



3rd Party Solar Sales
April 2012

About SolarCity

- The Leading Solar Service Provider in the U.S.
 - More than 30,000 projects completed or underway
 - Serving thousands of markets nationwide—AZ, CA, CO, DC, DE, HI, MA, MD, NJ, NY, OR, PA, TX, WA and Ontario, Canada
 - Installing ~600 new projects per month
 - #1 Market Share
- 1,600+ Employees
- Raised \$1.4 Billion in Structured Financing

High Technology



Manufacturing



Government



Education



Retail



Agriculture



Nonprofit



Multifamily Housing



Houses of Worship



SolarCity – Full Service Provider

SolarCity provides a single source for solar financing, design, installation, monitoring and maintenance.



Sales



Financing



Engineering



Installation

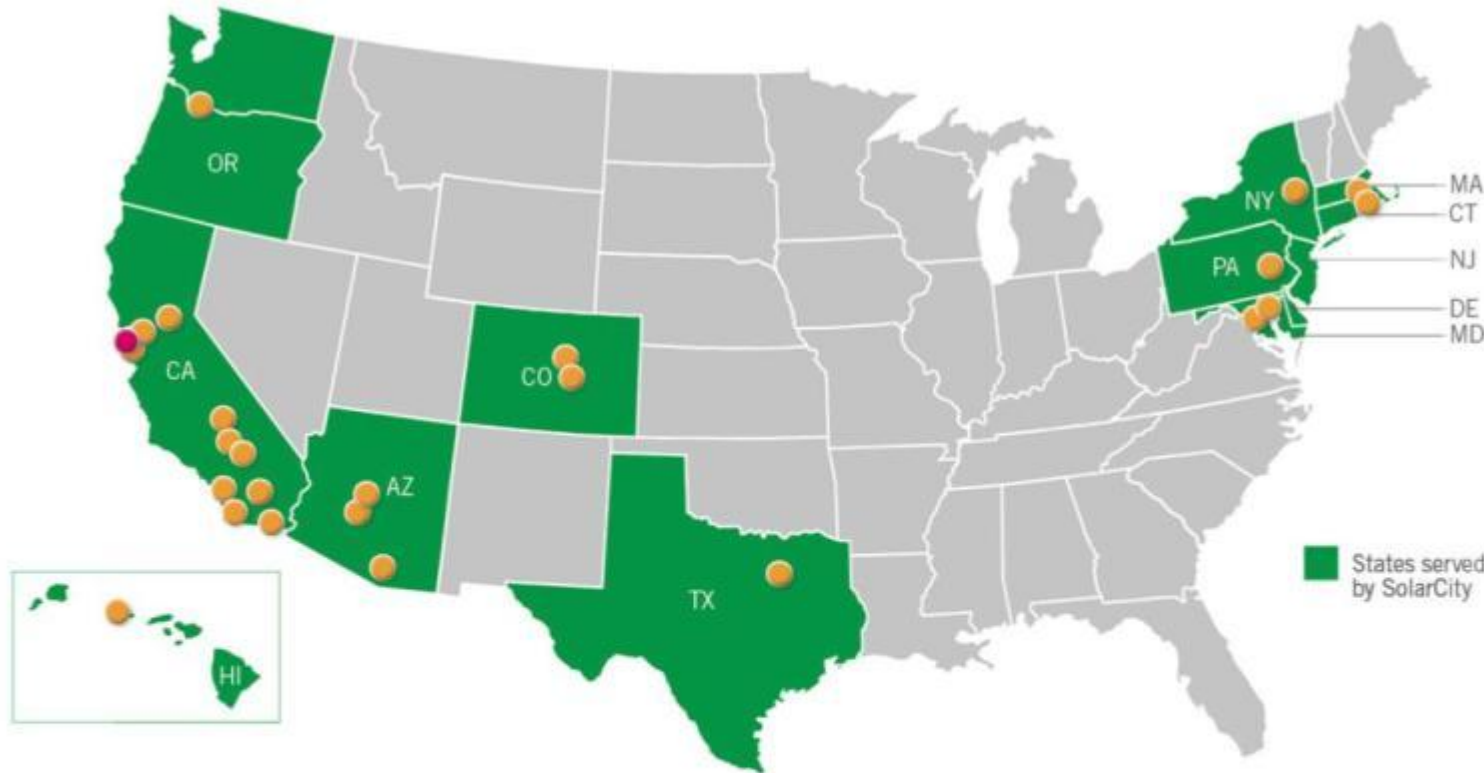


Monitoring &
Maintenance



Products &
Services

SolarCity Locations & Regional Operations Centers



● Headquarters

San Mateo, CA

● Regional Operations Centers

Deer Valley, AZ	Foster City, CA	Sacramento, CA	Mililani, HI	Cranbury, NJ
Phoenix, AZ	Fresno, CA	San Diego, CA	Billerica, MA	Albany, NY
Tucson, AZ	Lancaster, CA	Santa Ana, CA	Raynham, MA	Portland, OR
Bakersfield, CA	Los Angeles, CA	Denver, CO	Jessup, MD	Broomall, PA
Berkeley, CA	Pomona, CA	Parker, CO	Silver Spring, MD	Dallas, TX

Arizona

California

Colorado

Delaware

Hawaii

Maryland

Massachusetts

New Jersey

New York

Ohio

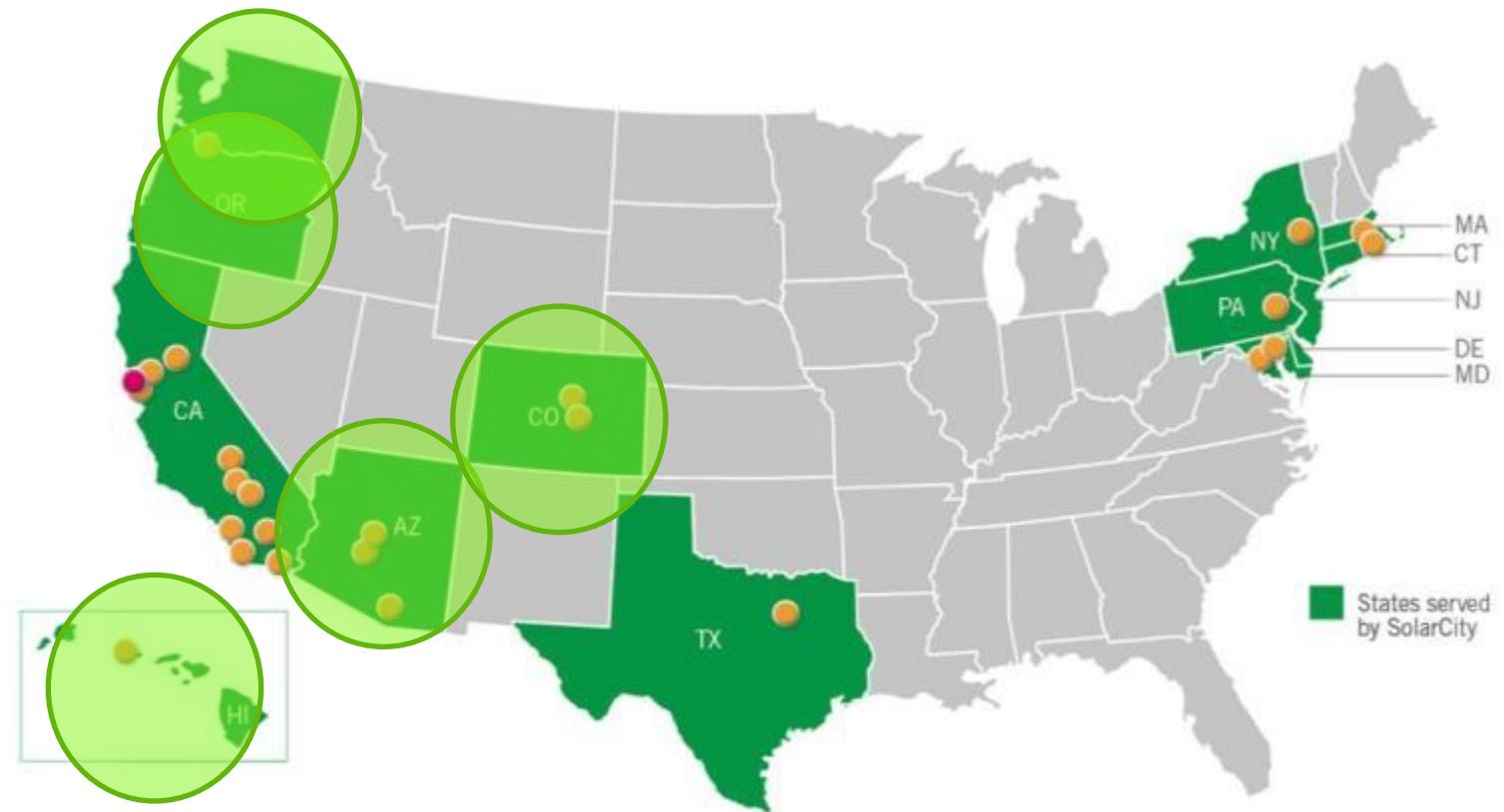
Oregon

Pennsylvania

Texas

Wash D.C.

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Oregon

Pennsylvania

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Wash D.C.



Total System Size	23 MW
Installed	2010-2011
Type	Ground mount, Rooftops and Carports
Locations	90 stores installed; 120+ by end of 2013
Industry	Retail

Walmart

Multiple locations in CA, AZ, NJ and CO

> 30 MWs installed by end of 2011

> 120 systems under contract



Slide #
SolarCity CONFIDENTIAL



SolarStrong

Multiple locations nationwide

> Targeting 120,000 base housing systems



System Size	6+ MW
Installed	2011
Type	Ground mount and Residential Rooftops
Location	Tucson, AZ
Industry	Government/Military

Davis-Monthan Air Force Base

Soaring Heights Community

First SolarStrong project



System Size	394 kW
Installed	October 2010
Type	Car Port
Location	Hillsboro, OR
Industry	High Tech

Intel

Jones Farm Campus

SolarCity and Home Depot



The screenshot displays the SolarCity website. At the top left is the SolarCity logo, followed by The Home Depot logo. To the right is a live chat icon and a button that says "Speak to a Live Rep Now". Below the logos is a green sidebar with navigation links: "Solar Financing", "Photo Gallery", "Featured Video", "Frequently Asked Questions", "Solar Seminars", "EV Charging Stations", and "Request a FREE Quote". The main content area features a large image of a house with solar panels and a swimming pool, with the text "Affordable Solar Power" overlaid. Below the image is a section titled "The Home Depot's Trusted Partner" with text explaining the partnership and a promotional offer: "This month you can save \$1,000 on solar power with SolarCity and The Home Depot! Use promo code FEB1000 to request your coupon." At the bottom left is a form to "Request More Information and a FREE Quote for Your Home." with fields for First Name, Last Name, Email, Street Address, and City / State.

SolarCity

THE HOME DEPOT

Speak to a Live Rep Now

Affordable Solar Power

The Home Depot's Trusted Partner

The Home Depot works only with home service professionals who meet the highest standards for experience, know-how and customer service. This month you can save \$1,000 on solar power with SolarCity and The Home Depot! Use promo code FEB1000 to request your coupon.

Request More Information and a FREE Quote for Your Home.

First Name

Last Name

Email

Street Address

City / State

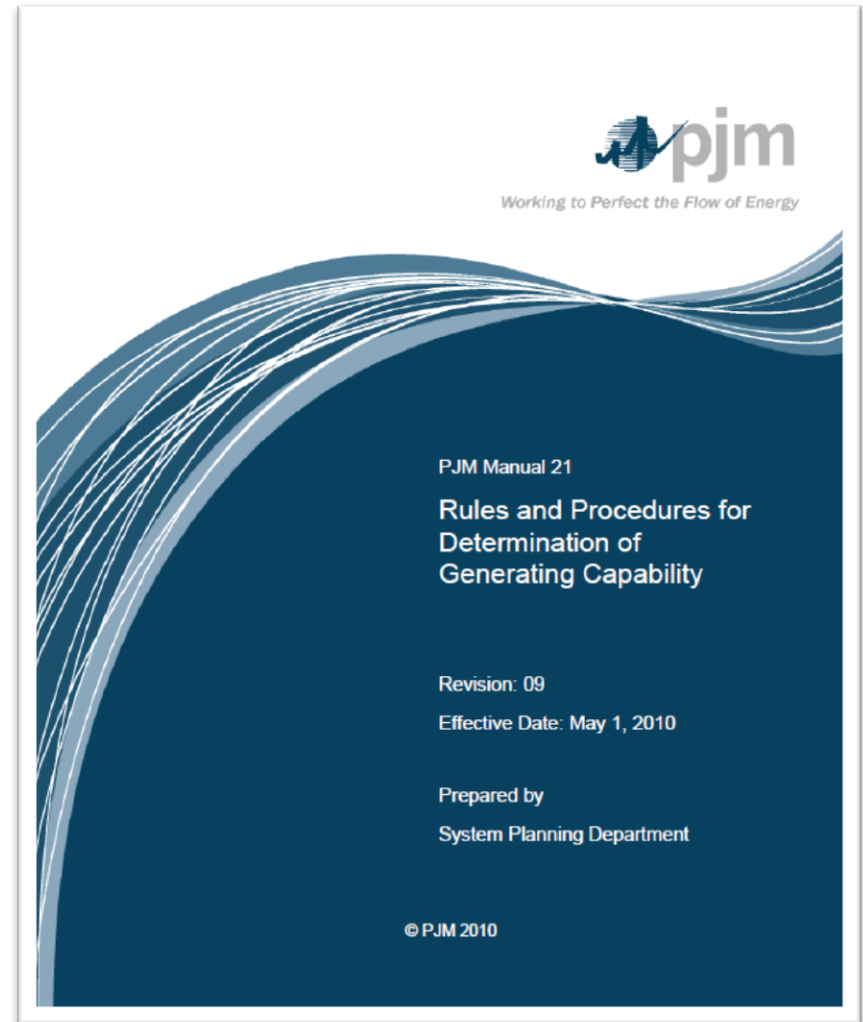
- SolarCity offers solar through 400 Home Depot Stores.

Will 3rd Party Solar Raise Rates for Everyone?

- Assume a customer cuts 1000 kWh /year by updating the “beer fridge” in the garage.
- Assume their neighbor cuts 5000 kWh / year by putting in solar panels.
- Is the second customer raising everyone’s rates?
 - If using fewer kWh from the utility is bad, energy efficiency should be discouraged.
- In fact, solar energy in many ways saves all other ratepayers money – it produces most during the hot Summer afternoons when the grid is most stressed and power is most expensive.

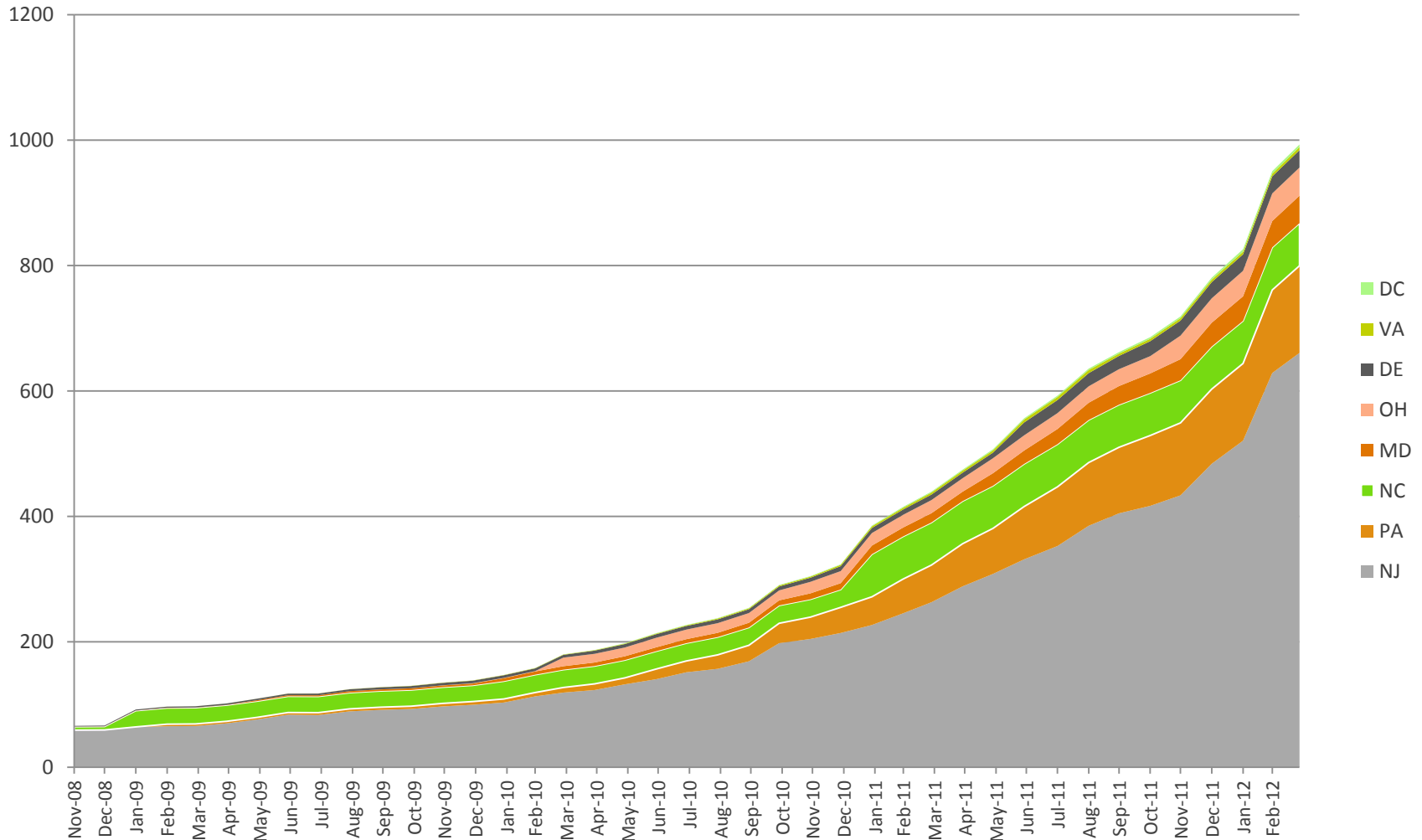
Will 3rd Party Solar Cause Unreliability?

- If 1 solar kW hurt reliability (needed 1 backup kW,) “capacity value” would be **negative 100 percent.**
- If 1 solar kW didn’t hurt or help, “capacity value” would be **zero percent.**
- If 1 solar kW knocked out the need for 1 backup kW, “capacity value” would be **positive 100 percent.**
- In PJM market, it is **positive thirty-eight percent.**
- In Colorado, it is **40%.**



Has 3rd Party Solar Caused Unreliability?

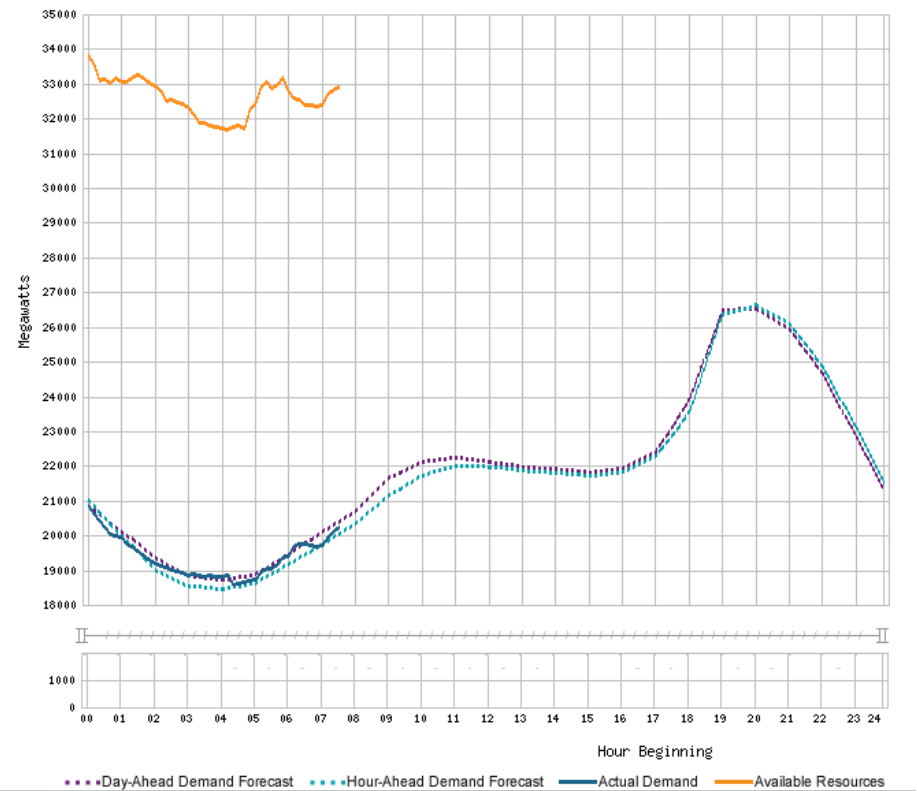
PJM solar MW (DC) – NC is 7%



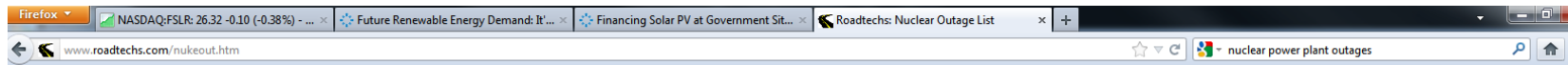
Will 3rd Party Solar Cause Unreliability?

- How does the grid know what is in the contract?
- A residential solar system might be 5 kW. A hair dryer would be about 1.2, a microwave oven 1.5.
 - It's hard to predict how many microwaves will be turned on twenty minutes from now.
 - It's a little easier to predict how much solar generation will be active twenty minutes from now.
 - It's *much* easier to predict how much solar generation will be operating tomorrow.
 - Especially if it's spread around; one cloud can't cover the whole state.

Solar and Reliability



Intermittency is Not Unreliability -24? 7? 365?



the interactive site for the traveling contractor
Roadtechs.com
 home >> nuclear >> outage list

tuesday, march 27, 20

Exelon What if...you did something
 to make your career soar?
www.exeloncorp.com

Please Note:

We depend on the users of Roadtechs.com for the outage dates shown below. If you can provide updated outage info, please click on the "Change" link for the unit you are updating.

[Click here to add a new plant to the list.](#)

[Click here to download the list in a spreadsheet compatible CSV format.](#)

[A][B][C][D][E][F][G][H][I][J][K][L][M][N][O][P][Q][R][S][T][U][V][W][X][Y][Z]

Plant & Unit	City	ST	Country	Owner	Rx Type	Nominal MWe (note 1)	Typical Outage Length (days)	Typical Cycle Length (months)	Estimated Outage Start Date (note 2)	Notes	Submit Change
Angra 1	Angra Dos Reis	Angra Dos Reis	Brazil	EletroNuclear (ETN)	PWR	857	80	18	No Data	Reactor Head Replacement	change
ANO 1	Russellville	AR	USA	Entergy	PWR	891	31	18	03/13/13		change
ANO 2	Russellville	AR	USA	Entergy	PWR	1050	35	18	09/15/12		change
Beaver Valley 1	Shippingport	PA	USA	FirstEnergy	PWR	911	28	18	04/09/12		change
Beaver Valley 2	Shippingport	PA	USA	First Energy	PWR	800	28	18	09/26/12		change
Bellefonte 1	Hollywood	Alabama	USA	Tennessee Valley Authority	PWR	1256			No Data		change
Braidwood 1	Braceville	IL	USA	Exelon	PWR	1200	23	18	04/16/12		change
Braidwood 2	Braceville	IL	USA	Exelon	PWR	1200	17	18	10/15/12		change
Browns Ferry 1	Athens	AL	USA	Tennessee Valley Authority	BWR	1100	25	24	10/22/12		change
Browns Ferry 2	Athens	AL	USA	Tennessee Valley Authority	BWR	1100	40	24	03/16/13		change
Browns Ferry 3	Athens	AL	USA	Tennessee Valley Authority	BWR	1100	45	24	04/07/12		change
Bruce 1	Tiverton	Ontario	Canada	Bruce Power	CANDU	850	45	24	No Data	Currently under rebuild	change
Bruce 2	Tiverton	Ontario	Canada	Bruce Power	CANDU	850	45	24	No Data	Currently under rebuild	change
Bruce 3	Tiverton	ON	Canada	Bruce Power	candu	800	23	20	No Data		change
Bruce 4	Tiverton	ON	Canada	Bruce Power	CANDU	950	30		No Data		change
Bruce B 5	Tiverton	ON	Canada	Bruce Power	candu	950	45	24	No Data		change
Bruce B 6	Tiverton	ON	Canada	Bruce Power	CANDU	950	53		No Data	feeder replacement & C.I.G.A.R	change
Bruce B 7	Tiverton	ON	Canada	Bruce Power	CANDU	950	45	24	No Data		change
Bruce B 8	Tiverton	ON	Canada	Bruce Power	CANDU	950	45	24	No Data	feeder replacement	change
Brunswick 1	Southport	NC	USA	Progress Energy	BWR	975	42	24	03/03/12		change
Brunswick 2	Southport	NC	USA	Progress Energy	BWR	980	38	24	No Data		change
Byron 1	Byron	IL	USA	Exelon	PWR	1200	26	18	09/10/12		change
Byron 2	Byron	IL	USA	Exelon	PWR	1200	30	18	No Data		change
Callaway	Fulton	MO	USA	Ameren	PWR	1373	27	18	No Data		change
Calvert Cliffs 1	Lusby	MD	USA	Constellation Energy	PWR	800	51	24	02/05/12		change
Calvert Cliffs 2	Lusby	MD	USA	Constellation Energy	PWR	800	30	24	05/18/12		change
Catawba 1	York	SC	USA	Duke Power Company	PWR	1100	29	18	11/24/12		change
Catawba 2	York	SC	USA	Duke Power Company	PWR	1100	26	18	03/10/12		change
Clinton	Clinton	IL	USA	Exelon	BWR	1017	21	23	No Data		change

- roadtechs home
- nuclear
- petro-chem/fossil
- alternative energy
- electric t&d
- construction
- homeland security
- shipyard/marine
- computer
- aerospace
- overseas
- medical/pharm
- search jobs
- rss / jobfeeds
- post stats
- lodging
- classifieds
- employer registration
- buy banner ads
- e-mail roadtechs
- user agreement
- other services
- help

Search Jobs

[Help](#)



Why do Businesses Not just Buy With Cash?

- Why do businesses lease space per square foot instead of buying buildings?
- Why do businesses lease copiers per page instead of buying copiers?
- Why do businesses rent trucks per mile instead of buying them?

We find: Capital constraints, desire to focus on core business, desire to have full performance guarantee. Nonprofits and state agencies see solar pricing drop by half when PPAs, not just leases are allowed.

Why is there a Monopoly on Electric Service?

- The grid as a “natural monopoly” where the market fails.
 - The government steps in to set “fair prices”.
- Should the government extend these protected monopolies into other businesses, by banning competition?
 - Could someone seeking solar get competing bids?
 - **Yes.** In fact most do.
- Where does the limit lie?
 - “What happens between two consenting adults, behind the meter”
 - Safety, reliability and interconnection are the state’s business
 - Banning competition is not

3rd Party Solar

Is	Is Not
A privately negotiated contract, in a competitive market	A Government-Protected Monopoly
Reducing a Customer's Own Load from a system on their Own Property	Deregulating The Market, Allowing Private Development of Power Plants Miles Away
A Source of Generating Capacity	A Threat to the Grid
A Way to Leverage Private Capital	A Means of Raising Rates
A Way to Enable Nonprofits to Go Solar	