October 8, 2013
Lynn Westerlind, Chair
Evaluation Management Committee
National Grid

2013 - 2014 Evaluation
Strategic Plan
October 8, 2013

Lynn Westerlind, Chair
Evaluation Management Committee
National Grid
Evaluation Strategic Plan (ESP)

- Developed collaboratively by the Program Administrators (PAs), the EEAC Consultants and the evaluation contractors.
- Includes
  - Background (Scope of Research Areas, Budget, Resources, Planning Process, Previously Completed Research, Research in Progress)
  - Near Term Priorities
  - Planned Research
  - Other Research
- Describes the evaluation planning process and studies, in an effort to better document strategic evaluation planning.
- More aligned with program planning period.
What is ESP?

- Does not include . . .

- Does include . . .

  Evaluation Strategic Plan

  - How budgets are determined and allocated to specific functions
  - What are key areas of special focus over the next several years
  - How often various types of studies need to be done
  - How EM&V efforts are structured within each research area
  - What research is in progress?
  - What research have we completed since 2010?
Scope of Research Areas

Residential
- Residential New Construction
- Residential Lighting
- Residential Products
- Heating and Cooling Equipment
- Residential Retrofit
- Multifamily
- Low Income

Non-Residential
- Non-Residential Large Retrofit
- Non-Residential New Construction
- Non-Residential Small Retrofit

Cross-Cutting
- Umbrella Marketing
- Behavioral
- Community Initiatives
- Market Effects/Net to Gross
- Codes & Standards
- Potential Studies
- Non-Energy Impacts

Non-Residential
- Low Income
Budget and Resources

**Budget:** Close to $60 million available to research areas

**Resources:**
- 25 PA employees,
- Several external evaluation experts to supplement PA staff,
- 4 EEAC consultants
- 13 evaluation firms

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Electric 2013</th>
<th>2014</th>
<th>2015</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$4,517,689</td>
<td>$4,774,194</td>
<td>$5,084,378</td>
<td>$14,376,260</td>
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<tr>
<td>Non-Residential</td>
<td>$5,763,321</td>
<td>$5,788,086</td>
<td>$5,908,618</td>
<td>$17,460,025</td>
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<tr>
<td>Cross-Cutting</td>
<td>$2,570,252</td>
<td>$2,640,570</td>
<td>$2,748,249</td>
<td>$7,959,071</td>
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<tr>
<td>Total</td>
<td>$12,851,262</td>
<td>$13,202,850</td>
<td>$13,741,245</td>
<td>$39,795,357</td>
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</table>

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Gas 2013</th>
<th>2014</th>
<th>2015</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$3,293,398</td>
<td>$3,368,041</td>
<td>$3,473,407</td>
<td>$10,134,846</td>
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<tr>
<td>Non-Residential</td>
<td>$1,373,122</td>
<td>$1,443,677</td>
<td>$1,489,301</td>
<td>$4,306,100</td>
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<tr>
<td>Cross-Cutting</td>
<td>$1,166,630</td>
<td>$1,202,929</td>
<td>$1,240,677</td>
<td>$3,610,236</td>
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<tr>
<td>Total</td>
<td>$5,833,150</td>
<td>$6,014,647</td>
<td>$6,203,386</td>
<td>$18,051,182</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Total 2013</th>
<th>2014</th>
<th>2015</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$7,811,087</td>
<td>$8,142,234</td>
<td>$8,557,785</td>
<td>$24,511,106</td>
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<tr>
<td>Non-Residential</td>
<td>$7,136,442</td>
<td>$7,231,763</td>
<td>$7,397,919</td>
<td>$21,766,125</td>
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<tr>
<td>Cross-Cutting</td>
<td>$3,736,882</td>
<td>$3,843,499</td>
<td>$3,988,926</td>
<td>$11,569,308</td>
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<tr>
<td>Total</td>
<td>$18,684,412</td>
<td>$19,217,497</td>
<td>$19,944,631</td>
<td>$57,846,540</td>
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</tbody>
</table>
Planning Principles

- Importance
- History
- Uncertainty
- Timing
- Balance
- Depth
- Flexibility
Planning Process

- Hosted strategic evaluation planning meetings
  - Encourage early participation in the evaluation planning process and solicit input from a wide variety of program stakeholders
  - Non-Residential and Cross-Sector was held in February
  - Residential held in mid-May
  - The meetings identified specific potential evaluation activities and as a group, stakeholders developed a preliminary assessment of each activity’s relative priority (High, Medium, and Low) and optimal timing.

- PAs and EEAC Consultants used the first four evaluation planning priorities outlined above to gauge the evaluation activities identified at the summit.

- Active engagement with both program implementers and policymakers to identify additional key research needs and to further refine project recommendations developed at the strategic evaluation planning meetings.
# Stages of Evaluation

<table>
<thead>
<tr>
<th>Stage</th>
<th>Deliverable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Conceptual Framework</td>
<td>1 Page Summary</td>
<td>Provides conceptual framework for the project including a very high-level budget and timing, as well as the objective or goal.</td>
</tr>
<tr>
<td>Stage 2: Preliminary (High Level) Workplan</td>
<td>2 - 3 Page Summary</td>
<td>Provides strategies to meet objective including more detail on the potential research design, level of effort (number of surveys, site visits) including additional detail on budget/timing.</td>
</tr>
<tr>
<td>Stage 3: Detailed Workplan</td>
<td>3 - 25 Work plan</td>
<td>Provides detailed sampling and analysis plans; specific staffing and milestone deliverables.</td>
</tr>
<tr>
<td>Stage 4: In Progress</td>
<td>Status Report</td>
<td>Work is conducted consistently with plan – there may be detailed planning occurring simultaneously with execution on early tasks.</td>
</tr>
<tr>
<td>Stage 5: Reporting</td>
<td>Draft Report</td>
<td>Period from draft report through final report and any review/communications/meetings in-between, includes paperwork for submittal.</td>
</tr>
<tr>
<td>Stage 6: Complete</td>
<td>Final Report</td>
<td>Report is finalized and filed with DPU.</td>
</tr>
</tbody>
</table>
Completed Research

• 117 studies completed since 2010!
• How do we compare to our peers?
  • CT 15 studies
  • NH 6 studies
  • RI 19 studies
• Each round of studies builds on the previous results.
In Progress

- Over 50 evaluation studies are in planned or in progress status.
- A full list of studies and projected timeline is provided monthly with the data dashboard.
Planned Residential

- 15 high priority studies
  - Lighting Market Saturation
  - Lighting Saturation Stagnation
  - Lighting Market Lift Assessment
  - Lighting Net-to-gross
  - Appliance Program Evaluation
  - Incremental Cost Study
  - HEHE and CoolSmart Impact Evaluation
  - Advanced Power Strips Impact Evaluation
  - HES Program Delivery Assessment
  - HEAT Loan Process Analysis
  - Low Income Multifamily Impact Assessment
  - Multifamily Process Evaluation
  - Multifamily High Rise New Construction Baseline Assessment
  - Residential Customer Profile Study
  - Trade Ally Panel
Planned Non-Residential

- 15 high priority studies
  - C&I Code Compliance Follow Up
  - Impact Evaluation of 2012 Custom HVAC Installations
  - Impact Evaluation of 2012 Prescriptive Non-Lighting Installations
  - Enhanced C&I Customer Profiles
  - MA C&I Learning from “Successful” Projects
  - How PA Differences Affect Program Outcomes
  - Commercial Real Estate Study
  - Rooftop Units Baseline Study
  - Characterization of Supply Side Populations
  - Direct Install Process Evaluation
  - Impact Evaluation of 2012 Prescriptive Gas Installations
  - C&I Market Effects Study
  - Impact Evaluation of Selected 2013 Custom Electric Installations
  - Impact Evaluation of Selected 2013 Prescriptive Electric Installations
  - Impact Evaluation of 2013 Custom Gas Installations
Planned Cross-Cutting

- 13 high priority studies
  - Behavioral Program Persistence Study
  - Codes & Standards Coordination/Planning
  - CMI – Efficiency Neighborhoods +
  - Market Effects – Strategic Planning
  - Net-to Gross – Top-Down NTG Methods
  - Net-to-Gross – Electric C&I NTG
  - Non-Energy Impacts – Low Income Health NEIs
  - Non-Energy Impacts – Using C&I NEIs for Project Recruitment
  - Non-Energy Impacts – Quantifying C&I New Construction NEIs
  - Umbrella Marketing – 2013 Pre/Post Campaign Analysis
  - Umbrella Marketing – Brand Effectiveness
  - Retrospective Electric DRIPE
Next Steps

- Draft will be distributed as a link on the EEAC site during the first half of October.

- Welcome stakeholder feedback on planned research in Stages 1 – 3 (conceptual – detailed workplan) through the end of October, so that we can move planned research into “in progress” as soon as possible!

- Especially seeking feedback on Stage 1 and Stage 2
  - Planned research in the “conceptual framework” stage, whether the project makes sense and how it should be approached
  - Planned research in the “preliminary workplan” stage, do the methods and research questions make sense
  - Any projects that we may have missed