**2019-2021 Evaluation Plan Update Process**

For Discussion at November Evaluation Committee Meeting - From EA Team, 11/9/20

**Process**

1. **Timing issues**

* Sooner because of contracting issues; June 2021 project deadlines where possible; later to better coordinate with MA?
* Best solution may be to move forward but leave some funds uncommitted until MA process, and leave an add-on project or two on hold in case no projects are fruitful / advantageous for CT.
* Keeping within total dollars – doesn’t require approval by EEB, but is sent after committee passes

1. **Considerations related to Schedule and Contracting**

* Preference for “add-ons” to existing projects where possible (many not yet underway with contracting delay) – contracting SHOULD be quick enough to allow some to complete by June 2021.
* Balanced by promise the “pools” would be relevant for projects through 2021; expect 1 more round of RFPs.
* Note Roadmap expected to change to 3-year area-wide contracting next period to relieve stress on contracting, contractor learning curve, EA team time.

1. **Proposed Schedule**

* Ideation by all early Nov
* Review / initial prioritization by EA team Nov. Alternative, walk-through with Evaluation Committee of all ideas for initial feedback / then organization by EA Team, and follow-up calls. (today and a call next week after ideas deadline?)
* Discussions with Evaluation Committee (at least 2 calls) December – including what are “add-ons” and what are new projects.
* Begin contracting for add-ons immediately
* RFP scopes for review late December / Early January (EA team)
* Comments from all on RFPs by early / mid-January
* RFP issued to pools mid/late January, with deadline 4-6 weeks later (end of Feb); scoring 2-3 weeks; recommendation to committee April meeting. Will not have 2021 results for new projects (may for add-ons).
* Contracting period unknown
* Will try to collapse schedule where possible – ideas? Shorten to get to March meeting if possible?

1. **Approximate Funds Uncommitted**

* $1.22 million (to be modified by reviewing contingencies)

**2019-2021 Projects Currently Committed / Already Under Contract or Close**

1. **See 2019-2021 Plan Update Project Status Table on last pages**
   1. **Underway includes all** 
      1. contracted 2019,
      2. contracted 2020,
      3. in plan keep, and
      4. new add to plan
      5. most add to existing projects.
2. **PSD Phase 2 projects beginning (covered under X1931 contract, discussed with committee recently, teeing up for Kickoffs):**

* 1a: Baseline/ISP – Commercial Furnace ISP
* 1b: Baseline/ISP – Commercial Boilers ISP
* 2a: Demand – Coincidence factors (CFs) dated or unreferenced
* 2b: Demand – CFs not based on ISO-NE seasonal peak (10% discount when combined with 2a)
* 3: New measure – VFD air compressor\*
* 4: New measure – Advanced lighting controls\*
* 5: Refrigeration – ACOP is dated and weak reference\*
* 6: Hours/documentation – C&I HVAC electric hours\*
* 7: Hours/HDD & CDD – Inland / coast\*

**Additional Project Concepts To Consider / Prioritize**

1. **PSD gaps not being studied in Phase 2 work but related to current work**
2. Baseline / ISP – ER / blended baselines (there is a current ER study) – not fully in existing study
3. Baseline / ISP custom lighting baseline (C2014)
4. EUL (X2001)
5. NEI (X1942)
6. **PSD gaps not being studied in Phase 2 work and not clearly related to current work**
7. New measure(s): Home automation
8. MF Studies
   1. Common area ductless heat pump
   2. Common area lighting
   3. MF weatherization: corridor CFM reduction factor, COPs, HOU, Weatherization
9. **Potentially Related to current studies (add-ons?)**
10. **HES & HES-IE Process evaluation**: to develop an understanding of how the HES program is working particularly as it relates to how different vendors interact with customers and if customers are getting the information they want from vendors, how well vendors are trained on program aspects, effectiveness of marketing
11. **Equity of C&LM Programs assessment including C&I**: how the C&LM programs are doing to address customer equity and participation rates. The R1983 HES/HES-IE study will get at that somewhat but that same concept would apply on the C&I side to economically distressed businesses/communities, and other aspects of the programs.
12. **Workforce evaluation**: Critical, especially post-COVID with the expected job losses we will have seen, and with more complex measures like heat pumps, controls, etc. (if this is not to be addressed in the current customer and workforce engagement project)
13. **Demand response – Eversource**: CT has not had its own EEB-managed study yet, aside from the one starting up that is UI-only. Eversource has had its DR pilots evaluated on a cross-state basis, and it may make sense to continue doing it that way since they are run on a cross-state basis, but as DR grows in importance in the portfolio at some point the Board/DEEP would probably want to have some direct research that digs into the program as it has played out in CT. DR programs include residential wifi tstats & storage, and C&I curtailment & storage, and there is also an EV load management pilot going on now that’s being evaluated on a cross-state basis.
14. **Advanced lighting and lighting controls**: Need improved data on savings impacts from lighting controls and advanced lighting products, as those will be a growing piece of the lighting pie (C2014 may get into some of this).
15. **Evaluation of non-energy goals**: Evaluation work to support the goals of GHG reductions, peak kW reductions, and fossil fuel (delivered fuels) reductions
16. **New Project Concepts Submitted** (nec)
17. **New measure to add to PSD**: Smart Thermostat for C&I and Small Business applications
18. **Hours of use:** investigation for standalone HVAC
19. **RNC Baseline Review**: Last one was of 2016 homes, so by the time a study gets up and running would be 2021-2022 homes. There are also RNC all-electric and PV-ready offerings that may be at the point it makes sense to evaluate them in another year or so
20. **COVID-related program changes focusing on new program delivery methods**: Not sure how much study this would merit given that they should be temporary (hopefully), but there’ve been a variety of program changes such as residential remote/ virtual home energy audits; mail-in kits of lighting, t-stats, and other products; increased C&I non-lighting incentives/comprehensive incentives, probably other C&I changes.
21. **Upstream non-lighting on the C&I side**: including HVAC and foodservice.
22. **Coordinate / leverage / add-on with studies in MA:** since both states are on the same 3 year plan cycle. MA’s planning process starts in January. (added: difficulty waiting given contracting timelines).
23. **Additional new projects proposed by EA, Tech Consultants, Evaluation Committee, Stakeholders through idea submittal process (deadline Monday 11/16/20)**
24. **Studies proposed in 3 year plan and not yet undertaken (to be reprioritized) -** **See 2019-2021 Plan Update Project Status Table on last pages - Not underway includes**
25. Defer
26. Delete, no longer relevant
27. New do not add
28. Through PSD process

**Table: Status of Projects from 2019-2021 Evaluation Plan Process So Far**

|  |  |  |  |
| --- | --- | --- | --- |
| Contracted 2019 |  | X1931 | In-Depth PSD Review (All sectors) |
| Contracted 2019 |  | X1941 | MF Impact evaluation (merges in R1971) |
| Contracted 2019 |  | X1939 | Early retirement initiatives evaluation (All sectors) |
| Contracted 2019 |  | C1901 | C&I Sector-wide Process Evaluation (non-SBEA) |
| Contracted 2019 |  | C1906 | SEM Evaluation |
| Contracted 2019 |  | R1982 | Residential HVAC/DHW Performance and Potential Assessment |
| Contracted 2019 |  | R1965 | HP / HPWH Baseline and Potential Assessment |
| Contracted 2019 |  | R1963 | Short Term Residential Lighting Analysis |
| Contracted 2019 |  | R1973 | Retail Non-Lighting Products Impact and Process evaluation |
| Contracted 2019 |  | R1959 | SF Renovation and Additions Potential Analysis |
| In Plan, keep |  | X1932 | DR EM&V Support (All sectors) |
| In Plan, keep |  | X1942 | Cross-Cutting NEI studies (merges in R1942) |
| In Plan, keep |  | C1902 | ECB NTG and Baseline |
| In Plan, keep |  | R1983 | HES & IE Process and NTG Evaluation |
| In Plan, keep |  | X1940 | 2021 Study(ies) of Emerging Issues |
| New, add to plan |  | R2023 | RASS Database enhancements |
| New, add to plan |  | X2028 | CT Participation in Multi-state Gas End Use Metering Study |
| New, Add to Plan |  | C2024 | Budget increment for C1634 EMI survey cost overrun. |
| New, add to plan |  | X2001 | Measure Life / EUL Update |
| New, Add to Plan |  | C2014 | C&I Lighting saturation & remaining potential |
| New, add to plan |  | X2022 | Education, Workforce, Community, Customer Engagement Evaluation |
| New, add to plan |  | R2029 | Combined Residential Weatherization Status, and Duct Leakage Desk Study |
| In Plan, Defer / later |  | R1968 | RNC Baseline and Potential Study |
| In Plan, merge |  | R1984 | HES & IE Impact Evaluation |
| In Plan, defer |  | R1960 | SF Weatherization Assessment / Update |
| In Plan, Defer |  | C1920 | EO Impact Evaluation - Phase 1 |
| In Plan, Defer |  | C1918 | SBEA Impact Evaluation |
| In Plan, delete - no longer relevant |  | R1969 | Impact Evaluation / retention of behavioral program savings |
| New, Incorporate into existing project |  | R2007 | *HVAC/DHW (e&g) impact evaluation including NTG* |
| New, add to existing projects |  | C2016/X2016 | *C&I / residential financing process evaluation & assessment of need and effectiveness* |
| New, add to existing projects |  | R2019 | *Residential segmentation to facilitate marketing* |
| New, add to existing projects |  | C2020 | *EO segmentation study (participation patterns, trends, market assessment to ID missed groups)* |
| New do not add |  | X2006 | *APS Literature Review: Savings and Directions / potential for CT and In service rate (ISR) concerns* |
| New do not add |  | R2015 | *Passive House potential study* |
| New, add to existing projects |  | R2027 | *HPWH Reliability* |
| Thru PSD process |  | C2002 | *Better Savings Estimates from Controls / EMS systems - new installs & retrofits* |
| Thru PSD process |  | C2003 | *Advanced Lighting Controls Savings Analysis* |
| Thru PSD process |  | R2004 | *MF Blower Door Savings Estimates* |
| Thru PSD process |  | X2005 | *Peak coincidence factors, load shapes, and HOU value updates* |
| Thru PSD process |  | X2008 | *Cross-sector Baseline review - industry practice, C&S* |
| Thru PSD process |  | C2009 | *Review of NTG & RR for C&I Linear LEDs (upstream, EO custom, SBEA)* |
| Thru PSD process |  | C2010 | *Review / Adopt MA Prescriptive for HP (c&I,<10Kftsq)* |
| Thru PSD process |  | C2011 | *Review / Adopt MA Prescriptive for HP (c&I,>10Kftsq)* |
| Thru PSD process |  | C2013 | *Review of savings method for CT C&I HVAC Pilot Early Retirement (chillers >600T)* |
| Rejected |  | R1980 | WIFI Thermostats |
| Rejected |  | R1961 | *TOU Rate Evaluation (Not recommended)* |
| MERGE INTO 2005 |  | merge 2005 | *Summer Peak Coincidence Review for selected C&I measures* |
| Merge into 1939? |  | R2017 | *DHW and HVAC Early Retirement NTG* |
| Merge into 1901 |  | C2021 | *ECB process evaluation including market barriers* |
| NotRecm |  | X1933 | Demonstration EM&V Support (all sectors) |
| NotRecm |  | *X1938* | *Potential Study (All Sectors) (Not recommended, in favor of targeted potential)* |
| NotRecm |  | *X1935* | *Zero Net Energy New Construction/ZNE-NC (All Sectors) (Not recommended)* |
| NotRecm |  | *X1936* | *Property Record Data Leveraging (All sectors) (Not recommended)* |
| NotRecm |  | C1915 | *BES Impact Evaluation (next cycle) (Not recommended this cycle)* |
| NotRecm |  | C1914 | *Largest Savers Impact Evaluation (Not recommended)* |
| NotRecm |  | C1917 | *NEI primary research (not recommended)* |
| NotRecm |  | C1907 | *Monitoring-Based Commissioning Research (not recommended)* |
| NotRecm |  | C1913 | *Midsize Business Impact Evaluation (process merged into C1901/impact not recommended)* |
| NotRecm |  | C1910 | *Small Business Customer Profiling (not recommended)* |