Interconnection and Net Metering Work Group Meeting Notes -March 28, 2007

Participants in the meeting held in the Board's Hearing Room in Newark and via conference call:

- Scott Hunter Mike Winka Maureen Quaid Suzanne Dice-Goldberg Rachel Boylan Anne File James Calore Fred Lynk John Gufford
- Lenny Leon Richard King Charlie Garrison Ken Warren Alma Rivera Scott Schultz Peter Robilotta Joe Lane Ronald Jackson
- Lorrie & Art Smith John Veprek Rick Brooke Rich Hollabaugh Dennis Wilson Bruce Remmel John Zarzycki Terry Whitehouse Barbara Tyrrell

Introductions and Welcome

Scott Hunter asked the group to please sign in and we'll add your email address to our list serve. An agenda was emailed via list serv @ inx@njcep.com (see Appendix)

The meeting began with a brief discussion of the purpose of the meeting and expected topics including: review of the net metering and interconnection rules, how they are being implemented, effectiveness issues, technical issues, the law that made the net metering and interconnection rules possible, and the distinction between efforts that would need a legislative change versus those that need a rule change. OCE reports receiving public requests for revisions to certain aspects of the rules. We've also been asked about implementation issues, like reporting requirements, and technical issues such as situations where installations experience voltage outside parameters of inverters, which shuts down the inverters.

Suzanne Dice-Goldberg provided an overview of the net metering and interconnection rulemaking process. There was a detailed rulemaking in 2003/2004. By state law, rules must be re-adopted periodically to keep them up-to-date and legally valid. We start with informal stakeholder input. An example of this type of input would include this meeting. This is an advisory group. And in the rule making process, we don't need consensus in the advisory group process, per se. Our job is to seek recommendations and make our recommendations to board. This group is advisory only, but the input is still very valuable. On rulemaking timelines, once staff is ready to recommend a rule proposal, it must be approved by the Board and registered with state. Following this registration, there is a 60 day public comment period and a hearing. Following the hearing, it takes 60 days to organize the comments for the final rulemaking. The whole process typically takes about 6 months.

Some changes people want may not be consistent by EDECA. If there were the case, staff may recommend a statutory amendment. This approach could be tricky, since opening up the statute for one issue opens it for other issues.

Implementation Issues

Scott raised implementation issues to start a dialogue among the group and reveal a list of issues with the net metering and interconnection rules. For instance, many public inquiries are received on the number of interconnections, customer generators, capacity and extent of the application of net metering and interconnection throughout New Jersey. Due to the limited and infrequent reporting by Electric Distribution Utilities, it's difficult to report this information to the public. The Office of Clean Energy knows how many systems should have connections, based on the

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number of rebates. We estimate more than 2,000 systems are interconnected. In future rulemaking, we can discuss whether reporting requirements and data requested are adequate.

Fred Lynk asked about the timing of reports, which are required at end of each energy year (May 31). Why would we need it more frequently? Suzanne suggested it's helpful to have better data in amending rules. Dennis Wilson added that it can take up to 8 weeks for utility to get out to installations to inspect installations and swap meters, and the utilities don't notify the installers before they inspect a new installation. PSE&G doesn't get notification on code inspection from local inspectors. Suzanne summarized that there is insufficient communication between installers and utilities and recommended instituting regular conference calls to increase communication.

Dennis reported that the installers typically fax over the UCC when they contact the utilities for interconnection, but don't normally get notification back. It was recommended that a good starting point for increased communications might be greater engagement between people having a problem and the utilities. Dennis asked, "can utilities notify installers when meter is swapped out, and can there be a timeline specified for how long that will take?" Currently, this process can range from 2-8 weeks. Anne File offfered that JCP&L sends notice of final review when they receive the UCC, usually an email to customer to let them know that the meter will be swapped out and they can start operating. The variance in operating procedures between utilities was pointed out. Suzanne suggested that the board should not get involved in these nuts & bolts issues, but the parties involved must work it out. The reinstitution of an informal working group should be considered by the EDCs and the installers.

Richard King asked via the phone "Is there the possibility for a shortage of net meters at the utilities?". For residential installations, PSE&G uses a watt-hour meter, which are common. ACE uses a solid state electronic meter, and sees no issues in getting them. But, for non-residential meters, there may be an issue in getting the right meter, for example a time of use meter. Utilities typically have inventory control systems, which can adjust supply with demand. Rockland Electric suggested it should be okay on meters. PSE&G reported some meters cannot go backwards and only measure flow either way, so if left unchanged, outflow would get charged to customers. Therefore, PSEG customers require a new meter which shows register changes and zero it out, in case there's a question about when the meter was changed out. If installers put a system into operation before the utility has been out to install a new meter, it may disadvantage the customer.

If customer wants an advanced electronic meter, there is a provision to supply it at customer cost. Dennis will contact PSE&G directly to discuss. Meeting participants suggested that the SREC pilot program should reference this provision contained in the net metering rules within the SREC pilot program guidelines. The customer may request a meter, and the utility can charge the customer at their cost. Meeting participants expect there will be more requests because of the SREC pilot, which will require remote monitoring. This is not required for net metering, but will be required for the pilot.

Anniversary Date

The Office of Clean Energy receives periodic requests from customer-generators to review the anniversary provisions within the net metering and interconnection rules. Several meeting participants object to the net metering rule requirement for annual utility true up of customer accounts on the interconnection anniversary date. The anniversary provision within the net metering rules goes back to EDECA legislation. The legislation and the subsequent versions of the rule specify an annual period as means of truing up customer-generators' accounts with the utility where the credit rate switches from retail electric rates at the monthly rollover to the wholesale electricity rate at the annual true-up. Meeting participants report that the rate isn't the issue, but rather the timing. Some customers have requested a one time change in anniversary date.

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Customer generators with low summer and high winter consumption, who must true-up at the wholesale rate at an anniversary date before their higher consuming months, are not getting the greater value of the power produced at the time when their consumption is relatively higher.

ACE has moved the anniversary date for numerous customers. The other EDCs report that logistically, it is hard to keep track of many different anniversary dates. There has been willingness among EDCs to pick one or two dates, i.e., April 1 and Nov 1. The current language says that the anniversary date is the beginning of the month following system start-up. The legislation doesn't specify when the anniversary date begins. If not specified in law, can it be changed via rulemaking? Staff believes we can give the customer the choice of April 1 or Nov 1 on the interconnection application. The customers and installer can negotiate with at least one utility, when it's a utility policy that sets the date. Staff will add this recommended rule provision to the list of recommendations on potential rule change proposals for board consideration.

PSE&G has backlog of applications for old projects. How long do utilities have to keep those on record? They use the applications to analyze impacts on the system. Mike Winka reported that the CORE program does expire projects, and the program manager could set up notification for utilities. We'd have to get a list of all cancelled applications to utilities. It was recommended to add this item to the list of potential rule changes, inactive applications are considered removed from the system, and utilities can remove from their system. Scott suggested utilities immediately get list of applications believed to have expired to program managers, and they can verify projects are active or cancelled. Scott recommended this as another example of the need for better communication and reporting between utilities and program managers.

On and off peak compensation issue for time of day rates

Richard King raised the issue of; "What rate should be compensated, on and off peak". Mike Winka stated "it's already in the rules". Richard believes there's a mismatch when people produce net power on or off peak, and then use power off or on peak, with time of day meters exacerbating the problem. JCP&L records impacts during on and off peak, and people get credit in the period that's affected. Richard also is concerned that there are demand charges to consider. Meeting participants reminded Richard that a solar installation typically does not effect demand charges for a C&I customer due to the ratcheting nature of demand meters coupled with the intermittent nature of the solar resource. Demand charges in a billing period are traditionally established from the highest use time period which occurred during the past year. It would be unusual for the sun to shine unimpeded every day during the highest demand periods for an entire year.

Dennis suggested that hourly pricing would resolve the issue. Richard asked about blended rates to balance demand for customers who have solar panels in place. Scott believes this is a tariff issue, not a net metering issue. Time of use rates are available to net metered customers. Suzanne suggested this is a complex, possibly niche issue, will add to discussion list, and follow up on how utilities calculate on and off peak. ACE does the same as JCP&L. Rockland uses time of use meter. This issue may also affect capacity obligations at utilities.

Does the user get the net metering benefits in cases where a 3rd party owns the system?

Mike Winka said it's a PPA issue between customer and 3rd party. Benefits go to whoever's name is on the account. It's also an issue with RECs and who gets those. Meeting participants just want to make sure somebody gets benefits of net metering. Suzanne suggested review of rules, but that it's probably a business decision between the two parties.

Definitions

Mike Winka suggested Behind-the-meter or customer-generator may need better definition. For instance, Fort Dix with panels on housing, but meter at gate. How would an EDC handle these customer side of the meter or behind the meter (btm) installations? With Municipalities, can they divide and credit power generated at one site between load at various buildings? How can we handle customers with multiple homes and one installation? Cases with a mismatch between customer and generator?

PSE&G representatives did not know if they could accommodate some scenarios. On the definition of BTM or customer side of the meter, there's no definition in legislation, and there are an increasing number of questions on this issue. This issue needs to be fleshed out and brought back in a more thorough form. The intent was that some party is able to get net metering benefits, and if benefits are split, they would still be available. Mike offered to prepare some scenarios for presentation.

Combined Heat and Power

EDECA references solar and wind. The NM & INX Rules were expanded to include all Class 1 resources. Joe Sullivan said there is a strong interest in developing less than 2 MW cogen facilities. If we can use same rules and rule structure, would benefit onsite users and help meet the RPS goals. He suggests that the rules be expanded to include that group. Mike Winka believes the interconnection of CHP systems could be handled with rules expanded, but the net metering inclusion of CHP might require a legislative change.

The Interconnection Form

There was a 1st level draft form developed by a working group and distributed for public comment, with drafts of 2nd and 3rd levels developed but not distributed. There were subsequently submitted some extensive comments from MSEIA, with the comments tabled to be discussed at next meeting. Utilities want to finalize the forms.

To complete the 1st level form, Jim Calore suggests a comparison of the last NJ draft and the PA (MADRI) form. MSEIA would like to review Bruce's comments and provide a response. A subcommittee including Bruce and Jim, and Rick and Russ are volunteering to review and update the draft 1st level form. That group will meet and report back at the next full meeting. The subcommittee will convene a conference call in the near future. The next full meeting could be in about 6 weeks.

Ann File, JCP&L's net metering contact, is moving on and will no longer be the contact person. The new contact is listed on the JCP&L website.

AGENDA - NET METERING AND INTERCONNECTION RULES -- STAKEHOLDER MEETING New Jersey Board of Public Utilities -- Board Hearing Room 8th Floor, 2 Gateway Center, Newark, New Jersey March 28, 2007 1:00 p.m. – 4:00 p.m.

Welcome and introductions	Scott Hunter
 Please add your e-mail address on signup sheet 	1:00 pm – 1:20 pm
Purpose of stakeholder meetings	
 Provide Board staff with a variety of viewpoints on the rules 	
 Advise Board staff on how the rules are working in real life 	
 Information exchange and networking among stakeholders 	
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Background on the Net Metering and Interconnection Rules	Suzanne Dice-
 Short History: from EDECA Ch. 23 to current version of N.J.A.C. 	Goldberg
14:4-9	1:20 – 1:40
 Rule making process and timelines 	
Rules vs. Legislation?	
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NM and IX implementation so far:	Scott Hunter
 How many interconnections so far? What levels? 	1:40 -2:00
What significant problems/complaints have arisen? What	
problems seem to be repeating themselves? What are the trends?	
 Interconnection Application Form Revisions – status 	
 Eligible Technologies - Extended from EDECA's "solar or wind" to 	
all Class Lin 2004 via rule revision	
Issues under consideration:	Suzanne Dice-
Annualized period: revision of provisions for true-up at wholesale	Goldberg, facilitator
Definitions:	2:00 - 3:30
 Small Commercial Customer 	
 Customer Side of the Meter - currently codified but not 	
defined	
 Reporting Requirements – too operous? thorough enough? 	
Eligible Technologies – Include Fossil-fuel fired Combined Heat	
and Power systems? This would likely require legislative	
amendments	
Open the floor for suggestions from stakeholders	
Wrap up and next steps:	Suzanne Dice-
 List action items decided on at kickoff meeting. 	Goldberg, facilitator
More meetings?	3:30 – 4:00 pm
Who should meet?	'
What issues?	