October **5**, 2012

California Energy Commission DOCKETED 12-BSTD-2 TN #68117 10-22-12

California Energy Commission Attention: Docket No. 12-BSTD-2 Dockets Office 1516 Ninth Street, MS-4 Sacramento, CA 95814

Re: Support for Proposed Non-Residential Acceptance Contractor/Tester Certification

Dear Commissioners:

My name is <u>MIR</u> <u>ANDRADE</u> am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since <u>1911</u>. I have completed a <u>5</u> year HVAC System/ Sheet Metal Apprenticeship program.

I am writing to support the Energy Commission proposal to require Title 24 acceptance tests for nonresidential buildings to be performed by field technicians that have met specific experience, training and certification requirements. Certification will ensure that acceptance testing is correctly performed and will significantly reduce the incidence of HVAC systems being poorly installed and operating below their specified efficiency. Effective testing and adjusting of commercial HVAC systems requires a unique mix of experience, training and competence. Improper installation and inadequate acceptance testing will result in reduced energy efficiency and substandard performance. The TAB organizations identified in the regulation are the only entities that currently provide certification that ensures a technician has the proper experience, knowledge, and competence to properly perform such testing. Since these programs already exist, it simply makes sense to take advantage of what they have to offer. Accordingly, we strongly support the Commission's reliance on certification by these entities.

I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial HVAC systems. Acceptance testing training necessarily builds upon the knowledge and experience base possessed by electrical or mechanical system professionals. No test is going to be able to cover every permutation of commercial HVAC systems as installed in real world situations. Accordingly, most persons without a basic knowledge and experience base in these systems would be unable to effectively apply this training in complex real world situations, even if they were able to successfully pass a classroom test. To ensure effective acceptance testing, it is critical to ensure that acceptance testers have the underlying background and experience in these systems to be able to adjust to the complexities and permutations that a tester will encounter out in the field. The certifications should, at a minimum, require completion of the following components:

- Post-secondary training in a state-approved or nationally accredited educational program (including the state-certified apprenticeship system; nationally accredited colleges and universities), with the training institutions or types of training institutions identified by the CEC.
- A minimum number of hours of work experience equal to or exceeding the number of hours to meet any contractor licensure, trade journey card, or any other licenses or regulations affecting contractors or workers working in the field.
- Training and competency testing that includes hands on training and testing.

The regulations should clearly require that training and competency testing include hands on training and testing. The certification should also be tied to a trade or professional organization with continuing education requirements for maintenance of good standing.

Sincerely