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Comment Received From: Michael Scalzo
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Reinstating Plan Review Requirements for Enhanced Title 24, Part 6 Compliance

Additional submitted attachment is included below.

National Lighting Contractors Association of America

September 14, 2023

California Energy Commission
Docket #: 22-BSTD-01
Project Title: 2025 Energy
Code Pre-Rulemaking
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Reinstating Plan Review Requirements for Enhanced Title 24, Part 6 Compliance

To: California Energy Commission

NLCAA

National Lighting Contractors Association of America (NLCAA) is a nonprofit educational provider of California's Title 24 Energy Efficiency requirements. In 2014, NLCAA was approved by the California Energy Commission as a Lighting Controls Acceptance Test Technician Certified Provider, one of only two providers in the entire state of California. We train, certify, and oversee Lighting Acceptance Test Technicians (LC-ATTs) and Lighting Controls Acceptance Test Employers (LC-ATEs).

NLCAA is also approved by the California Department of Industrial Relations (DIR) as school number 174 to provide Continuous Education Units (CEUs) for certified electricians.

Proposal

NLCAA is proposing that the Building Energy Code Section 130.4(a)1 of the 2013 code cycle be reinstated. These requirements encompass the certification of plans, specifications, installation certificates, and compliance with various sections of the building code, specifically Section 130.1(c), 130.1(d), 130.1(e), and 130.2(c). NLCAA feels strongly that reinstating these certification criteria is essential for ensuring Title 24, Part 6 compliance and would foster a more collaborative approach with the Authority Having Jurisdiction (AHJ).

It is important to emphasize that the reinstated certification requirements would not serve as a means to override the AHJ's authority or the engineer on record (EOR). Instead, the reinstated certification requirements would function as a valuable tool to enhance transparency and cooperation with the design team prior to the permitting process and would provide clarity on non-compliance issues. The

reinstated certification requirements would yield the following.

1. Facilitating Collaborative Compliance: Reinstating these certification requirements would promote a collaborative compliance process. Rather than circumventing the EOR's decisions, the review process would work in tandem with their assessments. The EOR would remain the ultimate authority, while the review process would serve as an additional layer of documentation.

2. Elevating Documentation Practices: The restoration of these review criteria would significantly improve our documentation practices. The compliance documents would serve as clear records of compliance or non-compliance with specific Title 24, Part 6 regulations. This documentation would be valuable not only for the AHJ but also for building owners, architects, and the installing contractors, ensuring everyone is aware of any issues and their resolution prior to permitting.

3. Compliance Transparency: By noting instances of non-compliance through the certification process, we enhance transparency. This transparency can lead to more informed discussions and resolutions, ultimately fostering a better understanding of the compliance landscape.

4. Accountability: The reinstatement of these requirements reinforces the accountability of architects, engineers, and contractors for adhering to the energy efficiency and environmental standards outlined in Title 24, Part 6. It also ensures that building owners receive the energy-efficient lighting systems they expect and helps to meet California's decarbonization goals.

5. Energy Efficiency and Environmental Responsibility: This approach aligns with our commitment to promoting energy-efficient and environmentally responsible building practices, a cornerstone of Title 24, Part 6. It reflects our dedication to reducing energy consumption and mitigating the environmental impact of our projects and the decarbonization of California.

Points on the subject:

An ATT who has undergone additional training, as specified in the attached docket letter, should conduct a comprehensive plan review of all construction documents.

1. It is important to communicate any code compliance issues to the client or design team that could hinder the project's successful completion of the functional testing process.
    - Just meeting code compliance in the design phase doesn't guarantee smooth functional testing. Many projects encounter challenges related to daylit controls, such as cardinal direction considerations or occupancy sensor placement, which might not be adequately addressed in the plans despite complying with the code.
2. The role of the ATT must never override the approved plans of enforcement agencies.
3. Similarly, the ATT must never supersede the approved plans of the engineer of record.
    - In situations where the engineer is unavailable, there could be instances where the responsibility for a project is assumed by the ATT or another entity like a general or

electrical contractor. Such a transfer of responsibility has occurred in cases when the engineer is no longer accessible.

4. The NRCC could establish a designated signature area for ATTs to indicate whether they have found the design compliant or non-compliant. This information could then be shared with the design team prior to plan submission, fostering better communication and proactive resolution of compliance issues.

NOTE: NLCAA has submitted past correspondence on this subject, which we have included for reference and further information.

Urgency of Proposal

Since Section 130.4(a)1 was removed, the role of the ATT has been relegated to "just test what is shown on the drawings," regardless of Title 24, Part 6 compliance requirements. This has led to an increasing number of non-compliant projects being approved and a growing number of reports from ATTs in the field experiencing pushback and lack of enforcement amongst various AHJs. In addition, NLCAA has experienced a dramatic downturn in the number of active ATTs, with the remaining ATTs reporting an increasing loss of Acceptance Testing projects to "testers" that simply sign off on the forms. This is not a financially sustainable position for NLCAA and other ATTCPs.

Reinstating Section 130.4(a) would not only strengthen the effectiveness of acceptance testing but also promote genuine compliance rather than mere procedural checkboxes. NLCAA stands at a pivotal juncture due to the lack of enforcement, and unless substantial changes occur promptly, sustaining our business will be in jeopardy. NLCAA is not the sole ATTCP affected by this financial strain; other ATTCPs may also struggle to maintain their operations. Furthermore, if corrective action is not taken promptly, Title 24, Part 6 could devolve into a mere paperwork exercise, with more AHJs and designers bypassing California's Energy Code and undermining the state's decarbonization objectives. Therefore, NLCAA urgently requests expedited consideration of our proposal to reinstate Section 130.4(a)1 in this code cycle in order to restore compliance before it becomes too late for the entire ATTCP program. We request this change be made to the 2022 code, and if that's out of your regulatory authority, then have it be implemented in the 2025 energy code update.

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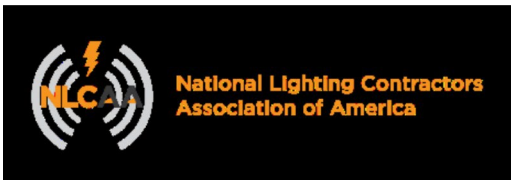
National Lighting Contractors Association of America

Supporting documents provided to the CEC over the years:

Attachment - 1:

DOCKETED	
Docket Number:	19-BSTD-03
Project Title:	2022 Energy Code Pre-Rulemaking
TN #:	234025
Document Title:	NLCAA letter on ATT involvement in NRCC rev2
Description:	This document supersedes TN #234004
Filer:	Brianna Kadar
Organization:	National Lighting Contractors Associaton of Amercia (NLCAA)
Submitter Role:	Applicant
Submission Date:	7/28/2020 2:07:39 PM
Docketed Date:	7/28/2020



NOTE: This document is a correction to the previously submitted letter under TN #234004. Originally the letter implied that NLCAA has already partnered with Energy Code Ace (ECA). This correction shows NLCAA HOPES to partner with ECA in the future. No agreements or decisions have been made at this point.

Background

One of the key cornerstones of the CA Title 24, Part 6 Building Energy Efficiency Standards are the Acceptance Test requirements that, when properly carried out, ensure code compliance and verification that lighting control equipment is installed and operates in compliance with Energy Standards requirements.

As with any testing requirements, the effectiveness of these Acceptance Tests is dependent upon the quality of the training and certification of the testers; therefore Section 10-103-1 sets forth the requirements that apply to nonresidential lighting control Acceptance Test Technicians (ATTs), Acceptance Test Employers (ATE), and the Acceptance Test Technician Certification Providers (ATTCPs) that train and certify them. This section of the energy code states that the ATTCPs are required to

submit a written application to the Energy Commission with a summary and the related background documents to explain how their training criteria and procedures meet the qualification requirements of Title 24, Part 1, Section 10-103-1(c). Furthermore, the ATTCPs must explain how their organizational structure and procedures include independent oversight, quality assurance, supervision and support of the acceptance test training and certification processes.

The required training and certification, provided by the ATTCPs, requires both hands-on experience and theoretical training such that ATTs demonstrate their ability to apply the Building Energy Efficiency Standards acceptance testing and documentation requirements to a comprehensive variety of lighting control systems and networks that are reflective of the range of systems currently encountered in the field. However, it is also understood that proper preparation is also a product of experience and therefore participation in the technician certification program is limited to persons who have at least three years of verifiable professional experience and expertise in lighting controls and electrical systems as determined by the Lighting Controls ATTCPs, to demonstrate their ability to understand and apply the Lighting Controls Acceptance Test Technician certification training. Also, because the energy code is on a 3 year cycle, there are additional requirements and procedures for recertification of ATTs each time the Building Energy Efficiency Standards is updated with new and/or modified acceptance test requirements. The ATTCPs are not limited to simply training and certifying the ATTs, they also describe in their applications to the Energy Commission procedures for accepting and addressing complaints regarding the performance of any certified ATT or ATE, and explain how building departments and the public will be notified of these procedures. Finally, the ATTCPs describe in their applications to the Energy Commission procedures for revoking the certification of ATTs and ATEs based upon poor quality or ineffective work, failure to perform acceptance tests, falsification of documents, failure to comply with the documentation requirements of these regulations or other specified actions that justify decertification.

The training and certification requirements, found in Section 10-103-1, not only set the standard for the ATT to be certified to perform the acceptance tests but also serve as the process to establish the ATT as the most experienced, best trained, verified professional, with ongoing requirements for recertification when code changes occur. Furthermore, the procedures that are set in place to address complaints and revocation of their certification in the event of poor or ineffective work ensures that the ATT is accountable and held to a high standard in ensuring code compliance and verification that lighting control equipment is installed and operating in compliance with Energy Standards requirements. **3301**

The importance of the ATT, as a resource, became apparent when on July 1, 2014 the 2013 CA Title 24, Part 6 went into effect and SECTION 130.4(a) set forth the Lighting Control Acceptance Test requirements. This code section stated that before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor and outdoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4. The certification was based on the Certificate of Acceptance that was to be submitted to the enforcement

agency under Section 10-103(a) of Part 1. Therefore, if the lighting control system was not installed and did not operate in compliance with Energy Standards requirements, the project would not pass the required Acceptance Tests and the occupancy permit would not be granted. This often results in considerable impact to project costs, due to extensive changes to an installed system, compounded by pressure from the building occupant to get the project signed off so they can occupy the building.

For this reason, the Enforcement Agencies were able to rely on the ATTs, because 2013 CA Title 24, Part 6, SECTION 130.4(a)1 required the ATT to certify the plans, specifications, installation certificates, and maintenance information meet the requirements of Part 6. When properly carried out, this requirement provided a method for the ATT to address any lack of information and inexperience due to the design team or the installing contractor not being properly versed in the energy code requirements, not understanding how the lighting control system is supposed to be installed, or how it is to be properly programmed to meet energy code requirements.

Current Issue

However, on January 1, 2017, when the 2016 CA Title 24, Part 6 went into effect, SECTION 130.4(a) removed the requirement for the Acceptance Test Technician (ATT) to certify the plans, specifications, installation certificates, and maintenance information meet the requirements of Part 6. It is our understanding that the reason for this change was that it was determined that the ATT could not overrule the Energy Code Enforcement Agency (EA) once plans were through plan check and stamped.

This change in SECTION 130.4(a) has resulted in significant and ongoing challenges that are the result of no longer requiring the ATT to be involved in the verification of the design and installation of the lighting control system prior to installation. The ATT is then brought in, at the last minute, to perform the Acceptance Tests after everything has already been installed. Unfortunately, there are often problems with the design, the installation and/or the commissioning. These challenges have resulted in considerable costs to resolve issues or often contribute to the ongoing and pervasive use of non-compliant building designs coupled with inconsistent enforcement of acceptance testing requirements at the local level.

In order to attempt to address these challenges, Energy Code Ace is offering an interactive, hands-on course that is designed to provide Plans Examiners and Building Inspectors with the knowledge and skills needed to more quickly and effectively enforce California's Building Energy Efficiency Standards (Energy Code or Title 24, Part 6) for nonresidential projects. The course objective is to assist in determining nonresidential construction's top areas of typical greatest impact on Energy Code compliance, identify essential Plans Examiner and Building Inspector review tasks associated with top Nonresidential Energy Code compliance categories, and describe how review strategy shifts based on project type, use given Plans Examiner and Building Inspector Nonresidential checklists to guide review, and identify where checklist line items correspond to compliance documentation, practice ways to address noncompliance, as well as methods for communicating effectively, during plan check and building inspection phases.

However, these courses have highlighted the challenge that the plan check process and the project inspection process is already very limited in the amount of time that is allocated to the EAs. Furthermore, these courses have also shown that the Plan Checkers and EAs performing the inspections have not received the same level of training, experience, or verification of the lighting control system requirements that the ATT was subject to.

In order to address any concerns of the ATT overruling the EAs once the plans have made it through plan check and were stamped, we recommend that the ATT certify the plans, specifications, installation certificates, and maintenance information meet the requirements of Part 6 as part of the completion of the NRCC document, prior to the plan review process. This would also address a commonly used practice of submitti ng plan design as 80% complete when submitti ng to plan review, which often results in plans being approved that are not 100% complete or compliant. While this may add a minimal cost to the project, for this work to be done by the ATT, it has been proven that the additional cost implications of having to resolve the noncompliance issues after they are installed often results in the changes not being made and contributes to an ongoing and pervasive use of non-compliant buildings coupled with inconsistent enforcement of acceptance testing requirements at the local level. Furthermore, the EAs could rely on the work of the ATTs, which would assist to in consistent acceptance test accountability and ensure building compliance.

NLCAA Proposal

To resolve these challenges, NLCAA proposes:

1. Having an ATT review the plans/specifications and the NRCCs for compliance and then have a required signature of the ATT on the NRCC form.
    a. This will increase compliance of the NRCC document as a whole and provide the EAs with properly completed compliance documents. We have found that many of the compliance documents that the ATTs review don't even have the correct NRCC, NRCI or NRCA forms selected on the NRCC leading to confusion with EAs unsure of what is required of the project.
    b. The ATT would also need to review the plans, helping to eliminate designs that may not pass functional testing; i.e. cardinal direction issues that arise during the daylight test, as explained in the NLCAA ATT course, placement of occupancy sensors, etc. This review will be needed to verify the NRCCs.
    c. Many ATTs are excellent at understanding the various manufacturers' lighting control systems, even more so than many engineers or third parties. As a plus, this could also provide a glimpse of the lighting controls system design, MFG specific, that could address any issues that may arise from a poor design or specification, as it did during the 2013 code cycle.

Ensuring the ATT has these capabilities.

2. NLCAA hopes to partner up with Energy Code Ace (ECA). ECA will be hosting a new online version of their 8-hour training course "2019 Title 24, Part 6 Essentials — Nonresidential Standards: Indoor Lighting" which is an in-depth training course on all aspects of the NRCCs.
    a. NLCAA hopes to utilize the Energy Code Ace course to create a new certification, potentially called the LCATT-P (Lighting Controls Acceptance Test Technician-Plan). After attending the certification course, passing a rigorous written test including plan reviews utilizing the NRCCs, the LCATT would be able to become an LCATT-P.
    b. NLCAA will take the additional, nonrequired, step to create further training on the NRCCs and plan specifications, beyond what is currently offered in the LCATT courses.

Conclusion

The review and signing of the NRCCs by the ATTs will support the California Energy Commission's overall goal of compliance of the Building Energy Codes. The unique training that the ATT receives per Section 10-103-1 makes them the most accountable in ensuring code compliance and the best qualified for plan review, adding the additional ATT-P training would further qualify the ATT to sign off on the NRCC forms. This plan review process will help support designers and save the end user money by eliminating change orders and project delays and ensuring energy efficient building savings are realized. Many Acceptance Testing companies have already added the process of plan review to their business model to ensure compliance and it has been proven to reduce overall project costs. Making this review process a requirement and adding the ATT signature to the NRCC forms will go a long way to address compliance issues and to support California's overall energy initiatives

National Lighting Contractors Association of America

Attachment – 2:

Presented at the CEC Stakeholder Meeting by Michael Scalzo with NLCAA on July 18th, 2017.

Hello CEC staff,

Thank you for allowing me to speak. My name is Michael Scalzo, I am a Title 24 Consultant and the Executive Director of the NLCAA. As an ATT, I have tested on over 300 Acceptance Testing projects in California.

After reviewing the changes for 2016, I personally do have a concern over the Standard's verbiage change in §130.4; the removal of "Certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of Part 6.". I feel that it will lessen the responsibility of the ATTs in regard to plans and specifications which could vastly reduce their involvement in ensuring that the mandatory requirements are met.

In the early stage of Acceptance Testing, the majority of projects were designed and/or installed incorrectly, thus not able to pass the Testing procedures. Many of these issues were due to the engineering firms not being prepared for the new 2013 Standard's changes. Additionally, we also saw the lack of basic requirements in Area Controls, Multi-Level and Auto Shut-Off on the majority of projects that we tested, and many of these requirements were not new to the 2013 Standards. We found that a portion of our time had to be devoted to design compliance to ensure the plans and specifications were correct.

ATTs have had to evolve and are now an integral part of projects. This is due to our proficiency in the Standards and our needed support in creating compliant designs. Designers and installers have come to rely on the ATTs for their expertise, and the AHJ inspectors are gaining a level of confidence in the ATT's verification process, not to mention providing the state-approved testing forms.

The design issues are still true today, but designers are more aware of the requirements due to the tutelage of the ATTs, but the AHJs are still approving non-compliant plans. I review roughly 300 sets of plans per year. I and other experts would say 98% of the plans that we review are not compliant.

In closing, the Acceptance Testing process has been challenging due to the continued design issues of even the basic requirements. However, the removal of the verbiage from §130.4 is impeding the continuing improvements that we have seen on projects, and projects are reverting back to the unenforced non-compliant designs.

Michael Scalzo, President of NLCAA