

**Distribute Generation Board Meeting**  
**Tuesday, January 20, 2015**  
**4:00-5:30 p.m.**  
**Department of Administration – Conference Room A**

Board Members Present: Ken Payne (Chair), Marion Gold, Charity Pennock, Hannah Morini, Sheila Dormody, Sam Bradner

Others Present:

Chris Kearns, Sue AnderBois, Shauna Beland, Corrine (Grid), Ian (Grid)

**-Call to order: Chairman Payne called the meeting to order at 4:15 p.m.**

**-Notification on Wind Energy Development/National Grid: Public Utility Commission Docket – Legal Dispute on the Financial Enrollment of the 2014 Distributed Generation Contracts Program**

Chris Kearns noted a dispute between a renewable energy developer and National Grid regarding the final enrollment of the DG contracts program from 2014. OER is monitoring the situation. DOA lawyer, Dan Major, is also aware. The Public Utilities Commission has not established a timeline for this matter and how it may proceed. OER or the DG board may wish to consider weighing in on this matter in the future.

Does it hold up contracts? Grid says no

**-Update on 2015 Renewable Energy Growth Program – Public Utility Commission Docket**

Chris Kearns stated that DG Board filed program recommendations to PUC before the holidays. Established two dockets for Tariff rules, regulations applications, forms submitted by National Grid and a Sub A for ceiling prices. Schedule established for proceeding in February and March. PUC is anticipated to rule by end of March. Dan Major DOA legal representation. OER is preparing as well. File testimony is first and will be submitted to first week of February.

Docket number 4536 A 4536 B, says National Grid.

**- National Grid Presentation on the Results of the 3<sup>rd</sup> Enrollment of the 2014 DG Contracts Program**

Corrine presented for National Grid. Reviewing last enrollment in 2013. Remaining allocation for last enrollment was 13 MW. National Grid executed 12 Standard Contracts totaling 11MW. All results filed with PUC. Statute says that any unused capacity in last year's program can be rolled over to the last year of the Rhode Island regrowth program. Medium scale and large scale solar is where the DG standard contracts program was most active. 31 municipalities participated in Rhode Island.

Summer of 2013 law changed requiring competitive bidding.

For almost all solar, the price has gone down.

Charity asked if it was possible to get listing of all DG contracts. Corrine said yes. Hannah notes it is confusing because it is not always known who the installer is. OER could reach out to find out who the installers may be. Ken Payne asked why mill locations in Bradford/Chepachet chosen. No reason could be provided.

**-Chris Kearns asks to address item number 6 on the agenda to devote the rest of the meeting to the Cadmus presentation. Chairman Payne agrees.**

### **-2016 Ceiling Price Services – Reconciliation Funding**

Chris Kearns notes DG Board is authorized to request Reconciliation price funding through the PUC for ceiling price services. This year the plan is to start the process in the Spring. They will look at multifamily homes and will request funding so they may request a ceiling price vendor for the spring. Just a point of order.

### **- Cadmus Presentation on Solar Quality Assurance**

Shawn Shaw, Cadmus renewable energy team and Matt Piantedosi a Cadmus inspector gave presentation on solar quality assurance programs and shared experiences they've had working in Rhode Island, Connecticut, Massachusetts, New York and elsewhere. Presentation was a regional overview.

Hannah Morini notes Cadmus was selected through a competitive RFP to be project inspector for Commerce RI funded projects.

Why should we care about quality? Good quality installations mean less downtime. Fewer service calls. Safer. Better perception. Make sure systems that are installed are done so as well as they can be. The number of unscheduled Maintenance events are less frequent.

How do we get good quality?

Step 1: Recognize there is a challenge.

Step 2: Systems don't fail on paper, they fail in the field-we need to get out there

- Did a study 62 percent of electric installers subcontract electrical work
- Data is collected and review and produces an inspection report, and a corrective action report. CA report is more streamlined. Also Summary data.
- Matt inspects the systems and works with the installers to fix the issues identified.
- Poor wire management is a common issue. Protect the conductors (rodents). Keep the weather out of PV Circuits. Good labeling is important to long-term safety and ease of service. Equipment grounding issues. Structural issues which may include modules not properly secured, high leak water damage potential.
- Major issues in Rhode Island over the last 30 inspections.

- Unfused conductors at line-side interconnections
- No overcurrent protection in the event of a fault
- Line-side fusible disconnect wired backwards
- Moderate RI issues: indoor wiring sleeved in outdoor conduit, conductors doubled under single terminals

Marion asks if inspections have been done under contract or through consumer requests. Cadmus confirms it was through contract

Step 3: turn data and inspection reports into real change.

Cadmus recommends new installers (4-5 years) to review some of their first jobs to determine what methods they use that may need improvement.

Charity asks what is consequence of having inspection and finding things that are wrong. Is there a monetary? How does Cadmus ensure change?

Shawn stated Installer not doing quality work may be put on a probation list. Installer may be eligible for an accelerated review for good quality. He has not seen a program that penalizes the installer in a direct monetary way. A program has a latitude to accept<sup>5</sup> reject or delay applications.

Hannah says since June, 30 projects have been inspected. Must be inspected before Commerce releases payment. Solarize has increased volume tremendously. Commerce looking into an expedited process or self-inspection for installers who have completed projects well.

Matt mentioned Cadmus looked at specific project and identified problem and compare to other installations by the same installer in Massachusetts. This is something that may determine what installers are thorough. It is not a matter of licensed or sublicense it is a matter of contractors and subcontractors. Those doing the work must be supervised by those who are awarded the contract.

Sheila asks if there is an additional round of inspections that must take place. Shawn stated it varies. He also said it is becoming common to see installers issue extended workmanship warranties. No programs Shawn is aware of have a systematic effort to go back and review projects from years ago.

Marion asked how Cadmus works with NYSEERDA. Shawn stated they inspect 1200-1400 systems a year in New York. Inspecting in NY since 2008. Marion asks how about a solarized community. Shawn replied yes, our approach is randomly sampling projects once completed and determine the sampling rate. He would approach solarized community in a similar way. Can be done if it is single installer or multiple as well. A good random sample should be enough to give the information you need.

**National Grid rep Ian (INSERT)** asked how receptive Installers are to the training. Matt stated, IAEEI it is very inclusive. Most are receptive. Some are not as much and wondering why Cadmus is coming.

Chairman Payne asked is there a differentiation in the size of the project. Is it more likely to have problems at different sized projects?

Engineer of record, banks engineer. Systems are not perfect. Quality on large 3 MW project is a little better.

Is the sophistication a determination of whether or not you will find defaults?

Shawn replied, not always.

Chairman Payne asked how many problems are uncovered by electrical inspectors and how many go unrecognized.

Matt replied that it's all across the board. In Boston inspectors are getting the information from Cadmus and it is improving based on how active electrical inspectors are. Many Rhode Island inspectors were at southern Massachusetts presentation. All of these systems that are encountered have passed local inspections. Chairman suggests that OER should take this up with Code Commission

Matt stated that going down in scale. More projects and activity will result. Especially relative to the statutory changes. Statistically it increases likelihood for something to go wrong.

Chairman Payne asks if there has been any contemplation for this kind of inspection.

Ian from National Grid says it is a matter for local code. The incentive is paid on the kW you deliver.

Sheila says the state should publish the data that is being collected on installers.

Chairman Payne notes that there is higher level of people entering the system.

Sam Bradner asked should we issue grades. Ian from National Grid notes that installers are not in agreement with National Grid. Sam responded saying that with wave of increase I think you will see similar results as other states have.

Grid says safety is the primary metric and issue for the company. Very interested in these issues and would like to integrate the findings by Cadmus.

Charity stated this is a very important topic with the expected increase in solar installation. It should be continued in discussion.

Chairman Payne says there is a little bit of time to think before PUC and enrollment process. We are identifying there could be a gap in the way we approach this in that projects may not be as high quality as we like.

**- Public Comment**

One man suggests the board thinks about mechanisms for the homeowner or contractor to have some kind of checkoff sheet to help determine they have a qualified electrician. Says he thinks this will help him and believes it will also help small businesses.

Marion noted OER and Commerce are putting together a list of issues for the Board to consider.

**Adjourn**

**Motion to adjourn by Sheila Dormody and seconded by charity Pennock at 5:28p.m.**

Respectfully submitted

Chris Kearns

Secretary Pro-tempore