

**DOCKETED**

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# Staff Recommendations for the 2022 Energy Code

Acceptance Test Technician Certification Provider Program

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Standards Compliance Office

March 10, 2020

California Energy Commission, Sacramento



# Welcome





# House Keeping

- [CEC WebEx main page](#): Meeting Number 927 789 029
- Oral and written comments will be accepted during the workshop.
  - Comments may be limited to five minutes per speaker if necessary.
  - You are encouraged to comment at any time – Please use the microphones.
- Written comments must be submitted to the Docket Unit by 5:00 P.M. on March 20, 2020 (Docket Number: 19-BSTD-03).
  - [2022 Energy Code Pre-Rulemaking docket](#) comment page
- Documents and presentations for this meeting will be available at the [2022 Energy Code Pre-Rulemaking docket](#).

**Any comments may become part of the public record for this proceeding.**



# Workshop Agenda

<b>Tentative Time</b>	<b>Staff Proposal – Notice Agenda</b>
9:00 am	<b>Introduction and Background</b>
	ATTCP Program Background
9:40 am	<b>Database requirement for all ATTCPs</b>
10:00 am	<b>Recommended changes to the Lighting Controls Acceptance Testing Requirements</b>
	Shut-Off Lighting Controls Acceptance Tests
	Automatic Daylighting Controls Acceptance Tests
	Demand Responsive Lighting Controls Acceptance Tests
	Institutional Tuning Power Adjustment Factor Acceptance Tests
	Outdoor Lighting Controls Acceptance Tests
Noon	Lunch
1:00 pm	<b>Recommended changes to the Nonresidential Data Registry Requirements</b>
4:00 pm	<b>Closing Remarks</b>



# Introduction and Background



# History of the Energy Commission

- Section 25402 et al. of the Public Resources Code (known as the Warren Alquist Act)
- The act created the Energy Commission in 1974 and gave it authority to develop and maintain Building Energy Efficiency Standards
- Requires the Standards and new requirements to be cost effective over the economic life of the structure
- Requires the Energy Commission to update the Standards periodically



# Policy Drivers: Building Standards

- The following policy documents establish the goal for new building standards:
  - 2008 CPUC/CEC Energy Action Plan – ZNE for Residential buildings by 2020 and nonresidential buildings by 2030
  - SB 100 – Clean electricity by 2045
  - B-55-18 – Governor Jerry Brown’s Executive Order to achieve carbon neutrality
  - AB 3232 – Assess the potential for the state to reduce the emissions of greenhouse gases from the state’s residential and commercial building stock by at least 40 percent below 1990 levels by January 1, 2030.



# 2022 Standards Update Schedule

<b>Estimated Date</b>	<b>ACTIVITY OR MILESTONE</b>
<b>March 10, 2020</b>	<b>Staff Workshop on the proposed changes for the ATTCP program</b>
March 26, 2020	Staff Workshop on the Energy Design Rating
<b>August-October 2020</b>	<b>Commission-Sponsored Staff Workshops</b>
Sept–November 2020	Express Terms Developed (including New MF Section)
February 2021	45-day Language posted, Start of 45-day review/comment period
<b>March 2021</b>	<b>Lead Commissioner Hearing</b>
<b>July 2021</b>	<b>Adoption of 2022 Standards at Business Meeting</b>
September 2021	Final Statement of Reasons Drafted and Approved
July 2021	Adoption CALGreen (energy provisions) - Business Meeting
December 2021	Approval of the Manuals
October 2021	Final Rulemaking Package delivered to CBSC
December 2021	CBSC Approval Hearing
January 2021	Software, Compliance Manuals, Electronic Documents Available
January 1, 2023	<b>Effective Date</b>



# Utility Stakeholder Meetings

<b>Utility-Sponsored Stakeholder Meeting Second Round</b>	<b>Date</b>
Lighting	March 3, 2020
Single Family Whole Building	March 5, 2020
Nonresidential Envelope Part 1: High Performance Envelope	March 10, 2020
Nonresidential and Single Family HVAC Part 1: Data Centers, Boilers, Air Distribution, Variable Capacity	March 12, 2020
Grid Integration	March 19, 2020
Multifamily HVAC & Envelope	March 26, 2020
Water Heating	March 17, 2020
Covered Processes Part 1: Refrigeration System Opportunities	April 2, 2020
Nonresidential HVAC and Envelope Part 2: Reduced Infiltration, HVAC Controls (DOAS, Air Efficiency)	April 14, 2020
Covered Processes Part 2: Controlled Environmental Horticulture	April 16, 2020
Multifamily Restructuring	April 23, 2020

[Utility Sponsored Stakeholder Meetings](https://title24stakeholders.com/)

<https://title24stakeholders.com/>



# Acceptance Test Technician Certification Provider Program

- The Acceptance Test Technician Certification Provider (ATTCP) program was established by the CEC in the 2013 Energy Code.
  - The purpose of the program is to help improve compliance with acceptance testing for lighting and mechanical controls.
  - ATTCPs are approved by the CEC.
- The ATTCPs train, certify, and provide oversight (including quality assurance) for the following:
  - Acceptance Test Technicians (ATTs) who perform the acceptance tests required by the Energy Code; and
  - Acceptance Test Employers (ATEs) that employ ATTs.
- As of July 1, 2014, acceptance testing for lighting controls must be performed by a certified ATT.



# Database Requirement for all ATTCPs



# Issue

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- The CEC evaluates energy efficiency programs for:
  - Public benefit
  - Compliance with the Energy Code
  - Greater energy savings, and
  - Cost effectiveness
- CEC access to ATTCP program related data is necessary to evaluate program performance.
- Current database functionality is only defined for mechanical ATTCPs.
- CEC staff access to information from these databases is inconsistent.



# Background and Context

- There are two CEC approved lighting controls ATTCPs:
  - California Advanced Lighting Controls Training Program (CALCTP)
  - National Lighting Contractors Association of America (NLCAA)
- There are four CEC approved mechanical ATTCPs:
  - California State Pipe Trades Council (CSPTC)
  - National Energy Management Institute Committee (NEMIC)
  - National Environmental Balancing Bureau (NEBB)
  - Refrigeration Service Engineers Society (RSES)
- Each ATTCP has implemented a database system to track proposed and completed acceptance tests.
- ATTCPs databases are voluntary and support their quality assurance programs.



# Current Code Requirements

- Add to Title 24, Part 1, Sections 10-103.1/.2
- ATTCP database is not required under the Energy Code
- One exception:
  - To make a mechanical ATT equivalent to a HERS Rater for nonresidential duct leakage testing
    - This is for one acceptance test out of 19
    - All mechanical ATTCPs comply with this requirement
    - Lighting control ATTCPs are not subject to this requirement



# Proposed Changes

Staff proposed to make a database system a requirement for all ATTCPs with the following goals (Title 24, Part 1, Section 10-103.1/.2):

- Support the ATTCP quality assurance program
- Provide printed and e-copies of completed acceptance tests to AHJs
- Provide verification services for AHJs
- Provide the CEC with administrative access



# Potential Impacts

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- No additional costs associated with this proposal
  - The ATTCPs have all (all six) implemented database systems that would comply with the intended requirements with only two needing minor adjustments.
- Compliance and Enforcement
  - May improve AHJ enforcement of the Energy Code.
  - Will not add burden to existing compliance efforts by ATTCPs.



# Comments

- In the future, a nonresidential data registry may be approved by the CEC and will need to interact with each ATTCP. Should staff consider an exception for the database requirement if the ATTCP relies exclusively on the nonresidential data registry?
- What additional technical considerations should be addressed other than:
  - Support the ATTCP quality assurance program,
  - Track proposed and completed acceptance tests,
  - Maintain a list of approved ATTs and ATEs,
  - Provide a means for AHJs to validate the submitted acceptance test compliance documents, and
  - Provide CEC administrative review access.



# Shut-Off Lighting Controls





# Topics to be Covered

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The two topics concerning the Shut-Off Lighting Controls are:

1. Aligning the occupancy sensing lighting control construction inspection with the Energy Code, and
2. Include each type of occupant sensing control in Reference Appendix NA7.6.2.3.



# 1. Occupant Sensing Control Construction Inspection

**Issue:** Align the occupancy sensing lighting control construction inspection with the Energy Code

- Construction inspection requirements are not closely linked with the Energy Code.



# Background and Context

- ATTCPs train ATTs to:
  - Perform the lighting controls acceptance tests:
    - Construction inspection
    - Functional test
  - Complete the compliance documents
- The construction inspection includes the following:
  - Specific checklist regarding documentation and installation inspections directly from the Energy Code requirements.
  - Verification that the installation is complete in preparation for functional testing.
- Over 2,000 certified lighting controls ATTs
- Over 27,000 lighting controls acceptance tests performed
  - The bulk (over 6,000) were performed in the county of Los Angeles



# Current Code Requirements

## NA7.6.2.1 General Requirements

Verify that the shut-off control qualifies as one of the required control types, is installed, and is fully functional in accordance with each applicable requirement in section 130.1(c), or that the application meets one of the exceptions. List each specific exception claimed, from section 130.1(c).

## NA7.6.2.2 Occupancy Sensing Lighting Control Construction Inspection

Prior to Functional testing, verify and document the following:

- (a) Occupancy sensor has been located to minimize false signals.
- (b) No closer than four (4) feet from a HVAC diffuser.
- (c) Passive infrared sensor pattern does not enter into adjacent zones.
- (d) Occupancy sensors do not encounter any obstructions that could adversely affect desired performance.
- (e) Ultrasonic occupancy sensors do not emit audible sound.



# Proposed Change

- Clarify the overall acceptance test requirements for the occupancy sensing lighting controls.
- Verify that the construction inspection requirements are supported by the Energy Code:
  - Minimizing false signals, being at least four feet from a HVAC diffuser, not detecting in adjacent zones, and being free of obstruction are not explicitly in the Energy Code
  - Ultrasonic occupancy sensors not emitting an audible sound is supported in the Energy Code (section 110.9(b)6Bii)



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Staff would like to hear if stakeholders have any specific suggestions for how to improve the construction inspection requirements.



## 2. Include Each Type of Occupant Sensing Control in Reference Appendix NA7.6.2.3

**Issue:** NA7.6.2.3 does not clearly specify each type of occupancy sensing controls.

- There are four types of occupant sensing controls that are defined in the Energy Code at this time: occupant, partial-on, partial-off, and vacancy sensors



# Background

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- The 2016 acceptance test compliance document included separate sections: occupant, partial-on, partial-off, and vacancy sensors.
- NA7.6.2.3 does not reflect compliance options.
- Industry and enforcement are hampered by inadequate compliance documentation.
- Occupant sensors are only one type of occupant sensing control.
  - There are four types of controls that comply with the Energy Code.



# Current Code Requirements

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- The current occupant sensing controls acceptance test procedures in NA7.6.2.3 are mostly specific to occupant sensors and do not address partial-on or partial off occupant sensors.
- There is one step that addresses vacancy sensors.



# Proposed Change

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Clarify the occupant sensing controls acceptance test to include requirements to test each type of occupant sensing controls.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Staff would like to hear if stakeholders agree with staff's recommendations or have any other suggestions for how to improve the acceptance test requirements in NA7.6.2.3.



# Demand Responsive Lighting Controls Acceptance Test



# Issue

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The NA7.6.3 procedures currently include steps that are not able to be verified through visual inspection prior to functional testing and a reference to requirements in the Energy Code without specific directions.

- Align the construction inspection with the Energy Code and the intended purpose of construction inspections.



# Background and Context

- The requirements in the acceptance testing procedures are based on the criteria set forth in the Energy Code.
- The demand responsive control requirements were expanded for the 2019 Energy Code.
- However, the NA7.6.3.1 requirements were not updated accordingly.
  - ATTs and ATTCPs must interpret the requirements in the field.
  - CEC Staff has provided interpretations that should be added to the Energy Code for clarification.
  - The current requirements are difficult to enforce for AHJs.
- Staff revised the compliance document (NRCA-LTI-04-A) to include specific requirements from section 110.12(a).



# Current Code Requirements

Prior to Functional testing, verify and document the following:

- (a) That the demand responsive control is capable of receiving a demand response signal directly or indirectly through another device and that it complies with the requirements in section 130.1(e).
- (b) If the demand response signal is received from another device (such as an EMCS), that system must itself be capable of receiving a demand response signal from a utility meter or other external source.



# Proposed Changes

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Staff recommends that the CEC replace the current construction inspection requirements with items from section 110.12 that can be verified through visual inspections prior to functional testing.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Is there any additional relevant information staff should consider related to this recommendation?



# Automatic Daylighting Controls Acceptance Test



# Topics to be Covered

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Staff recommends changes to three topics concerning the automatic daylighting controls:

1. Align the construction inspection of the acceptance test procedures for automatic daylighting controls with the Energy Code.
2. Add daylight dimming plus off power adjustment factor check to the stepped switching/dimming functional testing requirements.
3. Specify that acceptance testing is required for automatic daylighting controls in secondary sidelit daylight zones complying with section 140.6(d).



# 1. Automatic Daylighting Controls Construction Inspection

**Issue:** The automatic daylighting controls construction inspection consists of general language that the controls comply with applicable requirements in section 130.1(d) without providing any further details about which requirements are applicable for the construction inspection.



# Background and Context

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- The language in NA7.6.1.1 consists of a general statement that refers to section 130.1(d).
- Compliance documents follow the requirements and exceptions in section 130.1(d).
- Industry and enforcement can easily track the compliance document to the regulation (section 130.1(d)).



# Current Code Requirements

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## NA 7.6.1.1 Construction Inspection

Verify that automatic daylighting controls qualify as one of the required control types, are installed, and fully functional in accordance with each applicable requirement in section 130.1(d), and list each specific exception claimed, from section 130.1(d).



# Proposed Changes

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Replace the construction inspection with a checklist of applicable requirements from section 130.1(d), including the exceptions.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Staff would like to hear if stakeholders have any specific suggestions for additional improvements to the construction inspection requirements.



## 2. Automatic Daylighting Controls add Power Adjustment Factor

**Issue:** Add daylighting dimming plus off power adjustment factor check to the stepped switching/dimming functional testing requirements.

- The functional testing procedures for stepped switching/dimming control systems in NA7.6.1.2.1 are missing a check for the daylight dimming plus off power adjustment factor (PAF).



# Background and Context

- The automatic daylighting controls acceptance testing requirements:
  - Continuous dimming control systems
  - Stepped dimming/switching control systems
- Staff confirmed the intent of the regulations to include the PAF check in both sets of functional testing procedures.
- Staff consulted with ATTCPs on the potential impacts.
- Staff revised the compliance document (NRCA-LTI-03-A) to include the missing step.
- No code change was required.



# Current Code Requirements

- The functional test is for systems with more than 10 levels of controlled light output in a given zone.
- Identifies the minimum daylighting location in the controlled zone using one of the following methods:
  - Illuminance method
  - Distance method
- Requires the ATT to perform the no-daylight, full-daylight, and partial-daylight tests.
- There is no explicit consideration given for the PAF in the functional test.



# Proposed Changes

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- Use NA7.6.1.2.2 (continuous dimming control systems) as the guide.
- Maintain the key functional test requirements.
- Both sets of functional testing procedures should require the ATT to verify the daylight dimming plus off capability if the PAF is claimed.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Is there any additional relevant information staff should consider related to this recommendation?



### 3. Automatic Daylighting Controls in Secondary Sidelit Daylit Zones

**Issue:** NA7.6 does not explicitly state that acceptance testing is required for automatic daylighting controls in secondary sidelit daylit zones complying with the prescriptive requirements in section 140.6(d).



# Background and Context

- The requirements for secondary sidelit daylight zones are in section 140.6(d).
- Enforcement of section 140.6(d) is provided through its reference to section 130.1(d).
- Section 130.1(d) is enforced through acceptance test NA7.6.1.
- ATTCPs trained ATTs to perform the acceptance testing for primary and secondary sidelit daylight zones.
- AHJs have been relying on the ATTCP trained ATTs.
- ATTCPs have been enforcing secondary sidelit daylight zones using NA7.6.1 without a direct reference in compliance with CEC direction.



# Current Code Requirements

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- Reference Appendix NA7.6.1 does not clearly require for automatic daylighting controls in secondary sidelit daylit zones.
- The CEC confirmed the intent that the secondary sidelit daylit zones should be enforced using the same methods as the primary zones.



# Proposed Changes

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- Add clear reference in NA7.6 to section 140.6(d).
- Staff also recommends the language in section 130.4(a)3 of the Energy Code be updated.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Do stakeholders agree that this clarification is necessary and will have no significant impacts?



# Institutional Tuning Power Adjustment Factor Acceptance Test



# Topics to be Covered

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Staff recommends changes to two topics concerning the institutional tuning power adjustment factor acceptance test:

1. Institutional Tuning located in NA7.7.
2. Simplify the requirements for functional testing.



# 1. Institutional Tuning located in NA7.7

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**Issue:** The acceptance testing procedures for the institutional tuning PAF acceptance test are located in section within NA7, while other acceptance tests are located in NA7.6.



# Background and Context

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The ATTCPs already train ATTs to perform this acceptance test despite its location in NA7.7.



# Current Code Requirements

- NA7.7 describes the requirements for lighting controls installation, with the exception of NA7.7.5.2.
- NA7.7.5.2 describes the acceptance test requirements for institutional tuning:
  - Construction inspection
  - Functional testing
    - Observation of tuning, or
    - Verification of tuning



# Proposed Changes

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Staff will clarify NA7.7 to include a better description of the contents, including the acceptance test.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Is there any additional relevant information staff should consider related to this recommendation?



## 2. Institutional Tuning Power Simplify Requirement

**Issue:** The functional testing procedures currently state that if the ATT is observing the tuning of a system the party responsible for the tuning must certify that the remainder of the system is tuned in a similar manner.

- However, there is no mechanism for someone other than the ATT to certify results.
- The option to observe systems during test and have someone else certify the others are correct is delegating ATT authority to a non-certified technician.



# Background and Context

- The two methods for the ATT to verify installation:
  - Observe the tuning as it is performed, or
  - Verify the tuning afterward.
- The ATT can choose to work with the person performing the tuning or return once all systems are tuned.
- The CEC has provided no specific procedure for someone other than an ATT to certify tuning results.
- The ATTCPs have trained ATTs to perform the institutional tuning acceptance tests.
- However, these procedures can create situations where the ATT must fail the system if the person tuning is unavailable.



# Current Code Requirements

- The current acceptance test procedures are in NA7.7.5.2.3
  - Do not provide adequate compliance options with feedback from the ATTCPs.
- ATTCPs, ATTs, and ATEs are hampered by an inadequate acceptance test procedure and compliance documentation.
  - Staff has heard directly from the ATTCPs that the current procedures are not practical to implement because the CEC has not provided a place for this on the NRCA-LTI-05-A or any other compliance document.



# Proposed Changes

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Minor changes to be consistent with the Energy Code and ensure the procedures are implementable.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Are there any specific clarifications stakeholders suggest for these test procedures?



# Outdoor Lighting Controls





# Topics to be Covered

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Staff recommends changes to two topics concerning the Outdoor Lighting Controls:

1. Consolidate the motion sensor procedures into one acceptance test
2. Combine astronomical time switch and automatic scheduling controls tests



# 1. Outdoor Lighting Controls Motion Sensor Procedures

**Issue:** There is a separate acceptance test for motion sensors, automatic scheduling controls, and automatic scheduling controls installed in conjunction with motion sensors.

- Motion sensors are only permitted to be installed with automatic scheduling controls.



# Background and Context

- For the 2019 Energy Code, the CEC changed the outdoor lighting controls requirements in section 130.2(c).
  - Automatic scheduling controls would always be required.
  - Motion sensors are only required in specific applications.
  - Therefore, motion sensors will not be installed without automatic scheduling controls.
- The ATTCPs already train the ATTs to perform these acceptance tests.
- However, there are instances in the field where ATTs and AHJs are confused about how the compliance documents are to be completed.



# Current Code Requirements

The 2019 acceptance test procedures include procedures for three combinations of installation using motion sensors and automatic scheduling controls:

- Motion Sensors (alone)
- Automatic scheduling controls (alone)
- Automatic scheduling controls with motion sensors



# Proposed Changes

- Staff proposed to eliminate the redundancy of one of these existing acceptance tests in NA7.8:
  - Automatic scheduling controls with motion sensors.
- The resulting acceptance test procedures will be:
  - Automatic scheduling controls, and
  - Motion sensors that will require automatic scheduling controls to be tested first.



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Is there any additional relevant information staff should consider related to this recommendation?



## 2. Combine Astronomical Time Switch and Automatic Scheduling Controls Tests

**Issue:** The astronomical time switch control acceptance test is redundant to the automatic scheduling controls acceptance test (NA7.8.5 and NA7.8.6).

- The 2019 compliance document does not include a separate section for each.



# Background and Context

- Astronomical time switch controls are a type of automatic scheduling control.
- NA7.8 currently contains an acceptance test for both.
- The procedures for both are identical.
- Using the current compliance document:
  - ATTCPs have trained ATTs to perform these acceptance tests.
  - AHJs have been using the ATTCP program to effectively enforce these requirements.



# Current Code Requirements

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- The current acceptance test has identical requirements for both:
  - astronomical time switch controls
  - automatic scheduling controls
- The compliance documents already include both acceptance tests on one form.



# Proposed Changes

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Combine the astronomical time switch and automatic scheduling controls sections from NA7 (NA7.8.5 and NA7.8.6).



# Potential Impacts

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- No new tests or requirements.
- Changes are for clarity only.
- ATTCPs may update certification training materials.
- No additional burden to AHJs identified.

Is there any additional relevant information staff should consider related to this recommendation?



# Minor Editorial Recommendations



# Proposed Changes

These are nonsubstantive, non-controversial editorial changes that can be made to the Energy Code.

- Correcting them is intended to clarify existing requirements.
  - These include grammar, punctuation, structure, consistency, and wording of procedures.
- These minor editorial recommendations include the following sections:
  - Title 24, Part 1, Sections 10-103.1 and 10-103.2
  - Reference Appendix Sections NA7.6.1, NA7.6.2, NA7.6.3, NA7.6.4, NA7.7.5.2, and NA7.8.



# Comments

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Staff welcomes comments on the proposed language which will be included in the staff report to be published in the upcoming weeks.



Break





# Nonresidential Data Registry and ATTCP Requirements



# Issue

If the CEC approves a nonresidential data registry (NDR), the nonresidential certificate of acceptance (NRCA) compliance document is only valid if it is registered with a NDR.

- Lighting controls (and soon mechanical) NRCA compliance documents can only be completed by a certified ATT.
- Despite there being requirements for both nonresidential data registries and ATTCPs related to NRCA compliance documents, the Energy Code does not currently set requirements for how a NDR should interact with ATTCPs.



# Background and Context

- The 2008 Energy Code introduced the concept of a data registry in the form of a Home Energy Rating System (HERS) provider data registry.
- The HERS provider data registries were meant to improve the enforceability of the Energy Code by facilitating secure submittal, retention, and retrieval of compliance, installation, and HERS verification certification documents.
- The 2013 Energy Code introduced requirements for nonresidential compliance documents to be registered with a nonresidential data registry.
- The 2013 Energy Code also included provisions for the ATTCP program.
  - Each ATTCP must enforce a quality assurance program and as part of that program each ATTCP has implemented a database system used to track (and monetize) the activities of each ATT performing an acceptance test.
- There are several parties interested in submitting a NDR application to the CEC for approval.
  - No applications have been submitted at this time.



# Technical Considerations

- The quality assurance program employed by the lighting controls ATTCPs is subtly different from that of the mechanical ATTCPs.
  - Lighting controls ATTCPs are more able to work with a NDR than mechanical ATTCPs.
- Current ATTCP databases are not defined or approved as data registries.
  - Compliance with Extensible Markup Language (XML) schemas is required for the NDR.



# Topics of Consideration

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- Avoid double charging consumers.
- Promote market stability and transparency.
- Promote a fair and level playing field for NDRs and ATTCPs.
- No relationship between a NDR and an ATTCP should obstruct:
  - ATTCP's existing training, certification, and oversight programs, and
  - Workflow on a project site.



# Proposed NDR-ATTCP Options

**Option 1:** Define the ATTCP as an authorized user of the NDR in Reference Joint Appendix JA7.4.2. If this option is selected, staff recommends working closely with the ATTCPs to determine the level of access that is necessary.

**Option 2:** External Digital Data Source (EDDS) services are optional data entry systems used by a data registry (residential or nonresidential).

**Option 3:** Requirements can be added to a new section in JA7 to describe the authorized data exchanges between an ATTCP and a nonresidential data registry.



# Proposed NDR-ATTCP Option 1

- Pros:
  - This would likely allow the lighting controls ATTCPs to satisfy their oversight requirements.
  - This would be the simplest solution in terms of changes to the Energy Code and JA7.
- Cons:
  - This level of access may not be sufficient for mechanical ATTCPs to satisfy their oversight requirements.
  - The lighting controls ATTCPs may not be able to continue using their existing software for completion of the NRCAs by their ATTs.



# Proposed NDR-ATTCP Option 2

**Option 2:** External Digital Data Source (EDDS) services are optional data entry systems used by a data registry (residential or nonresidential).

- The ATTCP could use this designation to interact with the nonresidential data registry. The registration provider must submit an application to the CEC to use an EDDS service.
- This would allow NDR and the ATTCP to coexist in a regulated framework that could enable both to proceed with their respective regulatory responsibilities.

## Pros

- The ATTCP database system is primarily used to support the training, certification, and especially the quality assurance program that the ATTCP is required to implement.
- This option would cause little impact to the ATTCP training, certification, or quality assurance programs by allowing both the NDR and ATTCP systems to coexist.

## Cons

- This option would require that the ATTCP database system be compliant with the requirements in JA7.
  - The ATTCP database system is not currently required to be compliant with JA7 and as a result, compliance has never been determined.



# Proposed NDR-ATTCP Option 2

## Continued

### Cons (continued)

- Compliance with JA7 can be a significant undertaking and could require significant reprogramming of the ATTCP database system.
- The CEC cannot approve an EDDS as a stand-alone application putting this option in basic conflict with the existing ATTCP regulations, which require the ATTCP to submit an application to the CEC for approval.
  - This conflict would have to be resolved in the 2022 Energy Code, most likely in Title 24, Part 1, Sections 10-103.1 and 10-103.2.
- The requirement that a NDR submit the necessary application may give an unfair negotiation position to the NDR over the ATTCPs.
- This option can essentially give the NDR the ability to favor or even eliminate a competitor to its chosen ATTCP.
  - The elimination (or even the threat thereof) can drastically harm an otherwise competitive marketplace and artificially drive up consumer prices.



# Proposed NDR-ATTCP Option 3

**Option 3:** Requirements can be added to a new section in JA7 to describe the authorized data exchanges between an ATTCP and a nonresidential data registry.

- Staff would collaborate with approved ATTCPs and other stakeholders to develop this new section to JA7.
- Staff would engage in a workgroup to produce this new section to JA7 within the timeframe allotted by the 2022 Energy Code rulemaking.

## Pros

- This option has a better chance of addressing all of the concerns raised by staff than any of the other options discussed.
- This option will enable the ATTCPs and other stakeholders to discuss all issues in an open forum and potentially seek reasonable resolutions.

## Cons

- This process will be difficult to conduct within the constraints of the 2022 Energy Code rulemaking process.



# Potential Impacts

- Any potential associated costs are currently unknown and may be dependent on what approach is taken.
- This proposal may impact any future NDR provider, existing and future ATTCPs, and the ATTs certified by those ATTCPs, but to what degree is unclear.
- All other stakeholder of the construction process, such as builders and contractors, may not have any additional requirements imposed on them, but may bear additional costs.



# Comments

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Staff is seeking input from stakeholders on the following topics:

- Potential costs associated with any of the three options presented.
- Scope of impacts on the market, market players, stakeholders, and to the public for any of the three options presented.
- Potential alternatives to the three options presented.



# Closing Remarks and Thank You!

