

# COMMUNITY HOUSING PARTNERS

WV Office of Economic Opportunity  
RFQ GOE022014 for Three Trainings  
May 27th, 2014 1:30 p.m. Eastern Time



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Solicitation**

NUMBER
GOE012014

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
BETH COLLINS 304-558-2157

RFQ COPY

VENDOR

TYPE NAME/ADDRESS HERE  
*CHP Energy Solutions*  
*550 Industrial Dr.*  
*Christiansburg, VA 24073*

SHIP TO

GOVERNORS OFFICE OF ECONOMIC OPPORTUNITY  
 950 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25301 304-558-8860

DATE PRINTED
04/30/2014

BID OPENING DATE: 05/22/2014 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		924-35		
IN-SERVICE TRAINING						
REQUEST FOR QUOTATION (RFQ)						
THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, OFFICE OF ECONOMIC OPPORTUNITY, IS SOLICITING BIDS FOR TWO (2) REFRESHER COURSES AND RETESTING PER THE ATTACHED SPECIFICATIONS.						
***** THIS IS THE END OF RFQ GOE012014 ***** TOTAL:						

SIGNATURE <i>[Signature]</i>	TELEPHONE 540-382-2002	DATE 5/22/14
TITLE <i>[Signature]</i>	FEIN 54102 3025	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia  
Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

# Solicitation

NUMBER
GOE022014

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
BETH COLLINS 304-558-2157

RFQ COPY

TYPE NAME/ADDRESS HERE

*CHP Energy Solutions  
550 Industrial Drive  
Christiansburg, VA 24073*

VENDOR

GOVERNORS OFFICE OF ECONOMIC OPPORTUNITY

950 KANAWHA BOULEVARD, EAST  
CHARLESTON, WV  
25301 304-558-8860

DATE PRINTED
05/15/2014

BID OPENING DATE: 05/27/2014

BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO.01						
THIS ADDENDUM IS ISSUED TO MODIFY THE ORIGINAL SOLICITATION PER THE ATTACHED DOCUMENTATION.						
0001	1	LS		924-35		
IN-SERVICE TRAINING						
***** THIS IS THE END OF RFQ GOE022014 ***** TOTAL:						

SIGNATURE <i>[Signature]</i>	TELEPHONE 540-382-2002	DATE 5/22/14
TITLE CAO	FEIN 541023025	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

**SOLICITATION NUMBER: GOE022014**  
**Addendum Number: 01**

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The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

**Applicable Addendum Category:**

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

**Description of Modification to Solicitation:**

This addendum is issued to provide answers to vendor submitted questions as well as clarifications.

The bid opening date will change to May 27, 2014 at 1:30 PM, EST.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

**Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.





## Technical Questions and Clarifications for GOE022014

3.1.1.3 – Reads as “Vendor must purchase and provide to Office of Economic Opportunity, hard copy certificates for each participant who earned one, within 30 calendar days after the completion of each training.

- **Should be deleted because Building Performance Institute administers the certificates after tests are sent in for grading, etc.**

3.1.2.4 – Reads as “Training and testing must occur within the same week.”

- **Should read as “Testing will preferably occur in the next week following the training.”**

✓ Jones

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.:**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

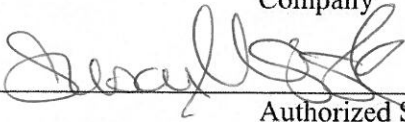
**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |                                     |                |                          |                 |
|-------------------------------------|----------------|--------------------------|-----------------|
| <input checked="" type="checkbox"/> | Addendum No. 1 | <input type="checkbox"/> | Addendum No. 6  |
| <input type="checkbox"/>            | Addendum No. 2 | <input type="checkbox"/> | Addendum No. 7  |
| <input type="checkbox"/>            | Addendum No. 3 | <input type="checkbox"/> | Addendum No. 8  |
| <input type="checkbox"/>            | Addendum No. 4 | <input type="checkbox"/> | Addendum No. 9  |
| <input type="checkbox"/>            | Addendum No. 5 | <input type="checkbox"/> | Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

CHP Energy Solutions  
Company

  
Authorized Signature

5-22-14  
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.



# Training Services Agreement Between

**CHP Energy Solutions Research and Training**

**&**

**The State of WV- Office of Economic Opportunity**

## *History –*

CHP Energy Solutions is an Interstate Renewable Energy Council (IREC) Accredited Training Provider™ for its Quality Control Inspector, Energy Auditor, Crew Leader, and Retrofit Installer Technician courses.

In June 2012, CHP Energy Solutions became the first training center in the nation to obtain IREC accreditation for an energy efficiency program. The training center earned this distinction for its Retrofit Installer Technician course.

Subsequently, in May 2013, CHP Energy Solutions became an IREC Accredited Training Provider™ for its Quality Control Inspector and Energy Auditor training programs, and in December 2013, it earned IREC accreditation for its Crew Leader training program.

CHP Energy Solutions has delivered its Quality Control Inspector course since November 2012. It has delivered its Energy Auditor course since May 2012, its Crew Leader course since April 2013, and its Retrofit Installer Technician course since October 2011.

CHP Energy Solutions has also licensed its Quality Control Inspector curriculum to the Building Performance Center, which became IREC accredited in December 2013 using this curriculum.

## **CHP Energy Solutions Services:**

### *Training Center -*

In addition to our experience as a WAP provider, CHP is also home to a nationally-renowned energy training center – CHP Energy Solutions Research and Training, formerly the New River Center for Energy Research and Training (NRCERT). Since 1999, CHP Energy Solutions Research and Training (CHP) has trained over 30,000 participants in building science and energy conservation techniques in over 40 states across the United States.



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## RFQ GOE022014 Proposed Services Response:

CHP Energy Solutions has been an IREC accredited training center since June 2012 (See attached certificates). The training center is fully prepared to offer QCI and EA courses and testing for up to 10 students in each class, and Heating System Fundamentals for 12 students in 2 separate classes. All students will need to register for the appropriate classes within CHP Energy Solutions' Learning Management System (LMS) <https://lms.chplearning.org> .

For the QCI and EA courses the students must meet the following:

- a. Pre-test for each student, administered through CHP Energy Solutions' Learning Management System (LMS)
  - i. Passing score for pre-test is 80%
  - ii. Those that fail the pre-test are **required** to take the online course and pass it with an 80%, before being enrolled in the full week course
- b. Registration support through CHP Energy Solutions' LMS
- c. Free access to the Online QCI and or EA courses to all that want access as prep for the in person course
- d. Ongoing LMS and Training support for the students.

***\*\*\* All students taking either the EA, QCI or Heating Systems Fundamentals courses will receive complimentary the equivalent online course as prep for the in person course corresponding to the class that they are taking. These courses are great review material and our students that take these before attending the week long courses have consistently performed better.***

### The following are responses to RFQ GOE022014 requirements:

**3.1.1.1** CHP Energy Solutions is fully capable and prepared to provide all three trainings at the Ghent, WV training center.

**3.1.1.2** CHP Energy Solutions provides all of its students with binders full of power point slides, reference documents, the JTAs associated with the course, BPI field guides for studying, and many other resources. Each student also has access to quizzes and pre-tests to prepare them for the BPI exams.

**3.1.1.3** Has been deleted per addendum 1.

**3.1.1.4** All costs have been included in the outlined costs listed in the pricing sheet. CHP Energy Solutions understands that it is responsible for all travel, lodging and meals for its trainers while performing training at the Ghent, WV training center.

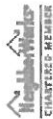
**3.1.1.5** All costs have been included in the outlined costs listed in the pricing sheet. CHP Energy Solutions understands that it is responsible for all travel, lodging and meals for its trainers while performing training at the Ghent, WV training center



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**Class # 1- Quality Control Inspector Course**

**3.1.2.1** No response needed.

**3.1.2.2** CHP Energy Solutions is prepared to provide training and testing for a maximum of 10 students for QCI.

**3.1.2.3** CHP Energy Solutions' QCI course is 5 days in length. The fifth day includes CHP Energy Solutions' written and field exams per our IREC accreditation. Our curriculum includes materials that directly align with the Job Task Analyses (JTAs) outlined by the DOE. All of our courses are imbedded with videos and the **students have the option to take the online course for free** before attending the in person class as additional prep and instruction. The students are given IPADS to use during the week that have instruction videos on them for studying in the evening. Quizzes are used throughout the course and a final test at the end of each week to assess knowledge, completion of the course and readiness to sit for the national BPI exams.

The agenda is include here:

**Monday**

- 8:00-9:00 Introductions, Course Outline, Tour (If Needed)
- 9:00-12:00 What is a QCI, Basic Documents, Inspecting Work In-Progress, Safety, Worker Professionalism (Communication)
- 12:00-12:45 Lunch
- 12:45-5:00 Address Work Problems, House as a System, Basic Building Science

**Tuesday**

- 8:00-12:00 Basic Building Science (Air Movement), Driving Forces of Air Leakage, Stack-o Lator Experiment
- 12:00-12:45 Lunch
- 12:45-5:00 Insulation Types, Construction Types, Exterior Visual Assessment, Interior Visual Assessment, Math Basics

**Wednesday**

- 8:00-12:00 Windows and Doors, Sidewall Inspection, Basement/Crawl Assessments, Attic Inspection, Knee-walls
- 12:00-12:45 Lunch
- 12:45-3:00 Knee-walls, Attic Fire Hazards, Attic Inspection Electrical, Attic Insulation, Attic Mechanicals, Attic Venting
- 3:00-5:00 Blower Door Testing (Review Power Points, Then Go to Lab)

**Thursday**

- 8:00-12:00 Duct Leakage Testing (Review Power Points, Then Go to Lab)
- 12:00-12:45 Lunch
- 12:45-5:00 Combustion Safety Testing (Review Power Points, Then Go to Lab)



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**Friday**

8:00-9:30

ASHRAE 62.2 Review

9:30-5:00

CHP Energy Solutions Written and Field Testing (to verify passing of Preparatory course, and offers feedback before taking the national exam)

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**3.1.2.4** CHP Energy Solutions is prepared to offer the testing for the national exams the following week after training. Times and dates will be coordinated with the WV office of Economic Opportunity.

**3.1.2.5** CHP Energy Solutions is prepared and capable of completing the necessary training and testing by September 30, 2014.

**3.1.2.6** CHP Energy Solutions has included in this RFQ its' IREC accredited certificates.

**3.1.2.7** CHP Energy Solutions is prepared to help students with questions and or instructions to assist with their BPI application process so that they are approved to sit for the courses and exams.

**3.1.2.8** CHP Energy Solutions understands that the training will be held at the Ghent, WV training center and that the New River Community and Technical College will provide classroom, computers and other associated equipment for the purpose of providing classroom instruction and testing.

**3.1.2.9** CHP Energy Solutions understands that the Office of Economic Opportunity will arrange for a site built house which meets the necessary requirements for the field training and testing. CHP Energy Solutions will need to verify that the house meets these requirements and will submit for the Office of Economic Opportunity the necessary paperwork to BPI to have this or other houses approved for and given an I.D. # for testing.

**3.1.2.10** CHP Energy Solutions will provide any additional props, equipment, technical support, materials, and supplies required for training and or testing, that are not mentioned in 3.1.1.8.





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**Class # 2- Energy Auditor Course**

**3.1.3.1** No response needed.

**3.1.3.2** CHP Energy Solutions is prepared to provide training and testing for a maximum of 10 students for Energy Auditor.

**3.1.3.3** CHP Energy Solutions’ Energy Auditor course is two weeks in length totaling over 45 hours. It includes materials that directly align with the Job Task Analyses (JTAs) outlined by the DOE. All of our courses are imbedded with videos and the **students have the option to take the online course for free** before attending the in person class as additional prep and instruction. The students are given IPADS to use during the week that have instruction videos on them for studying in the evening. Quizzes are used throughout the course and a final test at the end of each week to assess knowledge, completion of the course and readiness to sit for the national BPI exams.

The agenda is included here:

**Week 1.**

**Monday**

1:00-1:30	Welcome and Introductions (Pictures, Hats, Lunches, Instructions)
1:30-2:00	Review Syllabus & Course Expectations
2:00-2:30	Tour Facility
2:30-2:45	Break
2:45-4:00	Why We Work on Heating Systems
4:00-4:15	Break
4:15-5:00	Diagnostic Testing, Water Heating Diagnostics

**Tuesday**

8:30-10:00	Review Heating Units (Lab) Clock Gas Meter
10:00-10:15	Break
10:15-12:00	Vented Wall Heaters, Package Units, Gas Cook Stoves
12:00-12:45	Lunch
12:45-2:00	Measuring System Efficiency, Combustion Safety – Basics
2:00-2:15	Break
2:15-3:30	Combustion Safety – Testing
3:30-3:45	Break
3:45-5:00	Pressure House Demonstration

**Wednesday**

8:30-10:00	Combustion Safety Review
10:00-10:15	Break
10:15-12:00	Test SSE on Units (Lab)
12:00-12:45	Lunch
12:45-1:15	Combustion Air
1:15-2:00	Calculate Combustion Air (Lab)
2:00-3:00	Worst Case Depressurization Test (CAZ)
3:00-5:00	Demonstration of CAZ Test (Lab)

**Thursday**





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- 8:30-12:00 Break into groups and practice CAZ testing and Combustion Diagnostics (Lab)
- 12:00-12:45 Lunch
- 12:45-1:15 Duct Diagnostics
- 1:15-3:15 Duct Blaster Demo- Duct Tester Demo- Dominant Duct/Room to Room Pressures (Lab)
- 3:15-5:00 In groups practice Duct Blaster

**Friday**

- 8:30-10:00 ASHRAE 62.2 – Standards, ASHRAE 62.2 – Calculations
- 10:00-10:15 Break
- 10:15-11:00 ASHRAE 62.2 – Exhaust Fans
- 11:00-12:00 Measuring Exhaust Flow (Lab)
- 12:00-12:45 Lunch
- 12:45-5:00 BPI Review, Practice and Test-Out if Comfortable (Students can test-out during the second week if they choose)

**Week 2.**

**Monday**

- 8:30-9:00 Welcome and Introductions (Pictures, Hats, Lunches, Instructions)
- 9:00-9:30 Course Outline, Tour (If Needed)
- 9:30-10:30 Why we do Energy Audits, Client Interaction, Deferrals
- 10:30-10:45 Break
- 10:30-12:00 Base load, Utility Bill Summary
- 12:00-12:45 Lunch
- 12:45-1:45 Safety
- 1:45-5:00 House as a System, Building Science including Insulation and Construction Types

**Tuesday**

- 8:30-10:00 Visual Assessments Exterior and Interior
- 10:00-10:30 Inspections and Assessments Electrical
- 10:30-10:45 Break
- 10:45-11:30 Math Basics
- 11:30-12:00 Inspections and Assessments (Windows, Doors, Walls, Basement, Crawlspace, Attic)
- 12:00-12:45 Lunch
- 12:45-1:45 Inspection and Assessment of Ducts
- 1:45-2:45 Blower Door, Zonals, Infrared
- 2:45-5:00 Blower Door (Labs)

**Wednesday**

- 8:30-9:30 Retrotec Blower Door Demo
- 9:30-12:00 Onsite Audits Grandma’s House, Mobile home
- 12:00-12:45 Lunch
- 12:45-2:45 Finish Audits, Review Audits
- 2:45-3:45 Duct Diagnostics
- 3:45-5:00 House of Pressure

**Thursday**



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8:30-9:00	Review what the practical test procedure will be
9:30-10:30	Split the class with half doing combustion analyzing in the HVAC lab and the other half doing CAZ testing in the diagnostic labs
12:00-12:45	Lunch
12:45-1:00	Review Combustion and CAZ
1:00-5:00	Split class among all the labs and have them do Blower Door Set-up with Zonals

**Friday**

8:30-9:00	Review what the practical test procedure will be
9:30-10:30	Written Test
10:30-?	Practical Testing

**3.1.3.4** CHP Energy Solutions is prepared to offer the BPI exams following the training. Dates and times to be coordinated with the WV Office of Economic Opportunity.

**3.1.3.5** CHP Energy Solutions is prepared and capable of completing the necessary training and testing by September 30, 2014.

**3.1.3.6** CHP Energy Solutions has provided copies of its' IREC accreditation within this RFQ.

**3.1.3.7** CHP Energy Solutions is prepared to help students with questions and or instructions to assist with their BPI application process so that they are approved to sit for the courses and exams.

**3.1.3.8** CHP Energy Solutions understands that the training will be held at the Ghent, WV training center and that the New River Community and Technical College will provide classroom, computers and other associated equipment for the purpose of providing classroom instruction and testing.

**3.1.3.9** CHP Energy Solutions understands that the Office of Economic Opportunity will arrange for a site built house which meets the necessary requirements for the field training and testing. CHP Energy Solutions will need to verify that the house meets these requirements and will submit for the Office of Economic Opportunity the necessary paperwork to BPI to have this or other houses approved for and given an I.D. # for testing.

**3.1.3.10** CHP Energy Solutions will provide any additional props, equipment, technical support, materials, and supplies required for training and or testing, that are not mentioned in 3.1.1.8.





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### **3.1.4 Class #3 – Heating Unit Inspection Course**

**3.1.4.1** CHP Energy Solutions understands the course outlined in this section and provides a Heating System Fundamentals course that meets these requirements.

**3.1.4.2** CHP Energy Solutions is prepared to provide two (2) separate classes with 12 students in each. Classes will not be held at the same time.

**3.1.4.3** CHP Energy Solutions' will provide its' Heating System Fundamentals course from Monday – Friday from 8:00- 5:00 each day.

**3.1.4.4** CHP Energy Solutions will provide the training and its' test within the week course of Monday – Friday.

**3.1.4.5** CHP Energy Solutions is prepared and capable of completing the necessary training and testing by September 30, 2014.

**3.1.4.6** CHP Energy Solutions' Heating System Fundamentals course enables students to perform various diagnostics testing both pre and post work to verify system performance in addition to combustion analysis testing.

**3.1.4.7** CHP Energy Solutions will arrange for any additional props, technological resources, equipment, materials etc., not already provided for by the WV Office of Economic Opportunity.

**3.1.4.8** CHP Energy Solutions' Heating System Fundamentals course enables students to perform various diagnostics testing both pre and post work to verify system performance in addition to combustion analysis testing.

**3.1.4.9** CHP Energy Solutions' Heating System Fundamentals course enables the student to verify efficiency improvements, health and safety issues and verify Combustion Appliance Zone test results.

**3.1.4.10** CHP Energy Solutions' Heating System Fundamentals course enables the student to determine if the job is complete, effective and all heating system measures have been correctly performed and documented.

**3.1.4.11** CHP Energy Solutions understands that the training will be held at the Ghent, WV training center and that the New River Community and Technical College will provide classroom, computers and other associated equipment for the purpose of providing classroom instruction and testing.

**3.1.4.12** CHP Energy Solutions understands that the Office of Economic Opportunity will arrange for a site built house which meets the necessary requirements for the field training and testing. CHP Energy Solutions will need to verify that the house meets these requirements and will submit for the Office of Economic Opportunity the necessary paperwork to BPI to have this or other houses approved for and given an I.D. # for testing.



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**3.1.4.13** CHP Energy Solutions will provide any additional props, equipment, technical support, materials, and supplies required for training and or testing, that are not mentioned in 3.1.1.8.

The agency is responsible for registering all students in the course through CHP Energy Solutions' Learning Management System (LMS) located here <https://lms.chplearning.org/app/register> prior to the students attending the training or testing.

The WV Office of Economic Opportunity agrees to reimburse and pay CHP Energy Solutions for the above trainings as outlined in this agreement. This cost covers CHP Energy Solutions' staff time for preparation, instruction, travel, lodging, per diem, binders/handouts, and trainer during the training and other costs directly related to the training as well as technical assistance provided before and after the training sessions.

Any changes to this agreement must be made in writing and agreed to by both parties.

Proposal for Costs for the QCI & EA preparatory courses, testing and the Heating Systems Fundamentals courses are not to exceed: \$98,476.00

If you require any further clarification or information please don't hesitate to contact Phil Hull at the office or by cell. The office phone is (540) 260-9081 EXT 4012; my cell phone is (540) 239-0917.

Susan Sisk

Date

State of West Virginia

Date

Chief Administrative Officer

Office of Economic Opportunity

Authorized Representative





THIS IS TO ATTEST THAT

**CHP Energy Solutions, LLC**

is recognized as an

**IREC ACCREDITED TRAINING PROVIDER**

for the job task analysis **Quality Control Inspector** for the course

**Quality Control Inspector**

AS ASSESSED BY THE IREC REGISTERED ASSESSORS AND THE IREC AWARD COMMITTEE

Date of Issue: 5/23/2013  
Date of Expiration: 5/23/2018  
Certificate Number: IREC\_80004\_TP\_QCI

A handwritten signature in black ink, appearing to read "Jane M. Weissman".

Jane M. Weissman  
President and Chief Executive Officer  
Interstate Renewable Energy Council, Inc.



This is to certify that **New River Center for Energy Research and Training** is recognized as an  
**IREC ISPQ Accredited Training Program**

for curriculum covering the Job Task Analysis

**Energy Auditor (NREL)**

for the course(s):

**Energy Auditor**

As assessed by the IREC ISPQ Registered Assessors and the IREC ISPQ Award Committee to the  
IREC ISPQ International Standard 01022:2011

Approved by

Jane M. Weissman, President and  
Chief Executive Officer  
Interstate Renewable Energy Council, Inc.  
North American IREC ISPQ Licensee

Date of Issue  
May 23, 2013

Certificate Number(s)  
IREC\_60009\_TP\_EA

Date of Expiration  
May 23, 2018



THIS IS TO ATTEST THAT

**CHP Energy Solutions, LLC**

is recognized as an

**IREC ACCREDITED TRAINING PROVIDER**

for the job task analysis **Crew Leader** for the course

**Crew Leader**

AS ASSESSED BY THE IREC REGISTERED ASSESSORS AND THE IREC AWARD COMMITTEE

Date of Issue: 12/12/2013  
Date of Expiration: 12/12/2018  
Certificate Number: IREC\_70011\_TP\_CL

A handwritten signature in black ink, appearing to read "Jane M. Weissman".

Jane M. Weissman  
President and Chief Executive Officer  
Interstate Renewable Energy Council, Inc.



THIS IS TO ATTEST THAT

**CHP Energy Solutions, LLC**

is recognized as an

**IREC ACCREDITED TRAINING PROVIDER**

for the job task analysis **Retrofit Installer Technician** for the course

**Retrofit Installer Technician**

AS ASSESSED BY THE IREC REGISTERED ASSESSORS AND THE IREC AWARD COMMITTEE

Date of Issue: 6/7/2012  
Date of Expiration: 6/7/2017  
Certificate Number: IREC\_50008\_TP\_RIT

A handwritten signature in black ink, appearing to read "Jane M. Weissman".

Jane M. Weissman  
President and Chief Executive Officer  
Interstate Renewable Energy Council, Inc.





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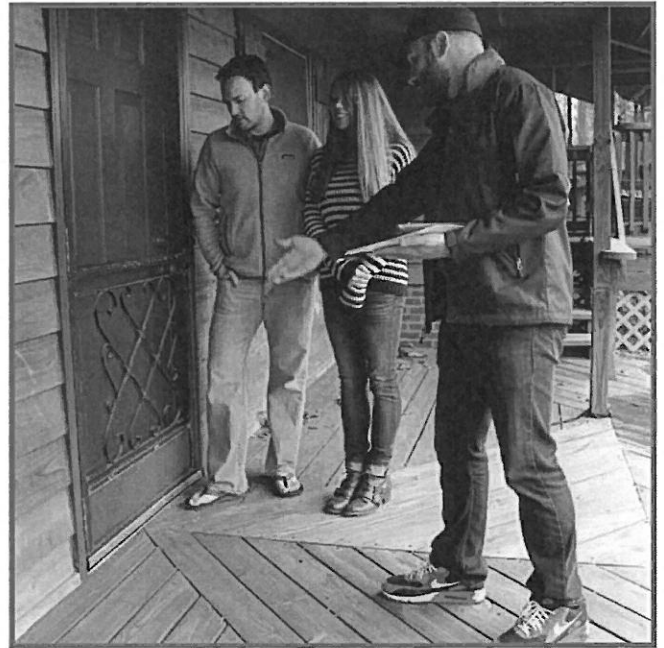
phone: 540-260-9081 fax: 540-260-9084

[www.CHPTrainingCenter.org](http://www.CHPTrainingCenter.org)

# Quality Control Inspector

## Course Description

The Quality Control Inspector (QCI) course is based on a National Renewable Energy Laboratory/U.S. Department of Energy Job Task Analysis\* (JTA) of the same name. The course is broken down into a week of instruction focusing on the job description/duties outlined in the JTA. Students will be exposed to and practice the skills needed to become a successful QCI. These skills include: conducting a precise audit of the building, verifying the work performed against the work plan, observing the retrofit work, understanding specifications and standards, performing building and safety diagnostics, recording/reporting findings and concerns, specifying corrective actions, communicating effectively with the client, and determining the final pass/fail of the work performed. This course is designed to prepare students to take the BPI Home Energy Professional Quality Control Inspector certification exam.



State-of-the-art technology is used in both the classroom and the labs to provide students with a high quality learning environment. Students will get feedback about learning progress by taking online quizzes via our Learning Management System (LMS) throughout the course. Students will take one written test, also delivered through the LMS, and three hands-on tests of their QCI skills. Upon successful completion of these tests, each student receives a certificate of completion.

## Course Objectives

- ▶ Conduct work-in-process visual/sensory quality checks
- ▶ Conduct post-work visual/sensory quality checks
- ▶ Perform post-work diagnostic inspections
- ▶ Evaluate and ensure worker professionalism
- ▶ Inspect and assess the building envelope
- ▶ Ensure program or project compliance

## Skills You'll Take Home

- ▶ Blower door testing
- ▶ Pressure pan testing
- ▶ Zonal diagnostics
- ▶ Exhaust fan flow verification
- ▶ Client, crew leader, and technician interaction
- ▶ Combustion appliance diagnostics
- ▶ Worst-case-scenario draft testing
- ▶ Work verification
- ▶ And much, much more!





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Christiansburg, VA 24073  
phone: 540-260-9081 fax: 540-260-9084  
www.CHPTrainingCenter.org

# Quality Control Inspector

## Organization

This is a lecture-lab course. Topics will be presented in a classroom setting and then followed up with student involvement in the lab. The class will be geared toward those who have had experience in the field as auditors or crew leaders. Student participation is very important. Testing for this course will involve both a written and field practical. Note: The BPI Home Energy Professional Quality Control Inspector certification is a separate test with an additional fee.

## Grading Criteria and Passing Score

The exam consists of four sections: one written and three hands-on. Students must pass each section with an 80% score or higher. If a student does not pass a section, he or she will be allowed to retake that particular section in accordance with CHP Energy Solutions Research and Training's retesting policy.

## Grading Plan

Written Section (delivered via our LMS)	65 points (52 points to pass)
Blower Door Hands-on Section	21 points (17 points to pass)
CAZ Hands-on Section	35 points (28 points to pass)
Duct Tester Hands-on Section	15 points (12 points to pass)

## Topics

### % of Weight of JTA in Course

Worker compliance with safety rules	2
Worker professionalism	12
Addressing work problems	2
Determining client satisfaction	10
Reviewing work scope	7
Exterior and interior visual/sensory inspection	8
Determining pass/fail of the work	8
Comparing installed measures against guides and work scope	2
Conducting health and safety tests	13
Conducting diagnostic tests	14
Identifying post-work problems	13
Communication skills	1
Professional credentials	2
Funding allocations	2
Close out of project (files/records)	4

## Cost

**One-week Course \$1750**

\*Note: The BPI Home Energy Professional Quality Control Inspector certification is a separate test with an additional fee.

To enroll in this course, students must be 18 or older and pass a Quality Control Inspector prerequisite pre-test which assesses their literacy levels, understanding of basic math, and understanding of basic building science. This Job Task Analysis may be viewed online at <http://www.energy.gov/sites/prod/files/2014/01/f7/51670.pdf> and at [CHPTrainingCenter.org](http://www.CHPTrainingCenter.org).



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# Energy Auditor

## Course Description

The Energy Auditor course is based on a National Renewable Energy Laboratory/ U.S. Department of Energy Job Task Analysis\* (JTA) of the same name. This two-week course provides the student with a comprehensive understanding of the auditing process, from diagnosing basic energy-related issues to combustion safety testing and developing a work-scope. Students will study how the house works as a system, learn how to apply building science principles to identify, prioritize, and correct energy-related issues within the building envelope, and learn about health and safety concerns associated with these issues. This course is designed to prepare qualified students to take the BPI Home Energy Professional Energy Auditor certification exam.



State-of-the-art technology is used in both the classroom and the labs to provide students with a high-quality learning environment. Three diagnostic house labs controlled by iPad technology provide students with a variety of real-life scenarios. Students will take one written and three hands-on tests of energy assessment skills. Upon successful completion of these tests, each student receives a certificate of completion.

## Course Objectives

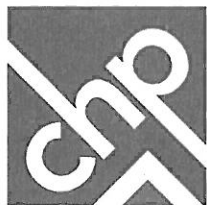
- › Recognize the different heating systems and fuel types being used
- › Properly perform combustion testing (SSE and WC Draft)
- › Calculate combustion air needed
- › Measure exhaust flow and perform ASHRAE 62.2 calculations
- › Perform duct diagnostic testing
- › Inspect and assess the building envelope
- › Perform basic math calculations
- › Properly gather infiltration data (Blower Door)
- › Use lab experience to gain a practical understanding of the lessons being taught

## Skills You'll Take Home

- › Blower door testing
- › Pressure pan testing
- › Zonal diagnostics
- › Exhaust fan flow verification
- › Client interaction
- › Combustion appliance diagnostics
- › Worst-case-scenario draft testing
- › Work-scope write-up
- › And much, much more!



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# Energy Auditor

### Organization

This is a lecture-lab course. Topics will be presented in a classroom setting and then followed up with student involvement in the lab. The class will be geared toward those who have little or no previous training in the field. Student participation is very important. Testing for this course will involve both a written and field practical. Note: The BPI Home Energy Professional Energy Auditor certification is a separate test with an additional fee.

### Grading Criteria and Passing Score

The exam consists of four sections: one written and three hands-on. Students must pass each section with an 80% score or higher. If a student does not pass a section, he or she will be allowed to retake that particular section in accordance with CHP Energy Solutions Research and Training's retesting policy.

### Grading Plan

Written Section	50 points (40 points to pass)
Blower Door Hands-on Section	21 points (17 points to pass)
CAZ Hands-on Section	35 points (28 points to pass)
Duct Tester Hands-on Section	15 points (12 points to pass)

### Topics

### % of Weight of JTA in Course

Heating System Fundamentals	2
Heating System Efficiency Ratings	2
Combustion Air	12
Worst-Case Depressurization	12
Duct Diagnostics	3
ASHRAE 62.2	6
Exhaust Fans and Measuring Flow	6
Client Interaction	5
Baseload	11
Safety	1
House as a System/Building Science	12
Visual Assessments	33
Math Basics	1
Envelope Inspections and Assessments	21
Work-Scope Development	2
Blower Door	11
Auditing Software (NEAT and SIR)	0

### Cost

Two-week Course \$2995

\*Note: The BPI Home Energy Professional Energy Auditor certification is a separate test with an additional fee.

To enroll in this course, students must be 18 or older and pass an Energy Auditor prerequisite pre-test which assesses their literacy levels, understanding of basic math, and understanding of basic building science. This Job Task Analysis may be viewed online at <http://www.energy.gov/sites/prod/files/2014/01/f7/51672.pdf> or at [CHPTrainingCenter.org](http://www.CHPTrainingCenter.org). CHP Energy Solutions Research and Training's Energy Auditor course is approved by the Virginia Department of Professional and Occupational Regulation (DPOR) as an accredited residential building energy analyst training program that satisfies the Virginia energy analyst licensing requirement for education of residential building energy analysts.





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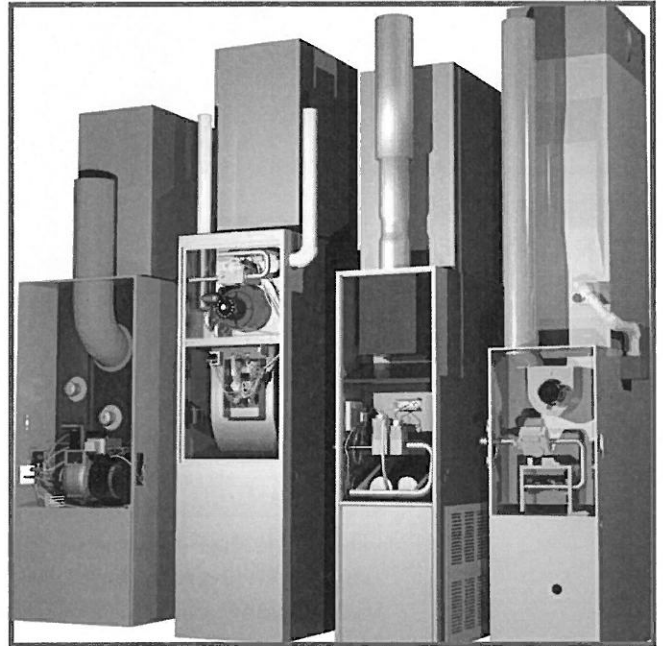
[www.CHPTrainingCenter.org](http://www.CHPTrainingCenter.org)

# HVAC Fundamentals

## Course Description

HVAC Fundamentals provides a foundational understanding of HVAC systems, controls, diagnostic testing and evaluation of efficiency performance, and Combustion Safety evaluation and recommendations. The class curriculum is suitable for weatherization crews and those seeking a better understanding of heating systems.

The class focuses on a variety of heating systems and how to properly test for their safe and efficient operation. Hands-on practice with these systems in our HVAC Lab and Diagnostic Houses is a core component of this class. Students will take both a written test and a hands-on test to demonstrate their understanding of how to evaluate HVAC systems for safety and efficiency. Upon passing these tests, each participant receives a certificate of completion.



## Course Objectives

- ▶ Understand why we work on heating systems
- ▶ Recognize different heating systems and fuel types being used
- ▶ Inspect and test draft of different venting systems
- ▶ Perform duct distribution diagnostic tests
- ▶ Perform a worst case CAZ depressurization test
- ▶ Perform combustion safety and efficiency testing
- ▶ Explain safety and efficiency improvement
- ▶ Use lab experience to give students a practical understanding of the lessons being taught

## Skills You'll Take Home

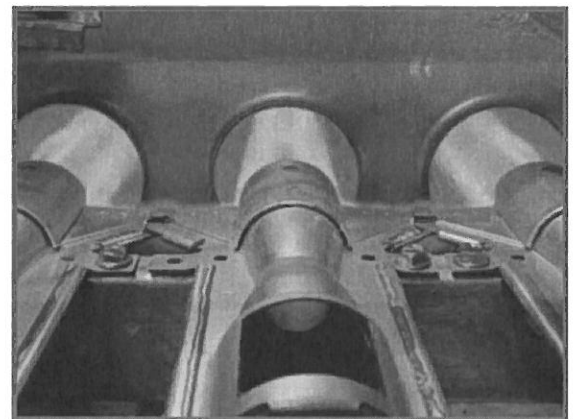
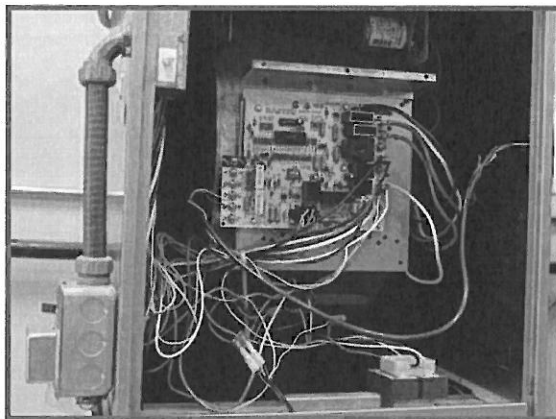
- ▶ Heating system identification
- ▶ Worst case draft testing
- ▶ Efficiency analysis
- ▶ HVAC diagnostic testing
- ▶ Basic troubleshooting
- ▶ Vent sizing
- ▶ Heat pump operation
- ▶ Combustion air calculations
- ▶ And much, much more!



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# HVAC Fundamentals



## Organization

This is a lecture-lab course. Topics will be presented in a classroom setting and then followed up with student involvement in the lab. The class will be geared toward little or no previous training in the field. Student participation is very important. Testing for this course will involve both a written and field practical.

## Grading Criteria and Passing Score

The exam consists of two sections: one written and one hands-on. Students must pass each section with an 80% score or higher. If a student does not pass a section, he or she will be allowed to retake that particular section in accordance with CHP Energy Solutions Research and Training's retesting policy.

## Grading Plan

Written Section	40 points (32 points to pass)
CAZ Hands-on Section	35 points (28 points to pass)

## Cost

**\$1750**

Note: Contact the Training Center for Course Costs and Group Pricing Information.

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RFQ No. GOE012014

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: CHP Energy Solutions

Authorized Signature: [Signature] Date: 5/22/14

State of Virginia

County of Montgomery, to-wit:

Taken, subscribed, and sworn to before me this 22<sup>nd</sup> day of May, 2014.

My Commission expires 11-30, 2016.

**AFFIX SEAL HERE**

**NOTARY PUBLIC**

[Signature]

*Purchasing Affidavit (Revised 07/01/2012)*



**CERTIFICATION AND SIGNATURE PAGE**

By signing below, I certify that I have reviewed this Solicitation in its entirety, understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Community Housing Partners

(Company)

[Handwritten Signature]

(Authorized Signature)

Susan M Sisk, OAO

(Representative Name, Title)

540-382-2002

(Phone Number)

540-382-1935

(Fax Number)

5/22/14

(Date)