

CITY OF SALISBURY  
WORK SESSION  
SEPTEMBER 15, 2014

Public Officials Present

Council President Jacob R. Day  
Mayor James Ireton, Jr.  
Councilman John "Jack" R. Heath

Council Vice President Laura Mitchell  
\* Councilwoman Eugenie P. Shields  
Councilman Timothy K. Spies  
\* arrived at 4:36 p.m.

In Attendance

City Clerk Kimberly R. Nichols, CMC, Public Works Director Michael Moulds, City Attorney Mark Tilghman (arrived at 5:30 p.m.), interested citizens and members of the press.

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On September 15, 2014, Salisbury City Council convened in a Work Session at 4:35 p.m. in Council Chambers, Room 301 of the Government Office Building.

**Pioneer Green Wind, LLC Presentation**

Pioneer Green Energy Vice President Bruce R. Thompson and Great Bay Wind Energy Center (Great Bay) Manager Paul Harris joined Council to discuss the benefits of wind energy with a PowerPoint presentation (attached as part of the minutes). Economic benefits discussed included:

- wind energy provides a clean, renewable energy to the area
- wind energy provides short term and long term economic development
- jobs would be created for people in Salisbury
- local schools and colleges could partner through job training and research programs

Great Bay's commitment to Salisbury with a long-term power agreement would include:

- holding job fairs in Salisbury to collect applications for development, construction and O&M positions
- local contractors would have a specific number of construction work jobs
- Great Bay would fund an Economic Development partnership
- Salisbury would be given naming rights

Mayor Ireton indicated all suppliers of solar and wind power would have equal opportunity to respond to the City of Salisbury's RFP. The presentation was for Council information only.

**SolarCity Presentation**

President Day invited SolarCity project developer Brent Eskay to join Council at the table to discuss solar power. His presentation included a PowerPoint presentation (attached as part of the minutes).

Mr. Eskay reported the following:

- SolarCity currently served over 180,000 customers
- the ideal site for a solar station for the City of Salisbury would be on Marine Road
- estimated first year savings would be \$50,000 and the twenty-year term savings would be \$1,400,000
- discussed a performance guarantee, ground and roof solar mounts, and the space constraint when using solar power (about 12 acres for 2 megawatts power)
- no capital investment would be required

Mr. Moulds discussed the current demands for the existing Wastewater Treatment Plant (WWTP), (about 10 megawatts) and estimated there would be more than enough solar electricity to serve the plant, with estimates for the new plant totaling 11 – 12 megawatts. After the WWTP, the next largest electricity expenditure for the City of Salisbury is streetlights. He reported that since the location of the ideal site for the solar power plant was near the Waste Water Treatment plant, the City would have a unique opportunity because of how the WWTP process works to remove nutrients. There would be a reduction in the annual chemical costs since the nutrients would be removed biologically rather than chemically.

Mr. Day questioned whether an RFP could be crafted flexible enough so that if the City's demand was higher than any one provider could likely provide, then the City could have multiple respondents to address the demand. Ms. Miller indicated they were initially intending to write the RFP for a 2-megawatt system, but would research the question. She stated that the City would be asking the vendors to find the site, and only about 2 megawatts could be obtained from one site.

Mayor Ireton discussed the differences in space requirements for wind and solar power. He asked both companies for examples of the local participation in jobs and manufacturing so he could get a sense of what other communities have been able to draw from these projects.

The presentation was for Council information only, and further discussion would be scheduled again on October 20, 2014.

### **Proposed Storm Water Utility Ordinance – Council discussion**

Mike Moulds and Amanda Pollack joined Council at the table to discuss the proposed Storm Water Utility ordinance. Mr. Moulds recapped the outcome of the last discussion in which Public Works was tasked with developing a plan for storm water credits for facilities making efforts to deal with water quality and quantity, and examining financial hardship exemptions. He explained the original drafted ordinance was modeled after Berlin's ordinance, and after more research they discovered the City of Rockville *Stormwater Management Ordinance and Regulations* was a useful template since their stormwater utility program has been in effect since 2009, the relation of their size to Salisbury, and their similar concerns as a Maryland City in the Chesapeake Bay Watershed. Mr. Moulds reviewed the following revisions:

- additional uses of the Fund including grants, public outreach and watershed planning (13.30.040)
- provision for a maximum assessed fee (13.30.050.1)
- clarification on the classification and fee determination of Condominiums and semi-detached residential homes which includes common areas in joint ownership (13.30.060.C, D, and E.)
- additional language added to establish procedures for Adjustment of the Fee (13.30.090) and drafted forms
- process for obtaining and applying for credits (13.30.120 to 13.30.123) and drafted forms
- financial hardship exemption (13.130.124).

Council discussion points included:

- grants/hardship discussion including Social Security recipients, disabled individuals, and Section 8 Housing residents
- renters ultimately will have to pay
- How are impervious surfaces on vacant lots addressed?
- payment terms and penalties, and what happens if customer refuses to pay
- goal is to have a quarterly fee if billed on a water bill
- residential fee is \$20 per year
- partial payment challenges

City Attorney Tilghman would examine Maryland law to see if this utility could be included on tax bills. Internal Services Director Keith Cordrey indicated Internal Services would prepare a comparison of pros and cons for billing on tax bills and utility bills.

Council reached unanimous consensus for Mr. Tilghman to review the draft and return to Work Session with a final draft for their consideration.

### **LLC Disclosure**

Council President Day asked Mr. Tilghman and Mr. Spies to share their research concerning LLC disclosures.

Mr. Spies discussed the section of the Maryland State application for LLCs that deals with resident agents and shared the following points:

- Maryland allows LLCs to be resident agents, which allows for layers upon layers of LLCs with resident agents
- anyone is permitted to be a resident agent, with full anonymity for the partners
- if the City does business with a corporation that is an LLC, and the owners remain anonymous, the City has no idea who they are doing business with
- the City could essentially be doing business with a series of LLCs by people who the City has done business with before but who have not been stellar performers, are from out of state and are unknown, or have been incarcerated and the City doesn't know it

- it was important the City knows who they do business with and who they exchange money with for services and goods

Mr. Tilghman added that full disclosure would allow the City to avoid conflicts of interest. Initially, LLCs were created to limited liability for people and were very attractive to property owners. He reported the consequence of LLCs is anonymity, and the creators of LLCs have expressed regret that they did not foresee that happening. It would be advantageous to know who the City does business with to avoid conflicts of interest and to identify undesirable partners.

Mrs. Mitchell did not support LLC disclosure and shared the following concerns:

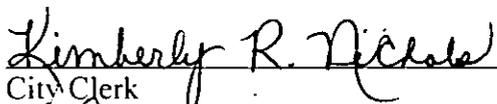
- the requirements to track and collect the requisite data for enforcement will place an inordinate burden on staff
- transparency is not improved because the document will not be readily available as it will not be openly available to the public, Council, Department Heads or members of quasi-judicial boards
- to collect this information, the City opens themselves up to the possibility of lawsuits for alleged favoritism and discrimination based on who the owners and officers are
- there currently is no risk to the City because the members of the LLCs are unknown
- this was debated with the prior Council/former majority, after two hours of discussion and more than (40) amendments, the Mayor decided to not sign the legislation
- unless Mayor Ireton has changed his position or we now have (4) votes, this warrants no more discussion
- If there are problems with an LLC, and the majority partner forms another LLC with other partners, a separate, legal entity is created. Mrs. Mitchell was unsure that the disclosure question was legal and the City could possibly be sued for discrimination.

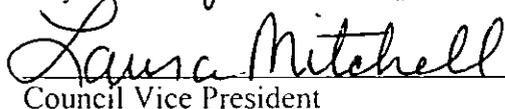
Mr. Heath indicated the City should be focused on the performance guarantee of everyone they do business with and hold them accountable. In his prior business experiences, one of the questions asked on RFPs was "Have you or your partners ever done business with us before?"

Council reached unanimous consensus to schedule the topic again for discussion with Mayor Ireton and Mr. Cordrey, but not to return the form discussed in the past. Mr. Day asked for Mr. Cordrey to craft an RFP policy for Council to consider at a future date.

### **Adjournment**

At 7:05 p.m. with no further discussion, Council President Day adjourned the Work Session.

  
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City Clerk

  
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Council Vice President

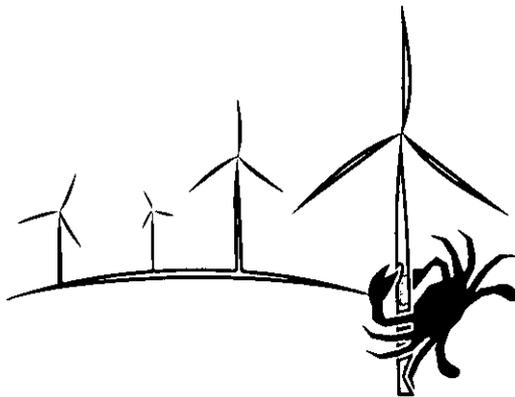


# Great Bay Wind Energy Center and City of Salisbury

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Strategic Economic Development and Long Term  
Renewable Energy Procurement Partnership

September 15<sup>th</sup>, 2014



**GREAT BAY**  
**WIND ENERGY CENTER**



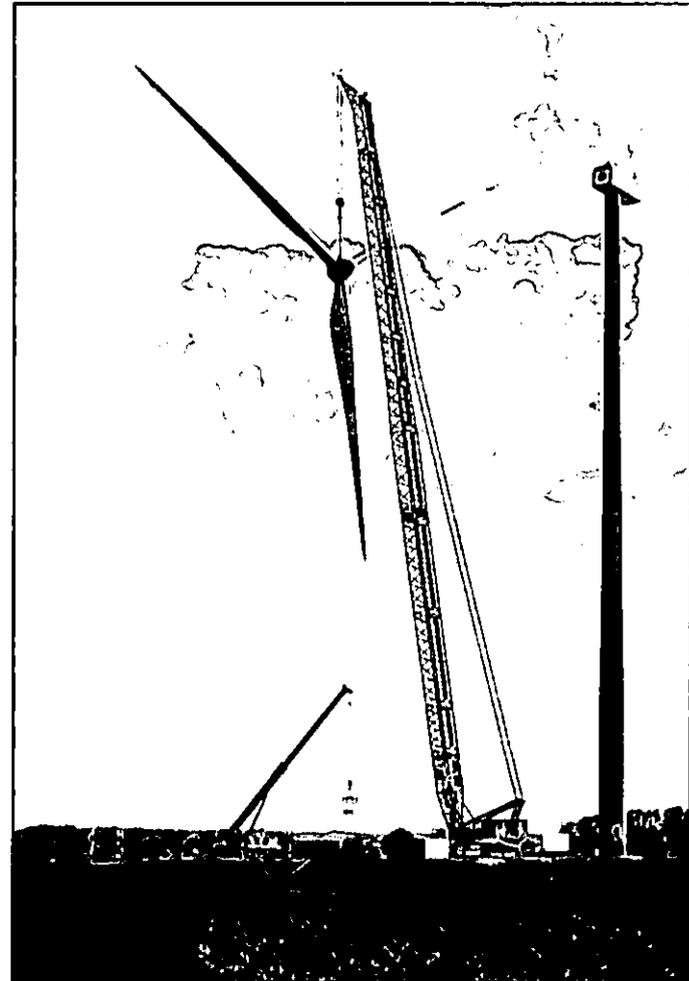
# Overview

- Pioneer Green Energy
- Wind Energy on the Eastern Shore
- Great Bay Wind Energy Center
- Partnerships and Economic Benefits
- Procurement



# PGE Overview

- ⦿ **Pioneer Green Energy LLC (PGE) is an independent, privately held company**
- ⦿ **HQ in Austin; offices in MD & NY**
- ⦿ **Highly experienced development team with cumulative nearly 30 years of wind development experience**
- ⦿ **Exclusively focused on project development; 75% wind; 25% solar**
- ⦿ **Specialize in complex, challenging, high value projects; emphasis on nodally-strong, low-congestion locations**
- ⦿ **Team has developed 3,000+ MW of wind**





# Recently Completed PGE Projects

- **288.6 MW Miami Energy Center (Wind)** Miami, TX

- Property taxes over project life >\$65 million
- Permanent jobs: 12 FTEs; Construction jobs: approx. 300

COD 2014

- **200.1 MW Logan's Gap Wind** Comanche, TX

- 125 MW PPA with Walmart
- Property taxes over project life >\$70 million
- Permanent jobs: 10 FTEs; Construction jobs: approx. 300

COD 2015

- **300 MW Green Pastures Wind** Knox County, TX

- Property taxes over project life >\$70 million
- Permanent jobs: 12 FTEs; Construction jobs: approx. 350

COD 2015

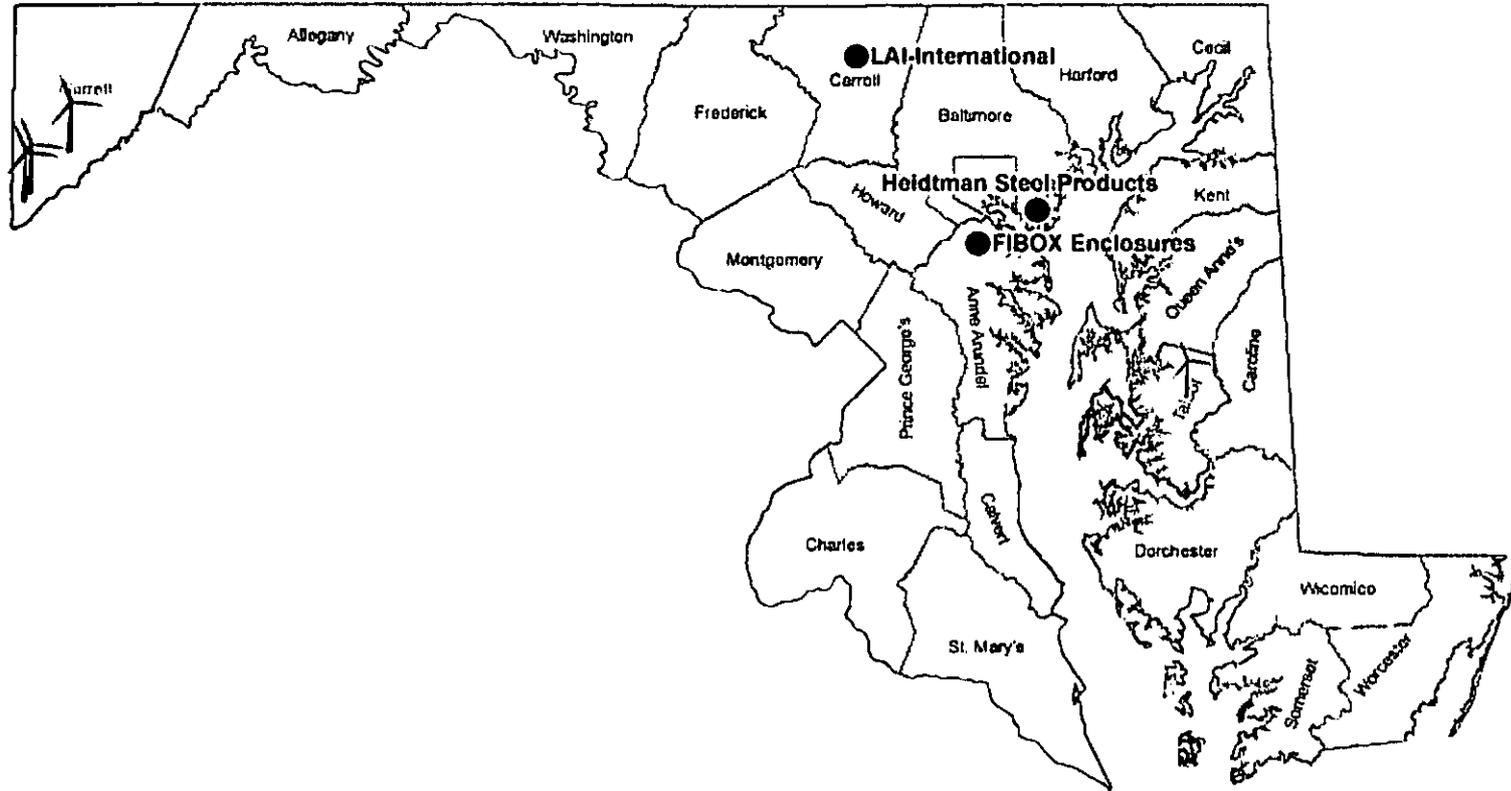
- **95 MW (5 sites) California Solar Sites** Kern County, CA

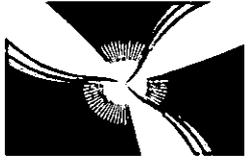
- Property taxes over project life > \$50 million
- Permanent jobs: 10 FTEs; Construction jobs: approx. 100 FTEs per project

COD 2015-16

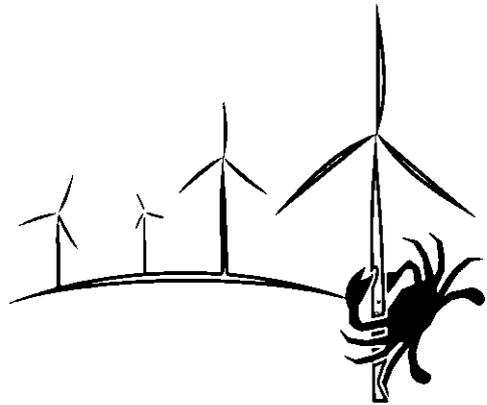


# Current Wind Related Manufacturing in Maryland





**PIONEER**  
GREEN ENERGY

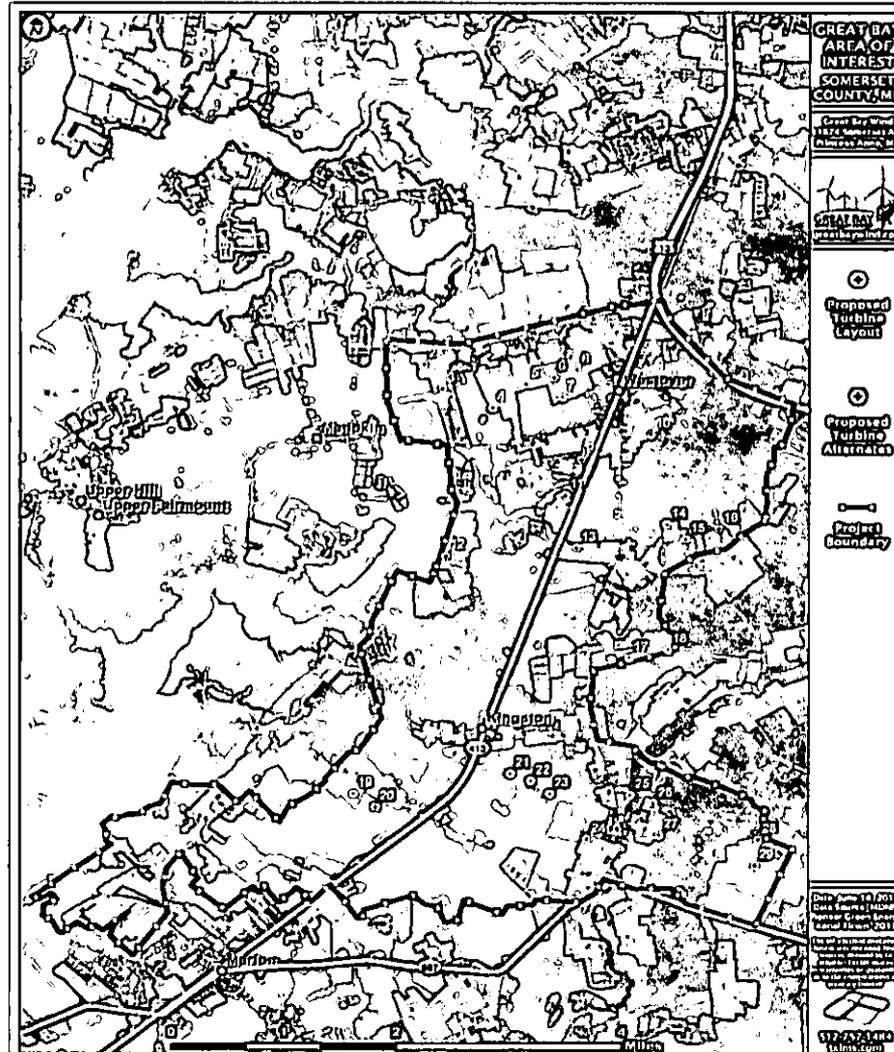


# **GREAT BAY**

## **WIND ENERGY CENTER**



# Great Bay Project Layout & Boundary





# Project Status

Pioneer Green has been developing the Great Bay Wind Energy Center for 5 years and is in late stage development and project permitting

- 100% of project land leased (10,000 acres)
- Local office in Princess Anne
- Extensive environmental/wildlife work has been completed
- FAA/Navy resolution expected in near term
- Anticipating 2015 and 2016 operations
- PTC Qualified



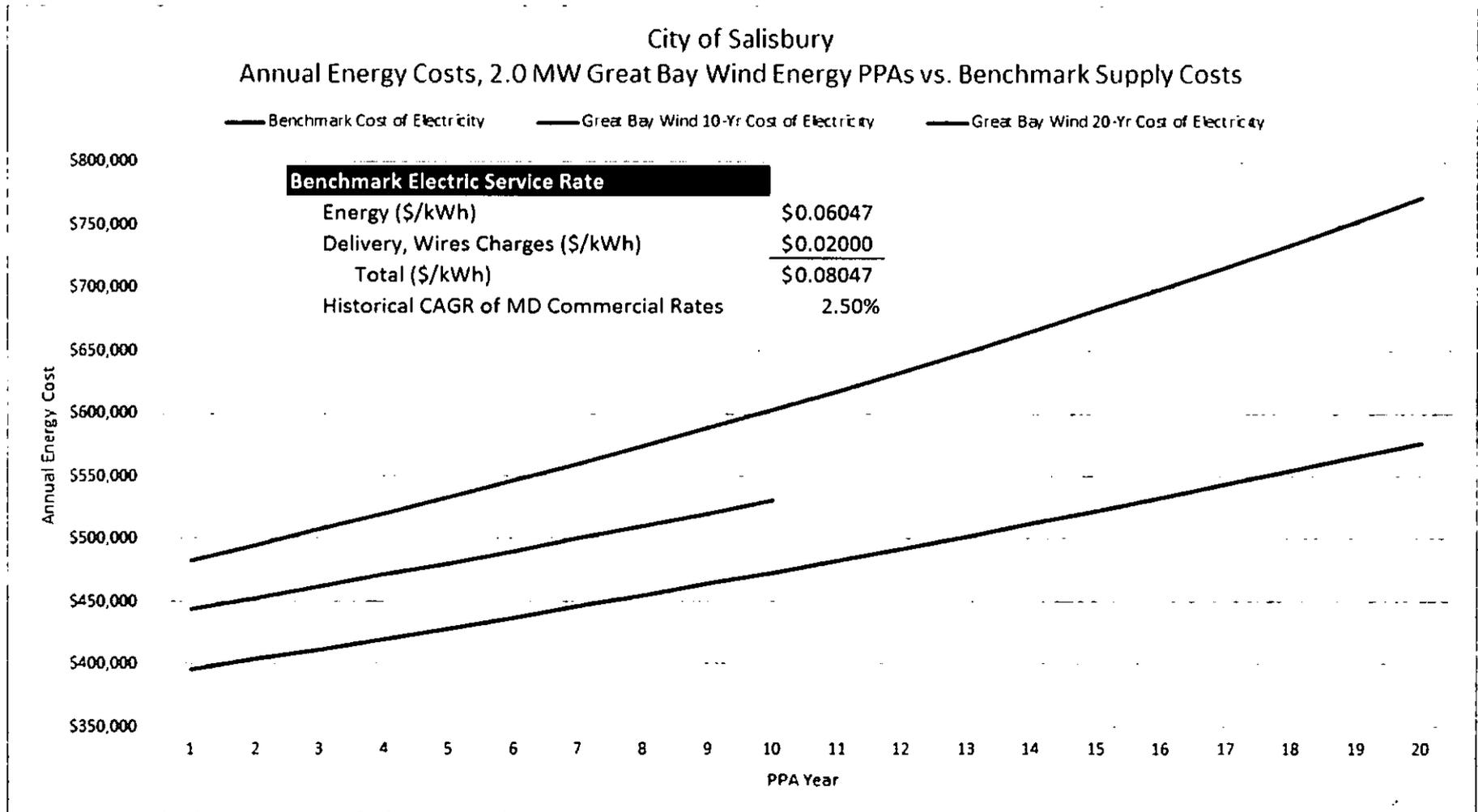
# Aggregate Net Metering Proposals

Pioneer Green proposes dedicating the output of one 2.0 MW wind turbine to supply the City of Salisbury:

- ~6,000,000 kWh annually
- located within the fully-permitted Great Bay project area
- located on land, and connected to a meter, owned or controlled by the City
- Pricing for 10-year contract:
  - \$0.074 per kWh escalated at 2.0% annually
- Pricing for 20-year contract:
  - \$0.066 per kWh escalated at 2.0% annually



# Annual Energy Costs Great Bay Wind vs. Benchmark





# Savings from Great Bay Wind Net Metering Proposals

## Benchmark Electric Service Rate

Energy (\$/kWh)	\$0.06047
Delivery, Wires Charges (\$/kWh)	\$0.02000
Total (\$/kWh)	\$0.08047
Historical CAGR of MD Commercial Rates	2.50%

## Great Bay Wind 10-Yr PPA Rate (proposed)

Energy (\$/kWh)	\$0.07400
Delivery, Wires Charges (\$/kWh)	\$ -
Total (\$/kWh)	\$0.07400
Contract Annual Price Escalator	2.00%

## Great Bay Wind 20-Yr PPA Rate (proposed)

Energy (\$/kWh)	\$0.06600
Delivery, Wires Charges (\$/kWh)	\$ -
Total (\$/kWh)	\$0.06600
Contract Annual Price Escalator	2.00%

## Savings - 10-Yr PPA

First Year Savings	\$ 38,820
Total Nominal Savings over PPA Term	\$ 547,541
Present Value Savings @8% Discount Rate	\$351,774

## Savings - 20-Yr PPA

First Year Savings	\$ 86,820
Total Nominal Savings over PPA Term	\$ 2,711,713
Present Value Savings @8% Discount Rate	\$1,196,469



# Energy Procurement Benefits

- Salisbury's procurement of clean energy from the Great Bay will:
  - Stabilize power prices for the facility
  - Facilitate long term energy planning
  - Hedge against rising fossil fuel costs
  - Generate significant economic development on the lower eastern shore
  - Combat climate change and sea level rise—the greatest threat facing coastal communities



# Economic Development Partnership

- Together, Great Bay and Salisbury, can bring renewable energy to the Eastern Shore in a tangible way and
  - Provide clean renewable energy to the region
  - Short and long term economic development
  - Job creation for Salisbury
  - Educational partnerships through job training and renewable research programs at local schools and colleges
  - Experience will provide Salisbury firms will have an upper hand on all future clean energy development



# Great Bay's Economic Development Commitments

As part of a partnership with City of Salisbury if a long-term power agreement is executed with the Project, Great Bay would commit to:

- Holding job fairs in Salisbury to collect applications for development, construction and O&M positions
- A specific number of construction work jobs/items will come from contractors who are based in Salisbury
- Fund an Economic Development Partnership
- Naming Rights



# Great Bay's Economic Development Commitments Cont.

- Long term strategic partnership
  - Great Bay would enter in MOU to memorialize commitment to bring new industry to Salisbury during pre-construction, construction and operations
  - Great Bay would commit to work with Salisbury to foster new investment in wind related manufacturing – both for the first phase of the project as well as additional phases and other regional projects
- Tourism and Events



# Educational Protocol



- Pioneer has experience structuring educational partnerships
- Job training programs
- Develop and expand renewable research
- Numerous universities around US have developed lasting partnerships



# Project Partnerships and Support

*We are committed to working alongside communities and developing partnerships*



*Princess Anne Chamber of Commerce*



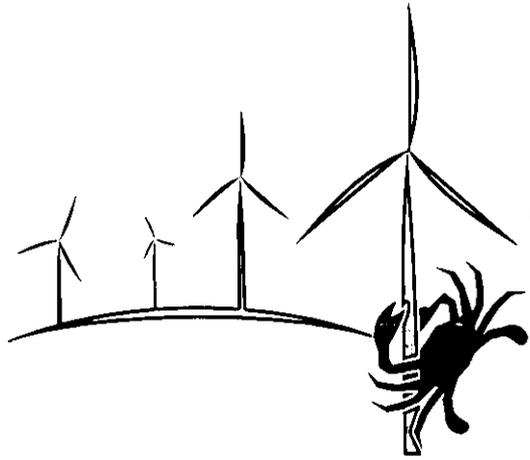
UNIVERSITY of MARYLAND  
EASTERN SHORE



Somerset Community Services, Inc.  
SERVICES SUPPORT THE POLICE DEPARTMENT AND FIRE DEPARTMENT

# SOMERSET COUNTY





# **GREAT BAY**

## **WIND ENERGY CENTER**

[www.greatbaywind.com](http://www.greatbaywind.com)

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(512)348-0606

Bruce Thompson  
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Great Bay Wind Energy Center

# APPENDIX

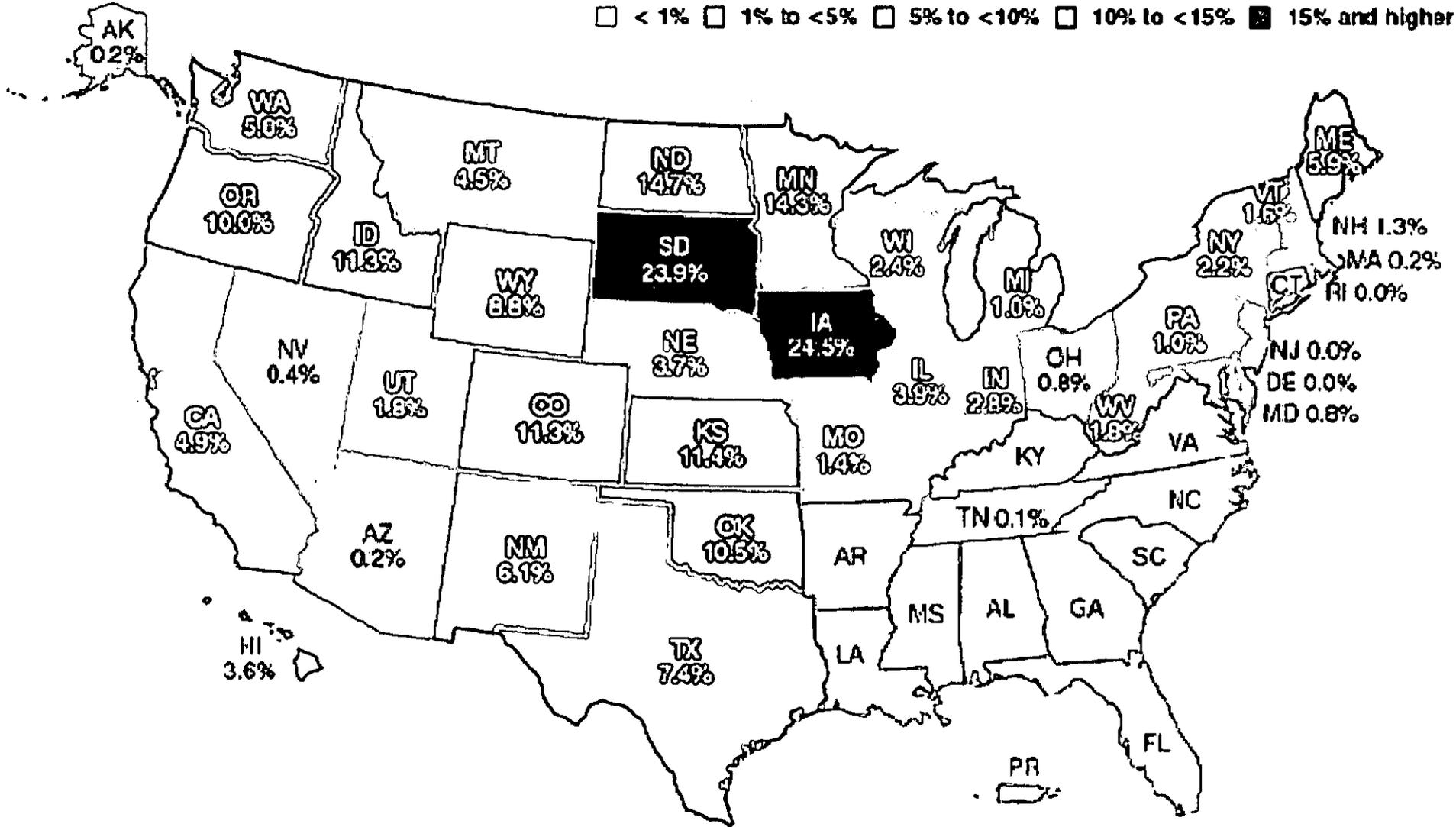


# Wind Energy Growth

- Since 2005, 35% of new energy capacity added in the US has been from wind
- Average of \$15 billion invested in new wind projects per year over last five years
- Over 10 GW constructed in 2012
- Over 60 GW on wind online at end of 2012
- Over 500 wind-related manufacturing facilities located in US
- Over 75,000 jobs in wind industry

# U.S. Wind Energy Share of Electricity Generation, by State

< 1%  
  1% to <5%  
  5% to <10%  
  10% to <15%  
  15% and higher







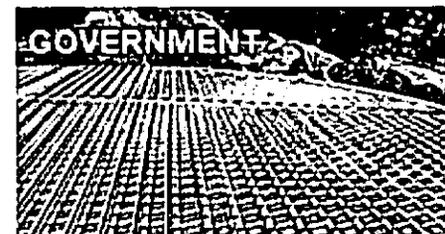
City of Salisbury

September 15, 2014

# SolarCity Overview

- **The national leader in clean energy services**

- 68,000+ customers
- 1,000+ commercial solar projects
- 400+ MW deployed
- Serving 14 states nationwide—AZ, CA, CO, CT, DE, HI, MA, MD, NJ, NM, NY, OR, PA, TX, WA and Washington DC

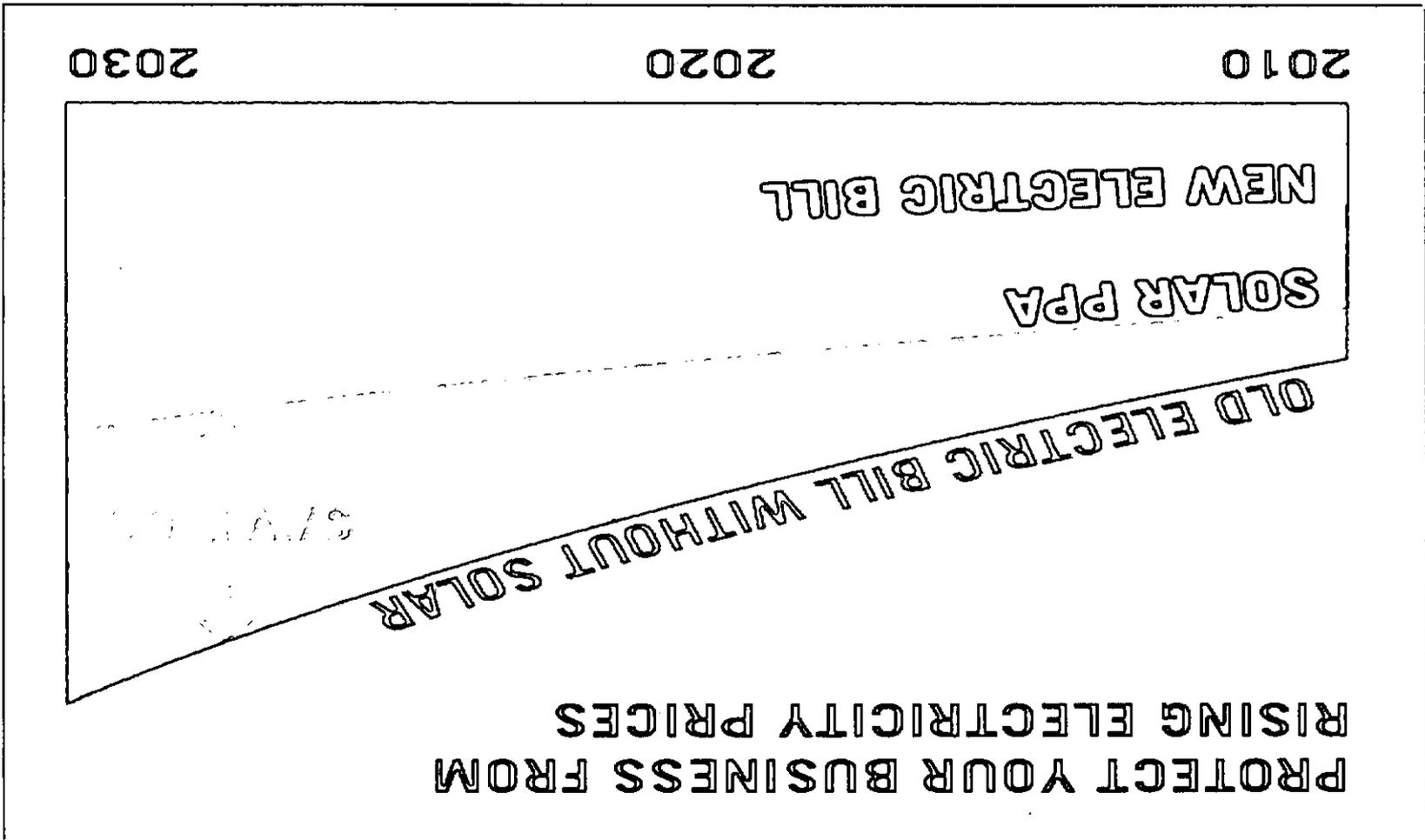


- **4,000+ Employees**
- **Raised ~\$3.4 billion in structured financing**
- **Publicly traded company since December 2012 (SCTY)**

# SolarCity Recommendation—PPA

- No capital investment
  - Pay only for the solar electricity you produce and use each month
- No cost to maintain the equipment
  - PPA comes with 20year warranty plus O&M agreement
  - No moving parts—expected to last 30+ years
- Predictable energy costs
  - Reliably forecast and control energy expenses
- Secure decades of electricity at a fixed price
  - As utility rates continue to rise, your savings will grow every year
- We combine all incentives into a low PPA price for you
  - SolarCity's PPA can leverage rebates, grant programs, tax credits and depreciation that you may not qualify for directly

# Basic PPA Structure



PROTECT YOUR BUSINESS FROM RISING ELECTRICITY PRICES

OLD ELECTRIC BILL WITHOUT SOLAR

SOLAR PPA

NEW ELECTRIC BILL

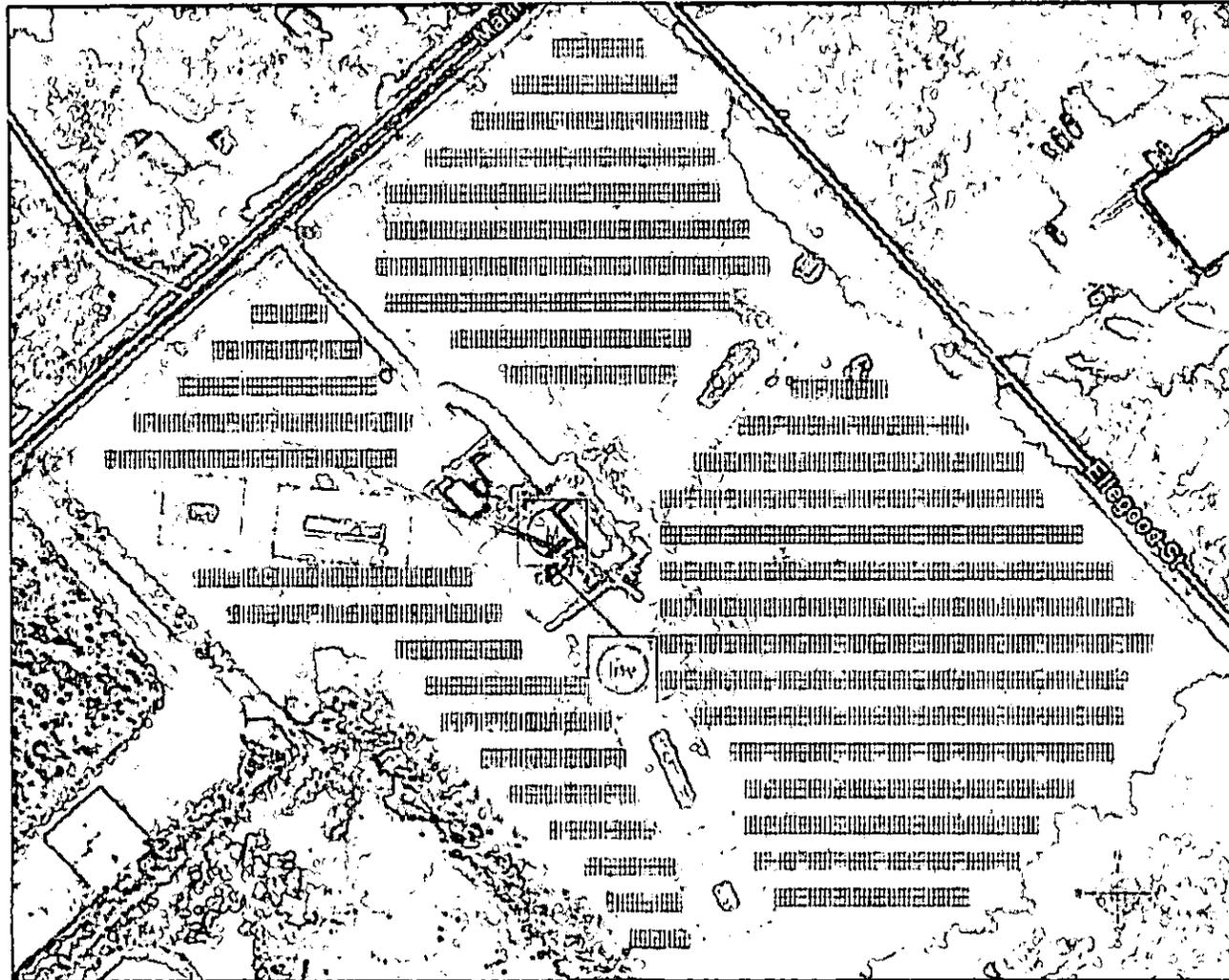
2010

2020

2030

# Tower Site - Marine Road

1259.7kW DC



**TOWER SITE  
MARINE ROAD**

SYSTEM SIZE: 1259.7 kW DC  
 SITE ADDRESS: 5749610, US

DATE: 3/23/2011  
 MODULE: TRINOSOL  
 INVERTER: SMA

DESCRIPTION  
 PV ARRAY  
 PACIFIC SYSTEM  
 STRINGS: 21 PV PANELS  
 (SEE MAP DRAWING) NOT FOR CONSTRUCTION

ARRAY INFORMATION				
Mounting Method	Module Count	tilt	Azimuth	kW DC
GRID MOUNT	4154	20	180	1259.7

**GENERAL NOTES**

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IBC AND ALL APPLICABLE LOCAL ORDINANCES.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES AND LANDSCAPE.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING ROADS AND DRIVEWAYS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES.

**SHEET NOTES**

- 1. SEE SHEET 101 FOR GENERAL NOTES.
- 2. SEE SHEET 102 FOR ELECTRICAL NOTES.
- 3. SEE SHEET 103 FOR MECHANICAL NOTES.
- 4. SEE SHEET 104 FOR CIVIL NOTES.
- 5. SEE SHEET 105 FOR STRUCTURAL NOTES.
- 6. SEE SHEET 106 FOR SPECIAL NOTES.

3055 De Anza Ave.  
 San Mateo, CA 94403  
 (415) 352-0211 (TOLL-FREE)  
 www.solarcity.com

# Project Summary

## **Savings: Significant financial benefit to the County**

This proposal will save the city the following over current grid rates:

**1.0MW DC Tower site: \$50,000 in year 1; \$1.4M over the 20-year term**

SolarCity's savings models assume a 2.1% year-over-year increase in utility rates. By comparison, per the Department of Labor & Statistics, the 20-year CAGR (compound annual growth rate or escalation) for utility rates in MD is 4.0%. As the Cities PPA rate is fixed at \$0.045/kWh over 20 years, increases in utility rates greater than 2.1% annually will result in even greater savings to the City over time.

**Local presence:** The City of Salisbury's installation and ongoing operations and maintenance will be managed out of our Beltsville, MD warehouse. SolarCity has completed over 1,000 projects nationwide with commercial, government and municipal customers. The Senior Project Manager, Jason Topercer, has worked in the solar industry since 2007 and has significant experience with multi-MW projects such as this. Whenever possible, SolarCity will utilize local subcontractors, including electrical and civil engineering.

**System design:** The solar power System is designed as virtual net metered (VNM) system. The structures are ground-mounted on pile-driven racking and will interconnect at medium voltage directly into the grid. SolarCity's PowerGuide monitoring system will be included, with an interface available to the City of Salisbury on a dedicated website, that can double as an educational and promotional tool.

# Salisbury Combined Site : Savings

Grid Avoided Cost \$0.0805/kWh

## PPA Structure

- Upfront Cost None
- PPA Rate \$0.045/kWh
- PPA Annual Escalation 0.0%
- Term 20 years

Annual Grid Escalation Rate 2.1%

- |                        |             |
|------------------------|-------------|
| ▪ Year 1 Savings       | \$50,000    |
| ▪ 20-Year Term Savings | \$1,400,000 |

## Energy Performance Guarantee



SolarCity is pleased to provide the City of Salisbury with a 100% Production Performance Guarantee. This guarantee is structured so that the PV system meets the Cities financial objectives without risk of lost production due to short term weather variations.

### How it Works

SolarCity will use industry standard modeling data and tools to create an energy production estimate for PV system after construction is complete. The expected output of the PV system and the monetary value of each kWh are recorded in the Performance Guarantee contract. Throughout the contract term, SolarCity will monitor the system to verify that it is operating properly. At regular intervals, known as "true-up terms", SolarCity will compare the total expected kWh energy production with the actual production of the system. In the event that performance does not match expectations, SolarCity will reimburse the City at the rate agreed to in the Performance Guarantee contract within 30 days of the end of each true-up term.

### Example Scenario – Power Purchase Agreement

The following scenario outlines a system that is expected to produce 1,000,000 kWh in the first true-up term. Expected production values adjusted for normal degradation for the lifetime of the system are noted in the table below.

*Table 1: Expected lifetime production assuming 0.05% module degradation*

In the PPA and scenario below, the system had a production shortfall of 50,000 kWh during the first true-up term and the customer will be reimbursed for the lost production. The two-cent per kWh value for the guaranteed energy price represents the difference between the PPA rate and the utility cost of power, as noted in the Performance Guarantee contract. The amount reimbursed to the customer at the end of the true-up term is determined by multiplying the guaranteed energy price by the production shortfall. In this case, the payout to the customer for the first true-up term would be \$1,000.00.

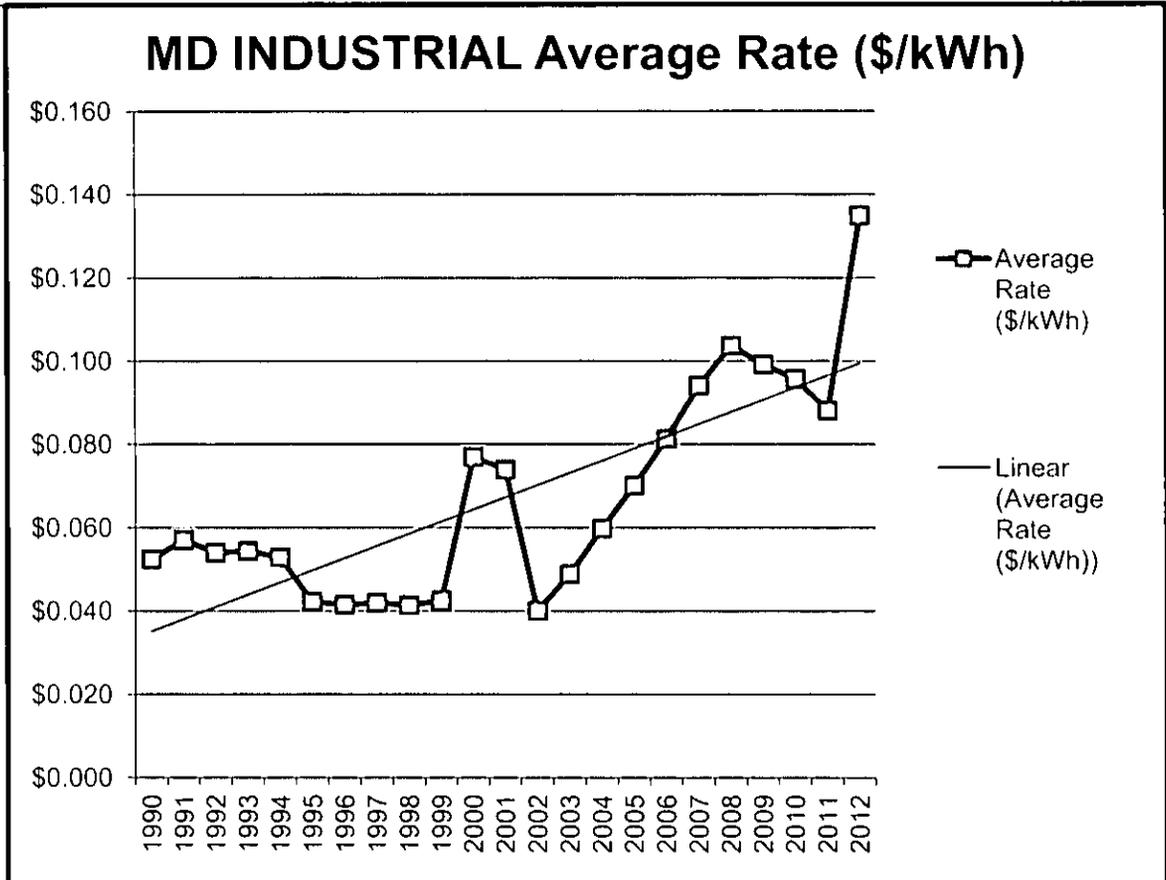
True Up Term		Guaranteed kWh Over True Up Term		Total kWh	
Years 1-5		1,000,000		1,000,000	
Years 6-10		975,249		975,249	
Years 11-15		951,110		951,110	
Years 16-20		927,569		927,569	
<b>PPA Scenario</b>					
Example Guaranteed True Up kWh	Example Actual True Up kWh	Example Utility Rate	Example Guaranteed \$/kWh Energy Price	Difference Between Utility Rate and Guaranteed Rate	Example Payment to Wiconico County
1,000,000	950,000	\$0.12	\$0.10	\$0.02	\$1,000.00

# Data taken from Dept of Labor and Statistics

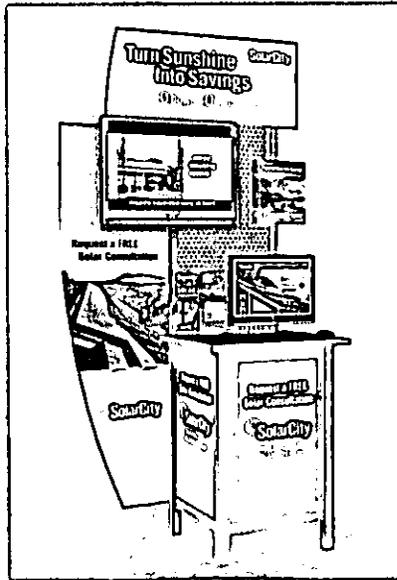
Sector	INDUSTRIAL	
State	MD	
20-year CAGR	4.0%	
10-year CAGR	11.9%	
5-year CAGR	6.8%	

Year	Average Rate (\$/kWh)	Annual Escalation
1990	\$ 0.0525	
1991	\$ 0.0571	8.06%
1992	\$ 0.0540	-5.68%
1993	\$ 0.0545	0.79%
1994	\$ 0.0530	-2.84%
1995	\$ 0.0423	-25.25%
1996	\$ 0.0415	-1.80%
1997	\$ 0.0421	1.27%
1998	\$ 0.0414	-1.50%
1999	\$ 0.0426	2.74%
2000	\$ 0.0770	44.66%
2001	\$ 0.0740	-4.05%
2002	\$ 0.0401	-84.71%
2003	\$ 0.0489	18.07%
2004	\$ 0.0599	18.35%
2005	\$ 0.0701	14.62%
2006	\$ 0.0814	13.82%
2007	\$ 0.0941	13.55%
2008	\$ 0.1037	9.24%
2009	\$ 0.0992	-4.61%
2010	\$ 0.0957	-3.59%
2011	\$ 0.0881	-8.64%
2012	\$ 0.1350	34.74%

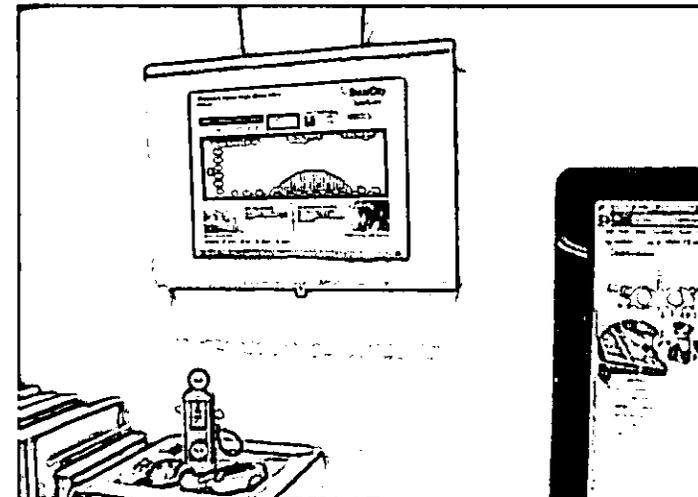
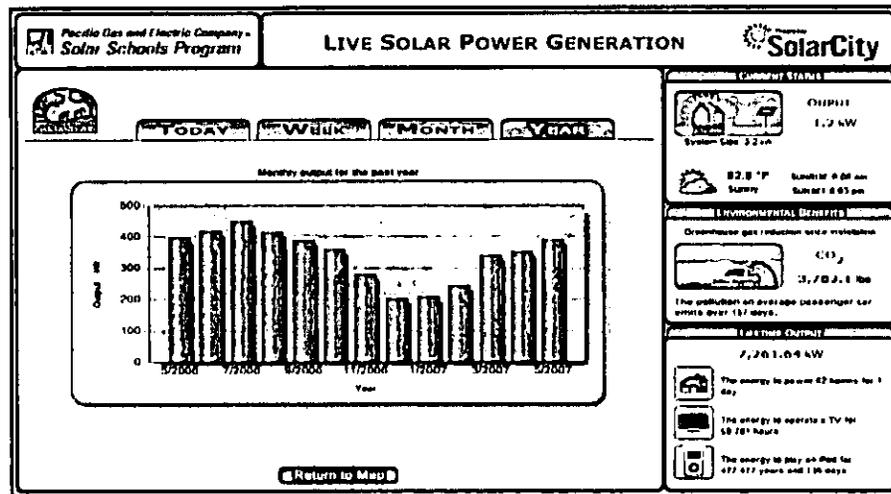


# Community Based Tools



## Solar PV Monitoring Gateways

SolarCity's PowerGuide monitoring gateway allows the viewer to observe dynamic changes in a PV system's output. This can allow the City to have a viewing portal for citizens to view the arrays productivity. Any computer can be hooked up to a screen and display current PowerGuide information. Additionally, SolarCity now offers iPad-based wall-mounted kiosks, as seen below. SolarCity can help the City find a cost-effective means of displaying PowerGuide's information in an interactive environment, and we have a history of partnering with school districts in the past to provide these resources.



PowerGuide prominently displayed on a touch-screen kiosk built from an iPad and Rhino iPad enclosure. SolarCity is an approved Rhino enclosure reseller.

# Ground Mount System





Thank You

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