

**CHP-FC Work Group**  
*Storm Response Long Range Planning - Minutes*  
December 18, 2012  
44 South Clinton Ave, 2<sup>nd</sup> floor CR, Trenton, NJ

Key discussion items:

- Do CHP and Fuel Cell technology fit in with storm response initiatives?
- How will the utility filings affect the feasibility of CHP installation in NJ?
- How will the cost-benefit analysis performed by CEEEP change the way the state supports CHP and fuel cell system installation?
- Are there ways to establish a more solid funding source to support these long term CHP and fuel cell initiatives?.
- General utility infrastructure concerns and viability of CHP and fuel cells as a reliable source of back-up generation.

1. Standby Charges, Alice Bator NJBPU:

- a. Provided updated on discussion of standby charges from utility filings.
- b. Contact [Alice.Bator@bpu.state.nj.us](mailto:Alice.Bator@bpu.state.nj.us) to be added to distribution list.
- c. Meeting will be scheduled to discuss standby charges, including:
  - i. Discovery of generic and company specific issues
  - ii. Rate design issues
  - iii. Discussion and agreement on issues.
- d. Q: Renewables not included in discussion?
  - i. A: Not sure, defer to Trisha
- e. Q: Filings for all four electric utilities posted?
  - i. A: Yes.
- f. Q: Is the Goal to come up with a consistent solution?
  - i. A: Yes, need input on current rate design to determine if there are concerns, as well as basis for conditions of current tariff. Concerns may be generic, but can't say for certain right now. Need a discovery process.
- g. NRRI has meeting on standby rates on 12/19/12.
- h. US DOE also doing national survey on standby rates. Completed/finalized yet?

2. Introduction, Mike Winka NJBPU:

- a. Provide status updates on current CHP programs.
- b. Determine CHP scenarios for emergency planning/preparedness.

3. Small CHP/FC Program status update, Valentina Rozanova TRC:
  - a. As of December 18<sup>th</sup>, 11 CHP/FC applications received in 2012.
  - b. 6 applications approved, 1 at board for approval, 2 cancelled by customer, 1 completed installation, 1 purchased equipment/mid installation, 7 projects under review.
  - c. Over \$1 million incentives committed; \$175,000 paid; \$6.3 million worth of incentives under review.
  - d. Total incentive budget through June 30, 2013 is \$17 million.
  
4. Large CHP-FC status update, Mike Winka NJBPU:
  - a. 6 CHP projects at board for approval – total \$11 million incentives of \$20M available for the 1<sup>st</sup> round.
  - b. 2<sup>nd</sup> round for new projects will be sometime in January. Open enrollment will be on a rolling basis (vs. competitive) until funds are exhausted -- \$25 million incentive available. Application will have two parts (1) technical review (2) financial review.
  - c. Q: \$25 million not inclusive of \$11 million?
    - i. A: Correct. Another \$25 million, in addition to \$11 million, available for projects in 2013.
  
5. NJ CHP Program Cost Benefit Analysis (CBA), Frank Felder Rutgers's CEEEP:
  - a. Urgent task to look at emergency response policy options through CBA as a result of Sandy.
  - b. Comprehensive evaluation of storm response issues—“where to put money first”.
  - c. Study is a multi-step, iterative process. Provide input on Sandy ASAP.
  - d. Currently in literature review, looking at other studies in the U.S. Target end date January 2013.
  - e. Next step, within 1-2 months, provide high level generic results.
  - f. Q: Looking at System-wide enhancements or critical facilities?
    - i. A: Both broad based and targeted.
  - g. Q: When determining benefits, where do you draw the line in direct vs. indirect vs. non relevant benefits?
    - i. A: CBA gets at many issues, but not all. Hard to quantify all indirect benefits, but we try to quantify as much as possible and make note of uncertainties.
  - h. Comment: Concern that CHP is getting mixed in with other storm response issues such as tree-trimming.
  - i. Q: Will results have any locational aspect?
    - i. Too early to answer.

- j. Q: Would study include net benefits to NJ? E.g. 2000 generation plants = \$2 billion net benefit to NJ.
    - i. A: Yes, supply side benefits will be accounted for.
  - k. Comment: CHP should be a societal benefit to NJ, independent of the storm response issue. CHP community does not want to see CHP efforts subverted.
    - i. Yes, but in the storm response “realm”, where do we spend money first?
  - l. Comment: Discuss hardening of the system in terms of both scope, such as back-up service/islanding capability.
  - m. Comment: Assume storm response includes all of Distributed Generation, not just CHP. Will study evaluate DG comprehensively?
6. Brief Overview of storm response task/long range planning, Mike Winka NJBPU:
- a. Objective/Goal- how does this fit in with other Sandy Response issues
    - i. Critical facilities are not going to wait for a study. They will install diesel or gas generators to pick up load in an emergency. Need to guide customers to a better solution, such as CHP, via incentives.
    - ii. See what other states are doing.
    - iii. Permit waivers a possibility
  - b. What Timeframe
    - i. Continue with programs as-is.
    - ii. Consider where we affect this funding level moving forward.
  - c. What technology CHP vs FC Vs emergency gen sets
    - i. Goal of EMP of 1500 MW by 2020---limited to only CHP. Add/expand to fuel cells.
  - d. What type of facilities business, hospitals, critical infrastructure
    - i. Need to define what is a “critical” facility
    - ii. Is there a prioritized location for these installations?
  - e. What capability of CHP-FC (blackstart capable) for all state funded or limited to some subset (hospitals/emergency)
    - i. Not all CHP/FC operate in emergency/island mode. Additional engineering and investment is necessary to add that functionality. Maybe make it a requirement, or provide additional incentive for this?

- ii. NJDEP: Inherent problem of back-up generation. There are strict rules limiting back up generation to brownouts or blackouts as posted by PJM. Created constant compliance issue.
  - iii. Emergency code requires auto-on in 10 seconds. CHP/FC difficult to bring on in less than 1 minute. Also must be staged on. Needs to be partnered with fast response generators.
  - iv. Get informed at the state level, maybe via questionnaire, about who lost power, for how long, whether they have backup generators, etc.
  - v. Interject large CHP installation in transmission and distribution grid planning.
- f. Funding
  - i. Any additional money available for this effort through EPA or FEMA?
  - ii. Need certainty in the market. Need to know money will be here year after year. Establish Portfolio Standard.
  - iii. Need to establish definition of Resilience Portfolio Standard---see Connecticut microgrid RFI? MA? NY? MD?
  - iv. Utility financing?
- g. Roles for the gas and electric utilities
  - i. Gas-fired systems dominate
  - ii. Electric interconnection fees—utility level, not state level?
    - 1. Meeting on interconnection revolve mostly around solar, not CHP/FC.
  - iii. Standby charges---consequences of which may stop CHP from being installed.
  - iv. Capacity market ---CHP only qualifies for 1 year worth.

## 7. Next Steps/Follow-Up

- a. Talk to Scott to add or confirm that the interconnection rules apply to all technology interconnections not just Class I renewables. Scott may address this in his ongoing NM/IX meetings.
- b. Get feedback on the federal storm response funding available to NJ; and for what purpose these funds will be available?
- c. Reach out to MD, CT, NY, MA for status on PS and their storm response programs
- d. Reach out to DCA on emergency generator code issues. Coordinate with DEP.
- e. Once Professor Feldor has an initial draft outline for the CBA, we will distribute to the group for comments.
- f. Next meeting in 4-6 weeks. Date will be set closer to meeting day.
- g. Provide any and all comments on this agenda/discussion to [CHP@njcleanenergy.com](mailto:CHP@njcleanenergy.com)

- h. If you would like to join the CHP/FC workgroup distribution list, please email webmaster as indicated here: <http://www.nicleanenergy.com/main/clean-energy-council-committees/clean-energy-committee-meetings-notes>