

2006-08 Statewide TA / TI Program Process Evaluation Final Results

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Evaluation Tasks

Major evaluation activities included:

- Logic model and program theory
- Interviews with program staff, auditors, verifiers
- Program process diagrams for each utility
- TA participant phone surveys (n=102)
- TA / TI participant in-depth interviews (n=42)
- Load shed test observations and audit ride alongs
- Discrete choice modeling

TA Participant Phone Survey

- Phone survey conducted with TA parts that had not yet progressed to TI phase
- SCE and SDG&E customers only (n=102)
- Emphasis on barriers to moving on to TI, program satisfaction

TA Participant Phone Survey Results: Satisfaction

- SCE and SDG&E customers gave very high satisfaction ratings for the TA/TI Program overall (70+ percent)
- Most respondents (77 percent) found the audit report useful
- Areas of dissatisfaction included:
 - Audit recos not taking into account business practices
 - Usefulness of audit report
 - Lack of follow-up from utilities
 - Delays in receiving the audit report

TA Participant Phone Survey Results: Program Barriers

Biggest concerns include:

1. Disruption of business
2. Savings not worth measure cost
3. Customer discomfort
4. Savings claims overstated

Respondents also would like to have more information provided on the costs and expected savings for each measure.

TA / TI Participant In-depth Interviews

- In-depth interviews done with TI parts and TA parts with elaborate audits
- Designed to get feedback on audit specifics
- Reviewed audit reports with customer during the interviews
- Interview samples:
 - PG&E = 8
 - SCE = 14
 - SDG&E – 20

TA / TI Participant In-depth Interviews: Barriers to Adopting Recommendations

Among interviewees, 53 percent of recos adopted
Most common barriers to adopting measures in TI include:

- Does not align with business operations
 - Lighting: affects displays, liability issues, staff complaints
 - HVAC: critical equip temps, staff complaints
- Lack of follow-up from auditor or utility

Lesser reason: Measures are too expensive

Additional In-depth Interviews: Engineers / Auditors / Aggregators

Interviews generally consistent with findings from customer surveys and interviews.

Key points:

- Comfort and productivity are primary concerns for customers
- Customers sometimes do not have the expertise / knowledge to implement DR measures
- Incentives need to be higher
- Some customers see benefit in DR as it enables them to understand and optimize their existing equipment
- Audit reports need to be provided to customers faster, with more follow up.

Discrete Choice Model

- Discrete choice model used to show the relative importance of multiple factors driving participation
- Logit model used to model the decision to move from the TA to the TI phase (N=570)
- Separate logit model used to simulate the decision to accept specific recommendations (N=3,343)
- Both decisions based on several factors:
 - Customer characteristics
 - Recommendation / Measure characteristics
 - Utility / Program

Discrete Choice Model Findings

- Variable reflecting DR savings is negative and significant, which is likely reflecting both job cost and potential disruption of larger DR measures
- Lighting EMS measures more likely to be adopted, HVAC EMS measures are less likely.
- From both models, SCE customers more likely to progress to TI phase. This may be due to SCE's version of the program, or other characteristics of SCE and/or its customers
- Customers that are in realty, public admin, hospitality, tech, and utility sectors more likely to progress to TI.
- Transportation, wholesale, and agricultural customer less likely to move to TI phase.

Evaluation Conclusions

- Overall, customers had high levels of satisfaction with the TA/TI program
- Areas for dissatisfaction include: usefulness of audit report and audit not taking into account business operations
- Customers desire more assistance from the program
- Customers less willing to give up control of decision-making power during DR events
- Recommendations involving Lighting / EMS, and shifting production to off-peak times are more likely to be adopted

Program Recommendations

- Develop a more turn-key program design
- Create business information forms for customers to fill out prior to audit
- Develop a standard audit procedure / checklist
- Establish standard post-audit follow up procedures to help customers navigate the program
- Create consistent data tracking system for both TA and TI phases
- Provide more information on measure costs and savings
- Deliver audit reports more quickly to customers.

Recommendations For Future Process Evaluations

- Conduct more customer phone surveys and in-depth interviews
- Include adequate customer notification to facilitate surveys
- Drop the load shed test observation tasks from the process evaluation
- Attempt to do audit ride alongs on first visit to the customer site