



FC Utilities Solar Power Purchase Program – Lessons Learned

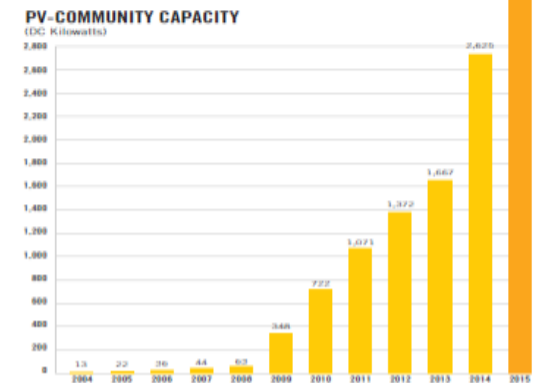
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Norm Weaver

## Significant 2 year expansion of distributed solar

2014-2015

- Roof top solar 930 kW
- Community Solar 620 kW
- Power Purchase Program 3700 kW



## SP3

- Target of 4 MW new local solar to meet Colorado RES, 20 year PPA funding approved by City Council
- Projects Solicited in 2013/2014, 42 projects offered totaling 12 MW, shortlist selection by lottery (a reverse auction was considered)
- Final outcome of 11 project totaling 3.7 MW

## **“Feed-in Tariff” Features:**

- Two project tiers - under 100kW & 100 to 1000kW
- PPA offer selected to balance attractive ROI and cost of RES compliance including 3X multiplier.
- Price tiers to encourage smaller projects - \$0.18/kWh for smaller, \$0.15/kWh for larger
- Interconnection “in front of the meter”

# Wholesale “Buy-Sell” Arrangement

## “All Requirements” Relationship

- MOU with **Platte River Power Authority (PRPA)**
- PRPA named as beneficial recipient of energy thence included in Fort Collins wholesale power bill
- PRPA credits Fort Collins for avoided costs including capacity, transmission losses and emissions reduction.
- Fort Collins retains all environmental attributes towards Colorado RES compliance

- CIS was “adapted” for PPA payments – bill credit acts as invoice and basis for payment
- Behind-the-Meter installations accommodated by a dual meter approach – one meter for SP3 payments and one aggregated with host site meters to avoid “net metering”

*(One meter cannot serve a dual function in the CIS world – who knew !?)*

- 7 sites under 100kW, 4 >100kW sites
- **600** kW under 100kW, **3100** kW >100kW (2 at 1000kW)
- 7 host site owned and 4 third party owned
- 3 of the larger projects “behind-the-meter”
- 4 solar EPC integrators completed the final selected projects.

- As an indication of the maturity of the solar business:
  - 14 out of 25 (56%) shortlisted projects were withdrawn
- Shortlisted projects withdrawn:
  - 10 under 100kW sites (800kW),
  - 4 >100kW sites (2100kW)
- No sites remaining on the SP3 waitlist



- Limited experience with green field planning & zoning
- Multiple submittals on the same tract
- Late due diligence on roof structural limitations
- Ambiguous commitment by host site
- Site issues - in floodplain, no legal access
- Breakdown of site lease negotiations
- Unanticipated site costs (interconnect, ditch companies,...)

- With acceptable ROI, the market will respond.
- Additional pre-screening may be needed for project shortlisting.
- Lottery not preferred by solar industry – a better approach?



*Abstract*

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Fort Collins Utilities launched a feed-in tariff program in 2013 seeking to install over 4MW of new local solar. This presentation will discuss some of the lessons learned including budget and PPA price setting, innovative benefit sharing under our all-requirements contract with power provider Platte River Power Authority, project turnover (approaching 2/3rds!) and metering adventures. (3:30-4:00 PM , Thursday, Oct 1)

### SP3 Site Summary

Host Site	Owner	Developer	Size (kW)	SP3 class
Scotch Pines Village	Scotch Pines Village	Bella Energy	96	1
RCD Plaza	RCD Plaza	Namaste Solar	80	1
Intel Carport	Intel	Solar City	997	2
MotherLove Herbals	MotherLove Herbals	Bella Energy	70	1
CSU Braiden Hall	Solaris Energy	Namaste Solar	99	1
New Belgium Brewery	New Belgium Brewery	Namaste Solar	99	1
Woodward	Woodward Inc.	Douglas Colony	125	2
CSU Main Campus				
Student Rec Center	Solaris Energy	Namaste Solar	544	2
Parmelee Hall	Solaris Energy	Namaste Solar	139	2
Vet Teaching Hospital	Solaris Energy	Namaste Solar	229	2
Edwards Hall	Solaris Energy	Namaste Solar	92	2
FCHA Redtail Ponds	FCHA	Bella Energy	59	1
CSU Concert Hall ("UCA")	Solaris Energy	Namaste Solar	99	1
1900 W. Laporte	Oakleaf Energy Partners	Bella Energy	999	2
Total			3727 kW	

