. Solar Photovoltaic Training for Building Code Officials.

This task order provided in-depth training for local code and building code officials and the solar industry on solar photovoltaics, including best practices for the structural and electrical review of solar photovoltaics in the field. Hawaii Solar Energy Association (HSEA) presented five sessions, one on Hilo, Kauai, Oahu and two on Maui from February 15, 2012 to February 27, 2012. Six hundred seventy (670) people registered for the training with a total of 619 people actually attending. A FAQ was developed to reflect common issues discussed across all sessions.

5. Task Order 2.F. Private Sector Training Including Design Strategies to Implement IECC 2009 in Hawaii.

This task order provided state wide training on latest code elements as well as new code opportunities under IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), “State Energy Conservation Code,” hereinafter HAR 3-181, for private sector design professionals, building professionals, and public sector officials state wide. It also provided for training on Design Strategies for Code Compliance. Six sessions were held from November 13, 2012 through November 30, 2012 on four islands including two on Oahu, and one each on Maui, Kauai, Hilo, and Kona. There were a total of 268 attendees. These training sessions were co-sponsored by Hawaii State Energy Office and Hawaii Energy. An updated FAQ was developed following the completion of all training sessions.

In addition, this task order provided for a Hawaii Building Energy Code Stringency Assessment and Savings Forecast. The analysis was prepared by Kolderup Consulting and submitted on December 10, 2012. Basically it states that the Hawaii Code (2009 International Energy Conservation Code with amendments) provides equal or greater energy savings when compared to the 2009 IECC for residential buildings and ASHRAE Standard 90.1-2007 for nonresidential buildings. The following is an excerpt from the study:

“Residential buildings. The energy consumption of an air-conditioned home

complying with minimum requirements of the Hawaii Code is likely to be 2% to 3% higher than the same home complying with the minimum 2009 IECC requirements. The Hawaii Code also includes homes without air conditioning in the scope of the envelope requirements, providing improved comfort as well as likely energy savings in cases when homeowners install room air conditioners. The magnitude of those savings is difficult to quantify, but it seems reasonable to assume that it will more than offset the 2% to 3% penalty in air-conditioned homes. Therefore, the net impact of the amendments is that the Hawaii Code provides equal or greater energy savings for residential buildings compared to the 2009 IECC.

Nonresidential buildings. One of the Hawaii Code amendments reduces stringency for nonresidential building while four other amendments provide increased savings. Therefore, the question is whether lost savings due to reduced stringency is offset by the additional savings due to the other amendments. The modeling and research carried out as part of this analysis show that:

- The Hawaii Code cool roof insulation exception for nonresidential buildings increases energy consumption by roughly 5% for buildings following that compliance path.
- The commissioning requirement should provide average savings of at least 5%.
- The occupancy-based guest room controls should provide at least 5% savings in hotels.
- Submetering requirements should provide average savings of at least 5% in tenant occupied buildings.
- The inclusion of unconditioned buildings within the scope of the envelope requirements will likely provide improved comfort and some energy savings in cases where room air conditioners or spot coolers are used.

The net impact of the amendments is that the Hawaii Code provides equal or greater energy savings for nonresidential buildings compared to the 2009 IECC and ASHRAE 90.1-2007.

Energy savings forecast. The Hawaii Code is expected to provide electricity savings of 1,250 MWh/yr in 2013, increasing to 12,504 MWh/yr in 2023 and 21,257 MWh/yr in 2030 and 25,008 MWh/yr in 2033. Those estimates are savings for the Hawaii Code vs. the 2009 IECC and ASHRAE Standard 90.1-2007. Those estimates are net savings, in which an increase in residential energy consumption is offset by savings in commercial construction.”

6. Task 2. G Event Services for Code Training on Kauai.

Provided event services support for November 15, 2012 training focused on the private sector in Kauai and public sector as appropriate on IECC 2009 under Task Order 2.F.

There were 40 attendees. Arranged for lunch and beverages and audio visual. Provided marketing and communications for the event, including announcements, press releases and other media services. Also provided registration services.

7. Task 2.H. Event Services for Code Training on Oahu, Maui, Hilo, and Kona.

Provided event services support for November 13 - 20, 2012 training focused on the private sector in Oahu (two sessions), Maui, Hilo, and Kona and public sector as appropriate on IECC 2009 under Task Order 2.F. There were 228 attendees. Arranged for lunch and beverages and audio visual. Provided marketing and communications for the event, including announcements, press releases and other media services. Provided registration services which included setting up the registration software.

In addition prepared and submitted an excel spreadsheet list of all participants and speakers for all Code training events. Prepared and submitted an excel spreadsheet list of all the people who were contacted to participate in order to develop a current mailing list.

8. Task 3A.1 Engineering Services to DAGS for Energy Savings Performance Contracting.

Provided engineering support to the Department of Accounting and General Services (DAGS) to implement DAGS Facilities, State wide, ESPC, Phase II Buildings project. Following is a table that lists the buildings included in DAGS Phase II ESPC Project

Table 2

LIST OF BUILDINGS INCLUDED IN DAGS PHASE II ESPC PROJECT:				
	Building Name	Island	Address	
1	CSD Baseyard	Oahu	729 Kakoi Street	
2	Hale Auhau	Oahu	425 Queen Street	
3	Kakuihewa	Oahu	601 Kamokila Boulevard	
4	Kalanimoku (Data Center O	Oahu	1151 Punchbowl Street	
5	Kamehameha V	Oahu	901 Bethel Street	
6	Kaneohe Civic Center	Oahu	45-260 Waikalua Road	
7	OR & L	Oahu	355 N. King Street	
8	Wahiawa Civic Center	Oahu	910 California Avenue	
9	Waipahu Civic Center	Oahu	94-275 Mokuola Street	
10	Hilo State Office Building	Hawaii	75 Aupuni Street	
11	Honokaa State Office Buildin	Hawaii	45-3380 Mamane Street	
12	Keakealani State Office Buil	Hawaii	79-1020 Haukapila Street	
13	Kona Civic Center (SOB 1, 2	Hawaii	82-6130 Mamalahoa Highway	
14	Kulana Naauao	Hawaii	41 Keawe Street	
15	North Kohala Civic Center B	Hawaii	54-3900 Govt Main Road	
16	Naalehu State Office Buildin	Hawaii	95-5669 Mamalahoa Highway	
17	Waimea State Office Buildin	Hawaii	67-5175 Kamamalu Street	
18	Kauai DAGS Administration	Kauai	1680 Haleukana Street	
19	Lihue Health Center & Anne	Kauai	3040 Umi Street	
20	Lihue State Office Building	Kauai	3060 Eiwa Street	
21	Lihue Courthouse (former)	Kauai	3059 Umi Street	
22	Plant Industry Building	Kauai	4398A Pua Loke Street	
23	Vector Control Building	Kauai	4398B Pua Loke Street	
24	Kaunakakai Civic Center	Molokai	65 Makaena Place	
25	DAGS Baseyard and Office	Maui	755 Mua Street	
26	Department of Agricultural B	Maui	635 Mua Street	
27	Department of Health Vector	Maui	641 Mua Street	
28	Lahaina Comprehensive Hel	Maui	1830 Honoapiilani Highway	
29	Wailuku Health Center	Maui	121 Mahalani Street	
30	Wailuku State Office Building	Maui	54 High Street	
31	Wailuku State Office Building	Maui	2264 Aupuni Street	

InSynergy Engineering, Inc., performed the initial site visit to the buildings to become familiar with the facilities and to conduct our own assessment of feasible ECO's that could be implemented. We confirmed the findings and recommended scope of work developed by the three proposers: Ameresco, Johnson Controls, and Noresco. Field surveys were conducted from July 11-18, 2011, on the islands of Oahu, Hawaii, Kauai, and Maui. A majority of the mechanical and electrical systems were evaluated and compared with the proposer's evaluations. Based on the proposals, it appears that Ameresco had completed a more comprehensive review of the facilities and has covered

a larger set of energy conservation measures. Johnson Controls, however, has a more detailed list of the existing mechanical systems and equipment.

Based on the field survey, the recommended mechanical system upgrades and overall condition assessment of the equipment by the three proposers is correct. However, Ameresco and Johnson Controls are more ambitious about upgrades to the mechanical systems. Taking into consideration the time frame of a 20 year contract, these recommended upgrades would be necessary although the condition of the equipment may currently be satisfactory. Both Ameresco and Noresco appear to have similar programs for lighting retrofits and in general the recommended scopes of work for these electrical ECM's is acceptable. Both of these proposals include more extensive electrical upgrades than Johnson Controls. Ameresco and Johnson Controls have a larger scope for HVAC replacement and in general the recommended scopes of work are acceptable.

Technical support was also provided for DAGS administration and staff during the review and evaluation of Technical Energy Assessment (TEA) documents that were submitted in response to the IFP solicitation process. The proposals that were developed by the three proposers which included baseline utility usage and cost, energy conservation measures cost, energy conservation measures savings, and cash flow comparison were reviewed and summarized. Technical support was also provided during ESCO oral interviews.

Provided technical review comments for the IGA portion of the scope of work.

9. Task 3.B. Engineering Services to the Department of Transportation – Airports for Energy Savings Performance Contracting.

This task order provided engineering support to the Department of Transportation for implementation of a statewide ESPC for the Airports, Harbors and Highways Divisions. It included providing technical support for DOT administration and staff during the Invitation for Proposals (IFP) process which included limited field surveys to confirm the findings and recommended scope of work developed by the proposers for the DOT airport facilities, the DOT harbor facilities and for the DOT highways. The report was submitted on December 22, 2011. In general, the overall condition assessment of the

equipment, the recommended mechanical and electrical system upgrades for all facilities was accepted.

Technical support was also provided for DOT during the review and evaluation of Technical Energy Assessment (TEA) documents that were submitted in response to the IFP solicitation process. The work included the review and summarization of the comparison of proposals for Baseline Energy Usage, ECM Cost, ECM Savings, and Preliminary Cash Flow Analysis. The report was submitted on December 22, 2011.

10. Task 9.A Technical Assistance for Energy Efficiency and Renewable Energy – Energy Savings Performance Contracting .

Provided technical assistance to State and County agencies for energy efficiency and renewable energy, with an emphasis on Energy Savings Performance Contracting.

Provided review of the proposed RFP for the Kailua Waste Water Treatment Plant (WWTP) ESPC and the responses to the RFP for the City and County of Honolulu Department of Environmental Services. Assistance in selecting the Offeror included providing assistance with RFQ scoring criteria, evaluation questions, scoring forms for client references, oral interview evaluation criteria, written and oral parts of the BAFO and preliminary project financial information for their BAFO. Made a power point presentation to the City on an overview of ESPC contracting and procurement. Reviewed the Kailua WWTP ESPC RFP. It was posted on the Purchasing Division's web site under Bids for Goods, Services, and Concessions on December 14, 2011. Reviewed Addendums which provided responses to vendor questions and clarification on project requirements. Reviewed and commented on the TEA proposals and served as a non-voting member of the RFP Evaluation Committee. Reviewed BAFO. Prepared remarks on IGA contract, reviewed the IGA report and reviewed the GES contract. Reviewed the government's spreadsheet analysis of the top three ECM's by awarded contractor.

Provided assistance on October 24 and October 28, 2011 in review of two performance contracts specifically the oral interviews of two proposers for the State of Hawaii, Department of Transportation, Airports Division. Submitted Global Summary and Evaluation Comments on November 14, 2011 and revised December 23, 2011 which

included global savings analysis and cost comparisons. Also provided information on how to select maintenance contracts. Provided evaluation of IGA and alternatives in a memo dated February 1, 2012. Reviewed IGA contract.

Provided review of the draft of the Honouliuli Wastewater Treatment Plant Energy Savings Performance Contract for the City and County of Honolulu Department of Environmental Services. In addition, responded to questions for preparation of proposal addendums. Reviewed proposals to the RFP. Participated in the telephone interviews of the vendors.

11. Task 9.B Technical Assistance for Energy Efficiency and Renewable Energy, Energy Savings Performance Contracting UH-Hilo.

Provided technical assistance to State and County agencies, universities and colleges for energy efficiency and renewable energy, with an emphasis on Energy Savings Performance Contracting. Reviewed the Request for Proposal (RFP) for Energy Performance Contract for the University of Hawaii, Hilo, Hawaii. Commented on items to be considered for inclusion in the Energy Performance Contract.

12. Task 9.C Technical Assistance for Review of Life of Contract Plan Template.

Provided the ESPC Life of Contract (LOC) Plan to provide guidance to project staff during the post-installation performance period of an Energy Savings Performance (ESPC) project. This workbook assists the staff in effective ESPC project management and includes the matrix/checklists. "The Intent of the Life of Contract Plan is to capture the performance data from the acceptance phase of the contract, to provide guidance on how to manage the contract for its remaining term to ensure proper performance of the equipment and the verification of the savings guarantees for the life of the contract."

Draft submitted on November 28, 2012. Final LOC Plan entitled, EPSC Life of Contract (LOC) Plan: Documents Management and Checklist for Energy Savings Performance Contracts (ESPC) was submitted on December 19, 2012.

DBEDT chose not to have it developed in website format due to budget constraints. The LOC Plan will be posted on the DBEDT website by DBEDT.

Miscellaneous technical advice provided included writing a project feasibility plus economic cost/benefit to justify bond funding for ESPC for State of Hawaii, Department of Accounting and General Services for PV installation in State facilities.

Other technical advice included providing review and comments on the results from independent measurement and verification spot-checks dated August 2011 of some of the energy conservation measures installed by NORESO in State of Hawaii, Department of Accounting and General Services facilities. ECM's evaluated included: ECM-01: High Efficiency Super T8 Lamps and Ballasts; ECM-02: New DDC Energy Management System; ECM-04: AHU Infrastructure Modernization; ECM-05: Convert Constant Volume HVAC Systems to VAV; ECM-06: Demand Controlled Ventilation; ECM-07: Energy Efficient Chillers; ECM-08: Variable Speed Chilled Water Pumps; ECM-09: Variable Speed Cooling Tower Fans; ECM-10: Condenser Water Treatment System; ECM-11: Cooling Tower Make-up Water Deduct Meters; ECM-12: Photovoltaic Systems; ECM-13: Low Consumption Plumbing Fixture Upgrades; ECM-14: Weather Based Irrigation Controls and Sewer Deduct Meters; ECM-16: Building Entry Doors; and ECM-18 Desktop Power Management.

Provided technical assistance to State of Hawaii, Department of Accounting and General Services for their request to the U.S. Department of Energy for technical assistance on M&V training. Provided background material, responded to questions and participated in conference calls.

13. Task 9.E. Technical Assistance for Energy Savings Performance Contracting to the Board of Water Supply (BWS)

Provided professional services to the Board of Water Supply to implement Energy Savings Performance Contracting for selected BWS facilities. Assisted BWS with the development of an Invitation for Proposals (IFP) solicitation package which included reviewing and revising drafts of IFP and TFP and participated in conference calls.

14. Task 9.F. Technical Assistance for Energy Performance Contracting to Develop Frequently Asked Questions (FAQs) List.

Developed a list of frequently asked questions for a basic understanding of ESPC

organized by categories and subheadings (including financing) for STATE use. FAQ list was developed based on materials previously developed and included brief FAQs and additional questions derived from activities related to current State and County energy performance contracts. Final version was submitted on December 14, 2012.

15. Task 12. Provide a Final Narrative Progress Report.

Provided a narrative discussion of project goals and objectives, significant results, best practices, major findings or conclusions, key outcomes, major deliverables, reports, and other achievements. Final report submitted on December 20, 2012.

4.0 COST STATUS:

Approved budget by task, budget period and actual costs incurred are shown below in

Table 3, entitled, Cost Status:

TABLE 3. COST STATUS

TECHNICAL ASSISTANCE FOR ENERGY PERFORMANCE CONTRACTING
Contract No. 59499

TASK ORDER	TITLE	APPROVED BUDGET	BUDGET PERIOD	TOTAL COSTS
1.A	Solar Water Heating Assessment	\$6,740.00	11/13/12 - 12/20/12	\$6,740.00
1.B	Prelim Energy Assessment Reports for HHSC's Four Primary Hospitals	\$39,600.00	11/30/12 - 12/20/12	\$36,042.37
2.B	Training and Technical Assistance for Implementing IECC 2009 in Hawaii	\$39,900.00	7/21/11 - 12/20/12	\$39,744.29
2.E	Solar Photovoltaic Training for Building Code Officials	\$27,759.59	2/14/11 - 4/30/12	\$27,759.59
2.F	Private Sector Technical Training to Implement IECC 2009 in Hawaii	\$38,000.00	8/14/12 - 12/18/12	\$36,900.36
2.G	Event Services for Code Training on Kauai	\$3,500.00	9/14/12 - 11/15/12	\$3,199.85

2.H	Event Services for Code Training on Oahu, Maui, Hilo and Kona	\$6,550.00	9/14/12 - 12/11/12	\$6,182.72
3.A.1	Engineering Services to DAGS for Energy Savings Performance Contracting	\$54,540.00	7/5/11 - 12/20/12	\$28,589.31
3.B	Engineering Services to the DOT-Airports for Energy Savings Performance Contracting	\$50,060.73	05/17/11 - 4/30/12	\$50,060.73
9A	Technical Assistance for Energy Efficiency and Renewable Energy - Energy Savings Performance Contracting	\$73,000.00	2/7/11 - 12/20/12	\$56,254.94
9B	Technical Assistance for Energy Efficiency and Renewable Energy - Energy Savings Performance Contracting UH-Hilo	\$6,600.00	11/16/11 - 4/30/12	\$1,955.39
9C	Technical Assistance for Review of Life of Contract Plan Template	\$5,500.00	11/8/11 - 4/30/12	\$5,354.66
9E	Technical Assistance for Energy Savings Performance Contracting to the Board of Water Supply (BWS)	\$2,220.00	9/7/12 - 12/15/12	\$392.67
9F	Technical Assistance for Energy Performance Contracting to Develop FAQs List	\$5,500.00	9/18/12 - 12/15/12	\$5,092.88
12	Final Narrative Progress Report	\$5,800.00	7/5/12 - 11/30/12	\$5,800.00
TOTAL		\$365,270.32		\$310,069.76

5.0 TECHNOLOGY TRANSFER ACTIVITIES:

1. Task Order 2.B. Training and Technical Assistance for Implementation of IECC 2009 in Hawaii. Technical support on code issues was also provided as follows:
 - a. Developed content for DBEDT web page for energy codes
 - b. Edited FAQ regarding differences between IECC 2006 and IECC 2009 and Hawaii revisions to be posted on the DBEDT website.
 - c. Developed a detailed log on which to record technical assistance for Code specific questions which will be posted on the DBEDT website.


- d. Provided technical assistance via the Technical Assistance Log.
- 2. Task Order 2.E. Solar Photovoltaic Training for Building Code Officials. A FAQ was developed to reflect common issues discussed across all sessions to be posted on the DBEDT website.
- 3. Task Order 2.F. Private Sector Training Including Design Strategies to Implement IECC 2009 in Hawaii. An updated FAQ was developed following the completion of all training sessions. This information is posted on the DBEDT website.
- 4. Task 2.H. Event Services for Code Training on Oahu, Maui, Hilo, and Kona. Prepared and submitted an excel spreadsheet list of all the people who were contacted to participate in order to develop a current mailing list for future events.

APPENDIX

APPENDIX 1.0
TASK ORDERS

Task Order 1.A

Solar Water Heating Assessment

Approved by: 
Date: 11/13/12

Amendment 1
TASK ORDER 1.A
ENGINEERING SERVICES FOR
SOLAR WATER HEATING ASSESSMENT

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 1.A

PERIOD OF PERFORMANCE OF TASK ORDER: through December 20, 2013

BUDGET AMOUNT FOR TASK ORDER: \$6,740.00

DATE PROPOSED: ~~November 7, 2012~~; November 13, 2012

PROJECT TITLE: ENGINEERING SERVICES FOR SOLAR WATER
HEATING ASSESSMENT

1. TASK WORK STATEMENT

Provide engineering support to DBEDT to assess the penetration and energy savings realized from the solar water heating systems that have been installed in the State of Hawaii:

2. EXPECTED OUTCOMES

PROJECT GOAL: Determine the number of solar water heating systems installed in the State of Hawaii and the savings in fossil fuels and electricity realized by their installation.

PROJECT OBJECTIVES, INCLUDING METRICS

Determine the number of solar water heating installations by island over the past 20 years, the direct amount of energy saved in electricity and ~~[propane/gas]~~ from avoided electric ~~[and gas]~~ heater use, and the equivalent savings in fossil fuels resulting from their installation.

3. PLANNED ACTIVITIES – WORKPLAN

Provide engineering services to include, but not be limited to:

- a) Confirm the Number of solar water heaters in Hawaii based on previous estimates developed by the solar industry.
- b) Estimate the electrical ~~[and propane/gas]~~ savings in kwh and Btu using a methodology for deriving savings following Hawaii Energy guidelines.

INSYNERGY TASK ORDER NO. 1.A. 11/7/2012

- b) Review, summarize, and describe Hawaii Energy's solar water heating assumptions from their latest Technical Resource Manual to document the methodology used in the analysis.
- c) Research and include any other information relevant to the assessment of costs and benefits of SWH for Hawaii, including determining the equivalent savings in fossil fuels and carbon emissions.
- d) Prepare a prefinal assessment report summarizing the analysis, methodology, and including all supporting documentation.
- e) Prepare a final assessment report based on review and feedback from DBEPT.

4. REPORTING

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. PROCESS FOR IMPLEMENTATION.

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. SCHEDULE OF PERFORMANCE

- a) Quarterly report ending December 20, 2012.

Quarterly Reporting Schedule

Date Due	Report
2012	
December 20	Narrative Progress and Jobs Report (Nov- Dec 2012)

b) **Schedule for Task**

Date Due	Activity
2012	
Nov 30	Prepare and Issue Pre-final Assessment Report
Dec 18	Prepare and Issue Final Assessment Report

7. **DELIVERABLES**

a) Quarterly report from start of Task Order to December 20, 2012.

b) Written reports for:

- (1) Pre-final Assessment Report
- (2) Final Assessment Report

8. **BUDGET** – attached as separate spreadsheet

Estimated engineering hours by Task (does include other types of hours or expenses)

BUDGET BY DOLLARS AND TASKS

Task Order 1.A - Solar Water Heating Assessment				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
CONTRACTOR - InSynergy Engineeringing				
1. Solar Water Heating Survey Review				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr		Hour	\$153.90	\$0.00
Mechanical Engineer		Hour	\$113.70	\$0.00
Electrical Engineer		Hour	\$113.70	\$0.00
2. Savings Analysis Methodology				
Proj Mgr Mech Engr	16	Hour	\$153.90	\$2,462.40
Proj Mgr Elec Engr		Hour	\$153.90	\$0.00
Mechanical Engineer		Hour	\$113.70	\$0.00
Electrical Engineer		Hour	\$113.70	\$0.00
3. Summary of Hawaii Energy's Solar Wat				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr		Hour	\$153.90	\$0.00
Mechanical Engineer		Hour	\$113.70	\$0.00
Electrical Engineer		Hour	\$113.70	\$0.00
4. Prefinal Report				
Proj Mgr Mech Engr	12	Hour	\$153.90	\$1,846.80
Proj Mgr Elec Engr		Hour	\$153.90	\$0.00
Mechanical Engineer		Hour	\$113.70	\$0.00
Electrical Engineer		Hour	\$113.70	\$0.00
5. Final Report				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr		Hour	\$153.90	\$0.00
Mechanical Engineer		Hour	\$113.70	\$0.00
Electrical Engineer		Hour	\$113.70	\$0.00
Subtotal				\$6,156.00
State Excise Tax			0.04712	\$290.07
TOTAL NTE \$6,500.00	40			\$6,446.07
REPORT/INVOICE PREPARATION				
Report Preparation/Invoice Processing	2	Hour	\$113.70	\$227.40
Subtotal				\$227.40
State Excise Tax			0.04712	\$10.72
TOTAL NTE \$240				\$238.12
TOTAL TASK ORDER NTE				\$6,740.00

Task Order 1.B

Preliminary Energy Assessment Reports for HHSC's Four Primary Hospitals

Approved by: E. Hovnan
Date: 12/20/12

AMENDMENT NO. 1
TASK ORDER 1.B
ENGINEERING SERVICES TO PREPARE
PRELIMINARY ENERGY ASSESSMENT REPORTS
FOR HHSC's FOUR PRIMARY HOSPITALS

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: T.O. 1.B

PERIOD OF PERFORMANCE OF TASK ORDER: through Dec 20, 2012

BUDGET AMOUNT FOR TASK ORDER: ~~\$34,900.00~~ **\$39,600.00**

DATE PROPOSED: ~~November 30, 2012~~ **December 14, 2012**

PROJECT TITLE: ENGINEERING SERVICES TO PREPARE PRELIMINARY ENERGY ASSESSMENT REPORTS FOR HHSC'S FOUR PRIMARY HOSPITALS.

1. TASK WORK STATEMENT

Provide engineering support to the DBEDT to conduct an energy feasibility assessment report for the following facilities:

- a. Maui Memorial Hospital
- b. Hilo Medical Center
- c. Kona Community Hospital
- d. Kauai Veterans Hospital

2. EXPECTED OUTCOMES

PROJECT GOAL: Define and Identify Feasible Energy Conservation Opportunities (ECO's) to develop Future IFP's for the Implementation of Additional Energy Performance Contracting Projects for the HHSC at Maui Memorial Hospital, Hilo Medical Center, Kona Community Hospital, and Kauai Veterans Hospital

PROJECT OBJECTIVES, INCLUDING METRICS

Provide services as directed and prioritized by STATE to conduct energy feasibility assessment reports to identify feasible Energy Conservation Opportunities (ECO's) that should be considered for implementation under Future Energy Savings Performance Contracts; including reporting metrics on projected jobs created and energy savings.

3. **PLANNED ACTIVITIES – WORKPLAN**

Provide engineering services to include, but not be limited to:

- a) Initial field visit to each site to familiarize ourselves with the facilities and to conduct an assessment of feasible ECM's that could be implemented to reduce electrical operating costs.
- b) Prepare an analysis to determine the current baseline energy use and to evaluate the life cycle cost savings and probable construction costs for each feasible ECO that is identified for each facility.
- c) Prepare an pre-final assessment report for each facility that summarizes our findings and recommendations, including a narrative with tables describing each of the facilities, the current baseline energy and utility usage (including electricity, gas, diesel, and water/sewer charges) and utility cost by hospital, and estimated ECM's cost and cost savings by hospital. An appendix of detailed information should also be provided. The narrative should include individual summaries by hospital as well as an overall summary table.
- c) Prepare an final assessment report incorporating any review comments from DBEBT and HHSC.

4. **REPORTING**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: craman@dbedt.hawaii.gov by email). The technical contact for this Task Order is Ron Kurasaki, HHSC, email: rkurasaki@hhsc.org who should be kept informed by email and Joe Evanoff, HHSC, tel: 733-4168, email: jevanoff@hhsc.org

5. **PROCESS FOR IMPLEMENTATION.**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

a) **Quarterly Reporting Schedule**

Date Due	Report
2012	
December 20	Narrative Progress and Jobs Report (Oct-Dec 2012)

b) **Schedule for Tasks 3.a., 3.b. and 3.c.**

Date Due	Activity
2012	
Dec 1-7	Conduct Field Surveys
Dec 10-14	Prepare ECO Analysis
Dec 18- or sooner	Prepare/Submit Pre-final Energy Assessment Reports to DBEDT/HHSC
Dec 20	Prepare/Submit Final Energy Assessment Reports

7. **DELIVERABLES**

a) Quarterly reports from start of Task Order to Dec 20, 2012.

b) Written reports.

(1) Pre-final Energy Assessment Reports

(2) Prepare/Submit Final Energy Assessment Reports

8. **BUDGET** – attached as separate spreadsheet

Estimated engineering hours by Task (does include other types of hours or expenses)

1. B OK

BUDGET BY DOLLARS AND TASKS

AMENDMENT NO. 1

Task Order 2A				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
CONTRACTOR - InSynergy Engineering Inc.				
SITE WALK-THROUGHS				
Field Surveys				
Proj Mgr Mech Engr	32	Hour	\$153.90	\$4,924.80
Proj Mgr Elec Engr	32	Hour	\$153.90	\$4,924.80
Mechanical Engineer	0	Hour	\$113.70	\$0.00
Electrical Engineer	0	Hour	\$113.70	\$0.00
Subtotal				\$9,849.60
State Excise Tax			0.04712	\$464.11
TOTAL NTE \$10,300.00	64			\$10,313.71
ANALYSIS				
Proj Mgr Mech Engr	16	Hour	\$153.90	\$2,462.40
Proj Mgr Elec Engr	16	Hour	\$153.90	\$2,462.40
Mechanical Engineer	32	Hour	\$113.70	\$3,638.40
Electrical Engineer	32	Hour	\$113.70	\$3,638.40
Subtotal				\$12,201.60
State Excise Tax			0.04712	\$574.94
TOTAL NTE \$12,800.00	96			\$12,776.54
PREPARE STUDY				
Proj Mgr Mech Engr	12	Hour	\$153.90	\$1,846.80
Proj Mgr Elec Engr	12	Hour	\$153.90	\$1,846.80
Mechanical Engineer	24	Hour	\$113.70	\$2,728.80
Electrical Engineer	24	Hour	\$113.70	\$2,728.80
Subtotal				\$9,151.20
State Excise Tax			0.04712	\$431.20
TOTAL NTE \$9,600.00	72			\$9,582.40
REPORT/INVOICE PREPARATION				
Report Preparation/Invoice Processing	1	Hour	\$113.70	\$113.70
Subtotal				\$113.70
State Excise Tax			0.04712	\$5.36
TOTAL NTE \$200.00	1			\$119.06
REIMBURSABLE EXPENSES				
Airfare (Project Manager)	0	RT	\$200.00	\$0.00
Airfare (Mechanical Engineer)	4	RT	\$200.00	\$800.00
Airfare (Electrical Engineer)	4	RT	\$200.00	\$800.00
Car Rental	4	Trips	\$50.00	\$200.00
Airport Parking	8	Days	\$15.00	\$120.00
TOTAL NTE \$2,000.00				\$1,920.00
AMENDMENT NO. 1				
SITE WALK-THROUGHS				
Field Surveys				
Mechanical Engineer	32	Hour	\$113.70	\$3,638.40
Subtotal				\$3,638.40
State Excise Tax			0.04712	\$171.44
TOTAL NTE \$3,900.00	32			\$3,809.84
REIMBURSEABLE EXPENSES				
Airfare (Mechanical Engineer)	4	RT	\$200.00	\$800.00
TOTAL AMENDMENT NO. 1 NTE \$4,700.00				\$4,609.84
TOTAL TASK ORDER NTE:	\$39,600	Total		\$39,321.56

Task Order 2.B

Training and Technical Assistance for Implementing IECC 2009 in Hawaii

Approved by: S. Haman
Date: 12/20/12

AMENDMENT NO. 3
TO
TASK ORDER 2.B
TRAINING AND TECHNICAL ASSISTANCE
FOR IMPLEMENTING IECC 2009 IN HAWAII

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 2.B.

PERIOD OF PERFORMANCE OF TASK ORDER: through [April 30, 2012]
December 20, 2012

BUDGET AMOUNT FOR TASK ORDER: ~~\$39,656.35~~ **\$39,900.00**

DATE PROPOSED: [July 12, 2011], May 15, 2012, May 21, 2012, December 14, 2012

PROJECT TITLE: TECHNICAL ASSISTANCE AND TRAINING TO
IMPLEMENT IECC 2009 IN HAWAII

1. TASK WORK STATEMENT

Training and technical assistance to implement IECC 2009, under Task 2 of Contract No. 59499.

2. EXPECTED OUTCOMES

PROJECT GOAL: Assistance and training on latest code elements in IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), "State Energy Conservation Code," hereinafter HAR 3-181 for building code officials and private sector design and building professionals statewide. Technical assistance on compliance and other code-related issues.

PROJECT OBJECTIVES, INCLUDING METRICS

Metric is completion of twelve half-day training sessions (six for building officials, six for design and building professionals) in Oahu, Hilo, Kona, Kauai, Maui; distribution of manuals and training materials, providing training evaluations, and providing technical assistance upon request.

3. PLANNED ACTIVITIES --WORKPLAN

a) ENERGY CODE TRAINING. Provide services as follows:

1. Develop an agenda/curriculum, power point presentation, evaluation form for participants, and other training materials for a

- three and one half hour presentation, specifically for building code officials, on IECC 2009 and HAR 3-181 for approval by STATE.
 2. Develop an agenda/curriculum, power point presentation, evaluation form for participants, and other training materials for a three and one half hour presentation, specifically for private sector design and building professionals, on IECC 2009 and HAR 3-181 for approval by STATE.
 3. Develop two checklists, one for building officials related to plan review and inspection and another for design professionals related to design features, which will be discussed during the training and a final copy of each provided to STATE for approval.
 4. Develop an evaluation form for participants to use to evaluate the training sessions and make recommendations as to desirable future training and submit to STATE for approval no later than one week prior to start of training.
 5. Provide each participant at the training with a folder of materials including, but not limited to, materials described in paragraphs 1-4 above, copies of IECC 2009 and HAR 3-181, evaluation form for session.
 6. Present twelve one-half day training courses (six for building officials, six for design and building professionals) in accordance with the schedule and sites approved by STATE.
 7. Following the training, submit for STATE approval a Summary Evaluation report, including, but not limited to, major issues discussed; a compilation of Frequently Asked Questions and answers; a summary evaluation of the training; recommendations for future training activities in Hawaii; copies of all materials presented/provided at the training sessions; and copies of individual evaluation forms.
- b) TECHNICAL SUPPORT ON CODE ISSUES, as requested by STATE. Work will include the following tasks:
1. Develop content for DBEDT web page for energy codes, including links to Counties code web pages.
 2. Provide technical assistance to answer specific questions from Code officials and others.
 3. Write FAQ regarding differences between IECC 2006 and IECC 2009 and Hawaii revisions.
 4. Develop a detailed log on which to record technical assistance for Code specific questions. Form of log and data fields to be approved by STATE.
 5. Review, assess, provide analysis to determine if the Hawaii IECC 2009

(a) for residential buildings meets or exceeds the most recently published International Energy Conservation Code, or achieves the equivalent or greater energy savings;

(b) for commercial buildings throughout the State meets or exceeds the ANSI/ASHRAE/IESNA Standard 90.1-2007, or achieves equivalent or greater energy savings; and

(c) as appropriate, and as directed by DBEDT, discuss analysis with the Pacific Northwest National Laboratory.

6. Provide technical assistance related to any inquiries, via the Technical Assistance Log, to include State and County officials.

5. 7. Other services as directed by STATE.

4. **REPORTING**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

Technical questions on the Task Order may be directed to Howard Wiig, DBEDT, telephone: 808.587-3811; email: hwiig@dbedt.hawaii.gov

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION OF TECHNICAL ASSISTANCE.**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

QUARTERLY REPORTS beginning the Quarter ending September 30, 2011, through ~~[April 31, 2012]~~ May 31, 2012. ~~December 20, 2012.~~

Quarterly Reporting Schedule

Date Due	Report
2011	
October 3	Narrative Progress and Jobs Report (Jul-Sept 2011)
2012	
January 3	Narrative Progress and Jobs Report (Oct-Dec 2011)
April 3	Narrative Progress and Jobs Report (Jan-Mar 2012)
[April 30] <u>May 31</u>	Narrative Progress and Jobs Report ([April 2012] <u>May 2012</u>)Jun 2012)

<u>October 3, 2012</u>	<u>Narrative Progress & Jobs Report (Jul-Sept 2012)</u>
<u>December 20, 2012</u>	<u>Narrative Progress & Jobs Report (Oct-Dec 2012)</u>

Task 3.a. Proposed Code Training Schedule (Actual dates to be determined)

Date Due	Activity
2011	
August 31	Task 3.a.1., 3.a.2., 3.a.3, 3.a.4. –training materials and evaluation forms received and approved
TBD	Task 3.a.5.--150 (est) binders/folders for participants delivered to trainees (Task 3.a.5)
TBD	Training takes place Day 1: Travel to Hilo Day 2. Teach classes in Hilo, drive to Kona Day 3: Teach classes in Kona, fly to Honolulu Days 4 and 5: Teach classes in Honolulu, fly to Kauai Days 6 and 7: Saturday and Sunday Day 8 : Teach classes in Kauai, fly to Honolulu/Maui Day 9 : Teach classes in Maui Day 10: Travel
One month after completion of training	Summary report of training
2012	

Deliverable dates for additional reports, analyses, and other items under Task 3.b. will be determined based on approvals from STATE.

7. DELIVERABLES AND PAYMENT SCHEDULE
DELIVERABLES

- a) Quarterly Narrative and Jobs reports during term of Task Order
- b) Deliverables for Code Training Tasks 3.a.1 through 3.a.6
 - (1) 150 training binders/folders; power point and other materials including agenda, checklists, and evaluation forms
 - (2) Twelve one-half day training courses (six for building officials, six for design and building professionals)
 - (3) Summary report of training including major issues discussed, a compilation of Frequently Asked Questions and answers, summary of evaluations, recommendations for future training activities in

Hawaii, copies of all materials presented/provided at the training sessions, and copies of individual evaluation forms. (Task 3.a.7.)

8. BUDGET

Spreadsheet attached.

9. SUBCONTRACTORS/CONSULTANTS

InSynergy will use the following SUBCONTRACTOR to provide these services in this task order.

Eric Kolderup, **Kolderup Consulting**, Phone 415-531-5198; email: erik@kolderupconsulting.com; 704 Tennessee Street, San Francisco, CA 94107.

10. ATTACHMENTS

Budget

Consultant Certificate of Compliance

BUDGET BY DOLLARS AND TASKS

AMENDMENT NO.3

Task Order 2.8				
Contract No.: 59499				
Contractor: INSYNERGY ENGINEERING, INC.				
	Qty	Unit	Rate	TOTAL COST
Coordination - Engineer	8	Hour	\$113.70	\$909.60
Quarterly Narrative Report Preparation - Engineer	4	Hour	\$113.70	\$454.80
Accounts Payable - Finance	8	Hour	\$61.50	\$492.00
Subtotal, InSynergy Engineering, Inc				\$1,856.40
Kolderup Consulting				\$38,025.90
Subtotal				\$39,882.30
State Excise Tax			0.04712	\$87.47
INSYNERGY ENGINEERING, TOTAL NTE \$2,000				\$1,943.87
SubContractor: KOLDERUP CONSULTING				
	Qty	Unit	Rate	TOTAL COST
ENERGY CODE TRAINING				
Develop 3-1/2 hr training session for building code officials Erik Kolderup	40	Hour	\$160.00	\$6,400.00
Develop 3-1/2 hr training session for design and building professionals Erik Kolderup	18	Hour	\$160.00	\$2,880.00
Develop checklists Erik Kolderup	8	Hour	\$160.00	\$1,280.00
Develop evaluation form for training sessions Erik Kolderup	1	Hour	\$160.00	\$160.00
Prepare presentation folders for participants Erik Kolderup	2	Hour	\$160.00	\$320.00
Present twelve 1/2 day training sessions Erik Kolderup	48	Hour	\$160.00	\$7,680.00
Summary Evaluation Report Erik Kolderup	2	Hour	\$160.00	\$320.00
Subtotal				\$19,040.00
State Excise Tax			0.04712	\$897.16
TOTAL NTE \$				\$19,937.16
Reimbursable Travel Costs (No multiplier)				
Airfare - San Francisco/Hawaii	1	RT	\$600	\$600.00
Airfare - Interisland	4	OW	\$150	\$600.00
Car Rental	7	Day	\$50	\$350.00
Lodging	7	Day	\$150	\$1,050.00
Per Diem	7	Day	\$50	\$350.00
IECC document + shipping	150	ea	\$30	\$4,500.00
TOTAL NTE \$				\$7,450.00
TECHNICAL SUPPORT ON CODE ISSUES				
Develop content for DBEDT's web page Erik Kolderup	8	Hour	\$160.00	\$1,280.00
Provide technical assistance Erik Kolderup	16	Hour	\$160.00	\$2,560.00
Prepare FAQ regarding differences between IECC 2006 and IECC and Hawaii revisions Erik Kolderup	6	Hour	\$160.00	\$960.00
Develop a detailed log to record technical assistance Erik Kolderup	4	Hour	\$160.00	\$640.00
Other additional services as directed by the State Erik Kolderup	16	Hour	\$160.00	\$2,560.00
Subtotal	50			\$8,000.00
State Excise Tax			0.04712	\$376.96
TOTAL NTE \$				\$8,376.96
REPORTING				
Quarterly Narrative Report Preparation Erik Kolderup	1.5	Hour	\$160.00	\$240.00
Subtotal				\$240.00
State Excise Tax			0.04712	\$11.31
TOTAL NTE \$				\$251.31
AMENDMENT NO. 3				
Other additional services as directed by the State Erik Kolderup	12	Hour	\$160.00	\$1,920.00
Subtotal				\$1,920.00
State Excise Tax			0.04712	\$90.47
TOTAL NTE \$				\$2,010.47
KOLDERUP CONSULTING, TOTAL NTE \$				\$38,025.90
TOTAL TASK ORDER NTE \$39,900.00				\$39,969.78

Task Order 2.E

Solar Photovoltaic Training for Building Code Officials

Approved by: [Signature]
Date: 2-24-12

AMENDMENT NO. 1

TASK ORDER 2.E

SOLAR PHOTOVOLTAIC TRAINING FOR BUILDING CODE OFFICIALS

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 2.E.

PERIOD OF PERFORMANCE OF TASK ORDER: through April 30, 2012

BUDGET AMOUNT FOR TASK ORDER: [~~\$33,000.00~~] **\$38,000.00**

DATE PROPOSED: [~~January 19, 2011~~] **February 23, 2012**

PROJECT TITLE: SOLAR PHOTOVOLTAIC TRAINING FOR BUILDING CODE OFFICIALS

1. TASK WORK STATEMENT

Training and technical assistance to building code officials on renewable energy technologies (photovoltaics), under Task 2 of Contract No. 59499.

2. EXPECTED OUTCOMES

PROJECT GOAL: Provide in-depth training for local code and building code officials and the solar industry on solar photovoltaics, including best practices for the structural and electrical review of solar photovoltaic systems in the field.

PROJECT OBJECTIVES, INCLUDING METRICS

Metric is completion of five training sessions in Hilo, Kauai, Maui (2), Oahu; distribution of manuals and training materials, training evaluations.

3. PLANNED ACTIVITIES --WORKPLAN

a) Training. Provide services as follows:

1. Develop an agenda/curriculum, power point presentation, evaluation form for participants, and other training materials for a six to eight hour presentation, specifically for building code officials and invited guests, on solar photovoltaics for approval by STATE.
- 2.. Develop a training manual and a checklist for building code officials related to plan review, installation inspection, design requirements/options, etc. to be provided to STATE for approval.

An updated checklist shall be provided to the STATE for approval following completion of the training.

3. Develop a Frequently Asked Questions (FAQ) document for use during training and provide an updated FAQ to STATE for approval following completion of training.
 4. Develop an evaluation form for participants to use to evaluate the training sessions and make recommendations as to desirable future training and submit evaluation form to STATE for approval no later than one week prior to start of training.
 5. Provide each participant at the training with ~~[a folder of]~~ materials including, but not limited to, materials described in paragraphs 1-3 above, copies of relevant reference materials, evaluation form for session.
 6. Present ~~[four]~~ five one-day training courses in accordance with the schedule and sites approved by STATE. **Due to the large number of attendees on Oahu the venue will be the Hawaii Convention Center.**
 7. Following the training, submit for STATE approval a Summary Evaluation report, including, but not limited to, major issues discussed; a compilation of Frequently Asked Questions and answers; a summary evaluation of training; recommendations for future training activities in Hawaii; copies of all materials presented/provided at the training sessions; and copies of individual evaluation forms.
- b. Training Support. Working closely with the selected trainer, provide services as follows:
1. Pre-meeting preparatory work (including training announcements, compiling registration lists for each session, arranging venues and refreshments), in accordance with the schedule and sites approved by STATE.
 2. On-site staffing for the five training courses.
 3. Distributing materials to be discussed during the training.
 4. Distribute to and collect evaluation forms from each participant at training sessions.
 5. Other services as directed by State.

4. REPORTING

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. PROCESS FOR IMPLEMENTATION OF TECHNICAL ASSISTANCE.
STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)
6. SCHEDULE OF PERFORMANCE
Quarterly reports beginning the Quarter ending March 31, 2012, through April 31, 2012.

Quarterly Reporting Schedule

Date Due	Report
April 3	Narrative Progress and Jobs Report (Jan-Mar 2012)
April 30	Narrative Progress and Jobs Report (April 2012)

Task 3.a. Proposed Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
One week before training starts	Agenda/curriculum training materials received and approved
TBD	Task 3.a.5. [100 (est) binders/folders] materials for 600 (est) participants delivered to trainees (Task 3.a.5)
TBD	Proposed Training takes place Schedule Day 1: Travel to Hilo Day 2: Teach classes in Hilo, fly to Kauai Day 3: Teach classes in Kauai, fly to Maui Day 4: Teach classes in Maui, fly to Honolulu Day 6 & 7: Saturday, Sunday Day 8: President's Day-Teach class in Maui Day 9: Teach classes in Honolulu, Travel
One month after completion of training	Summary report of training

Deliverable dates for additional reports, analyses, and other items under Tasks 3.b. will be determined based on approvals from STATE.

7. DELIVERABLES AND PAYMENT SCHEDULE

DELIVERABLES IN ELECTRONIC AND HARD COPY

- a) Quarterly Narrative and Jobs reports during term of Task Order
- b) Deliverables for Code Training Tasks 3.a.1 through 3.a.6
 - (1) ~~[100 training binders/folders]~~ 600 sets of materials, including but not limited to power point [and other materials including] agenda, checklists, FAQ, and evaluation forms
 - (2) Five training courses (one each in Hilo, Kauai, Maui (2), Oahu)
 - (3) Summary report of training, including major issues discussed, an updated compilation of Frequently Asked Questions and answers, an updated checklist, summary of evaluations, recommendations for future training activities in Hawaii, copies of all materials presented/provided at the training sessions, and copies of individual evaluation forms.

8. PUBLICATIONS

a. You are encouraged to publish or otherwise make publicly available the results of the work conducted under this Task Order.

b. An acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy under Award Number DE-EE0000216

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government.. Neither the United States Government nor the State of Hawaii, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government, the State of Hawaii or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, the State of Hawaii or any agency thereof."

9. BUDGET

Spreadsheet attached.

10. SUBCONTRACTOR/CONSULTANT

InSynergy will use the following SUBCONTRACTOR to provide these services in this task order.

Hawaii Solar Energy Association, Attention: Christy Imata, P.O. Box 37070,
Honolulu, HI 96837, (808) 352-0587, christy@hsea.org

11. ATTACHMENTS

Budget

Consultant Certificate of Compliance, if applicable

BUDGET BY DOLLARS AND TASKS

Task Order 2.E, Amendment No. 1				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
SOLAR PHOTOVOLTAICS TRAINING				
HAWAII SOLAR ENERGY ASSOCIATION				
Develop 6 - 8 hr training session for building code officials				
Develop training manual and checklist for plan review, installation inspection, design require/options.				
Develop a Frequently Asked Questions (FAQ) document				
Present five one-day training sessions				
Bill Brooks, Brooks Engineering	5	Day	\$2,000.00	\$10,000.00
Coordinate training sessions				
Develop evaluation form for training sessions				
Prepare presentation [folders] materials for participants				
Summary Evaluation Report				
Staff, Hawaii Solar Energy Association	1	LS		\$3,444.00
Subtotal				\$13,444.00
State Excise Tax			0.04712	\$633.48
TOTAL NTE \$				\$14,077.48
Travel Costs (No multiplier)				
Airfare - Mainland/Hawaii	1	RT	\$1,000	\$1,000.00
Airfare - Interisland	6	Flight	\$200	\$1,200.00
Taxi	4	Day	\$100	\$400.00
Lodging	8	Day	\$200	\$1,600.00
Per Diem	8	Day	\$65	\$520.00
Materials, Printing	400	Ea	\$30	\$12,000.00
Refreshments -Seminar	100	Ea	\$10	\$1,000.00
Subtotal				\$17,720.00
Amendment No. 1				
Provide venue for Oahu training sessions.				
Room Rental (Hawaii Convention Center)	1	LS	\$1,500	\$1,500.00
Refreshments	1	LS	\$2,142	\$2,142.70
Audio/Visual Rental	1	LS	\$923	\$922.51
Special Event Insurance	1	LS	\$441	\$441.38
Subtotal				\$5,005.59
TOTAL NTE \$				\$36,803.07
REPORTING - INSYNERGY ENGINEERING, INC.				
Coordination - Engineer	4	Hour	\$113.70	\$454.80
Quarterly Narrative Report Preparation - Engineer	2	Hour	\$113.70	\$227.40
Accounts Payable - Finance	2	Hour	\$61.50	\$123.00
Subtotal				\$805.20
State Excise Tax			0.04712	\$37.94
TOTAL NTE \$				\$843.14
TOTAL NTE \$				\$37,646.21
TOTAL TASK ORDER NTE				\$38,000.00

BUDGET BY DOLLARS AND TASKS

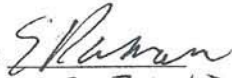
Task Order 2.E, Amendment No. 1				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
SOLAR PHOTOVOLTAICS TRAINING				
HAWAII SOLAR ENERGY ASSOCIATION				
Develop 6 - 8 hr training session for building code officials				
Develop training manual and checklist for plan review, installation inspection, design require/options.				
Develop a Frequently Asked Questions (FAQ) document				
Present five one-day training sessions				
<i>Bill Brooks, Brooks Engineering</i>	5	Day	\$2,000.00	\$10,000.00
Coordinate training sessions				
Develop evaluation form for training sessions				
Prepare presentation folders for participants				
Summary Evaluation Report				
<i>Staff, Hawaii Solar Energy Association</i>	1	LS		\$3,444.00
Subtotal				\$13,444.00
State Excise Tax			0.04712	\$633.48
TOTAL NTE \$				\$14,077.48
Travel Costs (No multiplier)				
Airfare - Mainland/Hawaii	1	RT	\$1,000	\$1,000.00
Airfare - Interisland	6	Flight	\$200	\$1,200.00
Taxi	4	Day	\$100	\$400.00
Lodging	8	Day	\$200	\$1,600.00
Per Diem	8	Day	\$65	\$520.00
Materials, Printing	400	Ea	\$30	\$12,000.00
Refreshments -Seminar	100	Ea	\$10	\$1,000.00
Subtotal				\$17,720.00
Amendment No. 1				
Provide venue for Oahu training sessions.				
Room Rental (Hawaii Convention Center)	1	LS	\$1,500	\$1,500.00
Refreshments	1	LS	\$2,142	\$2,141.70
Audio/Visual Rental	1	LS	\$923	\$922.51
Special Event Insurance	1	LS	\$441	\$441.38
Subtotal				\$5,005.59
TOTAL NTE \$				\$36,803.07
REPORTING - INSYNERGY ENGINEERING, INC.				
Coordination - Engineer	4	Hour	\$113.70	\$454.80
Quarterly Narrative Report Preparation - Engineer	2	Hour	\$113.70	\$227.40
Accounts Payable - Finance	2	Hour	\$61.50	\$123.00
Subtotal				\$805.20
State Excise Tax			0.04712	\$37.94
TOTAL NTE \$				\$843.14
TOTAL NTE \$				\$37,646.21
TOTAL TASK ORDER NTE				\$38,000.00

Task Order 2.F

Private Sector Technical Training Including Design Strategies to Implement IECC
2009 in Hawaii

Approved by:

Date:


12-20-12

**AMENDMENT 2
TO
TASK ORDER 2.F
PRIVATE SECTOR TECHNICAL TRAINING INCLUDING DESIGN STRATEGIES
TO IMPLEMENT IECC 2009 IN HAWAII**

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 2.F.

PERIOD OF PERFORMANCE OF TASK ORDER: through December 1520, 2012

BUDGET AMOUNT FOR TASK ORDER: ~~\$33,200.00~~ ~~\$35,834.00~~ **\$38,000.00**

DATE PROPOSED: ~~August 10, 2012, December 18, 2012,~~ **December 19, 2012**

PROJECT TITLE: PRIVATE SECTOR TECHNICAL TRAINING AND DESIGN STRATEGIES TO IMPLEMENT IECC 2009 IN HAWAII

1. TASK WORK STATEMENT

Statewide training focused on the private sector in Hawaii, and public sector as appropriate, on IECC 2009, under Task 2 of Contract No. 59499.

2. EXPECTED OUTCOMES

PROJECT GOAL: (1) Training on latest code elements as well as new code opportunities under IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), "State Energy Conservation Code," hereinafter HAR 3-181, for private sector design professionals, building professionals, and public sector officials statewide. (2) Training on Design Strategies for Code Compliance for private sector design professionals, building professionals, and public sector officials statewide.

PROJECT OBJECTIVES, INCLUDING METRICS

Metric is completion of

- a) Six (6) half-day technical training sessions on the Code in Oahu (2), Hilo, Kona, Kauai, Maui; distribution of training materials and evaluation.
- b) Six (6) one and one-half (1½) hour training course on Design Strategies for Code Compliance.; distribution of training materials and evaluation.

3. **PLANNED ACTIVITIES --WORKPLAN**

a) **Energy Code Training.** Provide services as follows:

- (1) Develop an agenda/curriculum, power point presentation, checklist, updated FAQs, an evaluation form, a copy of HAR 3-181, and other training materials for six, two (2) hour, power point presentations specifically for the private sector, on IECC 2009 and HAR 3-181 for approval by STATE. Submit to STATE for approval no later than two months prior to start of training.
- (2) Provide each participant at the training with a folder of materials including, but not limited to, materials described in paragraph a.1 above.
- (3) Present six 2hour training courses in accordance with the schedule and sites approved by STATE.
- (4) Following the training, submit for STATE approval
 - (a) an updated compilation of Frequently Asked Questions and Answers; and
 - (b) a Summary Evaluation Report on the training, including, but not limited to, major issues discussed; a summary of training evaluations; recommendations for future training activities in Hawaii; copies of all materials presented/provided at the training sessions; and copies of individual evaluation forms.

b) **Design Strategies for Code Compliance Training**

- (1) Develop an agenda/curriculum, power point presentation, an evaluation form, and other training materials for six (6), one and one half (1.5) hour training sessions on Design Strategies for Code Compliance for an air-conditioned residence and/or small commercial building. These design strategies will demonstrate compliance with the 2009 IECC and HAR 3-181. Submit to STATE for approval no later than two months prior to start of training.
- (2) Provide each participant at the training with a folder of materials including, but not limited to, materials described in paragraph b.1 above.
- (3) Present six (6) one and one half (1.5) hour training courses in accordance with the schedule and sites approved by STATE.
- (4) Following the training, submit for STATE approval
 - (a) a Summary Evaluation Report on the training, including, but not limited to, major issues discussed; a summary of training evaluations; recommendations for future training activities in Hawaii; copies of all materials presented/provided at the training sessions; and copies of individual evaluation forms.

c) **Other services as directed by STATE.**

- (1) Residential Stringency Analysis
- (2) NonResidential Stringency Analysis
- (3) As directed by DBEDT discuss analyses with PNNL
- (4) Revised FAQs based on results of training and log (which HW is maintaining)

4. **REPORTING AND CONTACT INFORMATION**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

Technical questions on the Task Order may be directed to Howard Wiig, DBEDT, telephone: 808.587-3811; email: hwiig@dbedt.hawaii.gov

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION OF TASK ORDER**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of various requirements by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

NOTE: HAWAII ENERGY may be providing media advertising, registration and venue services, including food and beverages, for the training in its service territories (Honolulu (2 sessions), Kona, Hilo, Maui) under a separate arrangement. Contact for Oahu, Maui, Hilo, Kona training is Malama Minn, Hawaii Energy, email: malama.minn@saic.com, phone: (808) 839-8869. Hawaii Energy will make a presentation as part of the training.

ISE will be providing similar services for the training on Kauai. Media advertising, registration and venue services, including food and beverages, for the training is not included. Contact for Kauai training is: Ron Darville, Building Division, County of Kauai.

6. **SCHEDULE OF PERFORMANCE**

Quarterly reports beginning the Quarter ending September 30, 2012 through December 20, 2012.

Quarterly Reporting Schedule

Date Due	Activity
2012	
October 3	Narrative Progress and Jobs Report (Aug-Sep 2012)
December 20	Narrative Progress and Jobs Report (Oct-Dec 15, 2012)

Task 3.a. Proposed Code Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
September 15	Draft Agenda/Curriculum
October 6	Final Agenda/Curriculum
November 1	Training materials received and approved
Nov 13-20	Binders/folders for participants delivered to trainees

Nov 13	Training takes place
Nov 14	Day 1: Oahu
Nov 15	Day 2: Oahu
Nov 16	Day 3: Kauai
Nov 17&18	Day 4: Maui
Nov 19	Day 5 and 6: Saturday/Sunday
Nov 20	Day 7: Hilo
Nov 21	Day 8: Kona
Nov 21	Day 9: Travel
December 14, 2012	Final report of training Final version of FAQs

Task 3.b. Proposed Design Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
September 10	Draft Agenda/Curriculum
October 6	Final Agenda/Curriculum
November 1	Training materials received and approved
Nov 13-20	Binders/folders for participants delivered to trainees
Nov 13	Training takes place
Nov 14	Day 1: Oahu
Nov 15	Day 2: Oahu
Nov 16	Day 3: Kauai
Nov 17&18	Day 4: Maui
Nov 19	Day 5 and 6: Saturday/Sunday
Nov 20	Day 7: Hilo
Nov 21	Day 8: Kona
Nov 21	Day 9: Travel
December 14, 2012	Final report of training

Deliverable dates for items under Task 3.d. will be determined based on approvals from STATE.

7. DELIVERABLES AND PAYMENT SCHEDULE

DELIVERABLES to 410 500 trainees

TRAINING BINDERS

- a) Agenda/Curriculum
- b) Revised FAQs
- c) Evaluation Form
- d) Private Sector Checklist
- e) HAR 3-181
- f) Power Point Presentation – on CD

DELIVERABLES to State

All deliverable materials will be provided in hard copy (2 copies) to STATE and on a compact disk (3 copies)

CODE

- (a) Six one-half day training courses
- (b) Training materials to attendees
- (c) Final report of training, including major issues discussed, a compilation of Frequently Asked Questions and answers, summary of evaluations, recommendations for future training activities in Hawaii, number of participants by venue, copies of all materials presented/provided at the training sessions, and copies of individual evaluation forms.
- (d) Final Version of Frequently Asked Questions (FAQs), incorporating design strategy FAQs.

DESIGN STRATEGIES FOR CODE COMPLIANCE

- (a) Six one and one-half (1 ½) hour training courses
- (b) Training materials to attendees (agenda/curriculum, power point presentation, an evaluation form, and other training materials related to design)
- (c) Final report of training, including major issues discussed, a compilation of Frequently Asked Questions and answers, summary of evaluations, recommendations for future training activities in Hawaii, number of participants by venue, copies of all materials presented/provided at the training sessions, and copies of individual evaluation forms.

8. BUDGET

Spreadsheet attached.

9. SUBCONTRACTOR/CONSULTANT

InSynergy will use the following SUBCONTRACTOR to provide these services in this task order.

Erik Kolderup, **Kolderup Consulting**, phone 415-531-5198; email: erik@kolderupconsulting.com; 704 Tennessee Street, San Francisco, CA 94107.

10. ATTACHMENTS

Budget

BUDGET BY DOLLARS AND TASKS.

AMENDMENT NO. 2

Task Order 3.F

Contract No.: 59499

KOLDERUP CONSULTING

	Qty	Unit	Rate	TOTAL COST
ENERGY CODE TRAINING				
Develop 2-1/2 hr training session agenda/curriculum Erik Kolderup	2	Hour	\$160.00	\$320.00
Develop PowerPoint presentation Erik Kolderup	8	Hour	\$160.00	\$1,280.00
Update checklist Erik Kolderup	1	Hour	\$160.00	\$160.00
Update FAQs Erik Kolderup	2	Hour	\$160.00	\$320.00
Develop evaluation form for training sessions Erik Kolderup	1	Hour	\$160.00	\$160.00
Prepare presentation folders for participants Erik Kolderup	4	Hour	\$160.00	\$640.00
Present six 1/2 day training sessions Erik Kolderup	24	Hour	\$160.00	\$3,840.00
Summary Evaluation Report Erik Kolderup	4	Hour	\$160.00	\$640.00
Subtotal	46	Hour		\$7,360.00
State Excise Tax			0.04712	\$346.80
TOTAL NTE \$				\$7,706.80
Reimbursable Costs (No multiplier)				
Airfare - San Francisco/Hawaii	1	RT	\$700	\$700.00
Airfare - Interisland	3	OW	\$200	\$600.00
Car Rental	9	Day	\$70	\$630.00
Lodging	9	Day	\$160	\$1,440.00
Per Diem	9	Day	\$50	\$450.00
Printing handouts	500	ea	\$2	\$750.00
TOTAL NTE \$				\$4,570.00
DESIGN STRATEGIES FOR CODE COMPLIANCE TRAINING				
Develop 1-1/2 hr training session agenda/curriculum Erik Kolderup	4	Hour	\$160.00	\$640.00
Develop PowerPoint presentation Erik Kolderup	24	Hour	\$160.00	\$3,840.00
Develop evaluation form for training sessions Erik Kolderup	1	Hour	\$160.00	\$160.00
Prepare presentation folders for participants Erik Kolderup	2	Hour	\$160.00	\$320.00
Present six 1.5 hour training sessions Erik Kolderup	24	Hour	\$160.00	\$3,840.00
Summary Evaluation Report Erik Kolderup	2	Hour	\$160.00	\$320.00
Subtotal	57	Hour		\$9,120.00
State Excise Tax			0.04712	\$429.73
TOTAL NTE \$				\$9,549.73
Reimbursable Costs (No multiplier)				
Printing handouts	450	ea	\$3	\$1,350.00
TOTAL NTE \$				\$1,350.00
OTHER SERVICES AS DIRECTED BY STATE				
Residential Stringency Analysis Erik Kolderup	24	Hour	\$160.00	\$3,840.00
NonResidential Stringency Analysis Erik Kolderup	8	Hour	\$160.00	\$1,280.00
As Directed Discuss with PNNL Erik Kolderup	8	Hour	\$160.00	\$1,280.00
Revised FAQs Erik Kolderup	4	Hour	\$160.00	\$640.00
Other as needed services Erik Kolderup	8	Hour	\$160.00	\$1,280.00
Subtotal	52	Hour		\$8,320.00
State Excise Tax			0.04712	\$392.04
TOTAL NTE \$				\$8,712.04
REPORTING				
Quarterly Narrative Report Preparation Erik Kolderup	1.5	Hour	\$160.00	\$240.00
Subtotal				\$240.00
State Excise Tax			0.04712	\$11.31
TOTAL NTE \$				\$251.31
TOTAL NTE \$				\$32,139.88
INSYNERGY ENGINEERING, INC.				
Coordination - Engineer	4	Hour	\$113.70	\$454.80
Quarterly Narrative Report Preparation - Engineer	2	Hour	\$113.70	\$227.40
Accounts Payable - Finance	4	Hour	\$61.50	\$246.00
Subtotal				\$928.20
State Excise Tax			0.04712	\$43.74
TOTAL NTE \$				\$971.94
AMENDMENT NO. 2				
Other as needed services Erik Kolderup	30	Hour	\$160.00	\$4,800.00
State Excise Tax			0.04712	\$226.18
TOTAL NTE \$				\$5,026.18
TOTAL NTE \$38,000			TOTAL TASK ORDER NTE	\$38,138.00

Task Order 2.G

Event Services for Code Training on Kauai

Approved by: Elkman
Date: 9-14-12

TASK ORDER 2.G
EVENT SERVICES FOR CODE TRAINING ON KAUAI

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 2.G.

PERIOD OF PERFORMANCE OF TASK ORDER: through November 15, 2012

BUDGET AMOUNT FOR TASK ORDER: \$3,500.00

DATE PROPOSED: September 10, 2012

PROJECT TITLE: EVENT SERVICES FOR CODE TRAINING ON KAUAI

1. **TASK WORK STATEMENT**

Event services support for November 15, 2012 training focused on the private sector in Kauai, and public sector as appropriate, on IECC 2009, under Task 2 of Contract No. 59499.

2. **EXPECTED OUTCOMES**

PROJECT GOAL: (1) Event services support for training on latest code elements as well as new code opportunities under IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), "State Energy Conservation Code," hereinafter HAR 3-181, for private sector design professionals, building professionals, and public sector officials statewide. (2) Event services support for training on Design Strategies for Code Compliance for private sector design professionals, building professionals, and public sector officials statewide.

PROJECT OBJECTIVES, INCLUDING METRICS

Metric is completion of

- a) One-half day technical training session on the Code in Kauai; distribution of training materials and evaluation.
- b) One -half day training session on Design Strategies for Code Compliance in Kauai; distribution of training materials and evaluation.

3. **PLANNED ACTIVITIES --WORKPLAN**

a) **Event Services Support.** Provide services as follows:

- (1) Arrange for lunch and beverages and audio visual as necessary (current agenda provides for meetings to start at 8:00 a.m. and end at 4:30 p.m.)

- (2) Marketing and communications for the events, including announcements, press releases and other media advice.
- (3) Registration Services :
 - (a) Registration for and announcement of the training via email blast and registration software.
 - (b) List of registrants for each event and list of participants at each event, including name, affiliation, telephone number, email address.
 - (c) Registration materials including name tags, sign-in sheets, other training materials.
 - (d) Man registration table for each event, ensure that all participants are signed in, hand out materials, and collect evaluation forms.

4. **REPORTING AND CONTACT INFORMATION**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager Liz Raman: eraman@dbedt.hawaii.gov, tel: 808-587-3806 DBEDT on-site contact is Howard Wiig, Tel: 808-587-3811; email: hwiig@dbedt.hawaii.gov.

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION OF TASK ORDER**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of various requirements by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

Quarterly reports beginning the Quarter ending September 30, 2012 through December 15, 2012

Quarterly Reporting Schedule

Date Due	Activity
2012	
October 3	Narrative Progress and Jobs Report (Sep 2012)
December 15	Narrative Progress and Jobs Report (Oct-Dec 15, 2012)

Task 3.a. Proposed Code Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
TBD	Draft press release, announcement, provided for DBEDT review
TBD	Announcement via email blast
November 1	Lunch and beverage budget and confirmation.
November 1	Audio visual rental confirmation.
November 1	Marketing and communication complete.

November 8	List of registrants submitted.
Nov 15	Training takes place Day 3: Kauai
Nov. 20	All evaluation forms and other deliverables submitted

Task 3.b. Proposed Design Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
November 1	Lunch and beverage budget and confirmation.
November 1	Audio visual rental confirmation.
November 1	Marketing and communication complete.
November 8	List of registrants.
Nov 15	Training takes place Day 3: Kauai
Nov. 20	All evaluation forms and other deliverables submitted

7. **DELIVERABLES AND PAYMENT SCHEDULE**
Narrative Progress and Jobs Report to be submitted according to the schedule in paragraph 6 above
8. **BUDGET**
Spreadsheet attached.
9. **SUBCONTRACTOR/CONSULTANT**
InSynergy will use the following SUBCONTRACTOR to provide these services in this task order.

Melinda Uohara, phone (808) 245-4648; email:Melinda@uohara.com.
10. **ATTACHMENTS**
Budget

BUDGET BY DOLLARS AND TASKS

Task Order 2.G				
Contract No.: 59499				
MELINDA UOHARA				
	Qty	Unit	Rate	TOTAL COST
EVENT SERVICES FOR ENERGY CODE TRAINING, KAUAI				
Coordinate lunch, beverages and audio visual support <i>Melinda Uohara</i>	4	Hour	\$30.00	\$120.00
Marketing and communications for event <i>Melinda Uohara</i>	20	Hour	\$30.00	\$600.00
Registration for event <i>Melinda Uohara</i>	8	Hour	\$30.00	\$240.00
Onsite event coordination <i>Melinda Uohara</i>	8	Hour	\$30.00	\$240.00
Subtotal	40	Hour		\$1,200.00
State Excise Tax			0.04712	\$56.54
TOTAL NTE \$				\$1,256.54
Reimbursable Costs (No multiplier)				
Food and Beverage	30	People	\$20	\$600.00
Registration Materials	1	LS	\$100	\$100.00
Audio Visual Rental	1	LS	\$400	\$400.00
Media Plan	1	LS	\$700	\$700.00
TOTAL NTE \$				\$1,800.00
INSYNERGY ENGINEERING, INC.				
REPORTING				
Coordination - Accounts Payable - Finance	2	Hour	\$61.50	\$123.00
Quarterly Narrative Report Preparation - Engineer	0.5	Hour	\$113.70	\$56.85
Accounts Payable - Finance	1	Hour	\$61.50	\$61.50
Subtotal				\$241.35
State Excise Tax			0.04712	\$11.37
TOTAL NTE \$				\$252.72
	TOTAL TASK ORDER NTE			\$3,309.27
	SAY			\$3,500.00

Task Order 2.H

Event Services for Code Training on Oahu, Maui, Hilo, and Kona

Approved by: 
Date: 12/11/12

AMENDMENT 1
TASK ORDER 2.H
EVENT SERVICES FOR CODE TRAINING ON OAHU, MAUI, HILO AND KONA

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 2.H.

PERIOD OF PERFORMANCE OF TASK ORDER: through ~~November 14, 2012~~, December 17, 2012

BUDGET AMOUNT FOR TASK ORDER: ~~\$6,400.00~~, \$6,550.00

DATE PROPOSED: ~~September 10, 2012~~, December 11, 2012

PROJECT TITLE: EVENT SERVICES FOR CODE TRAINING ON OAHU, MAUI, HILO AND KONA

1. **TASK WORK STATEMENT**

Event services support for November 13 - 20, 2012 training focused on the private sector in Oahu, Maui, Hilo, and Kona, and public sector as appropriate, on IECC 2009, under Task 2 of Contract No. 59499.

2. **EXPECTED OUTCOMES**

PROJECT GOAL: (1) Event services support for training on latest code elements as well as new code opportunities under IECC 2009 and Hawaii revisions to Chapter 181, Title 3, Hawaii Administrative Rules (HAR), "State Energy Conservation Code," hereinafter HAR 3-181, for private sector design professionals, building professionals, and public sector officials statewide. (2) Event services support for training on Design Strategies for Code Compliance for private sector design professionals, building professionals, and public sector officials statewide.

PROJECT OBJECTIVES, INCLUDING METRICS

Metric is completion of

- a) One half-day technical training session on the Code in Oahu, Maui, Hilo, and Kona; distribution of training materials and evaluation.
- b) One -half day hour training session on Design Strategies for Code Compliance in Oahu, Maui, Hilo, and Kona; distribution of training materials and evaluation.

3. **PLANNED ACTIVITIES --WORKPLAN**

a) **Event Services Support.** Provide services as follows:

- (1) Assist in marketing and communications for the events, including announcements, press releases and other media advice. DBEDT to provide copy.
- (2) Registration Services :
 - (a) Registration for and announcement of the training via email blast and registration software. Email list to be provided by DBEDT.
 - (b) Manage on-line registration system. Submit list of registrants for each event and list of participants at each event, including name, affiliation, telephone number, email address.
 - (c) Provide registration materials including name tags and sign-in sheets for two meetings on Oahu, one each on Maui, Hilo, and Kona. Training materials and agenda to be provided by DBEDT (Howard Wiig)
 - (d) Man registration table for two events on Oahu. Ensure that all participants are signed in, distribute badges, hand out materials, and collect sign in and evaluation forms.

3) **Participant and Mailing list preparation**

- (a) Prepare and submit to State an excel spreadsheet list of participants (including speakers) for the Code training events (Oahu 1, Oahu 2, Kauai, Hilo, Kona, Maui) and an inclusive worksheet summarizing/ listing all participants and speakers.
- (b) Prepare and submit to State an inclusive excel workbook/spreadsheet (s) of all people that were sent out notices to Statewide for the events, including additional addresses for the registrants for Oahu, Maui, Kauai, Hilo, Kona training, which would include first name, last name, business affiliation, mailing address, best contact telephone number, email address. This would be a cleaned-up spreadsheet that includes all of the addresses that notices were sent to (for example the Rebuild list, the code lists, etc) and any other lists that you used to send out notices as well as registrants and attendees at the session. The purpose is for us to have a current mailing list for future energy events. It may be necessary to develop the draft list and send out a test email to determine which addresses should be changed or eliminated

4. **REPORTING AND CONTACT INFORMATION**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager Liz Raman: eraman@dbedt.hawaii.gov, tel: 808-587-3806 DBEDT on-site contact is Howard Wiig, Tel 808-587-3811; email: hwiig@dbedt.hawaii.gov.

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION OF TASK ORDER**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of various requirements by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

Quarterly reports beginning the Quarter ending September 30, 2012 through December 15, 2012

Quarterly Reporting Schedule

Date Due	Activity
2012	
October 3	Narrative Progress and Jobs Report (Sep 2012)
December 15	Narrative Progress and Jobs Report (Oct-Dec 15, 2012)

Task 3.a. Proposed Code Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
TBD	Draft press release, announcement, provided for DBEDT reviewed
TBD	Announcement via email blast
November 1	Marketing and communication complete.
November 8	List of registrants, badges, sign in sheets for each event submitted to DBEDT.
Nov 13	Training takes place
Nov 14	Day 1: Oahu
Nov 15	Day 2: Oahu
Nov 16	Day 3: Kauai (By Task Order 2.G.)
Nov 17&18	Day 4: Maui
Nov 17&18	Day 5 and 6: Saturday/Sunday
Nov 19	Day 7: Hilo
Nov 20	Day 8: Kona

Task 3.b. Proposed Design Training Schedule (Actual dates to be determined)

Date Due	Activity
2012	
TBD	Draft press release, announcement, provided by DBEDT reviewed
TBD	Announcement via email blast
November 1	Marketing and communication complete.
November 8	List of registrants.
Nov 13	Training takes place
Nov 14	Day 1: Oahu
Nov 15	Day 2: Oahu
Nov 15	Day 3: Kauai (By Task Order 2.G.)

Nov 16	Day 4: Maui
Nov 17&18	Day 5 and 6: Saturday/Sunday
Nov 19	Day 7: Hilo
Nov 20	Day 8: Kona
Dec 3	All sign in sheets, registrations, evaluation, etc. submitted to DBEDT

7. **DELIVERABLES AND PAYMENT SCHEDULE**

Narrative Progress and Jobs Report to be submitted according to the schedule in paragraph 6 above

8. **BUDGET**

Spreadsheet attached.

9. **SUBCONTRACTOR/CONSULTANT**

InSynergy will use the following SUBCONTRACTOR to provide these services in this task order.

Lee-Ann Choy, Pacific Rim Concepts, LLC, phone 864-9812; email: prc@hawaii.biz

10. **ATTACHMENTS**

Budget

Task Order 3.A.1

Energy Savings Performance Contracting for DAGS

CSO V2
Amend
Task Order

Approved by: Approved Shuman
Date: 12-12-2012

AMENDMENT NO. 3
TO
TASK ORDER 3.A.1
FOR PROVIDING ENGINEERING SERVICES TO DAGS FOR ENERGY
SAVINGS PERFORMANCE CONTRACTING

CONTRACTOR'S NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 3.A.1, amend 1, amend 2

PERIOD OF PERFORMANCE OF TASK ORDER: through [April 30,
2012] December 20, 2012

BUDGET AMOUNT FOR TASK ORDER: \$90,000.00, \$66,000.00, \$54,540.00

DATE PROPOSED: [June 17, 2011] May 15, 2012 November 15, 2012, December
14, 2012

PROJECT TITLE: ENGINEERING SUPPORT FOR DAGS TO IMPLEMENT
ENERGY SAVINGS PERFORMANCE CONTRACTING (ESPC)

1. TASK WORK STATEMENT

Provide engineering support to the Department of Accounting and General Services (DAGS) to implement DAGS Facilities, Statewide, ESPC, Phase II Buildings project, under Task 3 of Contract No. 59499 for the following facilities:

LIST OF BUILDINGS INCLUDED IN DAGS PHASE II ESPC PROJECT:			
	Building Name	Island	Address
1	CSD Baseyard	Oahu	729 Kako'i Street
2	Hale Auhau	Oahu	425 Queen Street
3	Kakuhihewa	Oahu	601 Kamokila Boulevard
4	Kalanimoku (Data Center O	Oahu	1151 Punchbowl Street
5	Kamehameha V	Oahu	901 Bethel Street
6	Kaneohe Civic Center	Oahu	45-260 Waikalua Road
7	OR & L	Oahu	355 N. King Street
8	Wahiawa Civic Center	Oahu	910 California Avenue
9	Waipahu Civic Center	Oahu	94-275 Mokuola Street
10	Hilo State Office Building	Hawaii	75 Aupuni Street
11	Honokaa State Office Buildin	Hawaii	45-3380 Mamane Street
12	Keakealani State Office Buil	Hawaii	79-1020 Haukapila Street
13	Kona Civic Center (SOB 1, 2	Hawaii	82-6130 Mamalahoa Highway
14	Kulana Naauao	Hawaii	41 Keawe Street
15	North Kohala Civic Center B	Hawaii	54-3900 Govt Main Road
16	Naalehu State Office Buildin	Hawaii	95-5669 Mamalahoa Highway
17	Waimea State Office Buildin	Hawaii	67-5175 Kamamalu Street
18	Kauai DAGS Administration	Kauai	1680 Haleukana Street
19	Lihue Health Center & Anne	Kauai	3040 Umi Street
20	Lihue State Office Building	Kauai	3060 Eiwa Street
21	Lihue Courthouse (former)	Kauai	3059 Umi Street
22	Plant Industry Building	Kauai	4398A Pua Loke Street
23	Vector Control Building	Kauai	4398B Pua Loke Street
24	Kaunakakai Civic Center	Molokai	65 Makaena Place
25	DAGS Baseyard and Office	Maui	755 Mua Street
26	Department of Agricultural B	Maui	635 Mua Street
27	Department of Health Vector	Maui	641 Mua Street
28	Lahaina Comprehensive He	Maui	1830 Honoapiilani Highway
29	Wailuku Health Center	Maui	121 Mahalani Street
30	Wailuku State Office Buildin	Maui	54 High Street
31	Wailuku State Office Buildin	Maui	2264 Aupuni Street

2. EXPECTED OUTCOMES

PROJECT GOAL: Energy Services Agreement for DAGS Facilities, Statewide, ESPC, Phase II Buildings project

PROJECT OBJECTIVES, INCLUDING METRICS

Provide services as directed and prioritized by STATE to implement Energy Savings Performance Contracting statewide; including reporting metrics on projected jobs created and energy savings.

3. **PLANNED ACTIVITIES – WORKPLAN**

Provide engineering services to include, but not be limited to:

- a) Initial site visit to the buildings to familiarize ourselves with the facilities and to conduct our own assessment of feasible ECO's that could be implemented.
- b) Technical support for DAGS administration and staff during the review and evaluation of Technical Energy Assessment (TEA) documents that are submitted in response to the IFP solicitation process for the DAGS Facilities, Statewide, ESPC, Phase II Buildings project. Services include providing technical support if needed during ESCO oral interviews for the IFP solicitation process.
- c) Technical support for DAGS administration and staff in the review and evaluation of the Investment Grade Audit (IGA) report, annual energy savings cash flow model, reasonableness of cost estimates, and guaranteed energy savings agreement. Our effort includes one additional round of site visits with the selected contractor to assist in the development of the IGA proposal.

4. **REPORTING**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

Technical questions on the Task Order may be directed to Ralph Morita, DAGS, telephone: 808.586-0500; email: Ralph.i.morita@hawaii.gov.

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION.**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

- a) Quarterly reports beginning the Quarter ending June 30, 2011, through [April 31, 2012] December 20, 2012.

Quarterly Reporting Schedule

Date Due	Report
2011	
July 3	Narrative Progress and Jobs Report (Apr-Jun 2011)
October 3	Narrative Progress and Jobs Report (Jul-Sept 2011)
2012	
January 3	Narrative Progress and Jobs Report (Oct-Dec 2011)
April 3	Narrative Progress and Jobs Report (Jan-Mar 2012)
April 30 July 3	Narrative Progress and Jobs Report (<u>April-Jun 2012</u>)
<u>October 3</u>	<u>Narrative Progress and Jobs Report (July-Sept 2012)</u>
<u>December 31</u>	<u>Narrative Progress and Jobs Report (Oct-Dec 2012)</u>

b) Schedule for Tasks 3.a., 3.b. and 3.c.

Date Due	Activity
2011	
March – August	Task 3.a. Assist in IFP solicitation process; including field inspections of facilities
August	Task 3.b. Assist in evaluation of TEA, oral interviews; support IGA contract
November – December	Task 3.c. Review draft IGA report findings and determinations Review final IGA report.]
2012	
<u>May - November</u>	<u>Task 3.c. Review draft IGA report findings and determinations</u> <u>Review final IGA report</u>
<u>April December</u>	<u>All reports completed and submitted</u>

7. DELIVERABLES

- a) Quarterly reports from start of Task Order to ~~April~~ December 20, 2012.
- b) Written reports for Tasks 3.a., 3.b., and 3.c.
 - (1) field inspections
 - (2) review and evaluation of TEA
 - (3) evaluation of oral interviews
 - (4) review and evaluation of draft IGA
 - (5) review and evaluation of final IGA

8. BUDGET – attached as separate spreadsheet

Estimated engineering hours by Task (does include other types of hours or expenses)

AMENDMENT NO. 3

BUDGET BY DOLLARS AND TASKS

Revised Contract Amount: 57,620

Task Order 3.A.1				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
CONTRACTOR: InSynergy Engineering				
PRELIM IFP DEVELOPMENT				
Walk-Through				
Proj Mgr Mech Engr	24	Hour	\$153.90	\$3,693.60
Proj Mgr Elec Engr	0	Hour	\$153.90	\$0.00
Mechanical Engineer	48	Hour	\$113.70	\$5,457.60
Electrical Engineer	48	Hour	\$113.70	\$5,457.60
Subtotal				\$14,608.80
State Excise Tax			0.04712	\$688.37
TOTAL NTE \$15,300.00	120			\$15,297.17
INVITATION FOR PROPOSAL				
AUDIT PHASE				
RFI's, Addendums				
Proj Mgr Mech Engr	0	Hour	\$153.90	\$0.00
Proj Mgr Elec Engr	0	Hour	\$153.90	\$0.00
Mechanical Engineer	0	Hour	\$113.70	\$0.00
Electrical Engineer	0	Hour	\$113.70	\$0.00
Proposal Review				
Proj Mgr Mech Engr	28	Hour	\$153.90	\$4,309.20
Proj Mgr Elec Engr	0	Hour	\$153.90	\$0.00
Mechanical Engineer	0	Hour	\$113.70	\$0.00
Electrical Engineer	0	Hour	\$113.70	\$0.00
Subtotal				\$4,309.20
State Excise Tax			0.04712	\$203.05
TOTAL NTE \$4,500.00	28			\$4,512.25
INVESTMENT GRADE AUDIT				
PHASE				
Meetings, Walk-Through				
Proj Mgr Mech Engr	12	Hour	\$153.90	\$1,846.80
Proj Mgr Elec Engr	12	Hour	\$153.90	\$1,846.80
Mechanical Engineer	24	Hour	\$113.70	\$2,728.80
Electrical Engineer	24	Hour	\$113.70	\$2,728.80
RFI's, Addendums				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr	4	Hour	\$153.90	\$615.60
Mechanical Engineer	8	Hour	\$113.70	\$909.60
Electrical Engineer	8	Hour	\$113.70	\$909.60
Proposal Review				
Proj Mgr Mech Engr	20	Hour	\$153.90	\$3,078.00
Proj Mgr Elec Engr	20	Hour	\$153.90	\$3,078.00
Mechanical Engineer	40	Hour	\$113.70	\$4,548.00
Electrical Engineer	40	Hour	\$113.70	\$4,548.00
Subtotal				\$27,453.60
State Excise Tax			0.04712	\$1,293.61
TOTAL NTE \$28,800.00	144			\$28,747.21
REPORT/INVOICE PREPARATION				
Report Preparation/Invoice	8	Hour	\$113.70	\$909.60
Processing				
Subtotal				\$909.60
State Excise Tax			0.04712	\$42.86
TOTAL NTE \$660.00	8			\$952.46
REIMBURSABLE EXPENSES				
Airfare (Project Manager)	10	RT	\$200.00	\$2,000.00
Airfare (Mechanical Engineer)	10	RT	\$200.00	\$2,000.00
Airfare (Electrical Engineer)	10	RT	\$200.00	\$2,000.00
Car Rental	10	Trips	\$50.00	\$500.00
Airport Parking	30	Days	\$15.00	\$450.00
TOTAL NTE \$5,280.00				\$6,950.00
TOTAL TASK ORDER NTE				\$54,540.00

Task Order 3.B

Energy Savings Performance Contracting for the Department of Transportation-
Airports

Approved by: [Signature]
Date: 5/17/11

TASK ORDER 3.B
FOR PROVIDING ENGINEERING SERVICES TO THE DEPARTMENT OF
TRANSPORTATION-AIRPORTS FOR ENERGY SAVINGS PERFORMANCE
CONTRACTING

CONTRACTOR NAME AND ADDRESS:

InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813

CONTRACT NO. 59499

TASK ORDER NO.: 3.B.

PERIOD OF PERFORMANCE OF TASK ORDER: through April 30, 2012

BUDGET AMOUNT FOR TASK ORDER: \$90,000.00

DATE PROPOSED: May 16, 2011

PROJECT TITLE: ENGINEERING SUPPORT FOR DEPARTMENT OF
TRANSPORTATION-AIRPORTS (DOT-A) TO IMPLEMENT ENERGY
SAVINGS PERFORMANCE CONTRACTING (ESPC)

1. TASK WORK STATEMENT

Provide engineering support to the Department of Transportation-Airports (DOT-A) to implement a statewide ESPC for buildings, under Task 3 of Contract No. 59499 for the following airports: Honolulu International Airport, Kahalui Airport, Kapalua Airport, Hilo Airport, Kona Airport, Lihue Airport, and Molokai Airport

2. EXPECTED OUTCOMES

PROJECT GOAL: Energy Services Agreement for DOT-A Facilities, Statewide, ESPC, Statewide Buildings project

PROJECT OBJECTIVES, INCLUDING METRICS

Provide services as directed and prioritized by STATE to implement Energy Savings Performance Contracting statewide; including reporting metrics on projected jobs created and energy savings

3. PLANNED ACTIVITIES --WORKPLAN

Provide engineering services to include, but not be limited to:

- a) Technical support for DOT-A administration and staff during the Invitation for Proposals (IFP) solicitation process for the DOT-A Facilities, Statewide, ESPC, Buildings project. Services include

participating in scheduled field inspections of DOT-A facilities, Statewide, by interested Energy Services Companies (ESCOs) (if applicable/as needed).

- b) Technical support for DOT-A administration and staff during the review and evaluation of Technical Energy Assessment (TEA) documents that are submitted in response to the IFP solicitation process for the DOT-A Facilities, Statewide, ESPC, Phase II Buildings project. Services include providing technical support needed during ESCO oral interviews for the IFP solicitation process (if applicable/as needed).

4. **REPORTING**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

Technical questions on the Task Order may be directed to Jeff Chang, DOT-A, telephone: 808.838-8835; email: jeff.chang@hawaii.gov.

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION.**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

- a) Quarterly reports beginning the Quarter ending June 30, 2011, through April 31, 2012.

Quarterly Reporting Schedule

Date Due	Report
2011	
July 3	Narrative Progress and Jobs Report (Apr-Jun 2011)
October 3	Narrative Progress and Jobs Report (Jul-Sept 2011)
2012	
January 3	Narrative Progress and Jobs Report (Oct-Dec 2011)
April 3	Narrative Progress and Jobs Report (Jan-Mar 2012)
April 30	Narrative Progress and Jobs Report (April 2012)

b) Schedule for Tasks 3.a., 3.b. and 3.c.

Date Due	Activity
2011	
May – August	Task 3.a. Assist in IFP solicitation process; including field inspections of facilities
August	Task 3.b. Assist in evaluation of TEA, oral interviews; support IGA contract

c) Deliverable dates for additional reports, analyses, and other items under Tasks 3.d. will be determined based on approvals from STATE.

7. DELIVERABLES

- a) Quarterly reports from start of Task Order to April 30, 2012.
- b) Written reports for Tasks 3.a. and 3.b.
 - (1) field inspections
 - (2) review and evaluation of TEA
 - (3) evaluation of oral interviews

8. BUDGET—attached as separate spreadsheet

Estimated engineering hours by Task (does include other types of hours or expenses)

Task Order 3.B				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
CONTRACTOR - InSynergy Engineering				
PRELIM IFP DEVELOPMENT				
Meetings				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr	4	Hour	\$153.90	\$615.60
Mechanical Engineer	12	Hour	\$113.70	\$1,364.40
Electrical Engineer	12	Hour	\$113.70	\$1,364.40
Walk-Through				
Proj Mgr Mech Engr	28	Hour	\$153.90	\$4,309.20
Proj Mgr Elec Engr	28	Hour	\$153.90	\$4,309.20
Mechanical Engineer	56	Hour	\$113.70	\$6,367.20
Electrical Engineer	56	Hour	\$113.70	\$6,367.20
RFP Prep				
Proj Mgr Mech Engr	12	Hour	\$153.90	\$1,846.80
Proj Mgr Elec Engr	12	Hour	\$153.90	\$1,846.80
Mechanical Engineer	24	Hour	\$113.70	\$2,728.80
Electrical Engineer	24	Hour	\$113.70	\$2,728.80
Subtotal				\$34,464.00
State Excise Tax			0.04712	\$1,623.94
TOTAL NTE \$36,100.00	272			\$36,087.94
INVITATION FOR PROPOSAL AUDIT PHASE				
Meetings/Walk Thru				
Mechanical Engineer	104	Hour	\$113.70	\$11,824.80
Electrical Engineer	104	Hour	\$113.70	\$11,824.80
RFI's, Addendums				
Proj Mgr Mech Engr	4	Hour	\$153.90	\$615.60
Proj Mgr Elec Engr	4	Hour	\$153.90	\$615.60
Mechanical Engineer	14	Hour	\$113.70	\$1,591.80
Electrical Engineer	14	Hour	\$113.70	\$1,591.80
Proposal Review				
Proj Mgr Mech Engr	20	Hour	\$153.90	\$3,078.00
Proj Mgr Elec Engr	20	Hour	\$153.90	\$3,078.00
Mechanical Engineer	40	Hour	\$113.70	\$4,548.00

Electrical Engineer	40	Hour	\$113.70	\$4,548.00
Subtotal				\$43,316.40
State Excise Tax			0.04712	\$2,041.07
TOTAL NTE \$45,400.00	364			\$45,357.47
REPORT/INVOICE PREPARATION				
Report Preparation/Invoice Processing	8	Hour	\$113.70	\$909.60
Subtotal				\$909.60
State Excise Tax			0.04712	\$42.86
TOTAL NTE \$1,000.00				\$952.46
REIMBURSABLE EXPENSES				
Airfare (Project Manager)	6	RT	\$200.00	\$1,200.00
Airfare (Mechanical Engineer)	16	RT	\$200.00	\$3,200.00
Airfare (Electrical Engineer)	16	RT	\$200.00	\$3,200.00
Airport Parking	38	Days	\$15.00	\$570.00
TOTAL NTE \$8,200.00				\$8,170.00
	TOTAL TASK ORDER NTE			\$90,000.00

Task Order 9.A

Energy Savings Performance Contracting

Approved by: 

Date: 6/6/12

AMENDMENT NO. ~~2~~ 3**TO****TASK ORDER 9.A****FOR PROVIDING TECHNICAL ASSISTANCE FOR ENERGY EFFICIENCY AND RENEWABLE
ENERGY--ENERGY SAVINGS PERFORMANCE CONTRACTING****CONTRACTOR'S NAME AND ADDRESS:**InSynergy Engineering, Inc.
828 Fort Street Mall, Suite 500
Honolulu, Hawaii 96813**CONTRACT NO. 59499****TASK ORDER NO.: 9.A.****PERIOD OF PERFORMANCE OF TASK ORDER: through [April 30, 2012]****[May 31, 2012] December 20, 2012****BUDGET AMOUNT FOR TASK ORDER: \$~~[10,000.00]~~ ~~[\$33,800]~~ \$ 73,000.00****\$10,000 Base Amount****\$23,800 Amendment No.1****\$39,200 Amendment No. 3****DATE PROPOSED: [January 31, 2011] [October 12, 2011], [May 15, 2012]****May 31, 2012****PROJECT TITLE: TECHNICAL ASSISTANCE FOR ENERGY PERFORMANCE CONTRACTING****1. CONTRACT TASK WORK STATEMENT**Provide technical assistance for energy efficiency and renewable energy,
with an emphasis on Energy Savings Performance Contracting.**2. EXPECTED OUTCOMES****PROJECT GOAL:** Assist State and County agencies with Energy Savings
Performance Contracting**PROJECT OBJECTIVES, INCLUDING METRICS**Provide services as directed and prioritized by STATE to implement Energy
Savings Performance Contracting in selected entities; including reporting
metrics on projected jobs created and energy savings achieved**3. PLANNED ACTIVITIES --WORKPLAN Provide services**

to include, but not be limited to:

- a) Ongoing assistance and support services including, but not limited to,
updating EPC program procedures and documentation, participating in
annual reconciliation reviews; providing educational/technical training

services as requested; and preparing educational materials, policy issue papers, and detailed technical input on specific issues.

- (1) Provide technical assistance to the City and County of Honolulu, Department of Environmental Services.
 - i. Review proposed RFQIRFP for the Kailua WWTP ESPC.
 - ii. Review responses to the RFQ.
 - iii. Review and evaluate Best and Final Offers (BAFO).
 - iv. Answer review and technical and process questions, attend briefings, and provide copies of reviews, analyses, and other documents related to the project.

Amendment 3

- v. Kailua ESPC—Review, comment, and advise on IGA Contract, IGA Report, and Guaranteed Energy Savings Contract. Participate in discussions with selected contractor on Energy Conservation Measures, Co-gen, and other related issues.
- vi. Honouliuli ESPC—Review, comment, and advise on invitation for Proposal, Addendums, Offeror Proposals, Offeror Clarifications, Best and Final Offers, and IGA Contract. Participate in discussions on ECMs, Co-gen, and other related issues.

Technical questions on this amendment may be directed to David Nagamine, City and County of Honolulu, Department of Environmental Services, telephone: 808.768.3472; email: dnagamine@honolulu.gov

- (2) Provide technical assistance to the State of Hawaii, Department of Transportation, Airports, Highways, and Harbors Divisions, for their Performance Contract Project.
 - i. Review proposals, prepare questions, and participate in the oral interviews
 - ii. Review, analyze, and evaluate ESCO's answers to questions.
 - iii. Provide technical input on DDC system design for airport.
 - iv. Provide phone training/meetings for DOT staff.
 - v. Provide power points and other training materials and responses to questions from agencies.
 - vi. Provide copies of review, analysis, questions, and summaries of oral interviews and discussions with evaluation panel and DOT.

Amendment 3

- vii. Provide technical review and evaluation of the Investment Grade Audit report, annual energy savings cash flow model, and reasonableness of cost estimates and guaranteed energy savings agreement, M&V Plan, and financing agreement.
- viii. Provide copies of review, analysis, responses to questions, and other information to DOT.

Technical questions on this amendment may be directed to Jeff Chang, State of Hawaii, Department of Transportation, Airports Division, telephone: 808.838.8835; email: Jeff Chang/AIRIHIDOT@STATEHIUS

b) Provide other services as directed by STATE.

4. **REPORTING**

CONTRACTOR/SUBCONTRACTOR will keep STATE informed by email of any activities under this project and will copy DBEDT Project Manager email: eraman@dbedt.hawaii.gov by email).

CONTRACTOR will submit quarterly narrative reports no later than 3 calendar days following the end of the quarter to STATE in a format approved by STATE.

5. **PROCESS FOR IMPLEMENTATION.**

STATE will notify CONTRACTOR, or CONTRACTOR will notify STATE, of need for technical assistance by email. CONTRACTOR will obtain approval to proceed from STATE. (This shall be accomplished by email.)

6. **SCHEDULE OF PERFORMANCE**

- a) Quarterly reports beginning the Quarter ending March 31, 2011 through ~~April 31, 2012~~ ~~May 31, 2012~~ **December 20, 2012.**

Quarterly Reporting Schedule

Date Due	Report
2011 April 3	Narrative Progress and Jobs Report (Jan-Mar 2011)
July 3	Narrative Progress and Jobs Report (Apr-Jun 2011)
October 3	Narrative Progress and Jobs Report (Jul-Sept 2011)
2012	
January 3	Narrative Progress and Jobs Report (Oct-Dec 2011)
April 3	Narrative Progress and Jobs Report (Jan-Mar 2012)
[May 3] - [April 30] [May 31]	[Narrative Progress and Jobs Report] - [(April 2012)]
<u>July 3</u>	<u>Narrative Progress and Jobs Report (Apr-Jun 2012)</u>
<u>October 3</u>	<u>Narrative Progress and Jobs Report (Jul-Sept 2012)</u>
<u>December 20</u>	<u>Narrative Progress and Jobs Report (Oct-Dec 20 2012)</u>

- b) See Task 3.a.(1) Technical Assistance to City & County of Honolulu, Department of Environmental Services (Actual Dates to be Determined)

Date Due	Report
[2011-2012 October-[April]-[May]] <u>2011-2012 October2011-December 2012</u>	Briefing, Training Reports, and other documents in accordance with Task 3.a.(1) [(1)-iv] <u>i-vi.</u>

- c) See Task 3.a.(2) Technical Assistance to State of Hawaii, Department of Transportation, Airports Division (Actual dates to be determined)

Date Due	Report
[2011-2012 October-[April]-[May]] <u>2011-2012 October2011-December 2012</u>	Briefing, Training Reports, and other documents in accordance with Task 3.a. (2) i-iv <u>i-viii.</u>

- d) Deliverable dates for additional reports, analyses, and other items under Tasks 3.a and 3.b will be determined based on approvals from STATE.

7. DELIVERABLES

- a) Quarterly reports from start of Task Order to ~~[April 30, 2012]~~ **December 20, 2012.**
- b) Scope, deliverables, and schedules ~~[will be determined]~~ as are stated in Schedule of Performance for Tasks 3.a.(1) and 3.a. (2).
- c) Scope, deliverables, and schedules will be determined for Task 3.b.

THE FOLLOWING INFORMATION SHOULD BE PROVIDED ON THE ATTACHED SPREADSHEET. The Timesheet format is to be used for reporting quarterly jobs for CONTRACTOR/SUBCONTRACTOR.

8. BUDGET DOLLARS AND DETAILS BY TASK
Attached is a budget by dollars and task.

BUDGET BY DOLLARS AND TASKS

Task Order 9.A, <u>Amendment No. 3</u>				
Contract No.: 59499				
	Qty	Unit	Rate	TOTAL COST
CONTRACTOR - InSynergy Engineeringing				
Review/Report/Invoice Processing - Engineer	12.5	Hour	\$113.70	\$1,421.25
Review/Report/Invoice Processing - Admin	12	Hour	\$54.90	\$658.80
Subtotal				\$2,080.05
State Excise Tax			0.04712	\$98.01
TOTAL, CONTRACTOR, NTE \$2,200.00				\$2,178.06
<u>Amendment No. 3</u>				
<u>Additional manhours for extension of task order:</u>				
<u>Review/Report/Invoice Processing - Engineer</u>	<u>12</u>	<u>Hour</u>	<u>\$113.70</u>	<u>\$1,364.40</u>
<u>Review/Report/Invoice Processing - Admin</u>	<u>12</u>	<u>Hour</u>	<u>\$54.90</u>	<u>\$658.80</u>
<u>Subtotal</u>				<u>\$2,023.20</u>
<u>State Excise Tax</u>			<u>0.04712</u>	<u>\$95.33</u>
<u>TOTAL AMENDMENT 3, CONTRACTOR, NTE \$2,200.00</u>				<u>\$2,118.53</u>
<u>TOTAL, CONTRACTOR THROUGH AMENDMENT 3</u>			<u>NTE</u>	<u>\$4,400.00</u>
SUBCONTRACTOR - Synchronous Energy Systems, Inc.				
Technical Assistance - City and County of Honolulu, Wastewater Division, RFQ/RFP Review, Initial RFQ Review	35	Hour	\$125.00	\$4,375.00
Report Preparation, BAFO Review and Evaluation	30	Hour	\$125.00	\$3,750.00
Answer Technical and Process Questions	20	Hour	\$125.00	\$2,500.00
Subtotal				\$10,625.00
State Excise Tax			0.04712	\$500.65
Subtotal				\$11,125.65
Amendment No. 1				
Technical Assistance - Department of Transportation, Airports Division, Proposal Review and Analysis of Answers to Questions; participate in oral interviews	50	Hour	\$125.00	\$6,250.00
Phone Trainings/Meetings for Airports/Harbors/DOT	50	Hour	\$125.00	\$6,250.00
Provide technical input on DDC system design for	16	Hour	\$125.00	\$2,000.00
Subtotal				\$14,500.00
State Excise Tax			0.04712	\$683.24
Subtotal				\$15,183.24
Reimbursable Expenses				
Per Diem	12	Day	55	\$660.00
Round Trip Airfare	2	Trip	1100	\$2,200.00
Ground Transportation	4	Trip	50	\$200.00
Ground Transportation	12	Trip	30	\$360.00

Additional Lodging Expense	12	Day	150	\$1,800.00
Subtotal				\$5,220.00
TOTAL AMENDMENT 1, SUBCONTRACTOR, NTE \$31,600.00				\$31,528.89
<u>Amendment No. 3</u>				
<u>Additional Technical Assistance - City and County of Honolulu, Wastewater Division:</u>				
<u>Kailua ESPC - Review, comment and advise on IGA Contract, IGA Report and Guaranteed Energy Savings Contract. Partidpate in discussions with selected contractors on ECM, Co-gen, and related issues.</u>	<u>110</u>	<u>Hour</u>	<u>\$125.00</u>	<u>\$13,750.00</u>
<u>Honouliuli ESPC - Review, comment, and advise on IFP, Addendums, Offeror Proposals, Offeror Clarifications, Best and Final Offers, and IGA Contract. Partidpate in discussions on ECM, Co-gen, and related issues.</u>	<u>90</u>	<u>Hour</u>	<u>\$125.00</u>	<u>\$11,250.00</u>
<u>Subtotal</u>				<u>\$25,000.00</u>
<u>State Excise Tax</u>			<u>0.04712</u>	<u>\$1,178.00</u>
<u>Subtotal</u>				<u>\$26,178.00</u>
<u>Additional Technical Assistance - State of Hawaii, Department of Transportation:</u>				
<u>Provide technical review and evaluation of the IGA report, annual energy savings cash flow model, and reasonableness of cost estimates and guaranteed energy savings agreement, M&V Plan, and financing agreement. Provide copies of review, analysis, responses to questions, and other information.</u>	<u>80</u>	<u>Hour</u>	<u>\$125.00</u>	<u>\$10,000.00</u>
<u>Subtotal</u>				<u>\$10,000.00</u>
<u>State Excise Tax</u>			<u>0.04712</u>	<u>\$471.20</u>
<u>Subtotal</u>				<u>\$10,471.20</u>
<u>TOTAL AMEND 3, SUBCONTRACTOR, NTE \$37,000.00</u>				<u>\$36,649.20</u>
<u>TOTAL, SUBCONTRACTOR THROUGH AMEND 3</u>				<u>\$68,178.09</u>
<u>TOTAL, THROUGH AMENDMENT 3</u>				<u>\$72,578.09</u>
TOTAL, TASK ORDER NTE			\$ 33,800.00	<u>\$ 73,000.00</u>