

Xcel Energy Potential Study Working Group: Meeting Minutes

Title: Xcel Energy Potential Study Working Group April 2024 Session

Date: April, 11 2024, 10:00 a.m. MST

Location: Microsoft Teams

Agenda Item 1: Roll Call

William Goodrich with Mesa Point Energy (MPE) took a roll call of participants.

Present:

Working Group Members

Boulder County – Joe Garza

Clean Energy Economy for the Region (CLEER) – Zuleika Pevec

Climax Molybdenum – David Loring

Colorado Energy Office – Jocelyn Durkay, Megan Ottesen

Energy Futures Group, Sierra Club, NRDC – Jim Grevatt

Energy Outreach Colorado – Luke Ilderton

Mesa Point Energy – William Goodrich, Jim Bradford, Donna Montane

Southwest Energy Efficiency Project – Justin Brant

Western Resource Advocates – Clare Valentine, Michael Kenney

Xcel Energy – Nick Minderman, Brian Doyle

Agenda Item 2: Project Team Update

The group was introduced to the Potential Study vendors teams. The two teams are led by NMR Group and Evergreen Economics. Attendees for each team include:

NMR Team

NMR Group – Tom Mauldin

Brightline Group – Patrick Burns

Evergreen Economics Team

Evergreen Economics – Jesse Emge

Dunsky – Alex Hill

Michaels Energy – Jake Millette

Nick Minderman described how parts of the scope will be divided up between the two teams. The division of activities by team will be as follows: The NMR team will lead research on code baselines for new construction measures. The Evergreen team will lead characterization of retrofit measures. The NMR team will handle modeling for the commercial and industrial sector, while the Evergreen team will handle modeling for the residential sector.

The next phase is for each team to develop a work plan which will include a refined scope of work. Work plan development will be discussed with the Working Group during the May, June, and July Working Group meetings. These meetings will include presentations by members of the project teams.

The teams will continue to attend and participate in the Working Group meetings.

Justin Brant asked how the teams were selected.

Nick Minderman explained that the company solicited consultants through a Multiple Project RFP in December of 2023. The vendor teams were selected through that process and were specifically engaged for the potential study development. Review of additional relevant qualifications and experience were used to further vet the teams.

Agenda Item 3: Questions on Scope of Work and Discussion

William Goodrich gave an update on the comments and questions on the scope of work provided by Working Group members. The following summarizes the feedback received from the group:

- Feedback provided by several stakeholders
- Some feedback was in the form of questions or comments
- Some included direct revisions or additions to the scope of work outline
- Comment: Give stakeholders an opportunity to review the data that goes into the analysis before the analysis is complete, including measure lists, cost assumptions, efficiency assumptions, baseline assumptions, etc.
- Question: Is a baseline study included in the scope of work, or is it mixed in under primary research as appropriate?
- Question: Should the scope of work make clear that the vendor should use de facto market baselines rather than codes/standards baselines in estimating potential?
 - *May and June meetings will focus on the previous 2 questions*
 - *Not including a full baseline study for this potential study, but some primary research is expected*
- Comment: Give stakeholders an opportunity to review the data that goes into the analysis before the analysis is complete, including measure lists, cost assumptions, efficiency assumptions, baseline assumptions, etc.
- Question: Is a baseline study included in the scope of work, or is it mixed in under primary research as appropriate?
- Question: Should the scope of work make clear that the vendor should use de facto market baselines rather than codes/standards baselines in estimating potential?
- Comment: The baseline should assume that Commission decisions to end incentives for gas equipment and for gas in new homes are in place (which they are), e.g. the gas potential should assume that PSCo can't provide gas furnace incentives.

- Comment: It will be important to have a process for determining the parameters for how the analysis will choose between competing technologies and fuels.
 - Parameters for how gas is or is not included should be discussed with stakeholders. (i.e. gas backup on heat pumps)

Agenda Item 4: Review Revised Scope of Work Outline

William Goodrich presented the current Potential Study Scope of Work (SOW) outline with the additional language added based on the comments and questions from the Working Group. The following summarizes the discussion around the changes to the SOW.

3.1 Cost effectiveness analysis

Additional language: Cost effectiveness should also consider relevant state tax credits, such as the State of Colorado's heat pump tax credit, and other state and local incentives, if applicable.

Substantial discussion around this topic followed:

Jocelyn Durkay proposed two main considerations, first that other policy factors other than costs are considered, and second how will other incentives (tax credits, local incentives) that may affect customer participation rates or adoption of measures be incorporated?

William Goodrich said there may be ways to measure the effect credits have on adoption rates. An example would be adjusting adoption curves or looking at research on willingness to adopt measures with or without tax credits.

Jocelyn Durkay felt that all incentive sources, not just tax credits should be included in economic and achievable potential.

Clare Valentine agreed that adoption rates are influenced by not only utility incentives, but other incentives. She submitted it may be valuable in calculating mTRC to include these influences. She emphasized the importance of transparency with what is included and what assumptions are made when looking at tax credits and other incentives.

Nick Minderman suggested that perhaps the mTRC incremental measure cost could be calculated with a tax credit and without a tax credit and look at the difference.

Jocelyn Durkay liked Mr. Minderman's suggestion of including different incremental costs. She also commented that it should be made clear how and where tax credits and other incentives are considered in the analysis for the potential study.

Justin Brant agreed with the comments and suggested considering moving away from traditional cost effectiveness tests and would like to see the topic discussed in future discussions.

Alex Hill said in his experience cost effectiveness discussions can become a major focus in a potential study. He asked that the Working Group defer to the project teams on certain issues related to how adoption and cost effectiveness are modeled.

Clare Valentine supported the idea to let project teams develop the work plans and explain to the Working Group their methodology to incorporate tax credits and other incentives into the potential study analysis.

Nick reminded the group that not all customers are eligible for tax credits, which may add complication.

3.3. Additional language: 2026-2030 potential estimates will be provided both as annual values and five-year estimates.

There was no further discussion on this topic.

3.4. Additional language: The reporting tool should be provided prior to a draft report with ample time for review and feedback and a presentation on the use of the tool should be provided to the Potential Study Working Group.

There was no further discussion on this topic.

3.7. Additional language: IQ, DIC, single family, and multifamily residential segments should be considered independently, acknowledging there will be considerable overlap.

There was no further discussion on this topic.

3.8. Additional language: Measures should consider carbon reductions on an hourly basis using Xcel Energy grid-specific hourly emissions profile.

There was no further discussion on this topic.

3.9. Additional language: Measures should consider electric load impacts on an hourly basis and address potential changes in Xcel Energy's system peak based on anticipated adoption over time. ECM potential savings and cost-effectiveness calculations will be based on documented baseline assumptions that reflect the impacts of known and potential future changes in federal, state, and local codes and standards on the standard level of efficiency in each year of the study period. The study should document how codes and standards were considered and what the "cut off" date was for consideration of evolving codes and standards changes.

Nick Minderman commented that he will bring other Xcel Energy staff to future meetings to provide insight on what data (i.e. hourly carbon emissions) will or will not be available.

3.10. Additional language: The study should recognize benefits that Advanced Metering Infrastructure (AMI) with distributed intelligence capabilities can provide insofar as the infrastructure enables potential.

There was no further discussion on this topic.

4.2.2. Additional language: The study results would provide a comparison between the potential from this scenario and the potential from scenarios inclusive of NEBs adders, with the purpose of assessing the impact of NEBs on energy savings potential.

Alex Hill commented that NEBs are important to include in potential studies with focus on what measures pass and what measures do not. However, the impact of NEBs is typically actually small with respect to cost effectiveness. Alex prefers to focus studies on how NEBs affect adoption, as an example.

Jocelyn Durkay asked that a narrative be included that includes what factors influence use of NEBs adders.

5.1.3. Additional language: Common residential gas appliances including cooking and clothes dryers.

There was no further discussion on this topic.

5.1.4. Additional language: Residential geothermal heat pumps for both new construction and existing homes. This should be analyzed at a single-home level and at a neighborhood scale (e.g. six or more homes)

Nick Minderman suggested weighing the value of adding complexity to the model with the benefit of understanding the potentially small differences in certain measure permutations.

5.4. Additional language: Include high, medium, and low achievable potential scenarios. Include permutations of each scenario considering high- and low-price forecasts for electricity, gas, and carbon.

Patrick Burns inquired whether the commentor was including both beneficial electrification as well as energy efficiency.

William Goodrich suggested that high and low pricing forecasts be used for all measures.

Clare Valentine commented that in the previous potential study energy efficiency measures included price forecasts and that beneficial electrification should also include this. She also commented that the evolution of gas prices over the timeframe of the study was not included in past potential study.

Alex Hill said that electric prices are relatively predictable. However, gas prices can be more difficult to predict. Perhaps the focus should be on program investment scenarios

using low, med, high investment levels. He also suggested externalities or sensitivities rather than scenarios may be helpful.

6.1. Additional language: Evaluate demand management potential for the residential (including multifamily), commercial, and industrial sectors. Demand management intervention in new construction projects should be considered.

There was no further discussion on this topic.

*6.5 Additional language: Forms of demand management may include, but are not limited to:
Dispatchable load reduction
Daily load shifting
Renewable energy curtailment reduction
Electric vehicle load management*

David Loring indicated that there is already the ISOC program in place and asked if new efforts will be investigated in all three sectors. Additionally, he inquired whether existing programs would be expanded.

William Goodrich indicated demand management will likely be covered in all three sectors and expansion of existing programs will also likely be considered.

Nick Minderman suggested that these items would be covered in future meetings and the division between teams handling this scope has not been decided yet.

Other comments not related to specific items in the scope of work included:

Clare Valentine requested that the concept of virtual power plants (VPPs) be included for consideration.

Nick Minderman indicated that he would want to avoid any misalignment between the potential study and any commission decisions and was planning to discuss it with the project teams.

Agenda Item 5: Open Forum

William Goodrich shared spreadsheet with the Working Group to help guide decisions around prioritization of the various proposed SOW components. Due to lack of time to work through this effort, William will distribute a version of the spreadsheet to the Working Group for members to provide input on prioritizing the components.

Nick asked that the Working Group provide feedback in a prioritizing level of precision, rather than “is it in or is it out?”. This will help the project teams identify tasks and decide what fits the budget and scale of the project.

In discussing the overall process and scope of work the Working Group had the following comments:

Jocelyn Durkay indicated she understands there are budgetary constraints, and that most of her organization's comments reflect a desire to have potential study the reflects the community, is well grounded, and will inform future decisions by the company and the commission.

Nick Minderman mentioned that one question is the use of hourly analysis. He said that the hourly assumptions will be provided to the project teams to see if their models can handle that level of inputs. If the models cannot, he will look to the project teams to give guidance on how not using hourly inputs will affect the potential study outputs.

Agenda Item 6: Wrap Up and Next Meetings

Closing Comments

William Goodrich discussed future meetings topics.

Doodle pool will be sent to schedule May (and likely June and July)

Next meeting topics:

May: Work plan development

June: Work plan development

July: Study kickoff – possible hybrid virtual/in-person meeting, location TBD

Decisions Made

N/A

Action Items

Action Item	Responsible Group/Person	Deadline
Distribute scope of work prioritization workbook	Mesa Point Energy	Thursday, April 18, 2024
Provide input on prioritization of SOW components	Working Group Members	Thursday, April 25, 2024

Meeting Close

The meeting was adjourned at 11:34 a.m. MST.