
SOLAR PROGRAMS

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May 6th, 2016



ABOUT THE PRESENTER



Shannon Wagner is the Simply Solar pilot program manager for CPS Energy. She has 31 years of industry (gas and electric) experience in audit, finance, treasury, business development, and product development.

BBA, The University of Texas at San Antonio

MBA, Webster University

Certified Treasury Professional

ABOUT CPS ENERGY

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- Largest municipally-owned natural gas and electric utility
 - Acquired by the City of San Antonio in 1942
 - Serves over 1.1 million customers (765k electric and 335k natural gas) in and around a 1,515-square-mile service area
 - #1 in Texas and #7 nationally for solar generation capacity
 - #1 in Texas for demand response
 - Customers' combined (electricity and natural gas) energy bills rank among the lowest nationwide

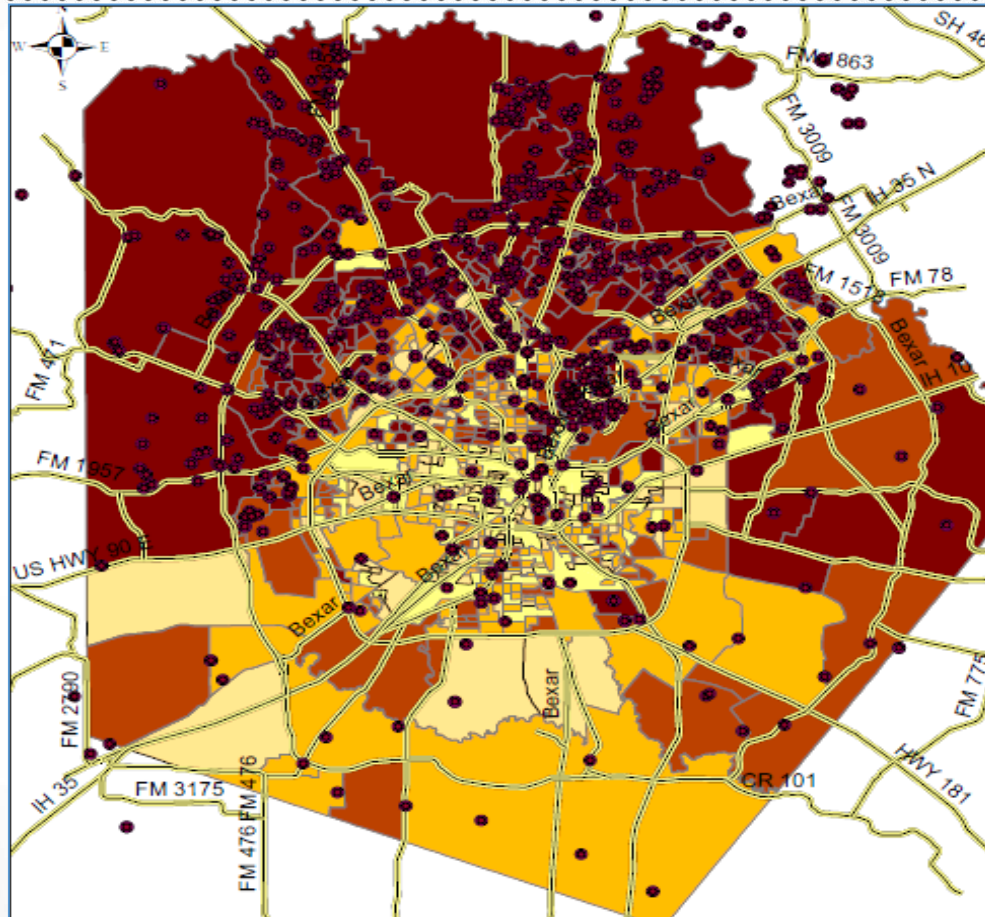
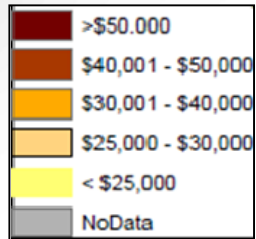


SOLAR PORTFOLIO

Utility Scale (FY2017)	500 MW
Private Ownership/Net Metering	39 MW
• <i>Add'l \$30M authorized</i>	~30 MW
Roofless Solar Pilot	1 MW
SolarHostSA Pilot	<u>5 MW</u>
Total Expected	575 MW

SOLAR ADOPTION

Median Income:



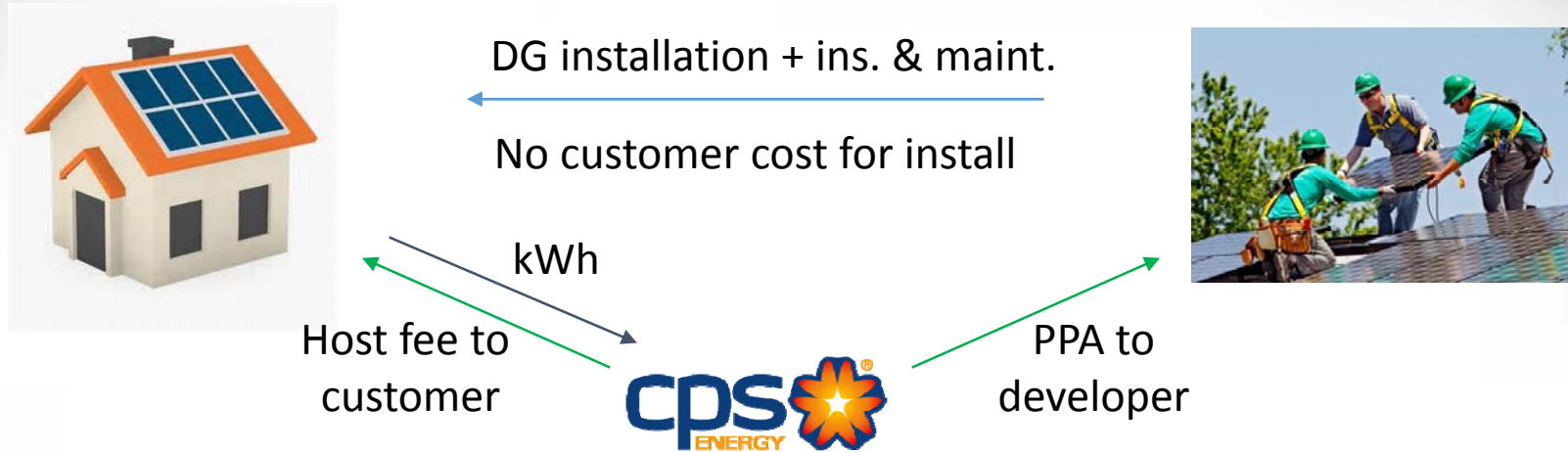
- Solar DG concentrated in more affluent neighborhoods
- CPS Energy paid out \$50M in rebates & approved another \$30M
- Funding for rebates covered by all customers but used by a select group
- Solar Pilot programs are designed to address these issues



PILOT OBJECTIVES

- Broaden DG availability across San Antonio
 - Smart inverters, distribution grid analytics
 - Solar benefits to all customers (regardless of income, roof, home ownership)
- Full fixed cost recovery
- Diversify generation portfolio, hedge uncertainties around carbon & other environmental regulations (water)
- More rapid solar expansion with lower, fixed costs
- Reduce cost & complexity for developers
 - Provide steady demand for solar DG
 - Gain benefits of purchasing in bulk, rather than one-off

NEW OFFER: SOLAR HOST

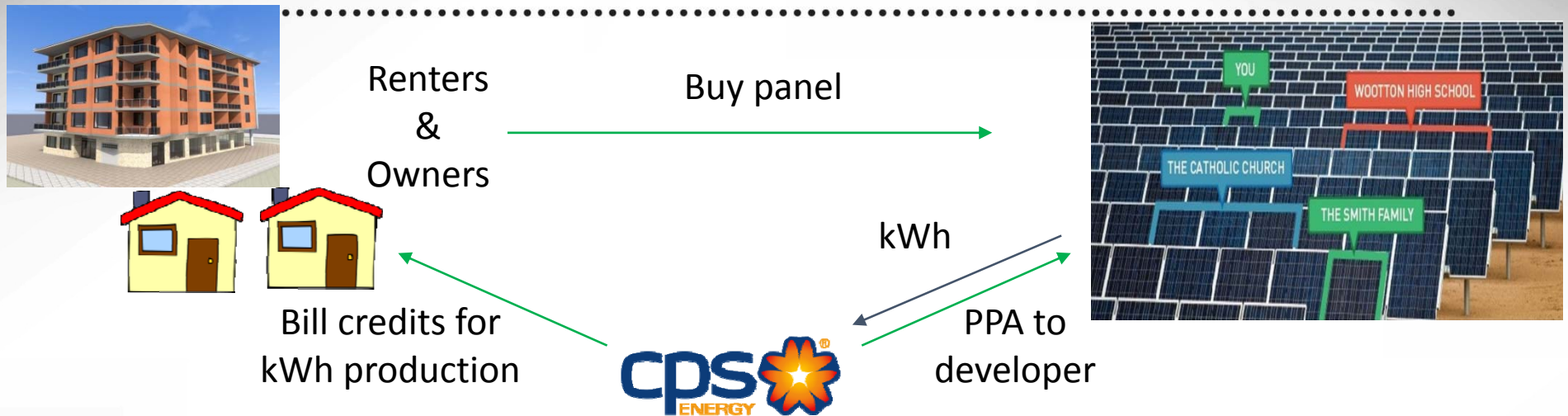


- No cost to customer
- Local installers
- Developer owns panels and sells power to CPS Energy
- Host fee to customer (cents/kWh) for 20 years
- Customer must own home/premise

- Roof must face south or west and be in good condition
- Developer pays maintenance & insurance
- Open to commercial or residential customers

Program includes the use of smart inverters at every installation & DERMS for ERCOT market integration

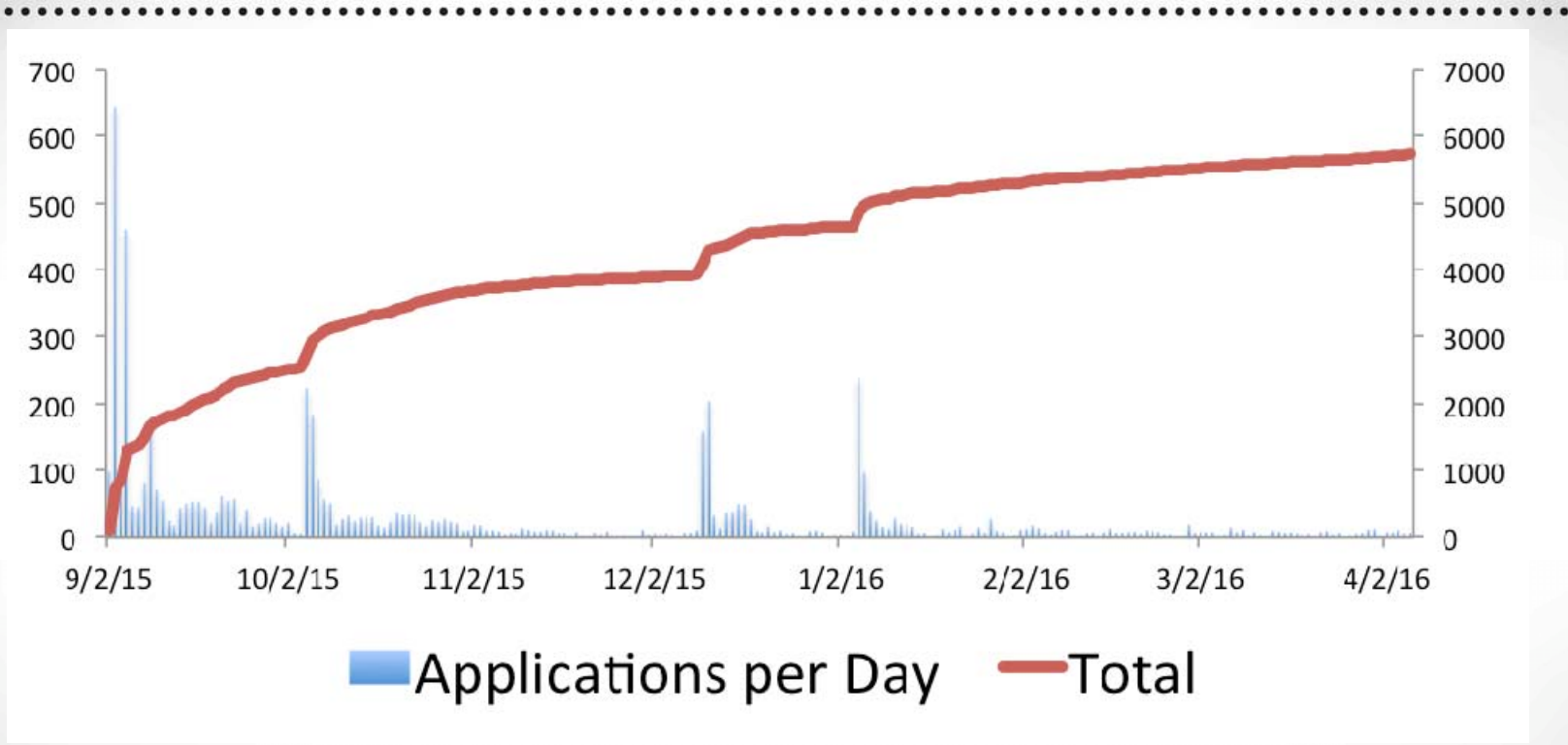
NEW OFFER: ROOFLESS SOLAR



- Customer owns panel(s) & gets bill credit for power produced for 25 years
- Open to either owners or renters, commercial or residential customers
- Entry point \$400 (lower after rebates and tax incentives)
- Nothing on your roof; no roof required
- Customer pays no maintenance, insurance, etc.
- Live anywhere in CPS Energy service area
- Sell or gift panels at any time
- Utility-approved siting

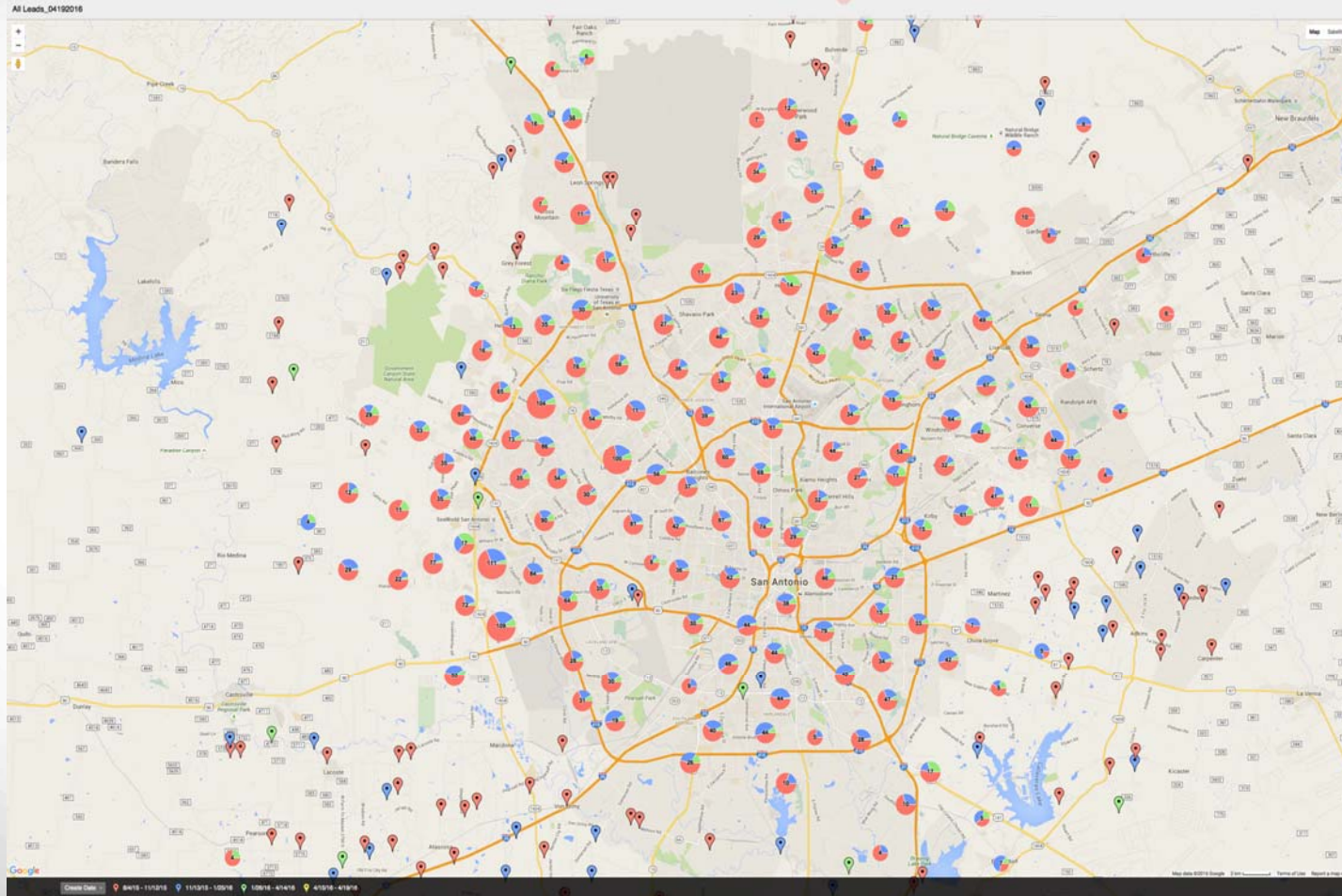
- Appeals to traditional private investors + renters
- Resolves net metering concerns for utility

MARKET RESPONSE – SOLAR HOST



- Oversubscribed at 5MW; applications closed 4/2016
- 50MW in applications, 15MW expected to pass inspection

SOLAR HOST APPLICATIONS



ROOFLESS SOLAR

- Site mobilization began 3/2016
- Approx. 300kW in subscriptions received thus far; primarily residential
- Rebates applicable
- Marketing effort being ramped up as construction progresses

NEXT STEPS

- Customer surveys
- Program evaluation early summer
- Recommendations mid-summer
- Roll-out full program fall/winter