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Field Experts Proposed Measures - Rater Selfie Photo Verification

Additional submitted attachment is included below.



CHEERS

FIELD EXPERT PROPOSED MEASURES

Response to CEC Comments

Rater Selfie Photo Verification

Document Overview

This package consolidates CHEERS' response to Commission comments on the Field Expert Proposed Measure related to Rater Selfie Photo Verification.

The document is organized as follows:

- **Response to CEC Comments – Rater Selfie Photo Verification**
Contains CHEERS' responses to Commission comments, clarification of scope and intent, a description of minimum process requirements, and a discussion of current pain points and anticipated benefits.
- **Appendix A – Original Field Expert Proposed Measure**
Original proposal as submitted by CHEERS, included for reference and continuity.
- **Appendix B – CEC Comments**
CEC initial comments on the proposed measure (01/22/2026)

Response to CEC Comments – Rater Selfie Photo Verification

Section 1 – Responses to CEC Comments

CEC Comment 2: Would this only apply to HVAC alterations? Why not apply to all tests? Are there potential additional costs? Will the Provider include an additional charge to upload photos or maintain storage?

Response:

CHEERS proposed initial implementation focused on HVAC-related measures to allow practical evaluation and refinement before broader application. CHEERS has no objection to including both HVAC alterations and HVAC new construction within the initial scope, if preferred by the Commission.

At this time, CHEERS does not recommend applying this requirement to all Field Verification and Diagnostic Testing measures. The intent of this proposal is to confirm Rater identity and presence rather than introduce a universal documentation requirement.

No additional changes are proposed. The measure requires only a single photo and can be supported using commonly available digital tools. The proposal does not prescribe a specific platform or storage mechanism.

CEC Comment 3: CEC has investigated a complaint where the Rater was only onsite briefly and used photographs that had been faked. What security features might help prevent this?

Response:

When a Rater's identity is directly associated with a project through on-site photo documentation, responsibility for the certification is explicit. The Rater understands that they are personally accountable for the work represented in the certification, which reinforces professional responsibility and reduces ambiguity when questions arise.

CEC Comment 4: There was a similar situation where the Rater never came onsite but completed forms as if they had. Some people will cheat no matter what system is put in place.

Response:

CHEERS agrees that no single measure eliminates all improper behavior. The objective of this proposal is to reduce ambiguity regarding who was physically present at a project site. By clarifying individual responsibility, Providers are better positioned to address issues accurately and proportionately.

CEC Comment 5: Rater cheating is a focus of the Provider QA program; how will that program be changed?

Response:

This proposal does not require structural changes to existing QA programs. The Rater Photo Verification provides additional context that supports QA investigations and complaint resolution by clarifying attribution, without expanding QA authority or altering audit methods.

CEC Comment 6: CF3Rs cannot be registered until CF2Rs are registered. If documentation were required when the Rater goes onsite, even if tests fail, this could create an ongoing record. However, Raters may be disincentivized by registration costs.

Response:

The Rater Photo Verification is associated with the CF3R certification stage and reflects the Rater's attestation that they are the individual certifying the project. It does not introduce any additional requirements at the CF2R stage and does not alter project sequencing, fee structures, or failure-handling procedures.

The photo serves as supplemental context to help confirm which individual Rater was physically present at the project site. While Rater Records and electronic signatures identify the Rater-of-record within the registry, they do not establish on-site presence. The photo may be treated as part of the existing Rater Record without changing registry mechanics.

CEC Comment 7: This should apply to all tests, not just HVAC Alterations, as the proposal is written.

Response:

CHEERS proposed initial implementation focused on HVAC-related measures to allow practical evaluation and refinement before broader application. CHEERS has no objection to including both HVAC alterations and HVAC new construction within the initial scope, if preferred by the Commission.

At this time, CHEERS does not recommend applying this requirement to all Field Verification and Diagnostic Testing measures. The intent of this proposal is to confirm Rater identity and presence rather than introduce a universal documentation requirement.

Section 2 – Minimum Process Requirements

Applicability and Intent

1. This requirement applies to the scope specified by the Commission (e.g., HVAC alterations and/or HVAC new construction).
2. The purpose of this requirement is to establish a contemporaneous record associating the Rater-of-record with a specific project site.
3. The requirement is intentionally simple and is expected to be achievable by all Providers using commonly available digital tools.

Rater Identity Verification (Provider-Level)

1. Each Provider shall maintain documentation sufficient to verify the identity of each Rater operating under its program.
2. Identity documentation shall be collected as part of Rater onboarding or ongoing credential maintenance and retained by the Provider.
3. The purpose of this documentation is to allow the Provider to reasonably confirm that the individual depicted in a project photo is the same individual registered as the Rater-of-record.

On-Site Rater Photo Requirement

1. For each applicable project, the Rater-of-record shall capture one photo while physically present at the project site.
2. The photo shall:
 - a. include the Rater;
 - b. be taken at or immediately adjacent to the project site; and
 - c. reasonably associate the Rater with the project location.
3. The photo shall be geotagged and timestamped, capturing location and time information as part of the image data.

Submission and Retention

1. The Rater photo shall be submitted to the Provider using a method designated by the Provider.
2. Submission methods may include upload, attachment, or other basic electronic means.
3. The Provider shall retain the photo as part of the project record.
4. No specific software platform, registry architecture, or image format is prescribed.

Use in Oversight and Review

1. The Rater photo provides contextual information regarding Rater presence and accountability.
2. The photo may be referenced by the Provider or Quality Assurance staff when reviewing complaints, audits, or questions related to Rater attribution.
3. The photo supplements existing certification and Quality Assurance processes and does not alter existing testing or verification requirements.

Summary

This minimum process establishes a low-burden method that all Providers can reasonably implement to associate a named Rater-of-record with a specific project site. By relying on a single geotagged, timestamped on-site photo and Provider-maintained identity verification, the measure improves accountability and clarity across the industry without introducing new testing requirements or administrative complexity.

Section 3 – Current Pain Points and Benefits

Current Pain Points

Ambiguous attribution of on-site responsibility

The current framework does not reliably establish which individual Rater was physically present at a project site. Registry credentials and electronic signatures identify the Rater-of-record but do not confirm on-site presence, leaving uncertainty when questions arise.

Occasional difficulty resolving QA reviews and complaints

In some instances, when questions arise during Quality Assurance reviews or complaint investigations, Providers may encounter uncertainty regarding which individual Rater was physically present at the project site. This can make resolution less efficient and, in certain cases, complicate the application of appropriate corrective actions.

Operational realities of Rater Company workflows

Many Rater Companies use centralized or delegated data entry processes. While these workflows may be administratively efficient, they introduce ambiguity between administrative actions and physical site work that the current system does not resolve.

Risk of disproportionate or cascading enforcement outcomes

When individual accountability cannot be clearly established, Providers may be forced to pursue corrective or disciplinary actions at the company level rather than the individual level. This can lead to outcomes that extend well beyond the underlying issue, potentially affecting large portions of the market due to isolated procedural errors. Such outcomes do not support industry stability or continuous improvement.

Benefits of the Proposed Measure

Clear and direct attribution of responsibility

The Rater photo creates a contemporaneous association between a specific Rater and a specific project site, providing clarity when questions arise and supporting accurate attribution.

More precise and fair oversight actions

With individual presence established, Providers and QA staff can address issues at the appropriate level, avoiding unnecessarily broad actions and supporting proportional responses aligned with the actual circumstances.

Reinforcement of professional accountability

By directly associating the Rater-of-record with the project site, the measure reinforces individual responsibility for certifications in a practical and transparent way, without introducing additional testing or procedural steps.

Minimal administrative impact

The measure relies on a single geotagged, timestamped photo and flexible submission methods, making it achievable for all Providers without material cost or system changes.

Net benefit to the industry and consumers

By improving clarity, accountability, and consistency, the measure strengthens confidence in the compliance framework while supporting industry stability and avoiding unnecessary disruptions that could ultimately impact homeowners.

Section 4 – Cost and Benefit Summary

Purpose and Method

This section evaluates the incremental cost of taking and submitting one geotagged, time-stamped on-site photo, compared with the accountability benefit described above.

Cost Basis

Labor cost context is shown using published wage benchmarks: BLS California OEWS hourly mean wage for construction and building inspectors, and California DIR prevailing wage total hourly rate benchmarks for building/construction inspectors.^{1,2}

DIR prevailing wage determinations are used in this section only as an all-in labor cost benchmark ("total hourly rate"), not as an applicability requirement for private-market work.

Incremental Cost

Assumed added time: 0.5 minute per project.

Using the BLS California inspector wage of \$47.00/hour, the cost is: $0.0083 \text{ hour} \times \$47.00 = \$0.39$ per project.¹

Using DIR all-in inspector benchmarks of approximately \$79.06 to \$101.31/hour, the cost is: $0.0083 \text{ hour} \times \$79.06 \text{ to } \$101.31 = \$0.66 \text{ to } \$0.84$ per project.²

Registry photo storage cost is de minimis. Example: one (1) photo totaling ~1 MB stored for 24 months. Using AWS S3 Standard pricing (\$0.023/GB-month for the first 50 TB/month tier), storage is approximately \$0.0007 per project over 24 months.⁵

Net Effect

For less than \$1 per project, the measure adds clear attribution of on-site responsibility. That cost is justified by the administrative and enforcement benefit of being able to associate a specific Rater with a specific project site. This improves accountability, supports more precise QA response, and helps avoid unnecessarily broad company-level actions when individual responsibility can be established.^{1,2}

Summary

The Rater Selfie Photo Verification measure addresses a narrow but consequential gap in the current framework: the inability to reliably associate a named Rater with physical presence at a project site. By resolving this gap through a simple, low-burden mechanism, the measure supports fair oversight,

proportional enforcement, and industry-wide stability without increasing testing requirements or consumer cost.

Footnotes

1. BLS, California OEWS State Occupational Employment and Wage Estimates (May 2023), 47-4011 construction/building inspectors hourly mean wage \$47.00. https://www.bls.gov/oes/2023/may/oes_ca.htm

2. California DIR, Prevailing Wage Determinations (Building/Construction Inspector): NorCal example including Sacramento (NC-63-3-9-2024-1 Total Hourly Rate \$79.06) and SoCal example including Los Angeles (SC-23-63-2-2025-1D Total Hourly Rates \$99.53–\$101.31). <https://www.dir.ca.gov/oprl/2024-2/PWD/Determinations/Northern/NC-063-3-9.pdf> ; <https://www.dir.ca.gov/oprl/2025-2/PWD/Determinations/Southern/SC-023-63-2%28D%29.pdf>

Appendix A – Original Field Expert Proposed Measure

Measure Summary

Required Summary Element	Response
Measure Name & Proponent	Rater Selfie Photo Verification – Proposed by CHEERS (Energy Code Compliance Provider)
Building Type	All existing residential buildings, including single-family and multifamily dwellings. Initial implementation is limited to existing homes as a practical starting point before potential future expansion to other building and project types.
Building System	Field Verification and Diagnostic Testing (FVDT) for Mechanical Changeouts conducted under the Energy Code Compliance (ECC) framework. This measure applies to field inspection and diagnostic verification activities performed by certified ECC Raters for the purpose of quality assurance and compliance validation.
Measure Description	<p>Require each certified ECC Rater conducting a field verification or diagnostic test for a mechanical changeout in an existing home to upload a geo-tagged, time-stamped selfie photograph taken in front of the dwelling on the day of verification.</p> <p>The purpose of the photo is to confirm the Rater’s physical presence at the project site and establish direct accountability for the verification results. The image must include embedded metadata showing GPS coordinates and timestamp, and it must be uploaded or otherwise provided to the ECC Provider as part of the compliance documentation.</p> <p>No additional testing photos or diagnostic evidence are required under this measure; this step is solely intended to confirm on-site presence.</p>

Required Summary Element	Response
Justification	<p>The effectiveness of California’s Energy Code Compliance (ECC) system depends on the authenticity of field verifications. Instances where certified Raters are not physically present during testing compromise the integrity of compliance data and erode public trust.</p> <p>This proposal introduces a simple, universally achievable, and non-burdensome safeguard to ensure that certified ECC Raters personally conduct all required verifications. Every modern smartphone includes automatic geo-tag and timestamp capabilities, requiring no additional tools, software, or training.</p> <p>The measure promotes transparency, consumer protection, and verifiable accountability while preserving workflow efficiency for Raters and Providers. It creates a clear, auditable record that the certified Rater was present and responsible for each verification.</p>
Data Needs	<p>No new data collection is necessary beyond the Rater’s photo upload. Implementation relies on existing registry or Provider upload functionality, which can easily accommodate photo metadata fields.</p>
Key Stakeholders	<ul style="list-style-type: none"> • ECC Raters and Rater Companies – those directly performing verifications • Energy Code Compliance Providers (ECC Providers) – including CHEERS • California Energy Commission – oversight and enforcement agency • Builders and Homeowners – beneficiaries of strengthened verification integrity
Estimated Energy Savings	<p>This measure does not directly alter equipment performance or field test procedures. However, it ensures that only certified Raters perform compliance testing, thereby improving the accuracy of energy code enforcement statewide.</p> <p>By reducing false or proxy verifications, this measure indirectly contributes to real-world energy compliance across California’s housing stock by ensuring that each test result represents an actual verified field condition.</p>
Estimated Costs	<p>Negligible additional cost. Raters already use smartphones on-site, and the average upload size is minimal. ECC Providers may incur minor system updates to accept and store photo metadata. No hardware or subscription expenses are expected.</p>

Required Summary Element	Response
Economic Impacts	<p>Positive. This measure simplifies accountability by clearly identifying the certified Rater responsible for each verification. It eliminates ambiguity when questions arise about who performed the work, allowing Providers and the Energy Commission to quickly confirm responsibility and take appropriate action.</p> <p>By making each Rater visibly and verifiably associated with their projects, the measure encourages stronger professional accountability and adherence to procedures. Although the direct financial impact is minimal, the administrative clarity and improved compliance behavior represent meaningful long-term efficiencies and program integrity benefits for all stakeholders.</p>
Consideration for Readiness (high, medium, or low)	High. The measure is low-cost, technically straightforward, and immediately implementable. It leverages existing technology and requires only minimal procedural guidance for consistent statewide application.

Appendix B – CEC Comments

Rater Photo Verification

David Choo – CHEERS

Direct Comments:

- AB130 may prohibit this for 2028.
- Would this only be for HVAC alterations? Why not apply to all tests? Are there potential additional costs? Will the Provider include an additional charge to upload photos or maintain them for storage?
- CEC has investigated a complaint from a homeowner where the Rater was only there for 15 min. and didn't seem to do anything. In that instance, the Rater used photographs that had been faked. What kind of security features might help to prevent this from happening?
- There was similar situation on a project where the Rater never came onsite but completed forms as if they had. So there would have to be some kind of requirement that verifies validity. Some people will cheat no matter what system is put in place.
- Raters cheating is a focus of the Providers QA program; how will that program be changed to address these potential issues?
- Currently, CF3Rs can't be registered until CF2Rs are registered. So if there were a process that requires HERS Raters to document when they go to the jobsite, even if the field tests fail, that could create an ongoing record instead of waiting until the very end. But right now, you have to pay money and no HERS Rater would pay to upload a fail. This is being addressed by making the Rater who uploads the fail the Rater of Record so they can't be replaced with a Rater who will pass. However, this proposal puts pressure in the opposite direction. Is there a mechanism to offset the cost of registering a FV&DT fail?
- This should apply to all tests, not just HVAC alterations, as the proposal is written.