Meeting Agenda (issued August 3, 2017)

a. Welcome/Introductions

b. Process/Protocol
   i. DMM Matter/Website/Email
   ii. Participant & Observer Roles/Responsibilities
   iii. Teleconferencing/Video/WebEx
   iv. External Support Requirements

c. Review & Prioritize Working Group Scope/Identify Modifications
   i. Interzonal CDG Credits
   ii. LMI Adders
      1. Generally
      2. Environmental Justice Adders
      3. Funding Source/Who pays
   iii. Role of NYSERDA Programs
      1. Coordination with VDER tariffs
      2. Establishing MW Goals for LMI CDG
   iv. Eligibility/Enrollment Mechanisms
      1. Definition of "LMI" and target communities
      2. Addressing LMI subscriber churn
      3. Treatment of master-metered buildings
      4. Methods to determine eligibility
      5. Leveraging CCA programs
   v. On-bill Financing
   vi. Utility Ownership

d. Work Plan Development
   i. Deliverables
   ii. Schedule/Timeline
   iii. Working Group/Subgroup Structure
   iv. Other Approaches?

e. Adjourn
   i. Summary
   ii. Next Steps
   iii. Action Items

Meeting Summary

Agenda a): Welcome/Introductions

The meeting of the LMI Work Group was convened at approximately 10:30am on August 4, 2017, at 90 Church Street, 4th Floor Boardroom, New York, NY. The meeting was chaired by Marty Insogna. Anna Gifford attended for NYSERDA and Joel Simkins for NERA. Seventeen persons attending the meeting live signed a signup sheet; an unknown number dialed in.

Agenda b): Process/Protocol

DMM Matter/Website/Email: The primary means by which documents will be distributed to the team will be email, rather than posting to DMM. Documents to be shared with the team should be emailed to LMIWG_VDER@dps.ny.gov; the documents will then be forwarded to the broader team. Email addresses were collected on the signup sheet. Later in the meeting, Marty noted that the one-pagers that some participants submitted, on which the list of issues and prioritization were based, would be circulated to the whole team.

Participant & Observer Roles/Responsibilities: Marty encouraged those with an interest in these discussions to come forward as Active Participants, even if not all of the issues were important to them and they would prefer to skip some meetings. The Active Participant vs. Observer distinction was not intended to scare off people with limited interests.

Teleconferencing/Video/WebEx: Teleconferencing facilities at the Staff's locations are not ideal; the biggest problem is the microphones (number, placement), making it challenging for those dialing in to hear the discussions clearly. Staff is open to having other entities with better facilities host the meetings. ConEd and NYSERDA have some teleconferencing facilities that may be an improvement on what the Staff can provide. (NYSERDA can link its Buffalo, Albany, and NYC facilities with video.) Sheryl Musgrove of Pace Law School noted that the ability to dial in, and also to speak by phone, may be especially important to LMI customers or their advocates, for whom the cost of travel to meeting locations may be prohibitive. There was general consensus that these participants must be given a meaningful voice in the meetings, and it was suggested that a portion of each meeting may be set aside for un-muting the conference line so that callers may speak, particularly for this purpose.

External Support Requirements: Marty noted that there were a number of areas in which it might prove helpful to get research support, e.g., what other states are doing, research into pricing. There are mechanisms for pursuing these research projects if there is interest.

Further Process/Protocol discussion: Concern was raised that there needed to be a sufficient lead time between the issuance of a notice and the scheduling of a meeting. Marty suggested that one way to meet more frequently might be to focus on subgroups, e.g., weekly subgroup meetings and biweekly full-group meetings.

Unstructured discussion

Prior to addressing the issues in part C of the agenda, there was a somewhat unstructured discussion. Due to the somewhat fluid nature of this discussion, and the difficulty hearing some of the speakers, there may be small omissions in this summary, but the most significant themes are believed to be captured here.

Concern was raised regarding how the substantive part of the agenda (Section c) was determined: a commenter suggested that the Work Group was focusing on the exploration of various potential *solutions* without having actually ensured that the underlying *problems* had been articulated correctly. The example was given of on-bill financing, which was arguably too specific a "solution" to be discussing without having first articulated the problem. Variations in this theme arose more than once of the course of the meeting, and in general, there was agreement that it made sense to ensure that the problem was well understood before specific potential solutions were evaluated. For example, there was agreement that we need to hear directly from CDG developers as to what it is, exactly, that prevents them from signing up low income customers.

Goals of this Work Group, threshold issues

The observation that the problems needed to be defined first led to Marty renewing his observation from the previous call that there were different ways of thinking about the goals that the group should be pursuing: was it making electricity more affordable to LMI customers (extending the benefits of broader DER adoption to them), or was it having LMI customers make greater use of DERs? In response, some claimed that the goals did not have to be mutually exclusive (the objective could be viewed as doing both together). It was also suggested that there could be other objectives, such as giving LMI customers an actual equity stake (e.g., through a cooperative ownership structure) in the DERs serving them.

There was some discussion of the fact that many LMI customers do not own their homes and cannot make their own unilateral decisions to employ on-premises DER. In response, it was suggested that certain DERs, such as CDG, are theoretically available to renters as well as owners. CDG could be a solution to the goal of access to DERs, though not necessarily a solution to affordability. Financing might also need to be part of the solution.

One observer noted that not all CDG business models were the same, and not all raised the same affordability obstacles to adoption. One speaker suggested that ideas previously raised before the LMI Working Group of the Clean Energy Advisory Council (CEAC) be revisited to see whether there were any worthy of a closer look in the context of this group. There was some discussion as to whether the CDG Low Income Customer Collaborative generated any ideas worth exploring in the setting of this Work Group. (Reporter's note: key documents related to the initiative can be found at http://www3.dps.ny.gov/W/PSCWeb.nsf/All/8A75B07F45E1672485257EDD00602D7C?OpenDocument). Marty noted that the Commission, in its March 9, 2017 Order, asked that Staff focus on continuing to explore greater participation by low-income customers in CDG projects, and it explicitly directed Staff to file a proposal that builds on information developed through the Collaborative.[1] Following the meeting, Marty circulated the Staff Report on the Collaborative to the Work Group.

Why aren't CDG developers able to sign up LMI customers?

A significant portion of the unstructured discussion, as well as some of the discussion of the issues listed in Section C of the agenda, revolved around a question asked multiple times by participant

[1] "In consultation with stakeholders, Staff shall develop and file, by September 1, 2017, a Low-Income CDG Proposal, which shall include, at a minimum, information developed through the CDG Low Income Customer Collaborative…" Order at 141.

Brian McNierney of NYSEG: if CDG developers are not averse to serving lower income customers, and can offer them savings over their current bills, what is the obstacle to actually signing them up? There are many projects in the queue, and developers need customers for them. So why isn't it happening? Why doesn't signing up LMI customers "work" for the typical developer? Brian gave two examples of facts that make it difficult to see what the obstacle(s) is (are):

- Many developers are telling customers that if they sign up, they'll get bill credits from the utility. They only have to pass on a portion of those credits to the developer, retaining the rest of the savings themselves. In Brian's view, if there are savings to the customer, and if there isn't an upfront financing commitment, then there shouldn't be an affordability problem.

- Some developers are building a list of customers interested in participating in the project, as a response to churn: if a customer participating in CDG moves out, someone from the list moves up and gets their spot. (Not articulated by the speaker, but the argument seems to be a response to the observation that high churn is an obstacle to serving LMI customers—they tend to move more frequently than more affluent customers.)

One response to Brian's points (raised by Jessica Azulay of the Alliance for a Green Economy) was that it reflects one kind of "access to DERs" (some of the financial benefits, via the bill credit), but that there are other ways of looking at access, such as ownership/equity. Signing up for a CDG project to obtain the benefit of the bill credit satisfies the former definition of "access to DERs" (it addresses *affordability*) but not the latter (it doesn't address *ownership/equity*).

It was suggested that whatever the underlying problem is that developers face in signing up CDG project participants, it may not be unique to LMI customers. In response, it was suggested that the problems may be exacerbated for LMI customers. For example, affluent customers may be willing to participate in projects from which they perceive weak financial benefits, because "going green" has a kind of value to them that tips the decision in favor of signing up. LMI customers may philosophically be just as eager to "go green" (they share concern for the environment) but are forced by economic circumstances to base their decision more heavily on purely financial benefits.

Marty provided some history of CDG projects, noting that a Phase 1 project could be authorized based on getting 20% of project customers to be LMI. But under that structure, there were no "takers." How do we solve the market failure reflected in that outcome? He posited that this should be a major focus of this group's efforts.

Max Joel of NYSERDA commented on the failure of LMI-focused CDG projects in Phase 1, characterizing the problems as interconnection and financing, not the LMI customer base per se. He noted that this was based on anecdotal evidence from some discussions with developers, who were themselves willing to sign up LMI customers, but whose financers insisted on customers with better credit (e.g., minimum FICO scores). But developers themselves are willing to sign up everyone.

Max's comment prompted some inquiry and discussion as to what was behind the position of the financers who insisted on customers with higher credit scores. A few possibilities were noted: LMI customers were more likely to default on bill payments, tended to move more, were overall less attractive to financers than more affluent customers. A developer noted that it was more attractive in multiple ways to serve more affluent customers, focusing again on the affluent customers being more stable and more creditworthy.

Marty wrapped up this discussion with a bit of perspective. He discussed how NEM provides owners of solar installations with an excellent subsidy, but one unavailable to LMI customers who lack access to capital and don't own their own roofs. But CDG provides a way for them to potentially see some of the same benefits. Non-ownership of the roof isn't an issue with CDG, though access to capital is still a problem. He noted that there were different CDG models, such as subscriberships that don't entail upfront costs, and models where the customer becomes a part-owner. Yet these models don't seem to be attracting LMI participation, and not because the LMI customers are uninterested. But developers understandably fill their subscriber lists with high credit quality, more easily-managed (e.g., lower-churn), more affluent customers. So perhaps something needs to be offered to make LMI customers more attractive to developers and their financers: perhaps Interzonal CDG Credit, perhaps other adders, NYSERDA programs, maybe on-bill financing will be a piece of the solution (e.g., to credit risk). As a last resort, the utility can own the array and extend the benefits to its customers.

Why do we need to be pursuing the model in which CDG developers sign up LMI customers at all?

Commenter Bob Wyman of Dandelion (Home Geothermal)[2] asked why we were pursuing the model in which CDG developers sign up LMI customers, given the creditworthiness, financing, account management, and other issues noted. These are sources of cost and complexity that seem unnecessary. Why can't the developer simply sell power at below-market rates to the utility, with the utility then allocating the cheaper power to its low-income customers (it know who they are) in some sort of ranked or priority order? If the low-income customer doesn't pay, they lose their place on the list and other move up. It becomes an exercise in assembling the list, ranking it, and having a system for allocating the lower-priced kWh to the right customers.

Max Joel of NYSERDA responded that while Bob's story was an oversimplification, it was in a sense what NYSERDA is planning to do over the next six months. "The numbers work." The sun provides free energy, and solar PV prices have fallen to the point where (at least with the MTC) you can generate solar power for less money than the cost to the customer everywhere in the state; in some locations, you don't even need the MTC for solar to be cheaper. So if you can eliminate customer acquisition, financing, and management costs, the developer's piece of the pie gets bigger and it looks attractive to do something like that. NYSERDA wants to play that role. They have lists of LMI customers and community groups that they work with, and their goal is to offer no-cost solar subscriptions. An offering directly from the utility (Bob's suggestion) would be an even more stripped-down solution. Max then clarified how the program worked: NYSERDA contracts with the CDG owner to commit a certain portion (conceivably 100%) to LMI subscriptions. The subscriptions have to use standardized terms, and be at no cost to the customer. NYSERDA will help find and refer customers to the developer.

Bob: This sounds like you still have the expense and waste of customer outreach/acquisition, account management, etc. "Total waste of money." So why do it? One response: there is value in having customers and communities make informed energy decisions on their own. Another commenter noted that in some places, per Max's comment, the attractiveness of CDG depends on the MTC, which is going away; this suggests (to her) the need for an adder in the Value Stack. She understands the Order to require Staff to propose an adder for Phase 1, not just for Phase 2.

Agenda c): Specific issues on the Agenda

[2] Mr. Wyman's affiliation was obtained from his LinkedIn account.

Issue 6: Utility Ownership

This issue will be deferred, as it's only a backstop if other solutions fail to emerge. Marty will not have the group spend much time on it. There was some brief discussion of the fact that ConEd recently proposed, and the PSC approved, building a CDG solar array on its own property entirely for the benefit of LMI customers. The project's currently-approved scale is 3 MW, but it could potentially be scaled up to 11 MW. ConEd it not just relying on its existing LIHEAP lists but partnering with community groups to help sign up customers.

Issue 5: On-Bill Financing

There was some discussion of what this really means; it seems to be synonymous with consolidated billing (putting the CDG charges on the utility bill); some discussion about whether consolidated billing automatically means access to the ability to terminate service for non-payment (no, it doesn't). Marty had viewed this as a low priority issue but it may be important to developers (particularly if they want the ability to threaten service cutoff for non-payment). However, this is not necessarily an LMI issue; developers are interested in this for customers in all income groups.

Brian noted that customers wouldn't sign up for service from a CDG developer unless they expected the bill credit from the utility to exceed to charge from the developer. So the question is, why give the customer the credit, only to have them pay the developer (with some risk of non-payment)? Why not just have the utility give the customer their *share* of the credit (Brian used the figure 10%), and pay the rest directly to the developer, eliminating the risk of non-payment? Max Joel: We expect that to be the dominant model going forward: a portion of the VS going to the customer, the rest to the developer. But he noted that mechanically, the credit goes 100% to the customer initially, and then the customer cuts a check. Max agreed that a system where the customer is just given their charge of the credit, and the developer gets a check from the utility, should be workable. Some commenters said, this is what consolidated billing should look like. But this is still not just an LMI issue, it's broader. Brian suggested that this isn't even a "consolidated billing" issue. (Maybe it's "participation in receivables.")

Bob raised the question, if you give the customer 100% of the credit now—isn't that taxable income? The suggestion is that just paying them 10% has a tax benefit for the customer.

Issue 1: Interzonal CDG Credits (ICCs)

The room generally agreed that while the PSC placed this issue in the LMI group's domain, it didn't look like a purely LMI issue; the customers who might benefit from ICCs were not limited to LMI. There was a brief discussion of the logic and value of ICCs generally. A ConEd representative suggested addressing this in a subgroup.

Marty also suggested that rather than try to figure out the value you get from ICCs, it could be cleaner and easier to just discuss adders; what would the adder look like? He threw out an idea that he heard from the EDA (Environmental Democracy Alliance), which entails letting a low income customer pledge their utility discount towards a renewable project (CDG project). It might be worth revisiting. E.g., customer can pledge a fraction of their discount to their developer, and they participate in the kWhs in the project. This could make LMI customers more attractive—it's an additional value stream they wouldn't otherwise get. And it's another form of access to CDG, not just a subsidy. But some commenters felt it wouldn't eliminate the need for an adder.

Issue 4: Eligibility/Enrollment Mechanisms

Utility reps noted that they know who their HEAP customers are, but not the broader set of "low income" customers. It was noted that working with community groups can be helpful for identifying low income customers: they can help define eligibility targets, and assist with enrolment.

Issue 3: Role of NYSERDA programs

It was unclear whether this needed to be addressed as a separate item. Max committed to reaching out to developers to get them to discuss the math behind their enrolment decisions. We need to understand very specifically why the math doesn't work for LMI customers.

Max made some references to NYSERDA's own financial model; it is built around subscription to CDG, but perhaps could be adapted to model cooperative ownership. Max also suggested that he could seek input from the GreenBank on financing issues.

Marty suggested deferring this issue, dealing with it after adders.

Agenda d): Work Plan Development

Marty asserted that the September 1 deadline for a report from this group was not going to happen. He declined to set a new deadline at this time.

Agenda e): Summary, next steps, and action items

Initially, meetings were planned for both August 14 and August 23. However, it was decided to meet next on August 23 to allow for a focus on CDG developer input. Max Joel was tasked with reaching out to developers to encourage their participation in the August 23 session, and participants were asked to suggest questions for the developers. These clarifications concerning the date and focus of upcoming meetings were circulated by Marty to the Work Group on August 7. The August 23 session will be hosted by NYSERDA, with videoconferencing between Albany, Buffalo and NYC. Attendees can go to whichever location is most convenient.

Research project: Max Joel of NYSERDA suggested that NERA or E3 study the economics of CDG projects. What would it really take to make serving LMI customers feasible? What sort of returns are developers looking for? Marty and others agreed that this research may be worthwhile. (Reporter's note: it may make sense to first hear from the developers at the upcoming meetings.)

Sequence of issues:

- It was suggested that LMI Adders and Eligibility/Enrollment be addressed together, relatively early in the sequence of issues
- Role of NYSERDA Programs should be addressed only after LMI Adders/Eligibility/Enrollment
- Interzonal CDG Credit should be deferred

The meeting concluded at approximately 1:15pm.