Flexible and Consistent Reporting for Energy Efficiency Programs: Introducing a New Tool for Reporting Utility Customer-Funded Efficiency Program Spending and Savings

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Electricity Markets and Policy Group
Lawrence Berkeley National Laboratory

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Overview

1. Energy efficiency (EE) program reporting: Current situation and challenges
2. Uses of customer-funded EE program data
3. LBNL EE Reporting Tool: Overview and walk through
4. Q&A
Administrators of utility customer-funded energy efficiency programs regularly report what they spend and save to their regulators or other oversight entities.

These reports typically include:

- A narrative that highlights achievements of the program administrator’s portfolio of efficiency programs.
- Tables and charts that quantify spending, savings, and achievement of policy objectives.

Issues:

- Energy efficiency reporting practices vary widely among program administrators and states.
- Many studies of reporting practices for efficiency programs have identified issues of consistency, rigor, and completeness.
- Challenging to determine whether a program administrator is achieving its energy efficiency goals.
EE Reporting: Current Situation

Spending/Costs

- > 1/2 of states don’t report total costs (i.e. program administrator costs and participant costs)
- < 1/2 of states report program cost breakdowns, although cost categories often differ

Energy savings

- Only ~ 1/3 of states report lifetime savings.
- “Net savings” often not defined in annual filings, and baselines are rarely defined
Weak consensus on EE terminology and no fully adopted standard scheme for characterizing EE programs

EE Reporting Project Objectives

- Encourage more transparency, consistency and rigor in reporting EE program impacts, costs and methodologies
  - Particularly in those states where program administrators do not currently provide annual reports
  - Elevate the quality of reporting by states that are new to EE or just ramping up
  - Greater consistency: classification of spending and resource costs (administrative costs, incentives) and estimation of program impacts (e.g., net savings)

- Encourage comprehensiveness
  - More program-level reporting by states and program administrators on total costs, cost effectiveness, customer participation, market penetration
Uses of Reported Energy Efficiency Data

Program Administrators
- Benchmark to local, regional and state values for similar markets
- Identify opportunities for performance improvements and cost efficiencies

Utility and Air Regulators
- Weigh cost and performance among efficiency resources
- Compare demand and supply resources
- Ensure prudent spending of funds

System Operators and Resource Planners
- Make better load forecasts and thus enable better GT&D planning
- Aid in integrated resource planning

Efficiency Industry Actors and Other Stakeholders
- Assess market dynamics, trends and opportunities

EE Program Spending, Savings, Cost-effectiveness and Participant Data
Flexible and Consistent Reporting for EE Programs

Solution

Spreadsheet-based reporting tool and technical brief

<table>
<thead>
<tr>
<th>Approach taken</th>
<th>Potential benefits of Reporting Tool:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>• Reduced time for staff to assess reporting compliance</td>
</tr>
<tr>
<td>Review &amp; enhance existing work</td>
<td>• Improved benchmarking of programs over time and different geographic regions</td>
</tr>
<tr>
<td>Incorporate Customization</td>
<td>• Diagnostic for identifying higher/lower performing programs</td>
</tr>
<tr>
<td>Modify based on feedback</td>
<td></td>
</tr>
</tbody>
</table>

Final Product
LBNL Energy Efficiency Reporting Tool

- Flexible and customizable
- Comprehensive data collection
- Consistent format
- Raises the bar
Core Features

Core

- Program category (sector, type)
- Program implementer
- Program description
- Baseline used
- Claimed annual savings
- Claimed lifetime savings
- Measure life
- Number of participants/units
- Program expenditures
- Cost-effectiveness test results
Program Administrator-Specific Features

◆ Core
  - Program category (sector, type)
  - Program implementer
  - Program description
  - Baseline used
  - Claimed annual savings
  - Claimed lifetime savings
  - Measure life
  - Number of participants/units
  - Program expenditures
  - Cost-Effectiveness test results

◆ Customizable
  - Net vs gross reporting
  - Sector level reporting or program level reporting
  - Interactive effects
  - Planned savings vs. claimed/reported
  - Evaluated savings
  - Comparison with previous years
  - Site or source reporting of savings
  - EE financing
  - Program administrator incentive
LBNL EE Reporting Tool Walk Through
Using the Tool

Step 1: Basic Program Administrator Information

- Answers determine which supplemental data input forms are available
- Defines the structure of the data outputs

Step 2: Answer screening questions

Step 3: Data Inputs

Data Outputs
Main Menu

Step One:
Complete PA Information

Step Two:
Answer screening questions

Step Three:
Input Data

Data Outputs
### Program Administrator Information

- **Name**
- **Contact information**
- **Fuel type**
- **Targets**
- **Notes**
Main Menu => Instructions

STEP ONE: Complete Program Administrator (PA) Information

**Program Administrator Name:** ABC Utility

**Program year being reported:** 2014

**Program year definition:**

**EE proceeding docket:**

**Date EE docket was filed:**

**Name of Contact:**

**Email Address:**

**Telephone Number:**

**Single or Multi Fuel Utility:** Single Fuel

**Utility Fuel Type Reported:** Electric

**2014 EE Savings Target Format**

**Gross Energy Savings:**

**2014 EE Gross Savings Target (MWh):** 200

**Target baseline retail sales (MWh):** 26,800

**Source of target baseline retail sales:**

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STEP THREE: Data Inputs

- **Common to all Program Administrators**
  - Program Details & Descriptions
  - Claimed Program Savings
  - Actual Program Expenditures
  - Cost-effectiveness Test Results
  - Key Assumptions

- **Reporting features specific to ABC Utility**
  - Planned Program Budgets
  - Planned Program Savings
  - Evaluated Program Savings
  - Program Data - Prior Two Years
  - Portfolio Data - Prior Five Years
  - Energy Efficiency Change
  - Program Administrator Incentives

---

**Table of Contents**

1. Program Details & Descriptions
2. Claimed Program Savings
3. Actual Program Expenditures
4. Cost-effectiveness Test Results
5. Key Assumptions
6. Planned Program Budgets
7. Planned Program Savings
8. Evaluated Program Savings
9. Program Data - Prior Two Years
10. Portfolio Data - Prior Five Years
11. Energy Efficiency Change
12. Program Administrator Incentives

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User Guide Built In
Instructions

The workbook is designed to create an annual report by the Program Administrator (PA) to their regulator or oversite agency that provides information on energy savings costs and participation values.

Navigating the workbook

The workbook is designed to be within the screen without using the tabs. Some users may find it helpful to change the visibility of the tabs in this workbook. To change these options, click on "Options" > "Advanced", scroll down to see "Display Options for this Workbook" then change the toggle on "Show".

In addition, you can navigate to specific sections of the workbook in order to find or edit specific information.

The 'yellow cells' input values are from the user. **You can only enter data in the yellow cells.** Input the requested units as indicated by the workbook (i.e., if the data in MW or if it is MWh provide the data in MWh).

Completing the workbook

The process for completing this workbook involves **four steps:**

- **Step One:** Complete Program Administrator (PA) Information
- **Step Two:** Complete Screening Questionnaire
- **Step Three:** Data Inputs
- **Step Four:** Data Outputs

Each step of the workbook is detailed below:

**Step One**

Complete the PA information, including name, fuel type, docket number associated with the programs. Note that dual-fuel utilities will need to complete a separate workbook for each fuel.

**Step Two**

The screening questionnaire is an integral part of this workbook. It is used to help define the appropriate level of information for a given PA. There are 10 questions, which can be answered either by the PA or by the regulator. The 10 questions must be answered to ensure the information being reported will provide the regulator(s) with at least their minimum data needs.

The results of this questionnaire impact both the Inputs (Step Three) and Outputs (Step Four) that are available to the user, so it is **critical** the questionnaire should be answered before data is entered in Step Three and Step Four.
Glossary

Built In
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td># Participants</td>
<td>Total number of consumers participating in the subject program. For new construction programs, we classify &quot;number of homes or buildings&quot; as the number of participants. In some programs, the number of participants will be the number of structures or multifamily units that received efficiency measures through a program.</td>
</tr>
<tr>
<td># Units</td>
<td>Total number of measures installed or credited with savings in the subject program (e.g., number of CFLs for which savings are claimed in a lighting program). If the number of units reported for a new construction or retrofit program is defined as structures built or retrofitted to a higher level of energy performance, then these are not counted as units but as participants.</td>
</tr>
<tr>
<td>Administration Costs ($)</td>
<td>Actual spending by the program administrator (PA) on costs associated with planning, designing and implementing an energy efficiency program in a defined geographic area, unless some of those costs are specifically accounted for elsewhere. In general, these costs pay for the salaries, training and equipping of internal PA staff to administer and implement a program or oversee the work of an outside contract implementer. If evaluation, compliance and marketing, outreach &amp; education costs are not reported separately, then they typically are included under program administration costs. When a program is being terminated, shut-down costs also should be included in administration costs.</td>
</tr>
<tr>
<td>Air Quality Impacts</td>
<td>To some degree, power plants generally control emissions of some pollutants to the atmosphere; the balance goes up the stack. Some emissions are harmful to human health and welfare as they are emitted; others contribute to chemical reactions in the atmosphere, creating harmful contaminants while airborne.</td>
</tr>
</tbody>
</table>
### Main Menu – Step Two

**Screening Questions**

- Enables customization
- Answers impact the available data inputs and data outputs

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**STEP TWO: Answer screening questions**

**Answer these questions to help establish your minimum reporting requirements and desired outputs**

1. How do you report your savings?
   - Net & Gross
   - Gross Only

2. Do your reported gross savings values account for naturally occurring energy savings?
   - Yes
   - No

3. What cost-effectiveness tests do you provide in your annual report? Select all that apply
   - Total Resource Cost Test
   - Program Administrator Cost Test
   - Societal Cost Test
   - Ratepayer Impact Measure Test

4. Do you want to compare actual expenditures and claimed savings with planned values?
   - Yes
   - No

5. Are you also reporting evaluated savings?
   - Yes
   - No

6. Are you comparing spending and savings for this program year with previous program years?
   - Yes
   - No

7. Do you report savings at site or savings at the site plus T&D losses between site and the power plant?
   - Site
   - Site plus T&D losses

8. Do you account for interactive effects in your reported savings values? (see glossary for definition)
   - Yes
   - No

9. Do you have an energy efficiency program that allows customers to finance projects?
   - Yes
   - No

10. Do you report a claimed program administrator incentive?
    - Yes
    - No
### Screening questions

**STEP TWO: Answer screening questions**

Answer these questions to help establish your minimum reporting requirements and desired outputs.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) How do you report your savings?</td>
<td>Net &amp; Gross, Gross Only</td>
</tr>
<tr>
<td>1b) Do your reported gross savings values account for naturally occurring energy savings?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>2) What level are your programs screened for cost-effectiveness for regulatory purposes?</td>
<td>Customer sector &amp; Portfolio, Program</td>
</tr>
<tr>
<td>3) What cost effectiveness tests do you provide in your annual report? Select all that apply</td>
<td>Total Resource Cost Test, Program Administrator Cost Test, Societal Cost Test, Ratepayer Impact Measure Test</td>
</tr>
<tr>
<td>4) Do you want to compare actual expenditures and claimed savings with planned values?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>5) Are you also reporting evaluated savings</td>
<td>Yes, No</td>
</tr>
<tr>
<td>6) Are you comparing spending and savings for this program year with previous program years?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>7) Do you report savings at site or savings at the site plus T&amp;D losses between site and the power plant?</td>
<td>Site, Site plus T&amp;D losses</td>
</tr>
<tr>
<td>8) Do you account for interactive effects in your reported savings values? (see glossary for definition)</td>
<td>Yes, No</td>
</tr>
<tr>
<td>9) Do you have an energy efficiency program that allows customers to finance projects?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>10) Do you report a claimed program administrator incentive?</td>
<td>Yes, No</td>
</tr>
</tbody>
</table>

- Net-to-Gross
- Naturally occurring savings
- Level of cost-effectiveness screening
- Cost-effectiveness tests used
- Planned savings
- Evaluated savings
- Prior years data
- Location of savings
- Interactive effects
- EE financing
- Program administrator incentive
Main Menu – Step Three

Data Inputs - Core

Data Inputs – PA-specific features
Main Menu – Step Three

Data Inputs - Core

- Program details/descriptions
- Claimed program savings
- Actual program expenditure
- Cost-effectiveness
- Key assumptions
Main Menu – Step Three

Data Inputs – PA-specific features

- Planned budgets
- Planned savings
- Evaluated program savings
- Prior data
- EE finance
- PA incentives
### Example: Screening questions impact program administrator-specific inputs

**STEP TWO: Answer screening questions**

Answer these questions to help establish your minimum reporting requirements and desired outputs

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) Do you have an energy efficiency program that allows customers to finance projects?</td>
<td>Yes, No</td>
</tr>
</tbody>
</table>
Example: Screening questions impact program administrator-specific inputs

Reporting features specific to
ABC Utility
Available features depend on answers in Step Two

- f) Planned Program Budgets
- g) Planned Program Savings
- h) Evaluated Program Savings
- i) Program Data - Prior Two Years
- j) Portfolio Data - Prior Five Years
- k) Energy Efficiency Finance
- l) Program Administrator Incentives
Example: Screening questions impact program administrator-specific inputs

**STEP TWO: Answer screening questions**

Answer these questions to help establish your minimum reporting requirements and desired outputs

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) How do you report your savings?</td>
<td>Net &amp; Gross</td>
<td>Gross Only</td>
</tr>
<tr>
<td>2) Do your reported gross savings values account for naturally occurring energy savings?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3) What level are your programs screened for cost-effectiveness for regulatory purposes?</td>
<td>Customer sector &amp; Program</td>
<td>Ratepayer Impact Measure Test</td>
</tr>
<tr>
<td>4) Do you want to compare actual expenditures and claimed savings with planned values?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5) Are you also reporting evaluated savings?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8) Do you account for interactive effects in your reported savings values? (see glossary for definition)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9) Do you have an energy efficiency program that allows customers to finance projects?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Example: Screening questions impact program administrator-specific inputs

Reporting features specific to ABC Utility
Available features depend on answers in Step Two

- f) Planned Program Budgets
- g) Planned Program Savings
- h) Evaluated Program Savings
- i) Program Data - Prior Two Years
- j) Portfolio Data - Prior Five Years
- k) Program Administrator Incentives
Data Inputs – Two Examples

Two illustrative examples:
- Program details
- Claimed Savings
Data Inputs Example: Program Details

STEP THREE: Data Inputs

Common to all Program Administrators

a) Program Details & Descriptions

b) Claimed Program Savings

c) Actual Program Expenditures

d) Cost-effectiveness Test Results

e) Key Assumptions
Data Inputs Example: Program Details

Instructions: Provide program details in the following order: Program Name, Target Market Sector and Detailed Program Type. Note that the dropdown options available in Detailed Program Type are dependent on the response provided in the Target Market Sector field. Also, if the Target Market Sector is modified after the Program Type has been selected, then the Detailed Program Type must be selected again. If portfolio-level expenses are being reported, that are not associated with specific programs, then enter these as their own line item(s) with a Target Market Sector of "Cross Sectoral/Other". If the program type is not available, select the most appropriate Target Market Sector and enter the Detailed Program Type as opposed to using the drop-downs.

Select the type of baseline that is used for determining energy savings for the programs. Include additional information as is appropriate, especially if "Other", "Dynamic" or "Multiple" are selected.

If the program is administered in collaboration with another program administrator (PA), select "Yes" from the dropdown, e.g., a whole home retrofit offered jointly by an electric PA and a gas PA. Also, provide the name of the other PA with which the program is being jointly administered. More details on jointly administered or multi-utility programs can be provided in Program Notes section of the "Program Descriptions" sheet. Provide additional information for each program by clicking on the "Program Descriptions" button.

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Target Market Sector</th>
<th>Detailed Program Type</th>
<th>Explain baseline</th>
<th>Describe baseline(s) used if &quot;other&quot;, &quot;dynamic&quot;, or &quot;multiple&quot; were used</th>
<th>Was this program jointly administered?</th>
<th>Who was the other Program Administrator?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential New Construction</td>
<td>Residential</td>
<td>Res. New Construction</td>
<td>Code or Standard</td>
<td>Code or Standard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Residential Whole Home Retrofit</td>
<td>Residential</td>
<td>Res. Whole Home/Retrofit</td>
<td>Existing conditions</td>
<td>Existing conditions</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>C&amp;I Prescriptive</td>
<td>Commercial, Industrial</td>
<td>C&amp;I Prescriptive</td>
<td>Existing conditions</td>
<td>Existing conditions</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

- Program Name
- Target Market Sector
- Detailed Program Type

- Baseline
- Joint Administration
Data Inputs Example: Claimed Savings

STEP THREE: Data Inputs

Common to all Program Administrators

a) Program Details & Descriptions

b) Claimed Program Savings

c) Actual Program Expenditures

d) Cost-effectiveness Test Results

e) Key Assumptions
## Data Inputs Example: Claimed Savings

### Claimed Program Savings

**Instructions:** Provide annual demand savings, and annual and lifetime energy savings. Click the "Claimed Net-to-Gross" button to input NTG values. Provide the number of participants or units installed along with the number of eligible participants or estimated market size. Additionally, provide a participant definition for each program.

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Gross Demand Savings (MW)</th>
<th>Gross Annual Energy Savings (MWh)</th>
<th>Gross Lifetime Energy Savings (MWh)</th>
<th>Net-to-Gross Ratio</th>
<th>Net Demand Savings (MW)</th>
<th>Net Annual Energy Savings (MWh)</th>
<th>Net Lifetime Energy Savings (MWh)</th>
<th>Program Savings Lifetime (Years)</th>
<th>Participants/Units</th>
<th>Eligible Participants</th>
<th>Participant/Unit Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Residential New Construction (example)</td>
<td>20</td>
<td>258</td>
<td>2,580</td>
<td>0.90</td>
<td>18</td>
<td>232</td>
<td>2,322</td>
<td>10.0</td>
<td>500</td>
<td>8,000</td>
<td>Accounts</td>
</tr>
<tr>
<td>2. Residential Whole Home Retrofit</td>
<td>18</td>
<td>14</td>
<td>2,432</td>
<td>0.80</td>
<td>14</td>
<td>12</td>
<td>1,946</td>
<td>9.0</td>
<td>400</td>
<td>8,800</td>
<td>Homes</td>
</tr>
<tr>
<td>3. C&amp;I Prescriptive</td>
<td>10</td>
<td>300</td>
<td>1,284</td>
<td>0.70</td>
<td>7</td>
<td>210</td>
<td>864</td>
<td>8.0</td>
<td>32</td>
<td>245</td>
<td>Customers</td>
</tr>
</tbody>
</table>

- Gross
  - Demand savings
  - Annual energy savings
  - Lifetime energy savings
- Net-to-Gross Ratio
- Net
  - Demand savings
  - Annual energy savings
  - Lifetime energy savings
- Program savings lifetime
- Participants/Units
- Eligible Participants
- Participant/Unit Definition
Main Menu – Data Outputs

Data Outputs
- Portfolio
- Savings
- Expenditure
- Sector
- Savings
- Expenditure
- Expenditures by program
- Expenditures Type
- Detailed Program Results
- Historical Comparisons
Data Outputs – four examples

Four illustrative examples:
• Program historical details
• Program details
• Portfolio spending
• Portfolio summary

- Table 1: Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions
- Table 2: Market Sector Savings, Expenditures and Cost Effectiveness
- Table 3: Spending by Program
- Table 4: Portfolio Summary by Expenditure Type
- Table 5: Results Detailed by Program
- Table 6: Program Savings, Expenditures and Participation
- Table 7: Portfolio Expenditures and Savings by Year
- Table 8: Comparison with Last Year’s Data
### Data Outputs

| Table 1: Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions |
| Table 2: Market Sector Savings, Expenditures and Cost Effectiveness |
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| Table 5: Results Detailed by Program |
| Table 6: Program Savings, Expenditures and Participation |
| Table 7: Portfolio Expenditures and Savings by Year |
| Table 8: Comparison with Last Year’s Data |
## Main Menu

**Table 6**

Select program from dropdown menu to view details.

### Residential New Construction (example)

<table>
<thead>
<tr>
<th>Program</th>
<th>Budget</th>
<th>Actual</th>
<th>%</th>
<th>Plan</th>
<th>Claimed</th>
<th>%</th>
<th>Evaluation</th>
<th>%</th>
<th>Plan</th>
<th>Claimed</th>
<th>%</th>
<th>Evaluation</th>
<th>%</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Year 2012</td>
<td>$80,000</td>
<td>$90,000</td>
<td>113%</td>
<td>230</td>
<td>250</td>
<td>100%</td>
<td>200</td>
<td>87%</td>
<td>207</td>
<td>225</td>
<td>100%</td>
<td>180</td>
<td>87%</td>
<td>230</td>
</tr>
<tr>
<td>Program Year 2013</td>
<td>$100,000</td>
<td>$105,000</td>
<td>105%</td>
<td>250</td>
<td>253</td>
<td>101%</td>
<td>220</td>
<td>88%</td>
<td>225</td>
<td>207</td>
<td>92%</td>
<td>198</td>
<td>88%</td>
<td>230</td>
</tr>
<tr>
<td>Program Year 2014</td>
<td>$113,100</td>
<td>$156,400</td>
<td>118%</td>
<td>250</td>
<td>258</td>
<td>103%</td>
<td>340</td>
<td>136%</td>
<td>225</td>
<td>232</td>
<td>103%</td>
<td>306</td>
<td>136%</td>
<td>240</td>
</tr>
</tbody>
</table>

![Graph showing program years 2012, 2013, and 2014 with expenditure and energy savings data.]

**NOTE:** Based on answers to screening questions, the savings values are reported at the site.
Data Outputs

- Table 1: Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions
- Table 2: Market Sector Savings, Expenditures and Cost Effectiveness
- Table 3: Spending by Program
- Table 4: Portfolio Summary by Expenditure Type
- Table 5: Results Detailed by Program
- Table 6: Program Savings, Expenditures and Participation
- Table 7: Portfolio Expenditures and Savings by Year
- Table 8: Comparison with Last Year’s Data
## Data Output – Program Details

### Table 5

**2014 Portfolio Data**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Target Sector</th>
<th>Program Type</th>
<th>Actual $</th>
<th>Demand MW</th>
<th>Annual Energy MWh</th>
<th>Lifetime Energy MWh</th>
<th>Demand MW</th>
<th>Annual Energy MWh</th>
<th>Lifetime Energy MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential New Construction (example)</td>
<td>Residential</td>
<td>Res: New Construction</td>
<td>156400</td>
<td>20</td>
<td>258</td>
<td>2580</td>
<td>18</td>
<td>232.2</td>
<td>2322</td>
</tr>
<tr>
<td>Residential Whole Home Retrofit</td>
<td>Residential</td>
<td>Res: Whole Home/Retrofit</td>
<td>215600</td>
<td>18</td>
<td>15</td>
<td>2432</td>
<td>14.4</td>
<td>12</td>
<td>1845.6</td>
</tr>
<tr>
<td>C&amp;I Prescriptive</td>
<td>Commercial, Industrial</td>
<td>Cl. Prescriptive</td>
<td>156400</td>
<td>10</td>
<td>300</td>
<td>1234</td>
<td>7</td>
<td>210</td>
<td>863.8</td>
</tr>
<tr>
<td>&quot;Hide&quot;</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Data Outputs

Table 1: Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions
Table 2: Market Sector Savings, Expenditures and Cost Effectiveness
Table 3: Spending by Program
Table 4: Portfolio Summary by Expenditure Type
Table 5: Results Detailed by Program
Table 6: Program Savings, Expenditures and Participation
Table 7: Portfolio Expenditures and Savings by Year
Table 8: Comparison with Last Year’s Data
### Table 4: EE Portfolio Summary by Expenditure Type

<table>
<thead>
<tr>
<th>EE Program Expenditure Summary</th>
<th>2014 Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Total</td>
</tr>
<tr>
<td>Administrative Expenditures</td>
<td>21%</td>
</tr>
<tr>
<td>Delivery Expenditures</td>
<td>23%</td>
</tr>
<tr>
<td>Marketing, Education and Outreach ($)</td>
<td>5%</td>
</tr>
<tr>
<td>EM&amp;V ($)</td>
<td>6%</td>
</tr>
<tr>
<td>Incentive Expenditures</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
Data Outputs: Portfolio level

Table 1: Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions

Table 2: Market Sector Savings, Expenditures and Cost Effectiveness

Table 3: Spending by Program

Table 4: Portfolio Summary by Expenditure Type

Table 5: Results Detailed by Program

Table 6: Program Savings, Expenditures and Participation

Table 7: Portfolio Expenditures and Savings by Year

Table 8: Comparison with Last Year’s Data
Data Output – Portfolio Savings, Expenditures, Cost-Effectiveness

Table 1

2014 Portfolio Savings, Expenditures, Cost Effectiveness, Goals & Assumptions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand MW</td>
<td>Annual Energy MWh</td>
<td>Lifetime Energy MWh</td>
<td>Demand MW</td>
<td>Annual Energy MWh</td>
<td>Lifetime Energy MWh</td>
<td>Demand MW</td>
<td>Annual Energy MWh</td>
</tr>
<tr>
<td>34.8</td>
<td>250.0</td>
<td>2,600.0</td>
<td>39.6</td>
<td>225.0</td>
<td>6,246.0</td>
<td>39.4</td>
<td>454.2</td>
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</tbody>
</table>

Cost-effectiveness assumptions
- Utility Discount Rate: 0%
- TRC/Societal Discount Rate: 0%
- Participant Discount Rate: 0%

Methodology for calculating the cost-effectiveness tests

Non-Energy Benefits included in Cost-Effectiveness Tests

<table>
<thead>
<tr>
<th>Non-Energy Benefits to Participants</th>
<th>Included</th>
<th>Description (different from glossary)</th>
<th>Included in which Test(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;M Cost Savings</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Participant Health</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Employee Productivity</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Benefits Unique to Low-Income Consumers</td>
<td>0</td>
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<tr>
<td>Comfort</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Utility adder for societal benefits</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Air Quality Impacts</td>
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<td>0</td>
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<tr>
<td>Water Quantity &amp; Quality</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Employment and Other Economic Impacts</td>
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<td>0</td>
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<tr>
<td>Other Economic Considerations</td>
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</tr>
<tr>
<td>Social Risk &amp; Energy Security</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reduction of Effects of Termination of Service</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Assistance of Uncollectible Bills for Utilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Monetization of emissions</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Other</td>
<td>0</td>
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</tr>
</tbody>
</table>

Demand Savings Assumptions: Time period and methodology for which demand savings are evaluated

- Energy savings
- Expenditures
- Cost-Effectiveness
- Assumptions
Discussion: Next Steps

- Technical assistance available to states that want to adopt standardized reporting using the tool

- Options include:
  - Customization of reporting tool
    - Include information linked to state policy objectives or reporting required by legislature or PUC (e.g., summary tables, graphs)
  - Augment numerical reporting with a standardized narrative document that provides for qualitative descriptions of the program administrator’s efforts
Questions/Comments

http://emp.lbl.gov/

https://emp.lbl.gov/publications/flexible-and-consistent-r

Project funded by DOE Office of Electricity Delivery and Energy Reliability, National Electricity Delivery Division
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