

Solar Energy Deployment The Smart Grid – Solar Intersection

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SoCore Energy, An Edison International Company







Agenda

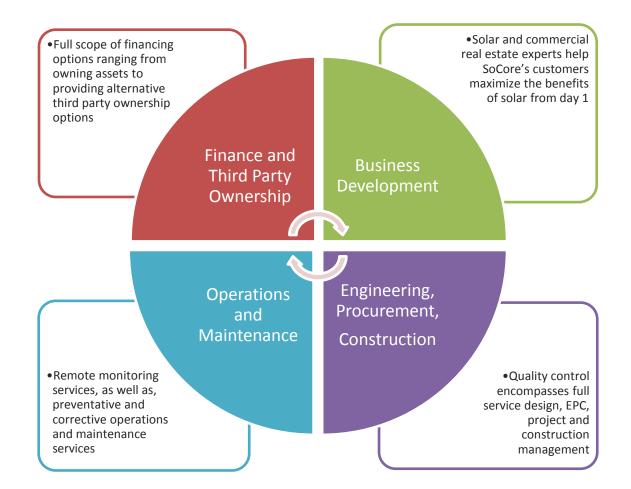
- Intro to SoCore
- Our Target Market and Customers
- Industry Trends and Utility Involvement
- Smart Grid Solar Intersection
- Great Lakes Region?







Intro to SoCore









Our Target Market & Customers



Walgreens

- Phase I rollout project (over 53 locations in Ohio)
- Unique financing structure from the State of Ohio
- Negotiated long term SREC deal with First Energy Solutions
- Starting Phase II





- Phase I complete
- Phase II, 30 MW multi-state portfolio
- Contract signature to system commissioning in less than one month
- Met the JCP's critical holiday blackout period specifications



Kimco Realty Corporation

- Country's largest owner of strip shopping centers
- SoCore has completed Phase I of multi-site rollout
- SoCore selected as exclusive partner for Phase 2





- · World's largest furniture retailer
- Selected SoCore Energy developed four stores totaling 4.5 MW
- Each development largest distributed solar project in their respective State



SIMON PROPERTY GROUP

- Owns malls in 43 states
- SoCore selected as partner for NJ Premium Outlet Mall
- Successfully won SREC bid program in NJ, currently in construction





- Starting 900 kW system for IBM MASS HQ in May
- Analyzing Phase II over multiple state single tenant assets
- Advised unique financing structure so REIT could monetize incentives







Industry Trends and Utility Involvement



- Edison International acquired SoCore Energy as of August 5, 2013
- #211 of Fortune 500 Companies in 2012
- \$12 Billion+ in revenue
- Makes SoCore Energy one of the most strategically positioned solar developers
- Provides SoCore with
 - Greater financial stability
 - Better economies of scale pricing
 - More creative financial and product solutions





Smart Grid – Solar Intersection

New Solar Value Streams: Reactive Power



In electric power <u>transmission</u> and <u>distribution</u>, **volt-ampere reactive (var)** is a unit used to measure <u>reactive power</u> in an AC electric power system. Reactive power exists in an AC circuit when the current and voltage are not in phase.

What does it mean? Existing solar inverters can bring responsive reactive power compensation to counter this impact and reduce electric bills, <u>BUT you need to know to do it.</u>





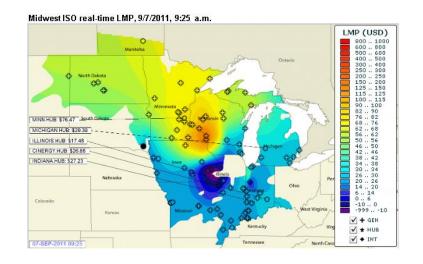


Smart Grid – Solar Intersection

New Solar Value Streams: Ancillary Grid Benefits

In combination with storage (batteries etc.), solar projects can supply ancillary grid benefits such as capacity and frequency response into the local grid operator / iso markets





Available in PJM
Requires market participation
and management skills

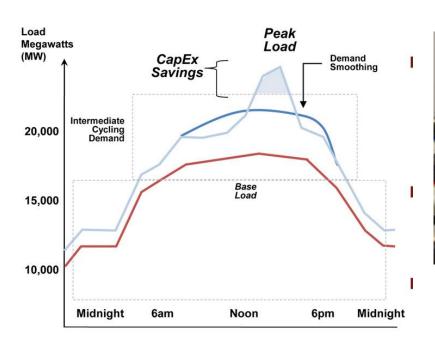






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New Solar Value Streams: Demand Response and Generation Response



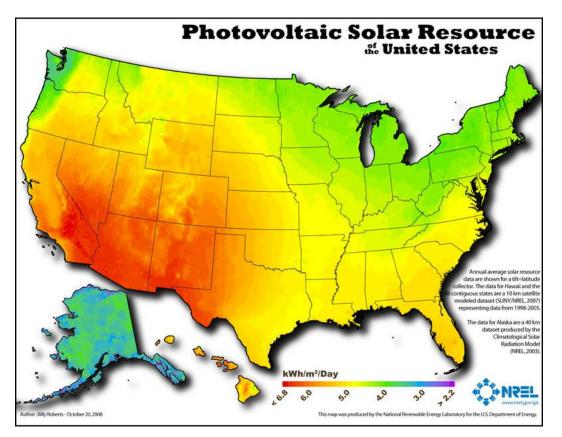


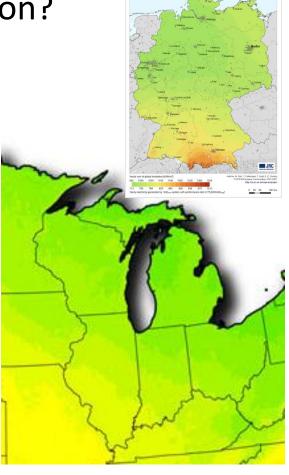






Great Lakes Region?











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