Act 236 2.0 Stakeholders Committee
Meeting Notes October 9, 2018
Central Electric Cooperative Board Room

Catherine welcomed the group, thanked Central Electric Cooperative and staff for their hospitality yet again, and asked for introductions.

Taking Stock -

E3 Update
E3 reported that, with a few clarifying phone conversations, they will have the information necessary to proceed, and anticipate sending an annotated outline of their report to ORS by the end of the week. They are on track to produce a draft of the full report by the end of the month.

Act 236 Plan B Update
Lauren Bowen (SELC) speaking for herself and Heather Smith (Duke Energy) thanked those who are working on a *short-term rooftop approach ("Plan B")* and said they are trying to define areas of agreement/disagreement and determine how the short-term roof-top solution might mesh with a complete Act 236 2.0.

Update on Low- and Moderate Income (LMI) Issues
Sue Berkowitz (Appleseed Legal Justice Center) and John Ruoff (AARP) reported on discussions to date by the *Low to Moderate Income Solutions subcommittee.* Sue noted that if low income electric consumers were not given some relief, we didn't have a true state energy plan, but an energy plan for those SC citizens who can pay for it. The gist of their proposal is to create a statewide (not dependent on each utility) electricity bill program to provide some relief to very low-income residents, as determined by SNAP eligibility. SNAP eligibility is managed by SC Department of Social Services (DSS). There are approximately 260,000 households eligible for SNAP benefits in the state, many of which consist of children, elderly or disabled individuals. Families qualify for SNAP at 130% of the poverty limit. Poverty level is defined as $12,000 for individuals and $20,780 for a family of three.

The program would be funded through a per-kilowatt hour charge on all utility bills, and revenues collected would be rebated back to the SNAP-qualified customers via utility bills. This would be similar to the current telecommunications Lifeline program.

The suggested rebate or utility bill credit would be $50/month, requiring an estimated $164 million/year, or about $2/MWH of electricity used. Sue and John suggested that IOUs would include this amount as an expense in filings before the PSC, with non-regulated utilities accounting for it as they do other business expenses. There was some discussion, with comments that perhaps the goal could be achieved at a lower cost.

John Ruoff noted that while they were fully supportive of energy efficiency efforts as well as solar, they felt that the most important work to be done immediately is provide relief for low income consumers. John Ruoff cited studies showing that low income residents spend a disproportionately high percentage of their income on energy, not because of inefficient housing stock, although that is certainly a problem, but because incomes are so low that any high bill can be overwhelming. They also addressed the assumption that low-income families are usually high energy users; however, they cited data from the National Consumer Law Center and the DOE Energy Information Administration that showed a positive correlation between income and energy usage. Energy bills are a major cause of evictions or loss of housing, and these are already a major problem in some areas of the state.

Questions or points raised included:

- can it be done through a general tax, to create a larger pool of funds?
- aren't you asking some customers to subsidize others?
- are there examples of similar programs in other states?
- what percentage of those qualifying are in multi-family vs single family homes? (relevant research by RAP on the implications of this)
- how much would the proposal increase bills (John said likely $2/month for a typical residential bill)
- how did you arrive at a $50/month bill adjustment…not enough? Too much?
- how would this work with LIHEAP? (Sue: LIHEAP is able to help only a small number of those who need assistance)

Requests were made for additional information on the likelihood of landlords raising rents with energy efficiency improvements (both likely and not likely.) Sue will provide information on a typical "market basket" for a family of three living at the poverty level. Thad Culley offered to supply information about the cost of service for single vs multifamily dwellings.

Full Act 236 2.0 Discussion -

PURPA, Commercial & Industrial, Interconnection Issues – Hamilton Davis

Hamilton's presentation, intended to prompt discussion, is available on our website at http://energy.sc.gov/energyplan/act236.

PURPA (Public Utility Regulatory Policies Act)
Hamilton noted that PURPA was first passed in 1978 and was designed to support competition in generation and decrease the use of fossil fuels, but that it did not come into widespread use until solar generation became more widespread and less expensive. There is a belief that the implementation of the requirements of PURPA could be improved, resulting in the introduction

of S.890 during the last legislative session. Points of contention include contract length (investors will not support projects with short contract periods) and calculation of avoided cost.

Questions and points raised during the discussion included:

- Is there interest in a renewable portfolio standard (RPS) at the state level? This might increase competition and drive prices to "the best deal" for consumers. Comment that we should determine how much renewable energy can be added in a cost effective manner before setting an arbitrary target, which might actually be too low.
- As solar reaches higher penetrations, will the capacity value change?
- Maryland has found that a combination of energy efficiency and solar will meet their needs for the next 15 years.
- Integration analysis, to identify how much cost-effective solar can be safely brought onto the system, as was done in NC, is important. The study, carried out by PNNL, is available on the Duke website: https://www.researchgate.net/publication/273682874_Duke_Energy_PV_Integration_Study_in_the_Carolinas_Service_Areas
- Duke's competitive procurement, specified by NC legislation, allows for projects in both NC and SC. It tends to favor very large projects, which benefit from economies of scale, but there is also a need for smaller, more geographically distributed projects. Duke representatives noted that their system procures the largest amount of electricity at the lowest price.
- It is important to consider how much solar the system can accept and ask how much is too much. SCE&G noted that their models are beginning to show the need for curtailments due to insufficient load, and that they are trying to determine how to handle the situation.
- Is increased solar causing a reduction in more coal-fired or gas-fired energy? (Don't know.) It is important to balance the system, so that addition of solar doesn't also cause in increase in more carbon intensive generation. "We need dispatch flexibility to balance long-term portfolios."
- It is important to consider how storage will fit into the discussion.
- Analyses for solar should be consistent with how gas plants, etc., are evaluated

Commercial & Industrial (C&I)

Hamilton presented a model which would allow for additional solar use by commercial and industrial customers. While it would not provide savings equivalent to those realized by residential rooftop solar, it would allow corporations renewable energy credits, "green energy" and some savings. There was discussion of C&I bill credits supported by all other ratepayers, and "rate arbitrage", but also an acknowledgement that C&I customers were somewhat left out of the original Act 236.

Interconnection

After Act 236 passed, a system for managing the queue for larger projects (SC Generators Interconnection Procedures) was approved by the PSC. There are a number of issues, including how projects relate to each other in the queue with regard to the necessary studies, transmission congestion, relationship between projects and substations. It was noted that failure to meet deadlines immediately disqualified solar developers, but that similar failure to meet deadlines on the part of utilities had no consequences.

There was discussion of the need for Integrated Resource Plans (IRPs) to include distribution level planning. Transparency is important--it should be clear how all numbers are derived, what metrics are used, etc. The PSC should require all to "open up the black box."

Reminders were offered that we "can't ignore the laws of physics and economics" and that customers were caught up in the queue entanglements.

Hamilton shared the expectation that the E3 report would suggest ways of handling the discrepancy that have worked elsewhere. He also noted that neither ORS nor the PSC had significant interconnection expertise, and that both should be enabled to acquire same.

Next Steps -

Nanette thanked everyone for their efforts and focus to date and acknowledged that we would not have a fully fleshed out final report by the next meeting date. She suggested discussing the detailed report outline at the next meeting (Tuesday, October 23rd) meeting and scheduling an additional meeting in November, at which time a final draft could be presented and discussed. Several dates were discussed, with Wednesday, November 7th, tentatively selected.