EEB Evaluation Committee Monthly Meeting MINUTES

Monday August 6, 2018 – 10:00-11:30

Department of Energy and Environmental Protection – Public Utilities Regulatory Authority, Commissioner’s Conference Room, OCC, 10 Franklin Sq., New Britain, CT

Meeting Materials in Box folder: https://app.box.com/s/ixuhs7zetd6z6w58yc13vp3m1vsd245e

Call-In Number: 303/900-3524; WEB Access: www.uberconference.com/skumatz
(Backup number – only if primary # doesn’t work – 720/820-1390 Code (1st caller) 8296#
www.join.me/SkumatzEconomics)

COMMITTEE MEETING MINUTES

ATTENDEES: O’Connor*, McLean-Salls (Acadia), Gorthala*, Duva (DEEP)*, Wells (DEEP), Ingram (Eversource), Oswald (UI), Skumatz, Prahl, Wirshafter, Jacobson, Chiodo (EA Team)

1. Public Comment - None

2. Approval of Minutes from July Meeting – Send for E-vote

3. Non-Project Updates and Issues
   • Review Interim progress / highlights.
     • Interim e-votes and meetings - Skumatz read bottom of this document with technical presentations, reports, and votes since last meeting.
     • Upcoming kickoff and data meetings – none on the schedule - C1635 for 2nd data request to be scheduled. Lisa’s screen share stopped working; Miles & Jenn filled in.
     • Status of Data requests and deliverables Timeline report. Currently no substantial data issues identified – Make sure notes are updated. Keep old notes and note new delays / issues in the notes column. Updated committee that we are working with one contractor to get them to be more proactive about contacting utilities for data confusions, definitions, etc.
     • SERA team invoices – July to be sent later – not yet available.

4. Interim update on projects, budgets, schedules/recommendations – EA Team talking notes discussed on call / not yet distributed. Separate attachment provided as these minutes are distributed.
   • EA Team is providing early check in on the state of expenditures for current projects in the 2016-18 plan. We wanted to provide earlier input to the utility carryover process. Reserve policies by the utilities: at the end of the document we provide the information we received on how reserves work. Eversource needs progress, projects in place, and they can reserve spending for 2019 and we need to provide estimates by 12/15. UI noted in the meeting that if the projects are contracted in 2018, they book to 2018 no matter which year the money is actually spent.
• We track project invoices and budgets regularly, and the current format for invoices have the totals in this calendar year, previous calendar year, and by task. It is included in each invoice for this round of project. This is done for 3 purposes – where we are, knowing the reserve that might be needed, and to keep track relative to plan needed.
• We asked the contractors for updates in a table and notes accompany the table in this separate memo. Note that the monthly project summary sheet and the Gantt both provide monthly updated information on total dollars spent by the projects up to the current month. The updated information in the attached memo breaks the money out by year for a number of the current projects. Key update information by project was discussed.
  • R1707 RNC NTG draft report to SERA team (we have edits). Committee will see shortly. Will have high NTG results likely to lead to discussion.
  • DHP study will be out and have some PSD results, and should be completed in 2018.
  • RASS will be almost all done in 2018, with possible exception perhaps of final work on database, and requires much coordination with 2 other projects, but vast majority of work will be done in 2018.
  • MF study expected to spend $5K in 2019, but we think that is likely low. Report expected to EA team in Nov/Dec, but there will likely to be editing needed in 2019, so more than $5K but not a lot.
  • HES impact won’t have results for August PSD discussion, and expect some money needed in 2019 (contractors estimate $120K); we expect impact in 2018, but there is a second phase that has a drill-down on the reasons for key impact results.
  • C1644 won’t have results for PSD, will involve some money in 2019, and report in 2019 to committee. Got a late start as we weren’t sure it would start.
  • C1634 and C1635 - These two reports always expected to have a substantial share of spending occur in 2019, which increased when projects got delayed. As it happens, it may need to shift even later.
  • R1603 discussion (Wirschafter). Impact evaluation will be finished by October 2018; end of October we will get that to the Committee and make a decision on which issues to investigate more deeply. Then some of that analysis likely to push into 2019. If we need to finish 2018, we could make decisions based on draft impact evaluation results. Prefer to do it in two phases and some of the money carries over to 2019.
  • Committee Question: will there be money not spent in 2018? Yes, as we have been discussing. However, it is not outside of the three year plan money, and it is a timing shift but not money outside the agreed and approved totals. Will there be a deliverable in 2018? Yes for most or all of the projects with carryover except the largest one or two (will we need to make a “Phase I” product for these of a sampling plan or similar?). Because not only are impact evaluations complicated, but in this project’s case, we reserved a special analysis (and spending) to delve into why the impact results are what they are. This is not about new money, it is about spending 2018 dollars in 2019.
  • Commercial (Chiodo). C1634 ECB new construction program evaluation. Planned evaluation to cover 2 years, and wanted to start study at end of 2017 so projects would be fresh and draw sample in 2 pieces, expecting study to go into 2019. Later start than expected, but majority to be spent in 2019, with a little of the spend into 2020.
• Other thing working on is there was a baseline / NTG for ECB that was to produce results that would be used by this study, but this study was deleted n the Sweep. Will present recommendation at next meeting. Expect this largely in 2019. We believe this will fit into the existing total budget approved by the Sweep, but more will be discussed in September’s meeting.

• Committee Question: Will the total for all projects stay within the approved sweep budget total (with carryovers)? Yes, that is the plan. Only question is which year they will happen in. Even in the sweep, we emphasized that at least 2 of the studies would not be able to be completed in 2018 (even before the sweep that was noted in the footnotes of multiple memos). This is an early heads up on the fact that carry over will be needed – earlier than we usually give you. The two commercial projects that DEEP wanted to proceed will not need new 2019 dollars, but will be spending 2018 dollars in 2019 (carried over / reserved / accrued). We sent notes to both utilities asking about the accrual / reserve process. This fits their procedures.

• This is meant for committee to get a heads up on where project are heading

• We will spend less than total in 2018, but for the 3 year plan we will not be over the total for the 3 year approved / revised sweep approved projects. We ae staying within the DEEP approved SWEEP approved monies.

• Question about EA team invoice – to be sent later.

• Jacobson: C1635 – Delays in getting utility customers to agree to allow metering, and utility is helping, but this is taking longer than expected. Some of the summer metering is unlikely to be able to be completed until 2019. In terms of budget ramifications, need to carry some money over to 2019 (larger than originally expected – metering delay contributing to higher amount of 2018 money shifting to 2019. Deliverable was always planned to be provide in 2019.). Will there be deliverable in 2018? No there was never an expected deliverable in 2018 because we missed winter metering due to delays, and that shifted to at least next winter.

• Upstream program and newer information we learned about the program that we want to recommend a modification. Not to sample customers from 2016 and 2017 because program is in big transition. New measures, changes in tracking information, measure improvements in inspection process, and program staff interviews suggest sampling from 2016-17 customer will not be most relevant for numbers that will be used for the next 3-4 years. Instead we are planning to include 2018 participants and start the work in March 2019. Question / explained the new plan uses newer participants due to interviews with program staff and information about program changes. On-site metering has not started; sampling change.

• Accrual procedures. Oswald found that accrual process is accrue all evaluation budget for 2018 so will show up in 2018 books and even if expenses come in in 2019, they are booked against 2018 budget, so against the 2016-18 budget. That is same as Eversource says Ingram.

• Request to send out the memo / table we are talking from.

5. Discussion of Projects / Status (and data) – see Gantt & Project summaries- Walk-through of Projects / Monthly Status Report – See Gantt charge and summaries.

• Chiodo – C1630 complete & posted; data all delivered
• ECB Impact – data requests 2 & 3 were for project files for first round of sites; data later than deadlines but delivered. ECB and EO include projects that are large customer projects, checked sample frame to see if there were multiple site visits across both projects and flagged for coordinated site visits. Evaluation team C1634 is starting field work mid to late August. Most summer metering is next summer, although non-seasonal measures can be installed now. Eversource asked if additional information needed about the project files. Asking for evaluation contactors to coordinate, not utilities, to be sensitive to minimizing customer burden. However, utility let her know they were willing to provide additional assistance if needed.

• C1641 - BES Impact evaluation – draft report sent out last month for review – received last comments from UI on Friday (given 2 week extension). Will address comments and incorporate in revised report.

• C1644 NTG - have been doing interview and collecting data and working on survey instrument. For upstream program they will continue to work on NTG estimates for the 2016 and 2017 populations because decisions to participate are not impacted by the program changes as much as the impacts. Will pursue NTG for upstream.

• C1635 EO impact – touched on major issues already. Deep into site visits and metering / M&V plan.

• Wirtshafter – Codes and standards – project complete.

• NTG 1707 – in final review by EA Team before distribution to committee. Found high spillover, consistent with other states.

• HES Impact evaluation is in data analysis / issues are being cleared up with help from utilities / UI.

• MF program last few site visits this week; data cleaning going on; data request out there but not late.

• Skumatz reported on next projects: 1613 sent to Craig for posting

• 1616 related to RASS – completed site visits / cleaning data

• 1617 EA team reviewed adoption modeling results and decision tree and working to produce results for PSD ASAP.

• R1709 - NEI study – expect report end of August / Early September to Committee. This was a study that was begun before Sweep; halted during Sweep; had gotten draft report done but draft needed work to be acceptable product. They did complete some work before the cancellation, and we asked them to clean up the product completed prior to cancellation in order to pay them the last tiny amount we withheld.

• Question about budgets study by study – Clarified that the dollars are presented each month in both the summary reports provided every month along with the dollar in the Gantt chart every month. Clarified that calendar year budgets are include on each utility invoice as well.

6. Other items –

• Update on DEEP / NEEP M&V 2.0 Grant or other projects.

Requested that DEEP send the slides that were used for call last month.

*** Supporting Materials in Box folder and attached before meeting, including:

• Updated Gantt Chart & Project Status Summary & timeline report

• E-votes / call notes (attached)

• Interim Status update

• Minutes from previous meeting

• SERA Invoice

• Slides from K/O & Presentation
## Summary of 2017-18 Votes to Date –

### Minutes & Invoices Approvals -

<table>
<thead>
<tr>
<th>Year</th>
<th>Minutes for the month</th>
<th>SERA Invoice</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2018</td>
<td>PASSED: (O’Connor &amp; Gorthala 7/9; Melley 7/31)</td>
<td>• PASSED: (O’Connor &amp; Gorthala 7/9; Melley 7/31)</td>
</tr>
<tr>
<td>May 2018</td>
<td>PASSED: (O’Connor Abstained 6/18; Gorthala in favor 6/18; Melley in favor 6/26; Dornbos 7/6)</td>
<td>• PASSED – (O’Connor 6/18; Gorthala 6/18; Melley 6/26; Dornbos 7/6)</td>
</tr>
<tr>
<td>April 2018</td>
<td>PASSED – (O’Connor 5/17, Melley 5/22, Dornbos 5/31)</td>
<td>• PASSED – (O’Connor 5/17, Melley 5/22, Dornbos 5/31)</td>
</tr>
<tr>
<td>Mar 2018</td>
<td>PASSED – (O’Connor 5/17, Melley 5/22 with edit to add her attendance, Dornbos 5/31 abstain)</td>
<td>• PASSED – (O’Connor 5/17, Melley 5/22, Dornbos 5/31)</td>
</tr>
<tr>
<td>Feb 2018</td>
<td>PASSED – (O’Connor 3/14, Gorthala abstains 3/14; Melley 3/21, Dornbos 4/6)</td>
<td>• PASSED – (O’Connor 3/14; Melley 3/21, Dornbos 4/6)</td>
</tr>
</tbody>
</table>
• Est invoice thru EOM – PASSED EVOTE (Distrib 12/21; In favor O’Connor and Gorthala 12/21; In favor Dornbos 12/22. |
| Dec | December minutes –PASSED – (O’Connor and Dornbos 1/9; Gorthala Abstained not present 1/9, Deep approved to approve in 1/17/18 email with question / question answered). | • Invoice thru 12/13 - PASSED EVOTE / Distrib 12/13; In favor Dornbos, Gorthala, O’Connor 12/14.  
• Est invoice thru EOM – PASSED EVOTE (Distrib 12/21; In favor O’Connor and Gorthala 12/21; In favor Dornbos 12/22. |
| Nov | PASSED vote during meeting 12/11/17 (O’Connor / Melley / Gorthala) | PASSED vote during meeting 12/11/17 (O’Connor / Melley / Gorthala) |
| Sept | PASSED e-vote Melley, Dornbos, O’Connor 10/13; Gorthala 10/14. | See above |
| Aug | PASSED-e-vote O’Connor, Gorthala 9/11; Melley 9/12; Dornbos 9/19. | See above |
| July | PASSED-e-vote O’Connor, Gorthala 9/11; Melley 9/12; Dornbos 9/19. | PASSED e-vote O’Connor, Melley, Gorthala 9/13; Dornbos 9/19. |
| June | PASSED-e-vote O’Connor, Dornbos, Gorthala passed 7/10/17; Melley abstains (minutes too long, not always accurate) | PASSED-e-vote O’Connor, Dornbos, Gorthala passed 7/10/17 |
| May | PASSED-in meeting O’Connor, Gorthala, Melley (6/12/17) | PASSED-in meeting Gorthala, O’Connor, Melley (6/12/17) |
| April | PASSED-Evote Oconnor, Gorthala (5/31/17); re-sent 6/9; in favor Dornbos, Melley (6/12/17) | PASSED-Evote Oconnor, Gorthala (5/31/17); re-sent 6/9; in favor Dornbos, Melley (6/12/17) |
| March | PASSED-Evote O’Connor, Dornbos, Melley, Gorthala 4/13/17 | PASSED-Evote O’Connor, Dornbos, Melley, Gorthala 4/13/17 |
| February | PASSED-Evote O’Connor, Melley, Gorthala 3/9/17 | PASSED- Evote O’Connor, Melley, Gorthala (3/9/17) |
| January | E-vote O’Connor 2/6, Gorthala 2/6; re-sent out for third vote 7/10/17 | PASSED- Evote O’Connor, Melley, Gorthala (3/9/17) |

## Other Votes / Meetings / Tracking –

### July 2018

- 7/18 – Technical presentation on R1702 Codes & Standards

### June 2018
• 6/28;7/5 – R1702 Codes and Standards Finalized report issued
• 6/13 – data call C1634
• 6/6 – Kickoff C1644

May 2018
• Data call UI – R1603
• 5/15 – Data call, C1635
• 5/10 – R1702 Codes and Standards Draft report for committee review

April 2018
• 4/2 – Presentation C1639 SBEA
• 4/10 – Data Call C1634 Request #1
• 4/23 – HES & IE Impact Data and program discussion

March 2018
• 3/20 – HES & IE Impact Kickoff
• 3/21 – Kickoff for SF and MF On-site Studies (R1616, R1705)

February 2018
• 2/6/18 – EA Team memo on viable project / oversight combinations
• 2/15 – Data Request #1 call C1635
• 2/27 – DHG Working Group meeting R1617

January 2018
• 1/25/18 – Review draft C1630 distributed
• 1/19/18 - EA Team Sent note to contractors on project status
• 1/17/18 – PASSED – Add $70K to budget for R1641 (discussion & memo in eval committee meeting). Votes via email: O’Connor 1/8/18; Dornbos 1/9/18; Melley 1/17/18; Gorthala abtain 1/9/18 (not at meeting).
• 1/9/18 – one pager for EEB Board summarizing Eval Rec’m for sweep prepared; delivered / discussed with EEB by Skumatz.
• 1/9/18 – Motion / Memo on Sweep Passed. EA Team memo on Eval Rec’m for sweep – Projects and EA team budget recommendation – BOTH PASSED by committee (O’Connor, Dornbos, Gorthala with clarifications, 1/9);
• 1/4/18 – Review draft R1613/14 distributed

December 2017
• 12/1 - HES Process and Impact Data meeting
• 12/6 – Data Call R1707
• 12/11 - Memo (during meeting) reconfirming data cost allocations to projects (for utility notice), funds to draw temporarily from evaluation, authority for contractors to spend and re-submit invoices to utilities.
• 12/11 - Call between Skumatz /Swift on Sweep calculations / clarification of carryover treatments, etc.
• 12/11 – Vote in committee to augment budget of C1641 by $70K
• 12/12 - VOTE APPROVE sweep approach - O’Connor sent EA team budget sweep revised memo from 12/11 meeting to committee; in FAVOR of general recommendations / approach:
O'Connor (12/12), Dornbos (12/13), Gorthala (12/13) with conditions (O'Connor - try to work with DEEP on 1663; Dornbos – approve overall compromise effort / approach with clarifications; Gorthala – agree with Dornbos / address DEEP issues); DEEP abstains but raises issues / questions.

- 12/13 – Skumatz responded to DEEP question.
- 12/13 - EEB meeting on Sweep – Skumatz attended via phone.
- 12/13 - Skumatz attended Residential committee meeting to monitor regarding evaluation / sweep
- 12/12 - Skumatz and Chiodo (?) attended Commercial Committee meeting to monitor regarding evaluation / sweep
- 12/19 – Call with utilities to understand / discuss elements of budget sweep (Skumatz and others)
- 12/20 - R1602 RNC report presentation

November 2017

- 11/2 – Kickoff NEI project (R1709)
- 11/13-DR pilots programs info (R&C)
- 11/14 – PASSED October minutes
- 11/14 – PASSED SERA invoice Aug-Oct
- 11/28 – Impromptu data call R1707/RNCNTG

October 2017

- 10/2 - Data Processes meeting
- 10/4 – Data call – R1707 (RNCNTG)
- 10/5 – Data call – R1706, R1616, R1705 (RASS, Lighting, MF)
- 10/5 – Kickoff R1702 (codes and standards)
- 10/13 – Evotes requested on minutes (passed; see table above)
- 10/13 – PASSED - C1630 budget increase of $5K (evote #2); In favor O’Connor 10/13, Dornbos 10/13; Melley no answer in 10/13 email; Gorthala abstain 10/14; Gorthala in favor 10/30.
- 10/16 – Data meeting NEI project (R1709)
- 10/20 – UI contracts approval process update meeting
- 10/30 – R1704 HES Programs update discussion

September 2017

- 9/5 – Discussion of UDRH
- 9/5 – Data request discussion 1706/1616/1705
- 9/21 - R1615 LED NTG Project Presentation
- 9/22 - R1706 RASS Kickoff
- 9/28 - R1707 RNC NTG Kickoff
- 9/29 - R1606 Behavior Retention Project Presentation

August 2017

- 8/1 – Meeting on recommendations for PSD revisions to Residential HVAC measures – boilers, furnaces, HPWH, circulating pumps
- 8/9 – presentation to EEB on data costs issue
- 8/11 - Data cost call
- 8/24-Data request meeting 1630
• 8/25-Data cost call

July 2017
• EEB full board vote on Data memo passed
• 7/31 – Meeting on recommendations for PSD revisions to Steam Trap equation
• 7/23 – Meeting on recommendations from 1602 on UDRH

June 2017
• Approved / Passed – Memo Summarizing Mini-RFP Results (in favor O’Connor, Dornbos, Gorthala, 6/5/17)
• Approved / Passed – 2 parts / both approved: Approving Memo identifying extra costs to evaluation projects because of data issues from utilities and identifying the assessment to each utility and recommending addition to each of the project budgets, with the money to be pulled out of funds that are not evaluation funds. (in favor O’Connor, Dornbos, Gorthala. 6/22/17)

May /June 2017
• None additional.

April 2017
• Interim Meeting -1617 DHP Working Group – 4/10/17

March 2017
• None additional

February 2017
• Approved/passed Evaluation Plan Update (votes in favor 2/8/17: O’Connor, Dornbos, Gorthala)

January 2017 Interim votes and interim committee meetings – not final
• Votes in favor of evaluation plan (in favor O’Connor & Gorthala 1/9/17; Dornbos 1/12 – passed). 1/24 DEEP votes against.
• December 2016 minutes passed (In favor 1/9 O’Connor, Melley, Gorthala, Dornbos).