

Municipal Aggregation Options for Community Solar in Illinois

A PRESENTATION FOR THE FOX VALLEY SUSTAINABILITY NETWORK

BY THE

ILLINOIS COMMUNITY CHOICE AGGREGATION NETWORK



Overview

Equity Issue for Community Solar

Challenging Economics for Small Accounts

Municipally Aggregation & Community Solar

Recommendations

Equity Issue for Community Solar

Projected Annual Payments for Illinois RPS (2015)			
Utility	Small Accounts	Large Accounts	All Accounts
ComEd	\$74,198,412	\$109,017,407	\$183,215,819
Ameren	\$15,794,802	\$37,247,391	\$53,042,193
MidAmerican	\$807,981	\$1,365,526	\$2,173,506
Total	\$90,801,194	\$147,630,325	\$238,431,518
Allocation	38%	62%	100%

Small Accounts will pay ~40% of the entire RPS, but most Community Solar developers are focusing on selling subscriptions to commercial accounts

Equity Issue for Community Solar

Subscription Acquisition/Management Cost Scenarios for Community Solar				
Small Accounts				
Acquisition/Management Cost (\$/Watt)*	Average Subscription (Watts)	Subscriptions per Community Solar Resource	Cost of Customer Acquisition (Total)	Cost of Customer Acquisition (\$/kWh)
\$0.2600	3,000	667	\$520,000	\$0.009198
\$0.3300	3,000	667	\$660,000	\$0.011675
\$0.4400	3,000	667	\$880,000	\$0.015566
Large Accounts				
Acquisition Cost/Watt**	Average Subscription (Watts)	Subscriptions per Community Solar Resource	Cost of Customer Acquisition (Total)	Cost of Customer Acquisition (\$/kWh)
\$0.0100	666,667	3	\$20,000	\$0.000354
\$0.0150	666,667	3	\$30,000	\$0.000531
\$0.0200	666,667	3	\$40,000	\$0.000708

The problem for Small Accounts

- High acquisition and ongoing management costs
- Costs not covered by added incentives set by IPA
- Represent a cost premium to Community Solar developer

The advantage for Large Accounts

- Low acquisition and ongoing management costs
- Perceived ability & willingness to pay
- Leave more profit for Community Solar developer

* Community Solar Economic Value Proposition, West Monroe Partners, 4/2017

** Informal survey of community solar developers

Challenging Economics for Small Accounts

High account acquisition & management costs

- Will lead higher subscription costs

Low on-bill credits valuation

- Default rate customers (Energy + Capacity + Purchased Electricity Adjustment)
- RES & Aggregation customers (Energy Only)

Variable on-bill valuation

- Difficult to predict savings or losses

Marginal Economics for Small Accounts (on default rate)

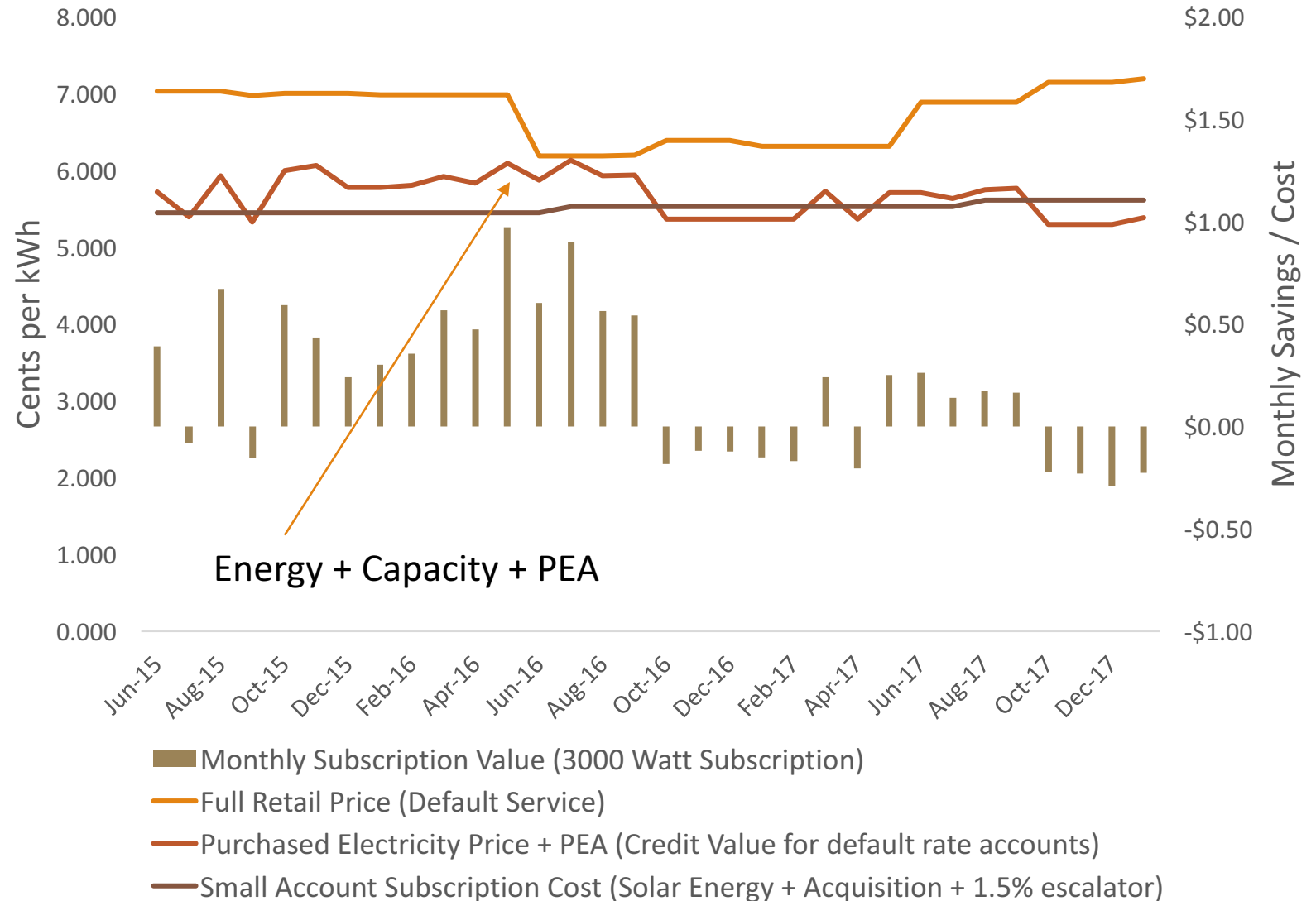
Assumptions

- Contract Period: 6/15-12/17
- 1 kW subscription
- Subscription Cost of \$0.0545/kWh, 1.5% annual escalator
- Subscription Value is:
Energy + Capacity + PEA
Account on default rate

Results

- 20 months w/Savings
- 12 months w/Losses
- Total Value: \$6.70 savings

Community Solar Value Analysis: Small Account on ComEd Default Service



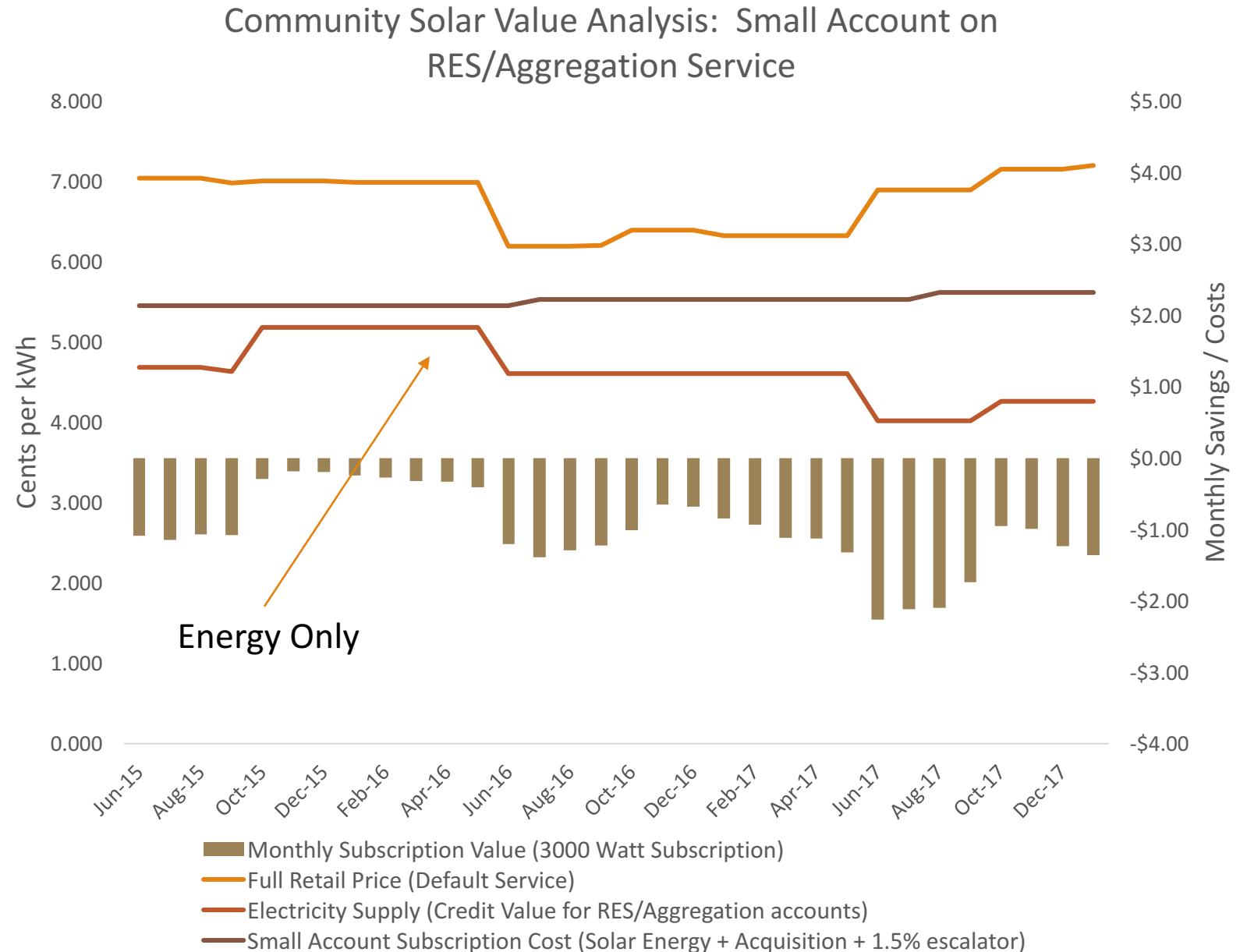
Negative Economics for Small Accounts (on ARES rate)

Assumptions

- Contract Period: 6/15-12/17
- 1 kW subscription
- Subscription Cost of \$0.0545/kWh, 1.5% annual escalator
- Subscription is **Energy Only**
Account on ARES or Aggregation rate

Results

- 0 months w/Savings
- 32 months w/Losses
- Total Value: \$32.26 in losses



Municipal Aggregation & Community Solar

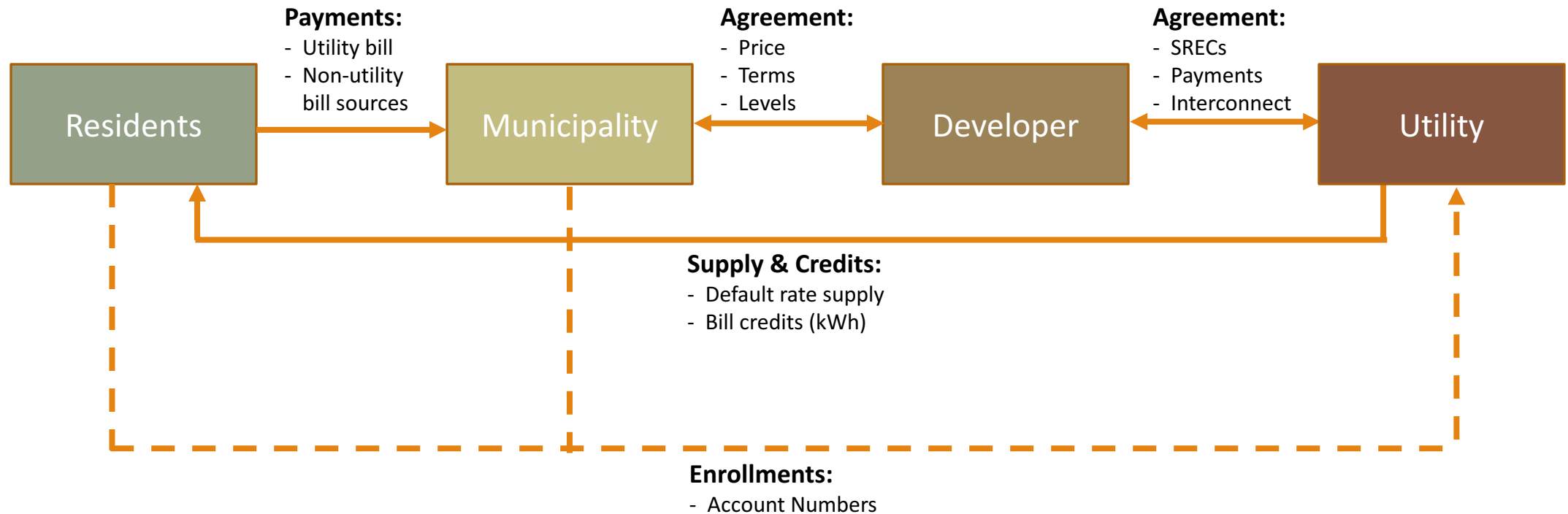
What Municipal Aggregation can bring to Community Solar

- Standardized contracts & subscriptions - Lower acquisition / management costs
- Single payer - Credit enhancement for developer
- Rate placement – Guide rate placement to optimize Subscription value

Optimized model

- Supply Rate: ComEd default
- Standardized Subscription: 1,000 Watts (must be greater than 200 Watts/Account)
- Enrollment Process: Opt-Out
- Contract Parties: Community Solar developer(s) and Municipality
- Revenue Source(s): Municipal collection from local ratepayers
- Value: Commit \$1, receive \$1.30 in value

Municipal Aggregation & Community Solar



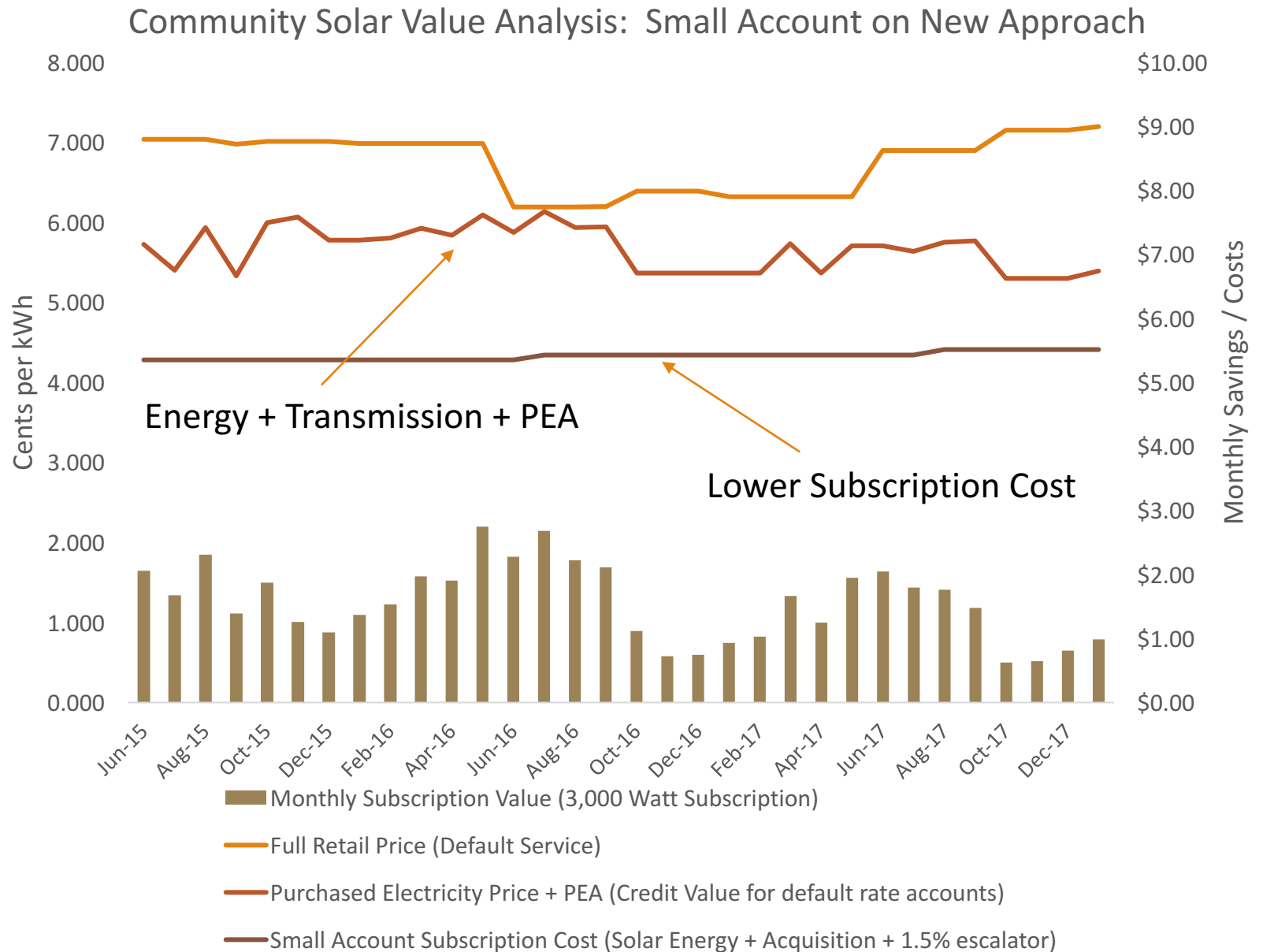
Better Economics for Small Accounts (on Muni Program)

Assumptions

- Contract Period: 6/15-12/17
- 1 kW subscription
- Subscription Cost of \$0.0428/kWh, 1.5% annual escalator
- Subscription Value is **Energy + Capacity + PEA** Account on default rate

Results

- 32 months w/Savings
- 0 months w/Losses
- Total Value: \$50.01 in savings



Recommendations: Caution

Cavaet Emptor (Buyer Beware)

- Do the math first to validate cost savings
- Fully consider the other values Community Solar offers

Cavaet Venditor (Seller Beware)

- Carefully consider messaging around 'savings'
- Find ways to reach the small consumers that are paying for 40% of the Community Solar incentives

Cavaet Advocatus (Advocates Beware)

- FEJA is progress – not perfection
- Review why utilities were allowed to place low values for bill credits through the ICC
- Carefully consider what claims you are delivering to the public

Thank You

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