

Meeting Agenda (September 8, 2017)

- a. Welcome/Introductions
- b. Process/Procedural Matters
 - i. Long-term roadmap
 - ii. Mid-term schedule
 - iii. September 19th plenary session
 - iv. Video conferencing
 - v. Staff Whitepaper to be SAPA'd
- c. October 1, DPS Staff Report on Mass Market Rate Design Bill Impacts
 - i. Joint Utilities walk through of comments
 - ii. Other Parties comments
 - iii. Staff chart on options for developing rate designs
- d. Next Steps/Next Meeting
- e. Adjourn

Meeting Summary

Process/Procedural Matters

Long-term roadmap: The roadmap is a high priority for Staff and it is in the works, but not ready to be shared today.

Mid-term schedule: In the Notice provided prior to this meeting, Staff laid out tentative meeting dates through December. Parties were asked to give feedback on this meeting schedule and mention any potential conflicts. Based on this feedback, Staff will distribute a new schedule with revisions, if there are any.

September 19th plenary session: The group took a vote on whether enough progress has been made in these working group meetings to warrant going forward with the plenary session. Based on the vote, and on comments from the other working groups, the plenary session will most likely not take place.

Video conferencing: The medium for this meeting and meetings for the foreseeable future will be video conferencing. Participants should still introduce themselves before speaking (name and organization) for the benefit of those listening in on the phone and for those taking minutes.

Staff Whitepaper to be SAPA 'd: There will most likely be a series of whitepapers over the course of these meetings. Whitepapers are straw proposals regarding key issues and policies that have been fully hashed out, and that are ready to be put out and SAPA 'd. Parties will always have the opportunity to respond to the whitepapers in writing before they go to the Commission for a decision. If the group decides a topic is not ready for a whitepaper, then the topic can be taken through an evidentiary proceeding. The group would need to crystallize which issues would be brought to the judge to be set for hearings. An example topic is marginal cost studies for DRV/LSRV, for which the group needs more information on what the next generation of marginal cost studies look like so that the evidentiary issues for a hearing can be fully delineated.

Some deadlines: The Staff report on mass market rate design bill impacts is due on October 1st of this year. In the beginning of 2020, the working group must deliver a report on methods for next steps beyond mass market net metering, so Staff wants to have something substantial done on that by December 2018.

Mass Market Rate Design Bill Impacts

Joint Utilities summary of comments:

Bill Atzl from ConEdison walked through the Joint Utilities (JU) thoughts on mass market bill impact studies.

The JU supports moving away from the current system of volumetric charges (which does not incentivize efficient use of the grid) towards rates that reflect cost causation, and rates that are more time-orientated for demand charges. Rates should be cost based, and not designed to favor one technology over another. Rates should encourage economically efficient decisions with regard to customer behavior and adoption of technologies – ultimately ensures more efficient use of the grid. Those criteria guide the JU rate design considerations, which are split into:

- Distribution options, which could incorporate
 - Customer charges, demand charges, grid access charges, fixed/subscription charges, or TOU charges (peak vs off-peak rates)
- Energy supply options
 - Move toward basing supply rates on a more market/cost based approach

In thinking about rate structures, the JU identified five steps:

1. Arriving at certain definitions
 - a. E.g. TOU structure – what the time periods are; demand structure – the method of demand measurement
2. Come up with billing determinants
 - a. Number of units you expect to bill (kWh, kW, etc.)
3. Calculate new rate structures on a revenue neutral basis
 - a. Consider peak to off peak differentials, winter to summer differentials, etc.
 - b. Examine how much of the revenue requirement is recovered through each rate requirement
4. Apply rate design to sample customers
 - a. Determine structural bill impacts – impacts of the change in rate structure, not changes in customer behavior or technology adoptions (i.e., assume no income effect on utility and no change in behavior by the customers as a first step.
5. Sensitivity analysis
 - a. Modify certain aspects of rate structure (summer vs winter, peak vs off-peak, etc.)
 - b. Estimate impacts in changes in customer usage (this is where you would look at changes in customer behavior and technology adoptions)
 - c. Utilize consultants and their knowledgebase

The JU identified data availability as the main issue of the bill impact analysis. To evaluate alternative rate designs, you need information about the impact on customers of various rate forms and detailed customer usage data for each of the utilities. Currently, utilities have samples of customers for which interval data are available that could potentially be helpful for performing bill impact analysis in various rate design scenarios. However, the samples do not have

statistically valid grouping of customer subsets. Samples will need to be restructured over time, with input from pilot projects and demonstrations, to provide detailed and valid results for different subsets of customers.

The JU answered some clarifying questions about the summary:

- Bob Wyman wondered if the JU have data on household equipment stock (fossil fuel, heat pump, electric vehicles, etc.)
 - Bill Atzl: ConEd does not have customer end-use appliance data, or on-site equipment stock data.
 - Joe Hally from Central Hudson G&E: We have customer base samples that tell us what equipment stock they have, but this residential appliance data are not linked to customer identifying information (not connected to an account number).
 - Mark Marini from RG&E: We do not have equipment research data; we have the typical load profile information for each representative service class.
- Kevin Lucas from SEIA asked if the JU look at sub-hourly approaches in their research.
 - Lauri Mancinelli from National Grid, Bill Atzl, Mark Marini, and Joe Hally clarified that their utilities have not looked at data intervals smaller than hourly.
- Doug Staker from Demand Energy Networks asked if the JU had considered any locational aspects as variables.
 - Bill Atzl said that the JU think about location in terms of VDER compensation but not in terms of base rates for delivery service.

Clean Energy Parties summary of comments:

Kevin Lucas from SEIA walked through the Clean Energy Parties (CE Parties) thoughts on mass market bill impact studies.

For the most part, the CE Parties support the comments made by the Joint Utilities, especially with regard to the significant issue of data availability. In order to ensure that the rate designs will be useful upon implementation, the CE Parties underline the importance of utilizing robust data to see how bill impacts will affect different sections of customers. The group must understand how consumers will respond to rate design changes (and if the customers will even comprehend the rate design changes). Thus bill impact analyses need to be performed on an individual utility basis to obtain statistically valid samples for different customer characteristics such as geographics, demographics, equipment, technologies, etc.

Furthermore, stakeholders need access to this customer data, as well as load data and sample study designs, in order to understand how the actual steps were taken to produce the studies that the utilities have been using.

The CE Parties believe rates should be reflective of underlying system costs, and not be punitive in nature. In general, they prefer a TOU rate to a demand charge structure, and think it is advantageous to capture customer specific costs within a customer charge. When coming up with rate designs, the CE Parties consider designs such as those that focus on keeping customer charges low, those that incorporate critical peak pricing, or those that incorporate seasonal and tiered pricing. They are particularly averse to rate designs with non-coincident peak demand charges.

Nathan Phelps from Vote Solar added that the group should not be too aggressive in rolling out all of this to mass market. Rushing with mass market could end up shocking the market from both a rate perspective and a confusion perspective. To that end, in addition to immediate bill impact analyses, the group must lay out a plan for looking at customer response, bill impacts given that response, and additional metrics such as societal cost.

General Discussion:

Staff noted that the report need to include what data are available from each utility in terms of customer usage data and load research data, so he asked that the utilities let him know what data they have available. He also asked that the utilities get back to him on what system data (peaking data, load profile data, etc.) they believe is necessary to develop rate design, and what they have readily available.

There was extensive discussion about the topic of data acquisition:

- Doug Staker mentioned that there have been multiple AMI pilots, and the group needs to find what trials are already out there and use them to get local demographics data.
- Bob Wyman suggested sources for equipment related data – NYSERDA is gathering data related to heating and cooling equipment, the DMV has information on electric vehicles, and the state has detailed appliance data in property tax records.
- David Boonin from NERA, as well as an unidentified participant, proposed obtaining demographics data by combining census block information with corresponding utility customer information.
- An unidentified participant suggested that there might be sufficient proxy studies already out there on customer responsiveness that the group could utilize instead of waiting years to conduct more detailed studies. The participant was not implying that the group should abandon the more detailed, local studies, but was recommending that the group use the existing proxy studies for initial rounds of bill impact analysis.

Many parties also had comments about the utilities' revenue requirement:

- Danny Waggoner from Advanced Energy Economy recommended the group look at how changes in rate design are lowering the revenue requirement for the utility, and whether the group intends for that to happen.

- Staff clarified that due to New York’s revenue decoupling mechanism, lowering rates for certain customers does not change existing revenue requirements for the utility. Lowering rates may affect future revenue requirements, but forecasting that effect is very difficult.
 - In order to make forecasting that effect less difficult, an unidentified participant proposed including changes in future costs and investment in the bill impact studies.
- Bob Wyman wondered why the group was not studying rate impacts in addition to bill impacts. Changes in rate design induce a customer response, which changes the utility’s revenue, which affects the next round of rates.
 - David Boonin addressed this feedback loop, suggesting that there needs to be some decoupling or secondary feedback if rate design changes lead to impacts on the utility’s revenue requirement. He clarified that these secondary feedback methodologies are carried out all the time and the processes are already in place to make adjustments for effects on revenue requirements.

Regarding customer response, Danny Waggoner suggested designing multiple rates so that customers can choose the rate that is most appropriate. Multiple rates could help resolve inequities among customers, since some customers are able to respond to rate design changes while other customers may not be as ready to respond. Warren cautioned that while this could be effective, the group must consider the tradeoffs and consequences of designing multiple rates.

There was also a broad discussion about enabling technologies and their role in rate design.

Next Steps

Next meeting: The next meeting of the rate design working group will be held on September 20th. Staff will try to put out a draft of the report by September 15th so that it will be available for comment for that September 20th meeting. Group feedback will be incorporated into the October 1st report and then that report will be SAPA’d.

Action items: Staff will continue to work on the long-run roadmap for all of the issues. Parties should read the document in the DMM matter number (17-01277) on how to go about coming up with various rate designs and scenarios to be tested in bill impact analyses. The Detroit Edison Geothermal Rate document is now available for review in the DMM matter number.