<table>
<thead>
<tr>
<th><strong>Docket Number:</strong></th>
<th>13-ATTCP-01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>Acceptance and Training Certification</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>222921</td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
<td>Amendment of 2016 Quality Control Process - Title 24 QC</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>Rachel Shuman</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>International Training Fund</td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
<td>Applicant</td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
<td>3/8/2018 8:41:45 AM</td>
</tr>
<tr>
<td><strong>Docketed Date:</strong></td>
<td>3/8/2018</td>
</tr>
</tbody>
</table>
This document is the agreement between the California State Pipe Trades Council and the ESCO Group to satisfy the 2016 Quality Control Process.
California State Pipe Trades Council

Amendment of 2016 Quality Control Process

Major Changes:

1. The 2013 process focused on the Acceptance Test Technician (ATT) whereby an onsite audit of 1% of all acceptance tests conducted by the ATT would be performed. Prior notification of an onsite audit was provided to the ATT.

2. The 2016 process focuses on the Acceptance Test Employer (ATE) whereby the performance of an onsite audit of 1% of each ATE’s projects per calendar year, is required. Onsite audits will be conducted on a random basis without prior notification to the ATE or ATT.

3. California State Pipe Trades Council has contracted the ESCO Group to provide third party independent onsite audits.

California State Pipe Trades Council Quality Control Process:

Audit Frequency and Triggers

Paper Audit of Acceptance Test Employer (ATE)

Required: 1% of ATE’s Acceptance Test forms completed per calendar year.

The Non-Residential Mechanical Document Registry (escodocreg.com) uses “Trip Wires” and certain algorithms within each form to analyze every form for anomalies. The Registry notifies California State Pipe Trades Council, of those forms that have been earmarked as anomalous so that they may be reviewed. This process reviews 100% of the completed forms exceeding the 1% review requirement.

Complaint Generated Audit of an ATE’s Project

A complaint must be initiated by a party with standing. e.g. the project’s property owner, commissioning agent, installing contractor, etc. California State Pipe Trades Council, upon investigation, may choose to order a partial or complete onsite audit of the project in question.

A party with standing must contact the California State Pipe Trades Council with a complaint within 48 hours of a completed audit.
Onsite Audit of ATE

Required: 1% of each ATE’s Projects per calendar year

General Overview

California State Pipe Trades Council has contracted the ESCO Group to provide, independent third party, onsite audit services. ESCO Group will perform onsite audits of no less than 1% of each Acceptance Test Employer’s (ATE) calendar year projects. Whenever feasible, onsite audits will be performed across multiple projects at various building-sites and include multiple Acceptance Test Technicians (ATT) employed by the ATE.

Onsite audits shall be performed on or before each ATE’s 50th project within a calendar year. *

*Some ATEs, due to the infrequency of their projects, may require audits after as few as 10 projects. ATEs performing less than 10 projects per calendar year may not have an onsite audit until the following calendar year.

The IQAP shall submit a report to the CEC no later than January 31, of each year. The report shall contain a list of of ATEs that did not receive an onsite audit during the previous calendar year. The IQAP will make a good faith effort to audit all ATEs listed in the annual unaudited ATE report on a priority basis (as early in the calendar year as possible).

ESCO Group performs onsite audits utilizing the “job shadow” method conducted by trained and credentialed Quality Assurance Inspectors (QAI).

California State Pipe Trades Council will record and make available to the California Energy Commission (CEC) all remedial actions resulting from an audit. This record will include but shall not be limited to remediation and/or discipline actions such as; retraining, suspension, or revocation of an ATE’s or ATT’s certification.

General Responsibilities

Responsible Person Requirements

A Responsible Person1 must initiate the acceptance testing job opportunity in the Non-Residential Mechanical Document Registry at www.escodocreg.com. The Responsible Person may then put the job out to bid generally or select and assign an ATE of their choice. Once the ATE is accepted by the Responsible Person, it is the ATE’s

---

1 Responsible Person as defined by Title 24, Part 1, Section 10-103(a)4 is a person who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design. This is most typically an Architect or Engineer of record, but may also be a contractor or building owner (typically for smaller jobs).
responsibility to insure that the ATT completes all necessary inputs for the acceptance testing job.

ATT Requirements

During an audit, all ATT’s certified by California State Pipe Trades Council must provide documentation of their test instruments calibration to any QAI upon request. Therefore, it is a requirement of certification that all ATTs have such documents available, at the jobsite, while performing Acceptance Tests.

ATE Requirements

All ATEs certified by California State Pipe Trades Council are required to register and maintain their projects in the online Non-Residential Mechanical Document Registry at www.escodocreg.com.

All ATEs are required to provide to their Independent Quality Assurance Provider (IQAP) a list of Acceptance Testing Projects (jobs) a minimum of 2 weeks in advance of the scheduled Acceptance Test and notify the IQAP of all date changes. This is will be accomplished via the Non-Residential Mechanical Document Registry.

1. General Onsite Audit Procedural Outline

Acceptance forms are procured by the ATE through the Document Registry by use of a valid ATT identification code and the entry of an expected date the acceptance test(s) is to be performed.

At the time of procurement from the Document Registry, the use of each compliance document requires the assignment of an ATT and the date that the acceptance test will be performed. The ATT cannot be assigned to an acceptance form without also assigning the date the test is to be performed. In case of a schedule and/or ATT change, the date must be changed by the ATE.

California State Pipe Trades Council, has access to the audit schedule report, which is filtered by date range. The report includes (by ATE, by ATT) the Project name, forms, and quantity of each form scheduled within the specified date range.

The expected date of the acceptance test must be no less than two weeks from the date of the procurement of the compliance document from the Document Registry and can be updated at any point by the ATE as needed. The ATE must also confirm (or extend, if necessary) the expected date of the acceptance test no less than 24 hours prior to the expected date (this is a simple check box on the Document Registry system). The Document Registry will send an automated alert to the ATE of all
acceptance test dates that require 24-hour confirmation at least two days prior to the expected date, as well as, an alert for any acceptance test dates that have not been confirmed on the day of the expected date.

2. The IQAP shall assign and schedule a QA Inspector (QAI) to perform an audit of an ATE’s project (jobsite).

A list of ATTs assigned to the project will be provided via the Document Registry. The QAI will attempt to monitor and audit as many of the ATTs as practical. The QAI may audit as little as a single form per ATT. Multiple QAIs may be assigned to a given project.

Neither the ATE or ATT shall be notified of any pending audit. The audit process is intended to be random and without notice.

a. The IQAP will select at random a list of projects for the QAI to inspect. The IQAP will take into consideration the estimated time for a QAI to observe at least one acceptance test at each jobsite and the distance traveled between project sites to the best of their abilities. The IQAP will select project sites from a list of available jobsites provided by ESCO Group in general compliance with the following criteria:

  i. Onsite audits will be performed on or before each ATE’s 50th project within a calendar year.

  ii. In the event that an ATE works on less than 50 projects within a single year, the project count will be added to the following year.

b. Prior to beginning an audit, the QAI will present their credentials to the ATT and the project site control authority.

c. The ATT shall provide valid proof of identity such as a driver’s license or other Government issued picture ID, as well as documentation of test instrument calibration to the QAI. Calibration certificates must be dated less than one year prior to using the test instrument in completing an acceptance test.

d. The QAI shall conduct the audit and submit their completed audit forms and notes to the IQAP.

e. The IQAP shall enter all completed audit forms and notes into the Document Registry.

f. Upon completion of an audit day, the QAI will enter the completed audit forms, along with all recommendations relative to any suggested additional training into the Registry. The report may include suggested remediation and / or commendations for excellence or indicate that the ATT could not complete a specific Acceptance Test.
g. The IQAP will determine if each audit performed is a pass, a pass with minor infraction, or a fail. The IQAP may rely on the recommendations of the QAI.

h. The IQAP shall notify by email the California State Pipe Trades Council, the ATE, and the ATT of the audit results.

3. Based on the audit results, California State Pipe Trades Council shall notify the ATE, and the ATT by email of what, if any, remedial actions are required.

a. (Insert ATTCP name here) will take the following actions upon receipt of a quality assurance report from the IQAP.

   i. Minor infraction; warning issued (ATE and ATT)

   ii. First Failure; Targeted retraining and retesting (ATE or ATT)

   iii. Second Failure; Decertification (ATE or ATT) with the option to restore certification with the successful completion of the full training and testing requirements.

b. California State Pipe Trades Council will maintain a record of all remedial actions for any ATE or ATT for no less than five years and will submit a descriptive report annually to the Energy Commission of all quality assurance activities with the assistance of ESCO Group.

4. **QAI quality verification process**, in an effort to maintain the quality of the audit verification process, several special auditors will provide oversite of the QAIs. They will, without prior notification provide onsite monitoring of the QAIs. They will monitor a minimum of 1% of the QAIs assigned projects.

Abbreviations:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE</td>
<td>Acceptance Test Employer</td>
</tr>
<tr>
<td>ATT</td>
<td>Acceptance Test Technician</td>
</tr>
<tr>
<td>ATTCP</td>
<td>Acceptance Test Technician Certification Provider</td>
</tr>
<tr>
<td>CARB</td>
<td>California Air Resources Board</td>
</tr>
<tr>
<td>IQAP</td>
<td>Independent Quality Assurance Provider</td>
</tr>
<tr>
<td>QAI</td>
<td>Quality Assurance Inspector</td>
</tr>
</tbody>
</table>