RHODE ISLAND OFFICE OF ENERGY RESOURCES

COMMUNITY REVIEW MEETING

DISTRIBUTED GENERATION-LONG TERM CONTRACTS
CEILING PRICES FOR 2013

Thursday, September 18, 2012
9 AM-10:30 AM
Conference Room B
RI Department of Administration
One Capitol Hill
Providence, RI

MINUTES

Attendees: Julian Dash, Marion Gold, Ian Springsteel, Chris Kearns, Bill Ferguson, Michelle Mulcahy, Stephen Wollenberg, Bob Grace, Jason Gifford, Seth Handy, Ken Payne, Fred Unger, Tony Callendrello, Jaime Fordyce, Hunter Straiter, Dennis Duffy, Mitchell Jacobs, Larry Dressler, Barry Weinscoff, Dennis McCarthy, Alan Clapp and Charles Hawkins

Office of Energy Resources (OER) Administrator, Marion Gold, began by having attendees introduced themselves to the third Distributed

Generation (DG) stakeholder meeting. The goal of the 2011 DG legislation is to promote grid connected renewable energy (RE). She would like to have RE enhance RI's energy efficiency (EE) and system reliability efforts.

The 2011 legislation requires the state to take a look at the ceiling prices annually to see how the system is working and to make any adjustments the market dictates. RE prices have been going down, which is a good thing. She then introduced Bob Grace of Sustainable Energy Advantage who used CREST, the national model for setting ceiling prices that are reasonable, to determine the prices. Bob G. explained that the purpose of the meeting was to get feedback in order to develop a first draft of revised ceiling prices. They are looking for prices for several technologies. The market has changed since last year with solar prices going down and other technologies going up. Bob G. has sent out an information request to interested parties to get feed back on prices for different size and technology buckets.

The idea is to set up a straw man with the data and feedback collected to find out if it is feasible and then do another draft for the next meeting. Costs of RE applications are site specific. You can take ether a conservative (lower prices) or an aggressive approach (higher prices) to setting these prices. Only the best projects will go forward in a conservative approach. The OER will be going for a more conservative approach. In this year's round OER is looking to

expand the number of classes from the previous nine, and include anaerobic digestion (AD). They will also develop a benchmark for hydro. Dennis McCarthy asked Bob G. if he was eliminating the 10-50KW projects. Yes, because of cost effectiveness the limit is 50 KW. Bob G. than turned the meeting over to his colleague Jason Gifford to present a slide presentation.

Jason G. only focused on the more critical slides. Using the National Renewable Energy Laboratory's CREST model, the total project cost minus the interconnect was calculated. They used Massachusetts's SREC data base. It is the average installed cost by quarter. Mitchell Jacobs said that he was more concerned about capitol costs so why did it drop.

Julian D. said that the 10% a year decline in property taxes build in to the price is not an assumption that will hold. He has never seen them decline. Fred Unger said that in Cranston the formula is 95% of cost dropping 5% a year. He thinks the deprecation in the model is too fast. Julian D. said the aim was not only creating the lowest prices in the shortest window of time, but also creating an industry with long-term downward pressure on prices so you avoid price fluctuations.

Jaime Fordyce asked why land value was not included in the calculation. Bob G. asked if there is an assumption that RE will increase the value of the land. Mitchell J. said that the lease numbers

in the model are really low. He said the lease rate and the tax rate are not consistent. Fred U. said that in RI, the town can waive the whole tax or nothing, he said the Cranston tax assessor said the State does not let them do pilots. Either you are all in or all out.

Bob G. said that they have some fresh 2012 information to include in the model from the Connecticut ZREC Program. Connecticut utilities just did a competitive process for three solar sizes. RI should use this numbers to do benchmarking. There is data on the size range of the potential bids. RI's model has prices that are slightly higher than Connecticut. This is reasonable because RI is smaller but the prices should not be substantially higher.

Michelle Mulcahy said in Connecticut they do allow pilots. She also said that RI only allows for 15 year feed in tariff (FIT) contract but in Connecticut they can go out to 25 years on the Power Purchase Agreement (PPA). There is no revenue certainty in RI after 15 years Julian D. said that he would caution comparing the two programs because RI has a higher risk profile. In RI you have price risk & time risk. Uncertainty adds to price.

Seth Handy said that the net capacity factor in the model is higher for RI. He would like to hear from others on this. Michelle M. agreed that it was high. She said roof mounts have significantly lower capacity. Bob G. said only one written commenter mentioned capacity. Jaime F. said that all of the projects he has done in RI have come in under

capacity. Chris K. said that Bob G. needs to hear this feedback in written comments. Julian D. said that the most accurate data point would be to measure the capacity of all RI solar projects but that is a huge task. Ian S. of NGrid said that capacity is a factor of the quality & design of the system. Bob G. said that he was getting limit data from the RE community. Julian D. said the impact of tax credit financing, like the ITC, were being ignored. Most projects are tax credit financed and this has not been addressed. Transaction costs also have not been considered.

Before leaving solar, Bob G. wanted to bring up one more data point. Is the drop in solar capitol coats the thing that people want to talk about? Jason G. said the responses varied wildly on this. Mitchell J. said the number was way off when you consider soft costs, and he will send you data. The price of PV panels is going down but everything else is going up. Chris K. said that people should send further comments to Bob G. before the close of business on Monday, because they need to move on to AD.

AD is a new to the program so they want to know now about AD resources currently in RI. The assumption is that food waste is the primary stock. It will be a tipping fee approach. They are looking at availability of stock more than capacity. Ian S. thought the capitol cost of the model were high when compared to AD projects NGrid has executed. He felt the range is higher by 50%. He urged Bob G. to review costs. Bob G. said there was a lot of diversity in the data.

Chris K. asked Tony C. if his company had project data. Tony C. said they had a lot of capitol data on food waste. You need to include all of the soft costs, which are substantial because it is new technology. Cost depends on where the project is situated. Food waste projects need to be near population centers. Environmental controls can also add cost. He feels the capitol cost number is low, but when you add the soft costs it gets higher. You also have to consider tipping fee revenue. Tony C. said the Operations & Maintenance (O&M) variable of .2 cents per KW seemed low. It should be more like 3.5 cents. Water & sewer is required. He also felt the lease costs were very low. It should be more like $25,000 a year. Fred U. said that they need written assurance from NGrid that they will be the lead market participant. Ian S. said he would work on it.

On the financing side for AD the model has assumes a 13 year term at 7% interest. And no state or federal incentives are included in the model. Fred U. said that with the bad RI economy many companies can't take advantage of tax credits. Seth H. said that if the third party investor can't leverage the tax equity the project does not work. He said because of the access of the credit, one type of investor is being favored over another.

Chris K. said that because of time constraints, wind won't be discussed at this meeting. However a follow-up meeting will be held. Bob G. said that there were clearly two issues, price & policy. The

policy tension revolves around the conservative vs. aggressive approach. These are issues that the OER will need to address. Written data and policy comments should be bundled and sent to the OER. Marion G. said she has to dig down on these policy issues before the next meeting.

A brief discussion on wind data ensued. Stephen Wollenberg asked if the change in price was driven by hard costs or soft costs. Bob G. said it was a combination of a number of things. Ian S. asked what data points drove the different prices. Smaller projects could have higher fixed costs. A discussion then ensued about the comparative cost of installing small & large turbines.

The next steps include Chris K. sending out a calendar so he can set up another meeting where a more thorough discussion of all the technologies will be held. Written comments are due by the end of Monday.

Julian D. thanked OER for making this effort and taking everybody's comments. He sadi the group was moving towards the goals of the program which are clear consistent RE policy with a goal of stabilizing and decline of prices. Bob G. said that the quality of the comments will be reflected in the final model.

The meeting was adjourned at 11:05 AM.