

**DOCKETED**

<b>Docket Number:</b>	20-ATTCP-01
<b>Project Title:</b>	Mechanical Acceptance Test Technician Implementation Proceedings
<b>TN #:</b>	237394
<b>Document Title:</b>	Executive Officer Recommendation
<b>Description:</b>	N/A
<b>Filer:</b>	Joe Loyer
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	4/8/2021 11:38:04 AM
<b>Docketed Date:</b>	4/8/2021

**STATE OF CALIFORNIA**  
**California Energy Commission**

In the matter of,

California Energy Commission decision	)	EXHIBIT A,
to make acceptance test technician	)	EXECUTIVE DIRECTOR
certification mandatory for performing	)	RECOMMENDATION TO FIND
mechanical systems acceptance tests as	)	CERTIFICATION THRESHOLD
required by the Building Energy	)	CONDITIONS PURSUANT TO SECTION
Efficiency Standards.	)	10-103.2(b) OF THE BUILDING ENERGY
_____	)	EFFICIENCY STANDARDS REGARDING
		THE MANDATORY REQUIREMENT TO
		HOLD AN ACCEPTANCE TEST
		TECHNICIAN CERTIFICATION TO
		PERFORM THE MECHNCIAL
		ACCEPTANCE TESTS REQUIRED BY THE
		BUILDING ENERGY EFFICIENCY
		STANDARDS

April 8, 2021

**Executive Summary**

For the California Energy Commission (CEC) to require any person performing a mechanical systems acceptance test required by the Building Energy Efficiency Standards (Energy Code) to be certified as an acceptance test technician, the CEC must first make the following two findings:

1. There is a minimum of 300 certified acceptance test technicians statewide (Section 10-103.2(b)1A).
2. Eligible professions have reasonable access to the requisite training to become a certified acceptance test technician (Section 10-103.2(b)2).

Staff has found that on a statewide basis there are more than 350 certified acceptance test technicians capable of performing the required acceptance tests listed in Section 120.5 of the Energy Code and eligible professions have reasonable access to the certification training.

**Background**

Under the 2013 Energy Code, the CEC developed a program to help improve compliance with the lighting controls and mechanical systems acceptance test requirements. The acceptance test technician certification provider (ATTCP) program provides training, certification, and oversight of acceptance test technicians (ATTs) who perform the acceptance tests required by the Energy Code, as well as the acceptance test employers (ATEs) that employ ATTs. ATTCPs are professional organizations that are approved by the CEC to provide training curriculum for ATTs and ATEs, certification procedures, complaint resolution (including disciplinary procedures), quality assurance, and accountability measures.

Acceptance testing is the final stage of equipment installation in a nonresidential building project. The goal of acceptance testing is to verify that the installations are operational and installed to design and Energy Code requirements. Acceptance tests are performed and documented by the installing technician, approved by the project's responsible party (typically an engineer, architect, general contractor, or project owner), and submitted to the authority having jurisdiction (AHJ).

Entities seeking to become mechanical systems ATTCPs must submit an application to the CEC that describes in detail its training, certification, and oversight of the technicians that they will certify. The CEC reviews and approves the ATTCP applications. The training to be provided must include both classroom and laboratory training, and the certification testing must be a proctored written and laboratory tests. The ATTCP oversight requirements include a quality assurance program that has three points of inspection. The data entered by the ATT on the electronic compliance documents that are controlled by the ATTCP are verified based on its data type and range of value. Each ATT is also subject to random desk audits (at a rate of 1 to 5 percent of acceptance tests performed) where the acceptance test results are reviewed by a knowledgeable expert for consistency and accuracy with the project plans (as approved by the AHJ). Finally, the quality assurance program includes an unannounced on-site inspection (at a rate of 1 percent of submitted acceptance tests) as the ATT is performing the acceptance test.

The installing technician can provide the mechanical systems acceptance test required by the Energy Code for mechanical systems installations without an ATT certification for nonresidential building projects. However, many technicians do not know that acceptance testing is required or how to perform it. When the CEC makes certification mandatory, technicians performing the acceptance test must be certified ATTs and will be trained on how the tests are performed and how compliance is demonstrated to the AHJs. The ATTCP certification program will include quality assurance measures to ensure that the ATT is performing the acceptance tests to code and as prescribed in the design approved by the AHJ, with penalties for non-conformance.

As implemented, the ATTCP program is intended to help builders, building owners, and tenants of nonresidential projects realize the energy savings provided by compliance with the Energy Code. AHJs will also be able to effectively rely on the ATTCP program to enhance its inspection and approval programs without the burden of additional time being required at the project site. AHJs will also be able to require on-site acceptance tests to be performed in its presence with the results in hand as an ultimate check of compliance.

### **Summary of the Staff Evaluation**

For the CEC to consider making ATT certification mandatory to perform mechanical systems acceptance testing, the following requirements (Title 24, Part 1, Section 10-103.2(b)) must be satisfied:

1. There is a minimum of 300 certified ATTs statewide (Section 10-103.2(b)1A).
2. Eligible professions have reasonable access to the requisite training to become a certified ATT (Section 10-103.2(b)2).

Staff requested information from the mechanical systems ATTCPs to verify that the code requirements have been met. There are currently more than 350 certified ATTs capable of

performing the required acceptance tests listed in Section 120.5 of the Energy Code and eligible professions have reasonable access to the certification training.

The following concerns, raised at workshops held in February 2017 and July 2019, and were addressed by the published staff report and workshop (January 12, 2021):

1. Every county in California should have access to an adequate number of ATTs to perform the required mechanical systems acceptance tests.
2. Currently, some technicians are not seeking certification because it is not yet a requirement.
3. Stakeholders are concerned that the CEC may delay the implementation of the certification requirement if small counties that do not have a significant amount of nonresidential construction are not prepared for local implementation, even when larger building markets in California (such as the Bay Area or Los Angeles Area) may be ready to proceed.
4. Stakeholders are concerned that some local jurisdictions will not enforce the certification requirement, which would put those contractors who are certified at a disadvantage during the project bidding process.

These four concerns raise issues that are not encapsulated by the two required findings under 10-103.2(b). For example, even though 10-103.2(b)1 requires CEC to first find that there are over 300 ATTs statewide, this finding does not explore how these ATTs are geographically distributed across the state (concern #1). Similarly, although 10-103.2(b)2 requires CEC to find that eligible professions have reasonable access to the requisite training, this does not speak to regional market or preparedness disparities, such as those differences identified between the Bay Area or Los Angeles and many smaller counties. Thus, although substantial evidence on the record indicates that the 10-103.2(b) findings are satisfied, these findings do not fully address stakeholder concerns. Therefore, staff concluded additional action would be necessary to address these concerns.

Staff recommends addressing these concerns through implementing an intensive outreach and education plan to ensure AHJs, builders, engineers, architects, and other stakeholders are familiar with the mechanical systems ATTCP program and its application. Staff also recommends that local enforcement of this requirement be delayed allowing a reasonable time for training and implementation, not to exceed six months. This will allow lead time for additional technicians to seek and secure the require mechanical systems ATT certification.

It is staff's opinion that finding both mandatory requirements met while recommending local enforcement of this requirement be delayed for six months would provide an adequate time for builders in each county to more easily access an adequate number of ATTs (stakeholder concern #1), while recommending date certain enforcement would encourage technicians who have been hesitant to seek certification to get certified (stakeholder concern #2). This recommendation provides a reasonable compromise on flexibility between both larger jurisdictions (such as those in the Bay Area or Los Angeles) and smaller counties, who may have differing needs and schedules (stakeholder concern #3) without disadvantaging certified ATTs who have invested in that certification (stakeholder concern #4).

## **Recommendation of the Executive Officer**

Based upon the published staff report and workshop, I make the following recommendations:

1. Make the requisite finding pursuant to Title 24, Part 1, Section 10-103.2 that the mandatory mechanical systems ATT certification requirements have been met, and encourage local enforcement of the requirement be delayed until October 1, 2021, to allow time for training and implementation, not to exceed six months. This will provide the time necessary to address the four stakeholder concerns identified above.
2. Direct staff to implement an intensive outreach and education plan to ensure AHJs, builders, engineers, architects, and other stakeholders are familiar with the mechanical systems ATTCP program and its application. This engagement will help to address the four stakeholder concerns identified above.

Signature on File

Drew Bohan  
Executive Director  
California Energy Commission

Date April 8, 2021