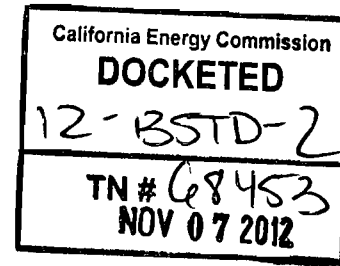


October<sup>30</sup>, 2012

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 Shawn Fowler, I am currently a 5<sup>th</sup> year Apprentice in the 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 sub-standard 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,

A handwritten signature in black ink, appearing to be "J. P. [unclear]".

10/30/12

October 30 2012

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 J. David Castro am currently a 4<sup>TH</sup> year Apprentice in the 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 sub-standard 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..

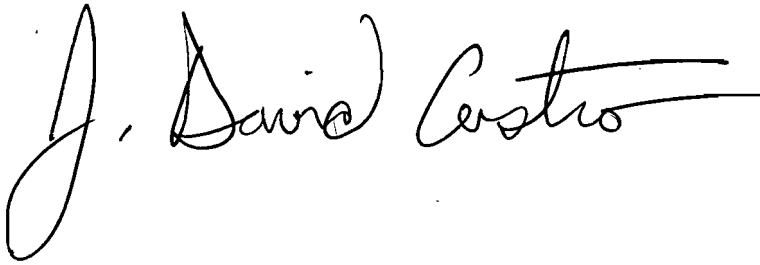
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial 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,

A handwritten signature in black ink, reading "J. David Castro". The signature is written in a cursive style with a large, looped initial "J" and a horizontal line at the end.

October 30, 2012

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 Linda Souza, I am currently a 2nd year Apprentice in the HVAC System/Sheet Metal Apprenticeship Program.

I am writing to support the Energy Commission's proposed regulations requiring certification for persons who perform Title 24 Acceptance Testing and Documentation for HVAC and advanced lighting control. Proper training and certification of individuals performing and documenting acceptance tests is crucial for California to realize its energy efficiency goals. Furthermore, I strongly support the Commission's decision to utilize existing programs to provide this certification rather than completely reinventing the wheel as was done with the HERS program. The TAB certification bodies identified as pre-approved certifiers are well-respected, nationally-renowned programs with rigorous curriculum, hands on training, and quality controls. TAB technicians are already available throughout the state and no other certifications exist that provide the training expertise and quality control necessary to ensure that HVAC systems actually perform as required under Title 24. The California Green Building Code already requires small commercial buildings to balance their HVAC systems in accordance with TABB, AABC or NEBB procedures, so this requirement will ensure consistency with current practices.

I also strongly support the pre-approval of existing TABB, NEBB and AABC contractors and technicians to perform these acceptance tests. These contractors and technicians should be rewarded for having invested in this advanced training before such training was even a requirement under Title 24. Moreover, they currently are the only technicians with verifiable training and experience in the skills and knowledge necessary to ensure competent testing, adjusting and balancing of commercial HVAC systems.

I also support the requirement for certification of acceptance test technician employers in order to ensure a high level of accountability and quality control. Certification of employers ensures appropriate supervision and support for the certified acceptance test technicians. By putting the employer's certification on the line in addition to the certified technician, pressure on the technician to quickly test and pass a system is reduced and it is more likely that the technician will be provided sufficient equipment, resources and time to correctly perform the acceptance test.

Sincerely,

Handwritten signature of Linda Souza in cursive script.

October 30, 2012

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 Larry Sanchez I am currently a 2nd year Apprentice in the HVAC System/Sheet Metal Apprenticeship Program.

I am writing to support the Energy Commission's proposed regulations requiring certification for persons who perform Title 24 Acceptance Testing and Documentation for HVAC and advanced lighting control. Proper training and certification of individuals performing and documenting acceptance tests is crucial for California to realize its energy efficiency goals. Furthermore, I strongly support the Commission's decision to utilize existing programs to provide this certification rather than completely reinventing the wheel as was done with the HERS program. The TAB certification bodies identified as pre-approved certifiers are well-respected, nationally-renowned programs with rigorous curriculum, hands on training, and quality controls. TAB technicians are already available throughout the state and no other certifications exist that provide the training expertise and quality control necessary to ensure that HVAC systems actually perform as required under Title 24. The California Green Building Code already requires small commercial buildings to balance their HVAC systems in accordance with TABB, AABC or NEBB procedures, so this requirement will ensure consistency with current practices.

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Sincerely,

