



Energy Efficiency Incentives: Evolving Policy, Requirements, and Challenges

June 21, 2018

9th Annual SEEC Forum, Sacramento

Objectives

1. *Both early adopter participants and agencies who have yet to fully integrate efficiency into their strategy (particularly disadvantaged and resource-constrained communities) will benefit from coming together through this session to learn and discuss barriers and opportunities introduced*
2. *Participants will be encouraged to discuss solutions whereby ratepayer funded programs can better serve the public sector market given the new obstacles reviewed*
3. *Understand how Energy Division evaluates programs as we move towards additional platforms for deeper energy savings*

Slide 2

1

Simplify.

Laurel Rothschild, 6/12/2018

Today's Agenda

Topic	Presenter	Est.Time
Introductions & Overview	Laurel Rothschild, The Energy Coalition	13 min
CPUC Update on Energy Efficiency Program Direction	Nils Strindberg, CPUC Energy Division	7 min
Policies driving programs	Athena Besa, SDG&E	10 min
Walking through the process	John Rossi, TRC Solutions	15 min
Questions to ponder	Brendan Havenar-Daughton, PG&E	5 min
Open discussion, including Q&A	Moderated by Laurel Rothschild, The Energy Coalition	25 min



Today's Speakers



Laurel Rothschild
Director of Energy
Programs
The Energy Coalition



Nils Strindberg
Sr. Regulatory Analyst
Residential Programs &
Portfolio Approval Section
CPUC Energy Division



Athena Besa
Energy Efficiency
Sr Project Manager
San Diego Gas & Electric



Today's Speakers



Jonathan Rossi, PE
Program Manager,
C&I Programs
TRC Solutions



Brendan Havenar-Daughton,
Local Government
Energy Strategy Lead
Pacific Gas & Electric

What is the West Side Energy Partnership?

The West Side Energy Partnership is a collaboration among six cities, Southern California Edison, the SoCalGas Company, and The Energy Coalition

Its mission is to help partner cities save energy through efficiency by leading the way in retrofit projects, outreach effort, policy development, and more



What is SoCalREN?

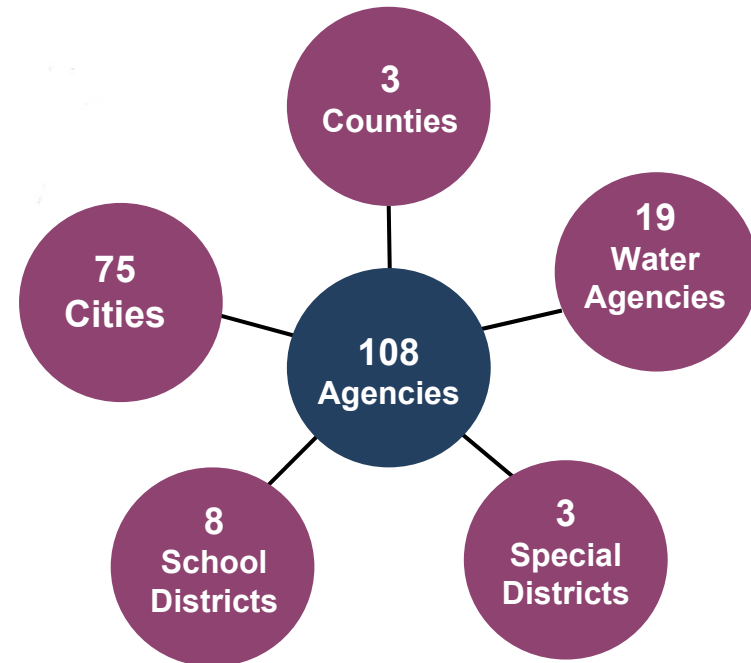
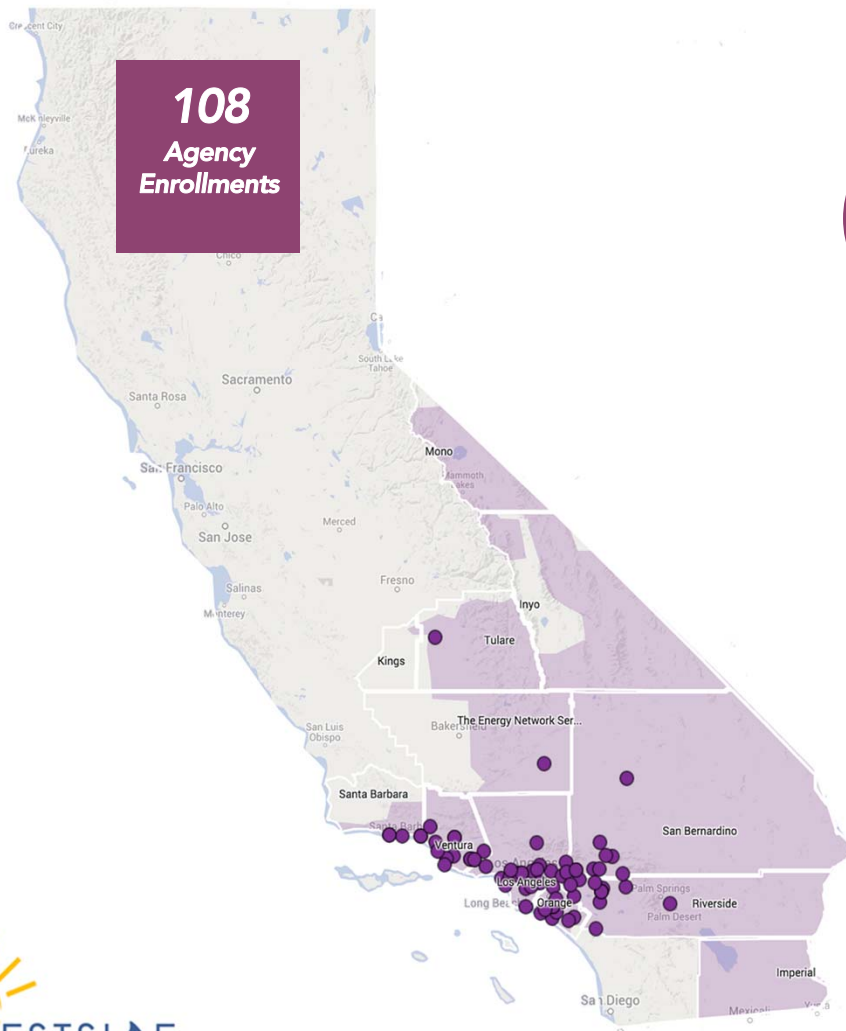
The SoCalREN Public Agency Program strives to achieve an unprecedented level of energy savings across Southern California by helping public agencies identify and implement projects



*The program is administered by the
County of Los Angeles and funded by California utility ratepayers
under the auspices of the CPUC*



Who's in SoCalREN?



Who's Eligible?

700+ public agencies in IOU territories

A Tailored Project Delivery Approach

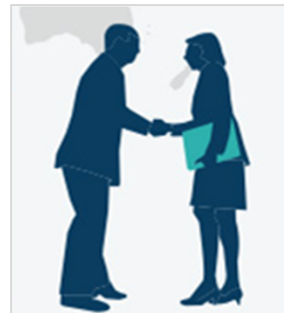
A dedicated SoCalREN Project Manager supports a project at every stage



Enrollment



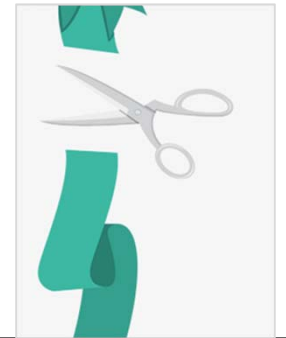
Audit



Procurement



Construction



Completion

Why this topic?

49,954,854 kWh

2,176 kW

125,167

Therms

Energy Savings: Cumulative IOU first year energy savings to date (projects installed)

544

Incentive
Applications
Submitted to date

SCE: 510 | SCG: 34

185

SoCalREN projects
completed to date

xx+ more in development



\$14,345,930

Utility Incentives
(projects installed)

\$15,350,177

Utility Incentives
(reserved + projects installed)



\$19,697,696

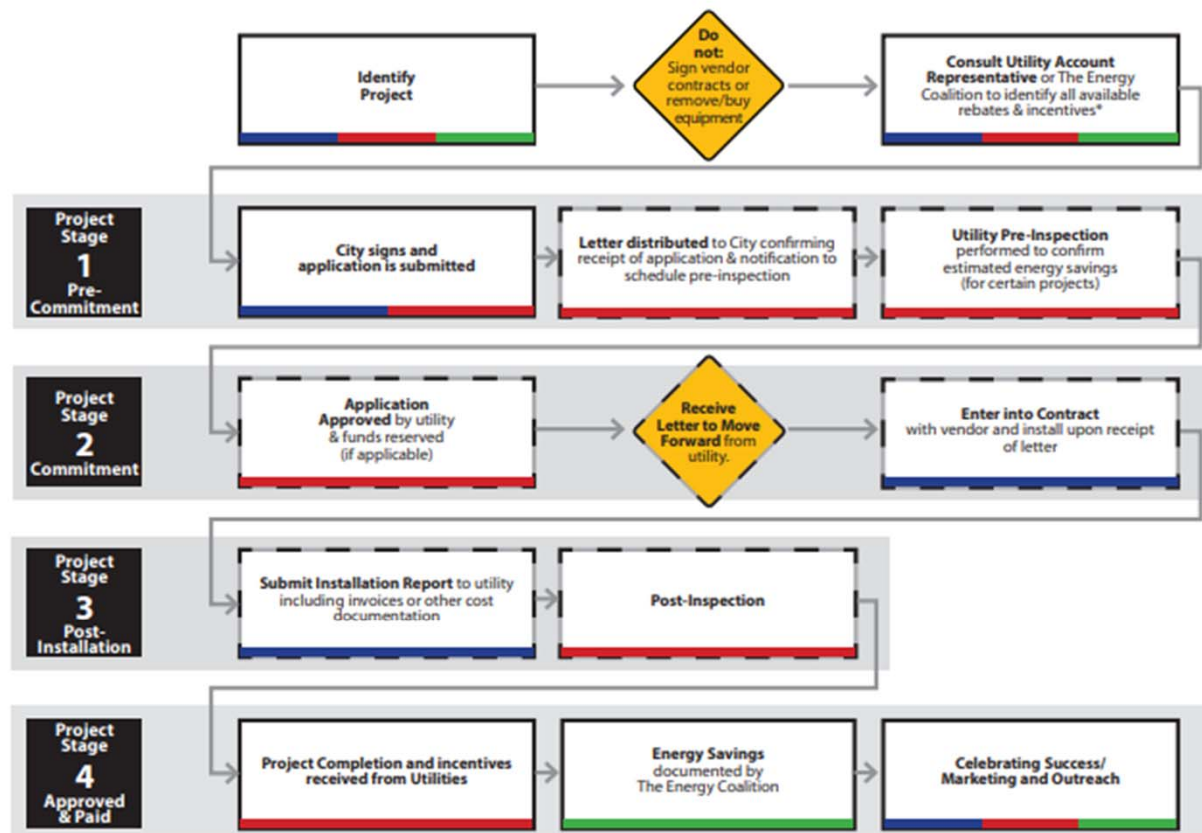
Utility On Bill Financing
(projects installed)

\$20,397,290

Utility On Bill Financing
(reserved + projects installed)



Life of an In-Sequence Municipal Energy Efficiency Project



* If your project qualifies for the Express Solutions program, you will be notified and can proceed with installation.

LEGEND

Partner City
Team Leader
Public Works
Facilities Management

Utility Partner
Energy Efficiency Project Manager
Account Representative
Public Affairs Manager

Facilitating Partner
The Energy Coalition Staff

Applies only to projects qualifying for the Customized Solutions program.

Slide 11

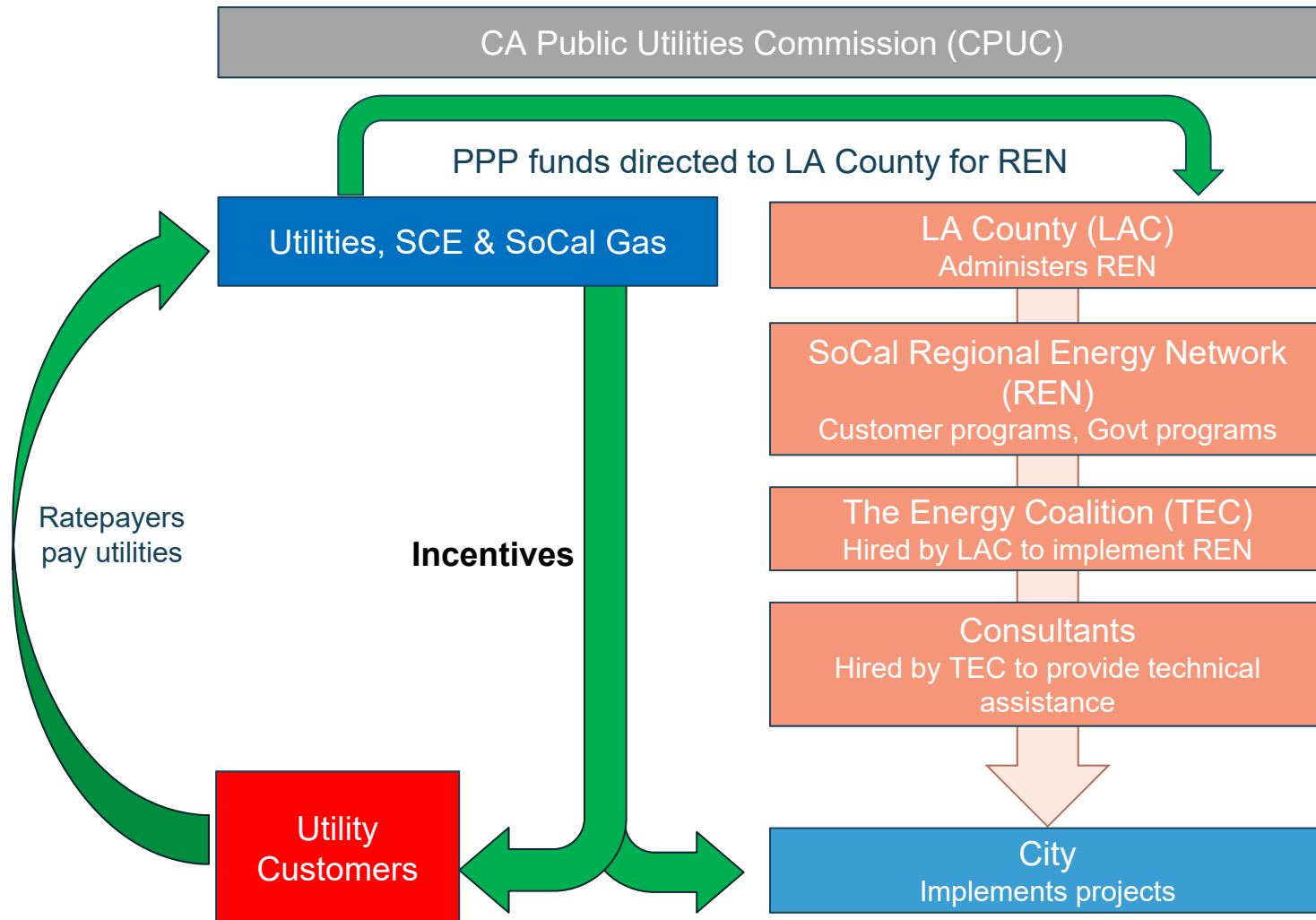
3 When was this last updated? +idorin@energycoalition.org
Laurel Rothschild, 6/12/2018

1 2015
Ivana Dorin, 6/12/2018

Public Agency Feedback on Incentive Programs

- High understanding of energy efficiency incentive programs and satisfaction with available support services
- **Policy changes have had an overall negative impact** on participant experience.
- Most commonly encountered obstacles are
 - **upfront application document requirements,**
 - **delays in application processing,**
 - **communication/timing of expiring incentives**
- Respondents were most interested in understanding
 - **incentive design & eligibility.**
 - **application requirements & delays,**
 - **policy communication**
 - **EE program direction**
- Most success and struggle with **lighting measures.**

Energy Efficiency Program Flow



EE Project Players and Responsibilities

- **Agency:** Provides access to sites, responds to inquiries and provides information when requested.
- **Implementer or IOU Account Representative:** Prepares incentive packages and addresses questions and concerns during tech review process.
- **3rd Party Technical Reviewer (Custom):** Under contract with IOU to review savings claims and project packages. Work with Agency/ Implementer/ Account Rep to resolve issues. Makes approved savings recommendations.
- **IOU:** Ultimately held responsible, by the CPUC, for ensuring energy savings are grid coincident! IOUs issue approval letter(s), and cuts incentive checks.
- **CPUC Staff:** Typically no involvement at all! Only a handful of projects are selected for Ex-Ante review. If selected, an in-depth review is performed.





Q&A

Let's Discuss!

Thank you for joining us today!

Additional Questions? Contact us:

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Athena Besa
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Brendan Havenar-Daughton,
Pacific Gas & Electric
B2H6@pge.com

But wait...there's more!

Please refer to the flashdrive for additional reference materials



APPENDIX SLIDES



Public Agency Feedback on Incentive Programs

- Survey distributed via SoCalREN Public Agency Program and Westside Energy Partnership email communication channels and directly to over 160 contacts
- Distributed 4/24/18 and open to responses for ~3 weeks
- 21 total responses



Survey Design

- Goals
 - ✓ Assess public agency understanding and satisfaction with EE incentive programs
 - ✓ Determine if there are any gaps left by the current support services available
 - ✓ Request open feedback on program experiences, both **positive** and **negative**
- Audience
 - 100+ agencies contacted - wide range of EE program experience
 - 200+ individuals contacts
- Basic info collected
 - Name, Email Address, Agency

Public Agency Incentive Program Experiences

This survey includes questions regarding your agency's participation in utility-sponsored energy efficiency incentive programs. The goal of this survey is to gain insight in the utility incentive process from the public agency perspective.

The feedback you provide will be used to further inform stakeholders that support public agencies in utilizing these programs. The responses collected during this survey will be consolidated and presented at an upcoming webinar that aims to educate and improve the user experience for all stakeholders participating in public agency energy efficiency incentive programs.

* Required

Email address *

Your email

Name of Agency:

Your answer

Your Name:

Your answer

How would you rate your overall understanding of energy efficiency incentive programs offered by the utilities?

1 2 3 4 5

very unfamiliar ☐ ☐ ☐ ☐ ☐ very familiar

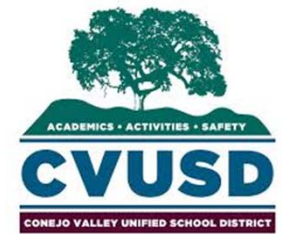
☐ Pre-Post-installation inspections

☐ Documentation requirements for application closeout (installation report)

☐ Time required to receive incentives and/or OBF reimbursement

☐ Other: _____

Participants



Survey Questions

How would you rate your overall **understanding** of energy efficiency incentive programs offered by the utilities?

- Scale of 1-5, from **Very Unfamiliar (1)** to **Very Familiar (5)**

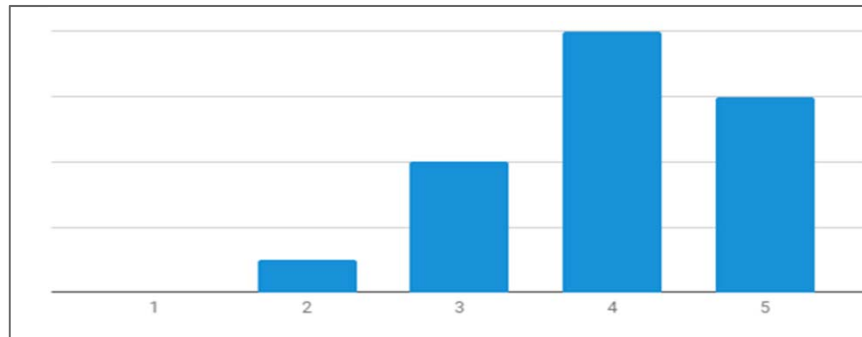
How would you rate your overall **satisfaction** with energy efficiency incentive program support?

- Scale of 1-5, from **Very Unsatisfied (1)** to **Very Satisfied (5)**

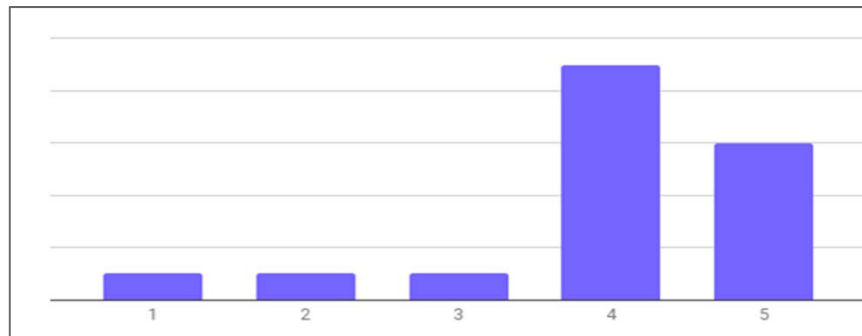
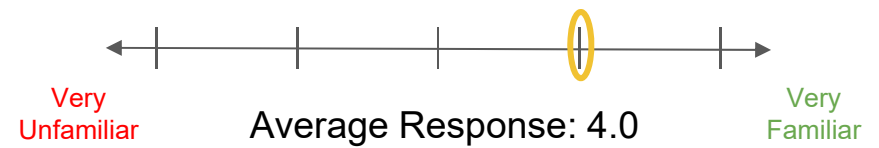
How would you describe the **impact** that **policy changes** for incentive programs, such as expiring incentives and influence requirements, have had on your agency's interest in energy efficiency incentive programs?

- Scale of 1-5, from **Very Negative (1)** to **Very Positive (5)**

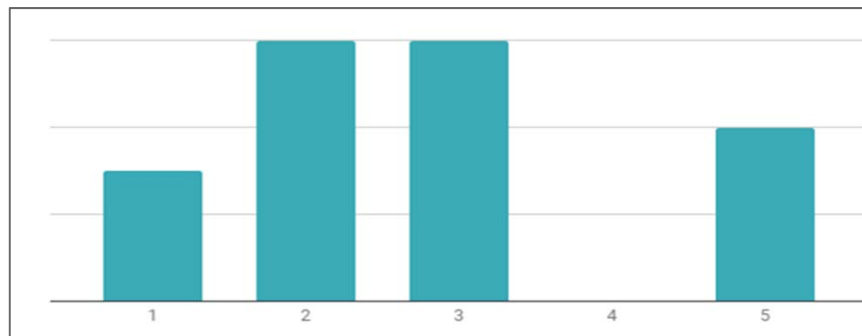
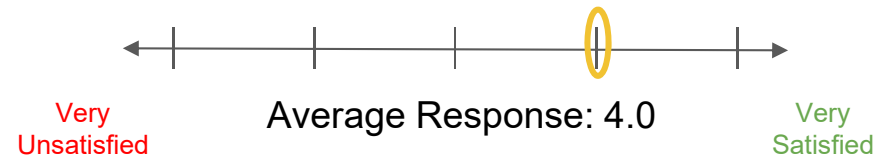
Responses



Understanding of Programs



Satisfaction with Support



Impact of Policy Changes

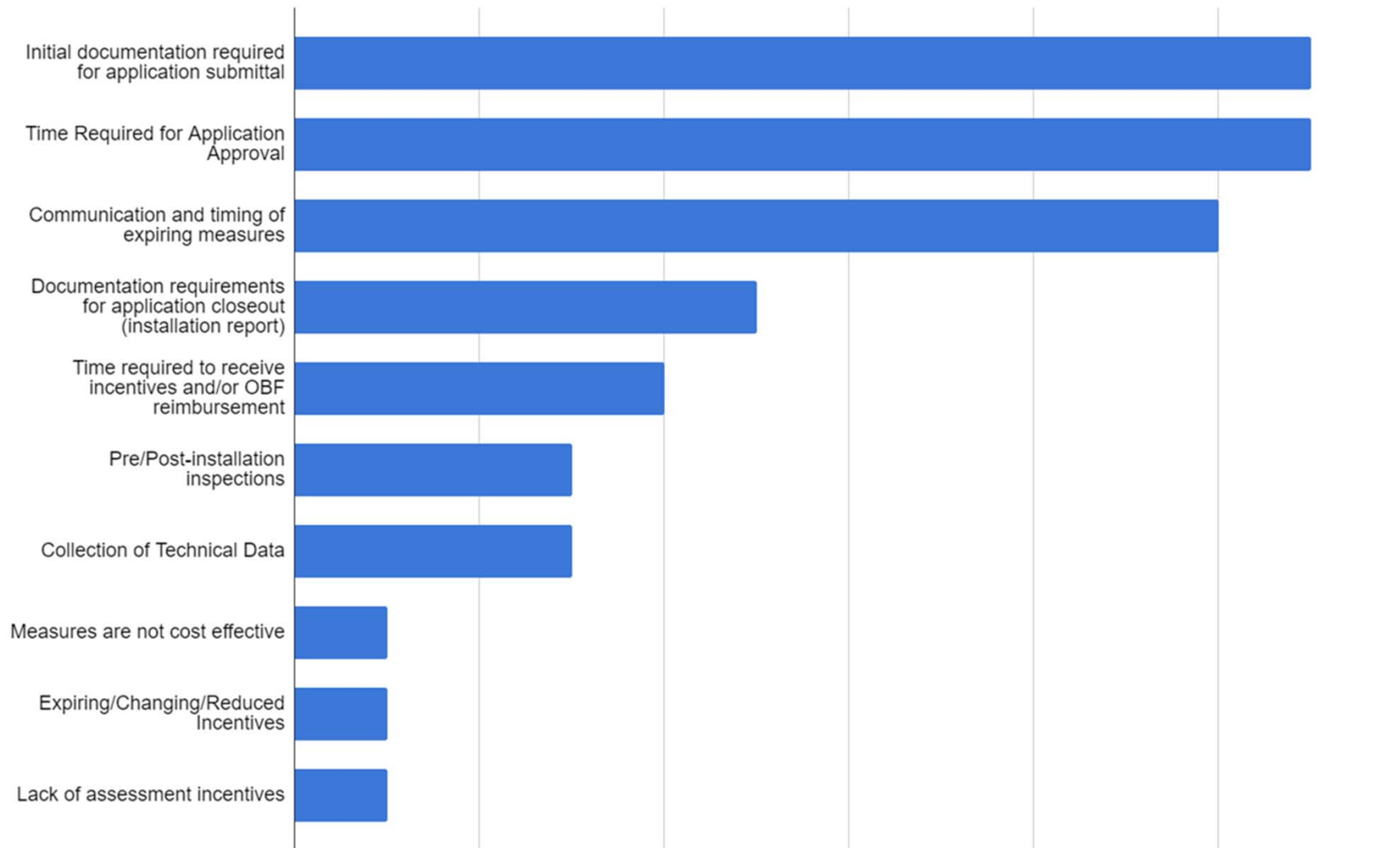


Survey Question

What are the biggest challenges of working with utility energy efficiency incentive programs? (Select up to three)

- Initial documentation required for application submittal
- Time Required for Application Approval
- Communication and timing of expiring measures
- Documentation requirements for application closeout (installation report)
- Time required to receive incentives and/or OBF reimbursement
- Pre-Post-installation inspections
- Collection of Technical Data
- *Measures are not cost effective (user added)*
- *Expiring/Changing/Reduced Incentives (user added)*
- *Lack of assessment incentives (user added)*

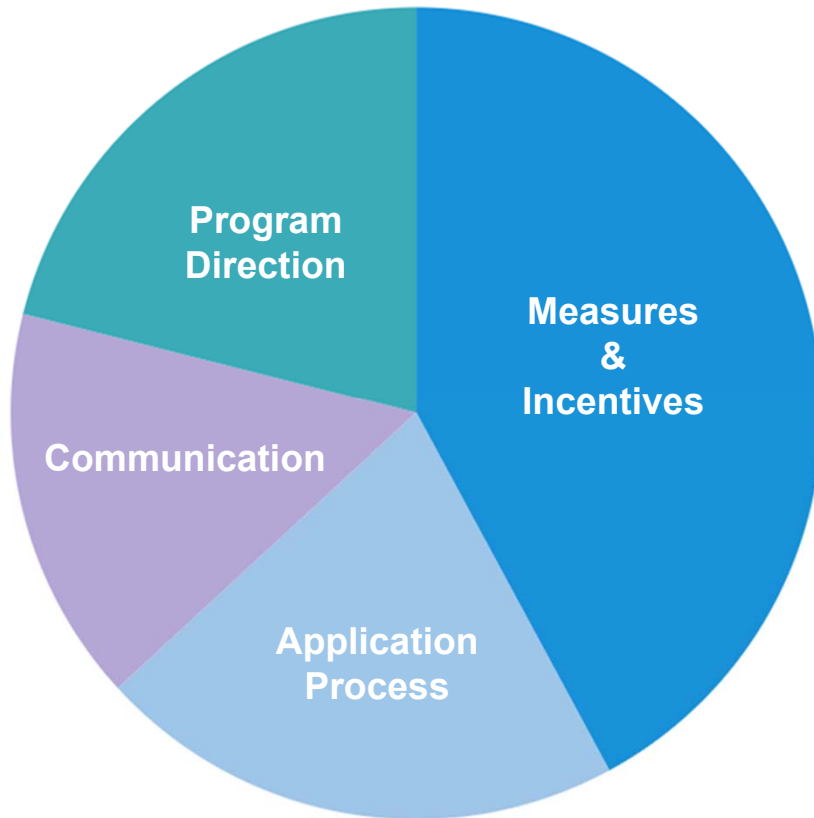
Responses



Questions *for IOUs and CPUC*

If you could ask the utilities and/or the California Public Utilities Commission (CPUC) one question regarding incentive programs, what would it be?

Responses

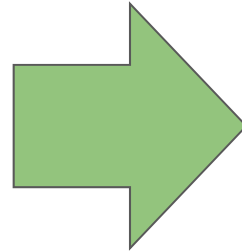


Primary Issue Categories

- Measure and Incentive Eligibility
- Application Challenges - Requirements & Delays
- Energy Efficiency Incentive Program Direction
- Communication of Policy Changes for EE Programs

Additional Questions

- Describe a project success story involving utility incentive programs.
- What contributed to the project's success?
- What factors helped to make the project successful?



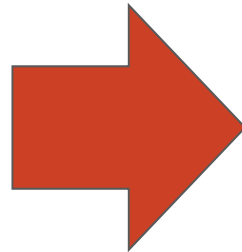
Street lighting incentives

On-Bill Financing

LGP/REN Support

Additional Questions

- Describe a project that was negatively impacted due to issues with utility incentive programs.
- What about the utility incentive program caused a negative impact?
- What were the consequences for the project?



Lighting measure expiration

Reduced incentives

Documentation requirements

Summary

- ✓ Understanding of energy efficiency incentive programs and satisfaction with available support services both scored high among respondents. However, **policy changes have had an overall negative impact** on participant experience.
- ✓ The most commonly encountered obstacles are **upfront application document requirements, delays in application processing, and communication/timing of expiring incentives**
- ✓ Most questions the respondents would like to ask the CPUC were focused on **incentive design & eligibility**. Other recurring themes were **application requirements & delays, policy communication, and EE program direction**.
- ✓ Most projects described in the success/struggle section involved **lighting measures**.

Calculated Energy Efficiency Incentives

Christopher Scott
Program Manager
Business Core & Finance Programs

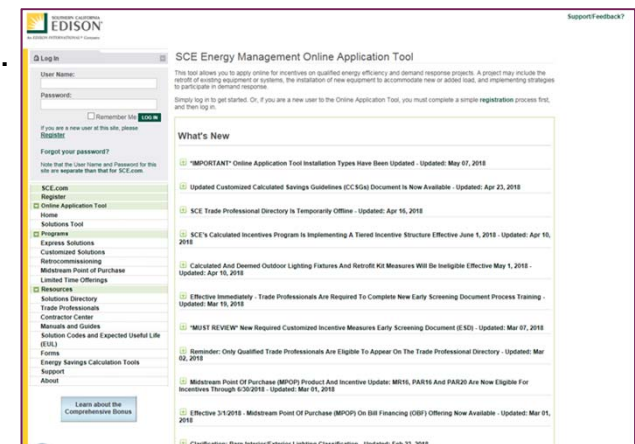
Energy for What's AheadSM



= 'ŽāResources

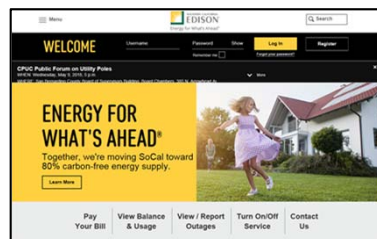
The SCE Online Application Tool (www.sceonlineapp.com) is not only the host site for submitting Calculated and Partnership energy efficiency incentive project applications, it houses a number of valuable resources.

- The landing page is titled “What’s New” and is updated regularly.
- This is your one-stop shop for legislative, program and measure updates, including [policy manuals and guidelines](#).
 - We recommend you visit this site at least once per week.
- The Tool also houses the most up to date information for:
 - SCE’s non-residential energy efficiency programs
 - Job aids
 - Calculation tools
 - And more!



SCE.com is also a great resource to access your site specific information, from rates and billing to SCE’s commitment to clean energy.

➤ If you have not already signed up for [My Account](#), please click on the link so you can enroll now!



Early Screening Document

SCE began providing early screening services to assist project developers on all Calculated (Custom, RCx/BRO, Partnership, Third Party) project submissions.

- Effective April 2, 2018, an Early Screening Document (ESD) approval email from SCE is required for all Calculated project submissions.
- The ESD Document and ESD Job Aid are posted on the “[Customized](#), [Retrocommissioning](#) and [Forms](#)” tabs on the Online Application Tool.
- An ESD training video is also available to assist customers and Trade Professionals with successful submissions.

The Early Screening Document was developed to:

- Improve customer satisfaction and mitigate the risk of setting unrealistic customer expectations.
- Establish a uniform and well-understood approach for identifying project quality issues upfront.
- Reduce inconsistent quality and unacceptable level/type of findings at the Ex Ante Review stage.
- Review and recommend measure level influence requirements.

The screenshot shows a web-based form titled "Early Screening Document for Custom Projects" with the Southern California Edison logo. The form includes "SCE Early Screening Document Instructions" which state that project developers must fill out all fields in orange in the "Project Information" and "ESD - EEM" sheets. It provides the email CustomReviews@sce.com and specifies the email subject format as [ESD_\(Project Name\)](#). A footer note directs inquiries to CustomReviews@sce.com. The form is displayed within a browser window showing tabs for "Cover Page", "Project Information", and "ESD - EEM".

Project Feasibility Study

SCE's Project Feasibility Study (PFS) is a living document used by all of SCE's programs that utilize calculated incentives (Customized, RCx/BRO, Partnerships, Third Party), and will continue to be updated on an as needed basis.

The newest version of the PFS is posted on the SCE Online Application Tool, and includes:

- Updated influence driver definitions.
- Updated narrative and influence recommendations.
- Check boxes and attachments that will help implementers/providers to identify which forms of evidence of influence are being provided to support the project on a measure by measure basis.

The PFS was developed to:

- Be the single use document for Calculated incentive submissions
- It should include the:
 - Narrative
 - Supporting influence
 - Influence documentation
 - Emails, screen shots, pictures, maintenance records, financial requirements, etc.
- It should also include:
 - All attachments that support the project
 - Audits, Savings calculations, Etc.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Project Feasibility Study
Customized/RCx • Partnerships • Third Party Programs

Customer Name
Address Street
City, CA 92867

Project Title – Project #

Prepared by:
Implementer/Developer Name
Address City, CA 95403
Primary Contact Name
Email
Phone: xxx-xxx-xxxx
Month Day, Year

Customer Name	(Required for all Third Party, Customized and BRO/RCx project submissions)
Position / Title	
Signature	
Date	

By signing this document, you acknowledge that you have read and reviewed the attached energy efficiency Project Feasibility Study that [Customer/Project Developer] has prepared. Your signature does not bind you to completing or installing any of the measures described in this report.

[Customer/Project Developer] understands that this project may be selected for an in-depth technical review by the Commission Staff (CS) of the State of California Public Utilities Commission (CPUC). If selected, the CS reserves the right to revise the project and all associated documentation to ensure the proposed energy savings are reasonable and correct. Any proposed changes to the project's energy savings or Energy Conservation Measures by CS must be implemented per the direction of the CS.

By signing above, you acknowledge that you understand that the energy savings described in this document are estimates only and are subject to change. Neither Southern California Edison nor [Customer/Project Developer] are liable if the projected estimated savings or project economics differ from actual energy savings and/or project economics because of variations in operating conditions, changes in project scope, changes to implementation based upon CS recommendations or industry Standard Practice study findings, changes based upon technical review findings, or for any other reason.

SCE Project Feasibility Study V6.1.4
Project Name

May 7, 2018
Page 1 | 14

Influence and Influence Job Aid

The Influence Job Aid is a living document and will continue to be updated periodically on an as needed basis.

The criteria on the Job Aid are a collection of commission staff documents and SCE internal documents that discuss influence and/or preponderance of evidence as defined by the Energy Division and the Statewide Working Group, and have been approved through a collaboration between SCE's Public Sector (Partnerships), Third Party and Calculated (Customized and BRO/RCx) programs.

- These collaborative groups required that assertions of program influence be backed up with supporting documentation that clearly demonstrates the implementer's and utility's roles in influencing customer decisions and actions. Program influence must demonstrate that the energy efficiency program caused a net benefit (for the ratepayers) by motivating the customer to implement absent the program intervention.

These three qualifiers should be key drivers of every project:

1. Identification: The program assists the customer in identifying energy efficiency opportunities
2. Technical Assistance: The program provides technical resources to facilitate the project (e.g. equipment inventory, equipment testing, data logging, etc.)
3. Financial Assistance: When the availability of incentive support to the customer directly becomes the deciding factor in the selection of a more efficient alternative solution to the one or ones that would otherwise be selected

This document was developed to:

- Improve the quality of influence and evidence provided in project narratives (e.g. Project Feasibility Studies).
- To help provide guidelines on what is an acceptable level of influence evidence needed to support projects based on project incentive values.
 - Copies of communications and supporting documents to and from end-use customers that document when and how the customers made their decisions are key
- To centralize influence related criteria that do not utilize Yes/No questions or communications.

Successful Influence Includes

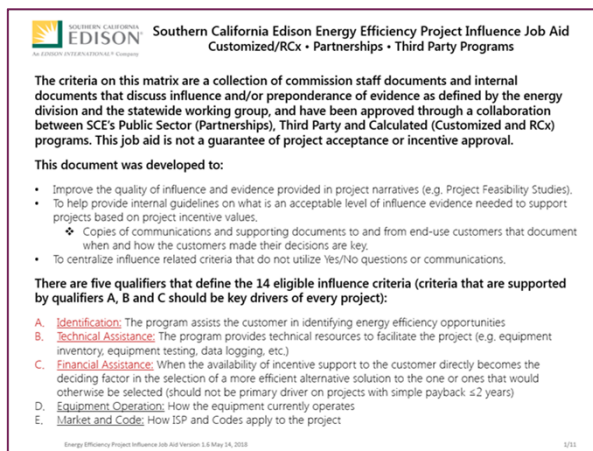
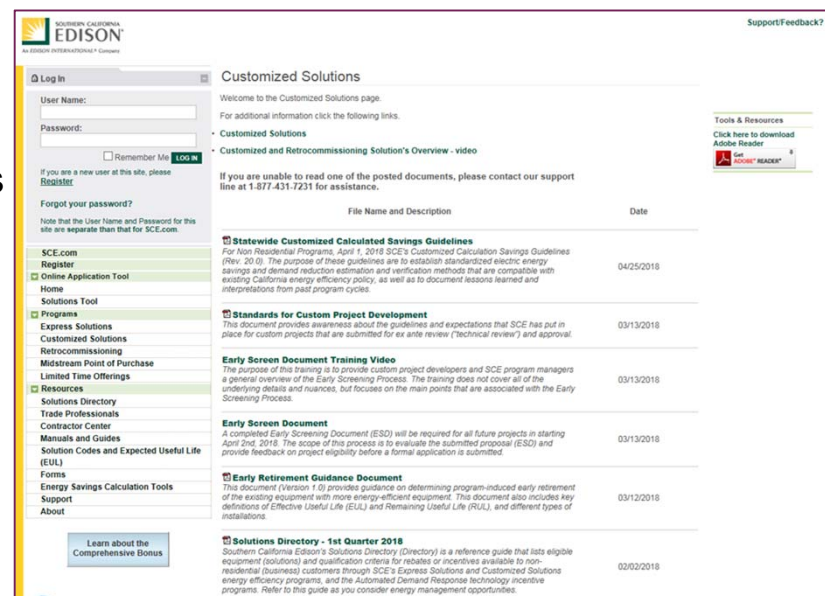
The evidence being supplied should come primarily from the end-use customer via documented communications with screen shots of emails, meeting minutes, audit reports, pictures, etc. The customer should describe:

- Of the 14 forms of criteria (in the job aid), those that list or describe multiple forms of evidence of influence, not all are required.
- 7 key forms of evidence of influence to support every project
 - How the initial communication with the implementer was initiated
 - What the Customer was going to do prior to being influenced by the implementer
 - What the Customer was moved to do after being influenced by the implementer
 - Who the Customer decision maker(s) were, how the decision was made and when
 - The business requirements that had to be fulfilled in order for the Customer to move forward with the measure/project
 - The financial requirements that had to be fulfilled in order for the Customer to move forward with the measure/project
 - If a measure's simple payback (Return on Investment or ROI) exceeds the Expected Useful Life (EUL), the Customer should explain the reason behind the business decision to implement the measure(s)
 - If a measure's simple payback (ROI) is ≤ 2 years, financial savings should not be used as the primary influence driver

Documents that Support a Calculated Project

All of these documents are available on the [Customized Solutions](#) tab of SCE Online Application Tool.

- Solutions Directory
- Statewide Customized Calculated Savings Guidelines
- Standards for Custom Project Development
- Preferred Calculation Tools Version 17.0
- Early Retirement Guidance Document
- Calculated Project Early Retirement Consideration Checklist
- Early Screening Document
- Project Feasibility Study
- Influence Job Aid



Cost Effectiveness

The goal of an Energy Efficiency program is to deliver the greatest energy savings (kWh) and demand reductions (kW) possible, while maintaining a high total resource cost (TRC).

- Total Resource Cost (TRC) Test measures the net cost of an energy conservation program, viewing the program as a utility resource. Both utility and participant costs are included. A TRC Test reflects the impacts of a program on both participating and non-participating customers.
- In a sense, it is the summation of the benefit and cost terms in the Participant and RIM (rate-payer impact measure) tests, where revenue/bill costs and incentives intuitively cancel out. The test provides a measure of the cost-effectiveness of a utility-sponsored energy efficiency program, per the California Standard Practice Manual.
- There are two ways to increase the TRC of a program.
 1. Increase the total savings delivered by the program
 2. Reduce the cost of implementing the program
- Total Resource Cost (TRC)
 - $TRC = \frac{\text{Avoided Costs}}{\text{Incurred Costs}} \approx \frac{\text{0.07} \times \text{kWh saved and kW reduced}}{\text{EE Program Costs} + \text{Measure Costs}}$

Measure Eligibility

