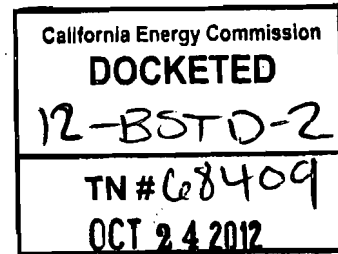


October 15, 2012

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 CESAR, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 8. I have completed a 4 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

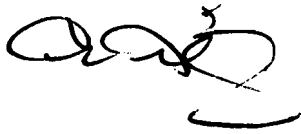
- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

CESAR CORNEJO

A handwritten signature in black ink, appearing to be 'CESAR CORNEJO', with a stylized flourish at the end.

October 15, 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 Kurt Eichhorn am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1984. I have completed a 42 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 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,



KURT Eichhorn

October 15, 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 SUDHIL BALI, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since '98. I have completed a 4.5 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 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..

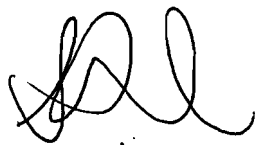
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial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

  
SUDHIN BAWA  
10-15-12

October 15, 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 Soey Barron. I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1989. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Banon". The signature is written in a cursive style with a large, stylized initial "J".



October 15, 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 JOSEPH T BOWLE I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1984. I have completed a 4 1/2 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.


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The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, appearing to be "Joseph" followed by a stylized surname, with a long horizontal flourish extending to the right.

October 15, 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 Curt Balzer, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2000. I have completed a 4 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.


While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

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The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, appearing to be "C. B. L.", written in a cursive style.

October 15, 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 Ricardo Byrne, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2006. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

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The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

*RByrne*  
*10/15/12*

October 15, 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 Paul Byrne, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1983. I have completed a 4 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 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 read "Paul By", with a long horizontal flourish extending to the right.



October 15, 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 Paul Cafini, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1996. I have completed a ~~12~~ 5 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 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.

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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, 

October 15, 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 Ken Cooper, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1983. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

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- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Capri". The signature is written in a cursive, flowing style with a large initial "R" and a distinct "Capri" at the end.

October 15, 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 Gilberto DeAnda, I am currently a 2nd 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..

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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.
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- 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 read "G. A. Adh". The signature is written in a cursive, flowing style with a large initial "G" and a long, sweeping tail.

October 15, 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 Paul Domenichini I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 27 years. I have completed a 5 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 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..

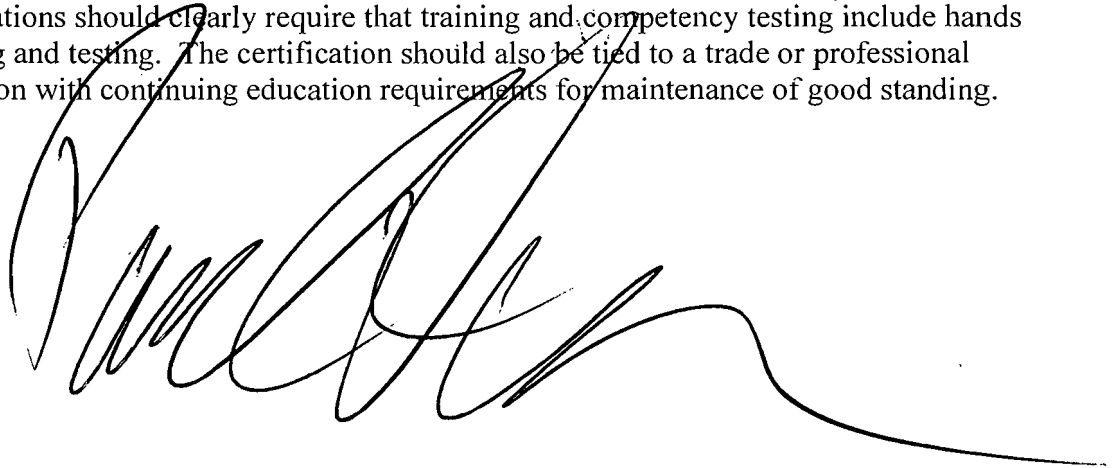
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial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

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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 large, stylized handwritten signature in black ink, written over the word 'Sincerely,'. The signature is fluid and cursive, with a long horizontal stroke extending to the right.



October 16, 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 John Fitch, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2000. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink that reads "John Fitch". The signature is written in a cursive style with a large, looping "J" and a distinct "F".

October 15, 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 John Gayden I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2000. I have completed a 4yr 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 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, consisting of a large, stylized 'J' followed by a horizontal line and a small flourish.

October 15, 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 JOHN GUADAGNI. I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1987. I have completed a 5 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 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 read "John Mulaguro". The signature is fluid and cursive, with the first name "John" and last name "Mulaguro" clearly distinguishable.

October <sup>15</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 CHRIS KELLY, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2002. I have completed a 5 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 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..

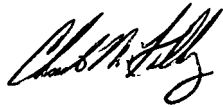
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial 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 read "Charles M. Kelly". The signature is fluid and cursive, with a large, stylized initial "C" and "K".



October 15, 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 Enin Kissane, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2000. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,



Eoin Kissane

October 16, 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 Ben Kreitz, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2005. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, consisting of several fluid, connected strokes. The signature is positioned to the right of the word "Sincerely,".

October 15, 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 TERRY KUNG I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1986. I have completed a 4 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 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..

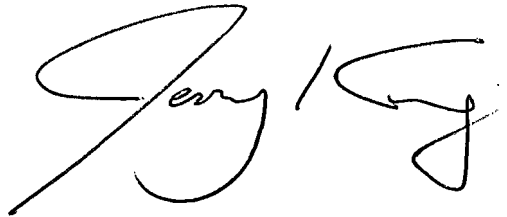
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial 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 read "Jery / G". The signature is fluid and cursive, with a large initial "J" and a stylized "G" at the end.

October 16, 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 Archie LeBar, I am an HVAC Journey person. I have been in the HVAC System Installation Trade since 1988. I have completed a 5 year HVAC System/Sheet Metal Apprenticeship program.

I am submitting these comments in support of the Energy Commission's proposal to require certification of anyone performing Title 24 acceptance testing. The proposed Title 24 energy code update requires sophisticated inspections, but these inspections are useless unless performed by acceptance testers that have the skills, knowledge and ability to competently perform these inspections. Without high quality inspections, the code cannot be enforced, and we will not achieve our energy efficiency goals. I support the concept of taking advantage of the existing certification programs that are offered by NEBB, AABC and TABB. AABC, NEBB and TABB are respected, experienced national organizations that were created specifically to verify that HVAC systems perform as designed. Each of these organizations is accredited under ISO/IEC 17024, the internationally recognized standard for certification bodies. This accreditation ensures that TABB, NEBB and AABC have the existing infrastructure and ability to address the challenges of providing training and certification for Title 24 HVAC acceptance test technicians, supervisors and employers. Because these programs are already established, they have the capability to immediately start providing California acceptance testing certifications, ensuring that the benefits of this proposed regulation are achieved sooner rather than later.

While I support the designation of the specific TAB organizations as Acceptance Test Technician Certification Providers, I am concerned that the requirements for allowing other entities to also become Acceptance Test Technician Certification Providers may not be rigorous enough. Approval of an Acceptance Test Technician Certification Provider should be based on adherence to the following minimum standards:

- The certification body should be tied to an organization that trains for broad occupational competency in building and construction, including in mechanical systems or in lighting systems.

- Certification Providers should be accredited or have demonstrated that the quality of their certification program has been reviewed and assessed by a representative panel of industry experts.

The regulations should also require that any application includes provision of all training and testing procedures, manuals, handbooks and materials and a detailed explanation of how the efficacy of the training curriculum content and methods was evaluated and verified.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Lim". The signature is fluid and cursive, with the first name "Andy" and the last name "Lim" clearly distinguishable.



October 15, 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 FRANK MARSELLA. I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1984. I have completed a 4.5 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 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..

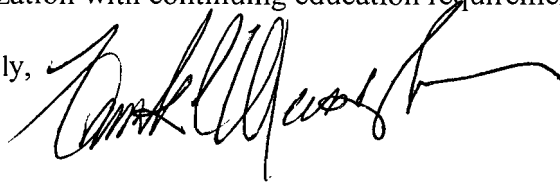
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial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

October 15, 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 Don Montgomery, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 1994. I have completed a 5yr 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 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.

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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 "D. E. Montgomery". The signature is written in a cursive, flowing style with a long, sweeping tail on the final letter.

October 5, 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 DANIEL MORALES, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 2004. I have completed a 5 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 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..

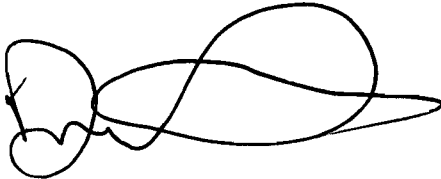
I am concerned that the proposed regulations do not provide rigorous enough prequalification requirements. Training and competency testing must go beyond just teaching a lay person a generic "acceptance test." This is not sufficient to ensure the real world ability to properly test and adjust commercial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

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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, consisting of a series of loops and a long horizontal stroke.

October 15, 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 Jason Parkey, I am an HVAC Journeyperson. I have been in the HVAC System Installation Trade since 96'. I have completed a 4½ 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 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.

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- 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, consisting of a large, stylized 'J' followed by a series of loops and a long horizontal stroke extending to the right.