



## **ANNOTATED FROM SESSION**

### **ACEEE Summer Study 2016 Informal Session: Preponderance of Evidence for Early Retirement Projects**

#### **I. The Legal Preponderance of Evidence Standard**

The phrase “preponderance of evidence” is a long-standing legal burden of proof standard with a clear meaning, which is:

- The “proposition” is more likely to be true than not true
- If there is a 51% chance than the proposition is true
- “More probable than not”
- “Not determined by the number of witnesses but their apparent credibility”
  - Important aspect of this is to have a good sample of evidence—to make sure no bad evidence is being withheld or missed

The application of this principle to energy efficiency “early retirement” claims can be phrased as follows:

- The Program Administrator or implementer must show that the equipment is more likely than not to have lasted at least another year after replacement.
- The Program Administrator or implementer must show that the retrofit is more likely than not to be the result of program influence.
- *This is to be determined by [important note in practice: perceived] credibility of evidence, not the number of documents provided.*

#### **II. Current CPUC Practice<sup>1</sup>**

CPUC guidelines, developed in the context of custom projects, provide a list of evidence that can be considered to establish the two required evidentiary factors:

##### **Operational Functionality with One Year RUL**

- Preliminary measurements on existing equipment showing that it is operating and meeting the service required
- Existing equipment installation dates (invoices if available) or last major overhaul (e.g. boiler retubing, chiller barrel overhaul)
- Critical system components, associated maintenance practices, current and future availability of replacement parts

---

<sup>1</sup> *Early Retirement Using Preponderance of Evidence*, July 16, 2014, SCE/CPUC, avail: <http://cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=5325>

- Proposed RUL supported by evidence
- Normal lead time for project implementation (planning, ordering, etc.)—this time is subtracted from RUL
- Customer statements regarding viability of equipment

**Program Influence – This, combined with ex post free ridership assessment, may be creating double requirements for the same concept.**

- Customer/program administrator history—meeting dates, participants, substance.
- Simple payback calculations
- Documentation of non-EE project drivers
- Customer “normal replacement practice”
- Documentation of standard efficiency alternatives available in market
- Customer statements regarding intent to continue using existing equipment

### **III. Evidentiary Requirements Proposal for Early Retirement Custom Projects – For Discussion and Brainstorming**

#### **Action items for working group:**

- **Find and review case studies of both successful and not approved projects**
- **Keep in mind the relative importance of existing conditions baselines for 1/3 EUL—there are other factors that can affect savings much more**

Drawing from the list of evidentiary options below, Program Administrators can support Early Retirement claims using one of the following approaches:

1. Numeric Approach: Providing two types of evidence of Operational Functionality and one for Program Influence should satisfy the standard.
2. Matrix Approach: Create a matrix of criteria, perhaps along the lines of the evidence types outlined below. Projects can be assigned points under each criterion and approval can be automatically granted after a minimum number of points have been awarded.
3. Other Proposals Discussed:
  - a. Using a hierarchy of clearly defined evidence types—i.e. if project cannot provide very solid evidence type one, there are other options (combinations of less solid documentation) that can be used.
  - b. Also explore possibility of using process map
    - i. Clear time line with strict use of drop dead dates
    - ii. Well defined set of “jurors,” back stop “appellate level” decision maker
  - c. Use of checklists? Although implementers would value clear judgment criteria more
  - d. “Semi-deemed eligibility” approach:
    - i. For types of equipment
    - ii. Customer profiles
    - iii. Implementers (LGPs, etc)
  - e. Consider broader system-wide view instead of individual applications for each measure in a project.

## **Operational Functionality**

- Evidence of previous repairs (history of repair)—i.e. invoices, pictures of internal inventory of replacement parts, customer letter indicating routine maintenance (quarterly/annually) practices, scope of work for maintenance contractors
- Visual inspection of equipment to confirm equipment is still operational (e.g. no fluid leaks, no rusting, normal sound of operation)
  - *Who would perform this inspection?*
- Preliminary measurements on existing equipment
  - *What is an acceptable level of service?*
    - Idea for generalized language: “HVAC maintaining desired space comfort, process meeting production demands.” Should this language account for amount of labor necessary for equipment to meet level of service?
- Availability of repair options—i.e. existence of motor rewinding industry, internal inventory of replacement parts, replacement parts readily available for purchase

## **Program Influence**

- Analysis that shows that cost to replace is greater than cost to repair
  - *Per legal definition of standard, should cost differential only be 1%?*
- Customer/program administrator history illustrating Early Retirement program offering—meeting dates, participants, substance.
- Customer “normal replacement practice” of other similar equipment
  - *Should previous utility-incented replacements be disregarded?*
- Customer statements

## **IV. Proposed Evidentiary Requirements for Early Retirement Claims for Workpaper Development – For Discussion and Brainstorming**

### **Challenges Specific to Deemed Measures**

- No site- or customer-specific information during ex ante measure (workpaper) development.
- Much less site- and customer-specific information is collected during measure installation.

The proposed evidentiary standards for deemed measures uses as a starting point the existing Commission guidelines to the extent they would reasonably apply to deemed measures, as follows:

### **Program Influence**

- Description of market barriers, and how program design will overcome market barriers
  - Documentation: simple market survey of distributors, trade allies and customers
- Documentation of non-EE project drivers
  - Documentation: simple market survey of distributors, trade allies and customers
- “Normal replacement practice”

- Documentation: simple market survey of distributors, trade allies and customers
- Documentation of standard efficiency alternatives available in market
  - Documentation: Simple market survey of distributors or shelf stocking practices
- Simple payback calculations
- Other reasonable criteria to demonstrate that measures are only likely to be replaced early due to program influence

### **Equipment Viability**

For deemed measures, the requirement of showing the equipment is working *and likely to continue working for another year had it not replaced* would be difficult to demonstrate given the amount of information collected in a typical deemed project, and is furthermore a very subjective evidentiary requirement. Thus, the evidentiary requirement should be reformulated to be consistent with common practice in other jurisdictions for meeting an early requirement claims, which is that the measure is: *“installed and operating”*

- Existing equipment is operating and meets the required service
  - Documentation: This information would need to be a program requirement, and evidence would need to be collected during program implementation (such as a photo of the measure)



### **Session Attendees**

Rafael Friedman, rafi@pge.com

Katie Wu, KW1@cpuc.ca.gov

Alejandra Mejia

Joe Fontaine, joe.fontaine@wisconsin.gov

Jake Anderson, janderson@energycoalition.org

Steven Long, steven.long@sce.com

Jordan Garbaio, jgarbayo@co.slo.ca.us

Pete Jacobs

Lucy Morris

Gary Fernstrom

Sue Haselhorst

Spencer Lip, spencer.lipp@lmco.com

Brendan O'Donnell

Lara Ettenson

Travis Edwards, travisedwards@waypointbuilding.com

Jennifer Wang, Jennifer.wang@sfgov.org

Patsy Dugger, patsy.dugger@cbi.com

Johnathon Fata, Johnathonfata@gmail.com

Pranesh Venugopal, pvenugopal@energycoalition.org