



Rockwood Solar Farm and ISF2

**PUAB Agenda Items To Cover
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PUAB Requested Information On:

- **MW's Installed for Phase II**
 - **Two Separate Locations**
- **Percent (%) of CSP Subscriptions**
 - **Solar Farm(s) Phase 1 & Phase II**
- **Annual Cost vs IPL Revenue**
 - **Cost for Power**
 - **Revenue Explained**
- **Land Acquisition and Lease Payment**
- **Contractors and Subcontractors**
- **IPL Cost of Interconnection**
- **Distribution Build Out Expenses**
- **Additional Q&A**

Mega Watt's (MW) Installed

- Phase II consisted of two separate locations – Rockwood(RSF) and ISF2
 - Rockwood Solar Farm = 4.4 MW
 - Independence Solar Farm 2 = 4.0 MW
 - Total for Phase II = 8.4 MW
- Independence Solar Farm (1) = 3.0 MW
- Total Solar (PV) Installed = 11.4 MW

Phase I Competitive Bids

- **All bids**
 - **High Prices**
- **Smaller projects:**
 - **Higher \$/MWh**
 - **Lower Total Cost**
 - **Faster Breakeven (CSP Contributions pay higher percentage of cost)**
- **MC-Power**
 - **Best combination of size and price**

Phase I Evaluation

- **Market Price Forecast: High Escalation**
- **EPA: Increasing Energy Price**
 - **CO2 Tax likely**
 - **Fracking restrictions pending**
- **Natural Gas Price Forecast: High Escalation**
- **Solar RECs add revenue**
- **Breakeven: 8-10 years**

What Changed

- **New Market Rules: Lower Prices**
- **EPA Regulations less likely**
- **Natural Gas Forecasts: Low Escalation**
- **Market Price Forecast: Low Escalation**
- **Missouri Solar RECs: No Value**
- **Breakeven: None**

Percent of CSP Subscriptions

- **CSP – Community Solar Program**
 - Residents commit to purchase power
(attached handout)
- **Independence Solar Farm (ISF) – 100%**
- **Phase II (RSF & ISF2) – 49% (8/16/18)**
- **Total CSP (Phase I & Phase II) – 67.1%
(8/16/18)**

Cost vs. Revenue

- **IPL Cost for Solar Power - \$81.5 MWhr**
 - **IPL Cost for Alternative Power - \$28.24 MWhr**
- **CSP Participation Rate - \$16.50 MWhr**
- **Contracted (25yr) Cost for Solar Power for Phase 1 & Phase II with CSP at 100% -**
(\$15,401,585.00) Loss

(attached handout)

Land & Lease

- **November 2017 – Independence purchases Rockwood site (94 acres) for \$985,000.00**
- **November 2017 – 30-year Lease with MC Power for 31.29 acres - \$500,000.00**
 - **\$250,000.00 on Lease date**
 - **\$250,000.00 on Commission date (Solar Farm)**
- **Approximately 40 acres available for future use.**

(attached handout)

Contractors & Sub-Contractors

- **Two contracts between MC Power and the City of Independence / IPL.**
 - **Power Purchase Agreement (PPA)**
 - **Small Generating Interconnection Agreement (SGIA)**
(attached handout)
- **All of owners (“Power Generator”) construction contracts are independent of the above agreements with the city.**

Interconnection Costs

- **Distribution Build-Out for Two sites:**

- **ISF2**

- Labor - \$ 13,392.10
- Material - \$ 21,358.64
- Total - \$ 34,750.74

- **RSF**

- Labor - \$165,889.92
- Material - \$125,596.65
- Total - \$291,486.57

- **Grand Total - \$326,237.31**

Questions?