

Solar Possible Kick-Off Event



Peter Lindstrom

Clean Energy Resource Teams (CERTs)

March 14, 2018



CERTs: Minnesotans Building a Clean Energy Future



Mission: We connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects

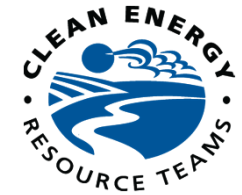


Today's Conversation



- Overview of the Solar Opportunity for Local Governments & Schools (*Peter Lindstrom*)
- Benefits & Examples of Collaborative Solar Procurements (*Trevor Drake*)
- OES Master Contract RFP & Proposed Joint RFP Process (*Larry Herke and Jordan Wentz*)
- Participation & Next Steps (*Trevor Drake*)
- Q&A/Discussion (*Lissa Pawlisch*)
- Post Event: Optional Tour of Rooftop Solar Array





B3 Benchmarking

3

BENCHMARKING

Welcome **Peter Lindstrom** | Sign Out

falcon

City of Falcon Heights

Energy Mode | Water Mode | Meter Search

- ↳ Fairmont
- ↳ **Falcon Heights**
 - City Hall
 - Community Park
 - Curtiss Field
- ↳ Faribault
- ↳ Farmington
- ↳ Felton
- ↳ Fergus Falls
- ↳ Fertile
- ↳ Finlayson
- ↳ Fisher
- ↳ Flensburg
- ↳ Floodwood
- ↳ Foley
- ↳ Forada
- ↳ Forest Lake
- ↳ Foreston

SUMMARY

BENCHMARK

PEER COMPARISON

ENERGY STAR

BASELINE

REPORTS

IMPROVEMENTS

Summary of the organization is detailed below. Data integrity is reported on using a variety of factors - complete, correct, contiguous and current. The better the entered data, the more accurate the results.

	Sites	SF	Bldgs	Meters
■ Complete	3	17,569	3	6
■ Incomplete	0	0	0	0
Total	3	17,569	3	6

100%

100%

100%

100%

% Complete

Freshness

Meter data current to

3/12/2015

1,092 days old

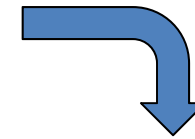
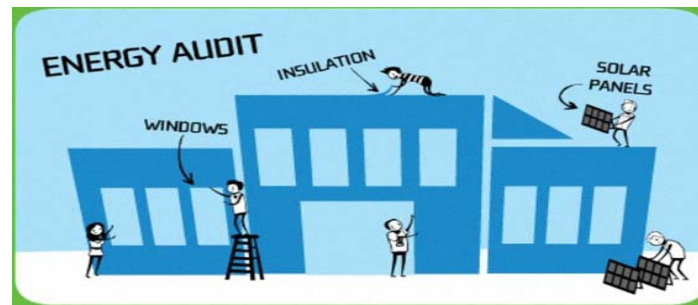
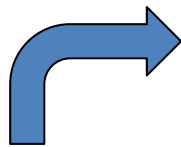
Attributes

City Programs GreenStep Cities

Sites (3 of 3 sites are complete) + Add a Site/Building

Site Name	Status	Building Type	Square F...	Bldgs	Meters	First Reading	Current To	Days O...	Cont. ...
City Hall	⚠	City Hall	15,332	1	2	12/26/2006	1/30/2018	-	59
Community Park	⚠	Park/Recreation	1,455	1	2	12/31/2006	1/30/2018	-	59
Curtiss Field	⚠	Park/Recreation	782	1	2	1/3/2007	3/12/2015	501	58

LEEP – Local Energy Efficiency Program & GESP - Guaranteed Energy Savings Program



BENCHMARK!



IMPLEMENT!



Encourage Solar Development



You've Got Options!



- Green Tariffs
 - *Xcel Renewable Connect Government*
- Community Solar Gardens
- Third-Party Solar Financing
- Direct Purchase



Green Tariffs & Community Solar Gardens



- Green Tariffs
 - *Xcel Renewable Connect Government*
- Community Solar Gardens

	Xcel Renewable Connect	Community Solar Gardens
RECs	✓	
Savings		✓
Term Flexibility	✓	
Availability	✓	✓ (maybe)
Encouraging Clean Energy	✓	✓



Third-Party Solar & Direct Purchase

Third Party Advantages

- No Upfront Costs/Take Advantage of Tax Credits
- No Maintenance Costs
- Predictable Cost of Electricity
- PPA (No Power Created? No \$)

Third Party Challenges

- Long Term Contract w/Complex Terms
- Purchase Price Uncertainty

Direct Purchase Advantages

- Ability to Use Cheap Public Debt
- Full Control Over Project
- Typical Project Management: Design, Bid, Build

Direct Purchase Challenges

- Finding the \$\$\$\$
- Project Management & Ongoing Maintenance
- No Tax Credits or Accelerated Depreciation

Who's Doing Third-Party Solar?



- Annandale Public Schools
- Becker High School
- City of Brooklyn Park
- Burnsville-Eagan-Savage School District
- City of Champlin
- Chippewa Middle School in North Oaks
- City of Crystal
- Chisago Lakes School District
- Chisago Primary School
- City of Cottage Grove
- City of Columbia Heights
- Farmington Schools
- Forest Lake Public Schools
- City of Falcon Heights
- City of Golden Valley
- Hopkins High School
- Holdingford Public Schools
- City of Inver Grove Heights
- Lester Prairie Water Treatment Center
- City of Lindstrom
- City of La Crescent
- City of Minneapolis
- Minneapolis Public Schools
- City of Maplewood
- City of Oakdale
- City of Red Wing
- Rockford Area Schools
- City of Rogers
- City of St. Cloud
- St. Cloud School District
- City of Scandia
- City of Shoreview
- City of St. Paul
- Waconia Public Schools
- City of Woodbury



Who has done Direct Purchase?



- Hennepin County
- City of Hutchinson
- City of Minneapolis
- Minneapolis Parks
- Mounds View Public Schools
- City of St. Louis Park
- City of St. Paul



Woodbury HealthEast Sports Center



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What is Collaborative Procurement?



Image credit: <http://www.health.com/pets/campylobacter-puppy-outbreak>

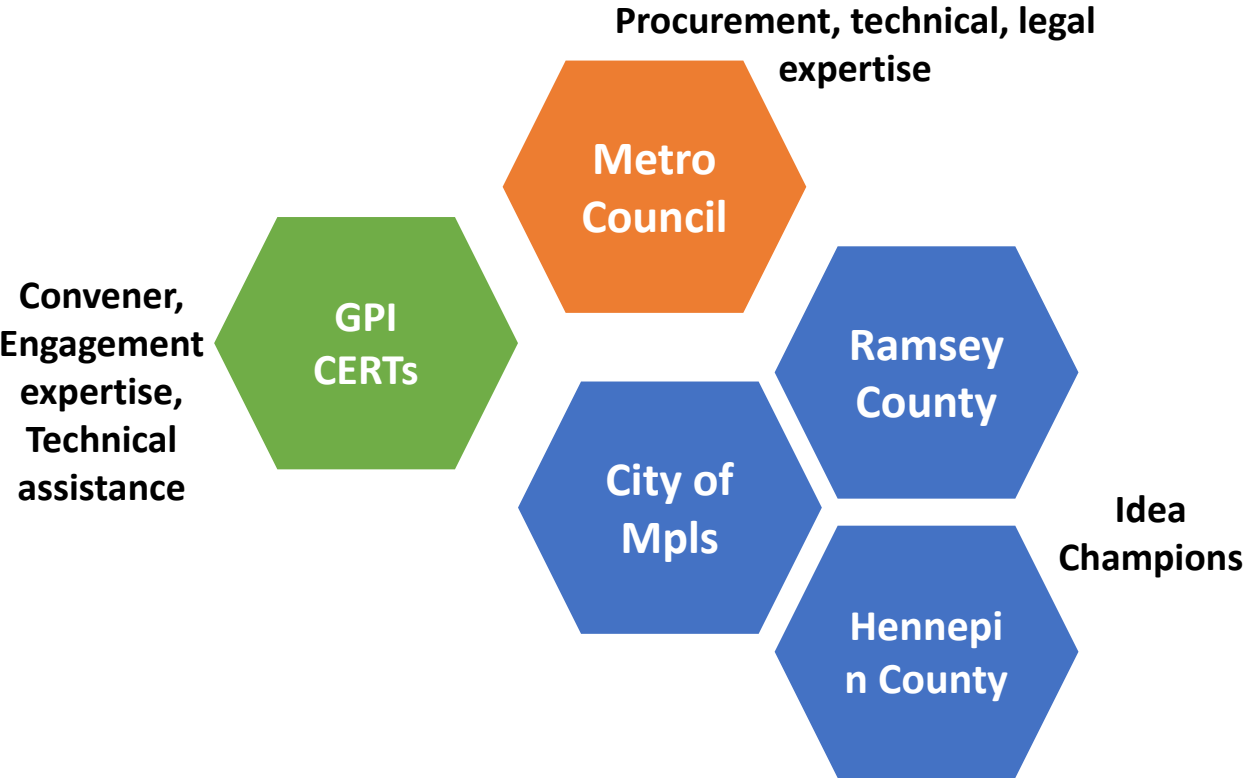
Case Study



Solar Garden Subscriber Collaborative Minnesota Xcel Territory 2015 –2016



Spring 2015: Formation of Steering Committee



June 2015: Kick-off Meeting



Image Credit: <http://operations.nfl.com/the-rules/evolution-of-the-nfl-rules/>



June-July 2015: “Non-Binding” Letters of Intent to Subscribe

1. Must submit in under 2 months
2. Must come from proper authority (council/board)
3. Must declare how much you electricity you will subscribe if given a “favorable offer”
 - Declared loads will be broken into tickets sized at 250kW (equal to 1/5 of a garden) and entered into a lottery for available subscriptions



June-July 2015: “Non-Binding” Letters of Intent to Subscribe

1. Must submit in under 2 months

31 Entities seeking 180 MW total

will subscribe if given a “favorable offer”

- Declared loads will be broken into tickets sized at 250kW (equal to 1/5 of a garden) and entered into a lottery for available subscriptions

August – December 2015: RFP, Selection, and Negotiation



August – December 2015: RFP, Selection, and Negotiation



- Procurement led by Regional Council on behalf of participants
- Selection team comprised of participants and technical experts
- Rank according to qualifications, experience, and price
- Procurement staff negotiate final contracts



August – December 2015: RFP, Selection, and Negotiation



- Procurement led by Regional Council on behalf of participants
- Selection of vendors based on RFP responses
- Ranked list of vendors
- Procurement process

5 Vendors offering 70 MW total



January 2016: Lottery!



Image Credit: <https://www.psychologytoday.com/blog/affluence-intelligence/201203/lottery-itis>

February 2016: Final Decisions



- Can ONLY accept or deny offers, no changes to contracts
- 1.5 months to take action
- LOTS of technical assistance provided on evaluating offers
-- webinars, emails, tools, 1-on-1 calls
- Participants were able to talk to one another about their opinions of the offers

Results



44 Government entities attended the project kick-off meeting

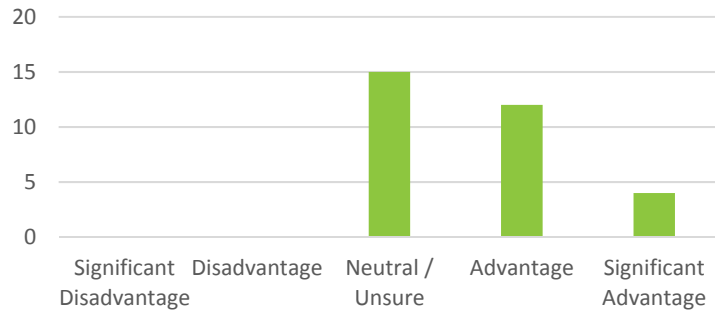
31 Submitted letters of intent

24 Signed agreements
~ 35 MW Solar
~ 42,000,000 kWh Annual Production

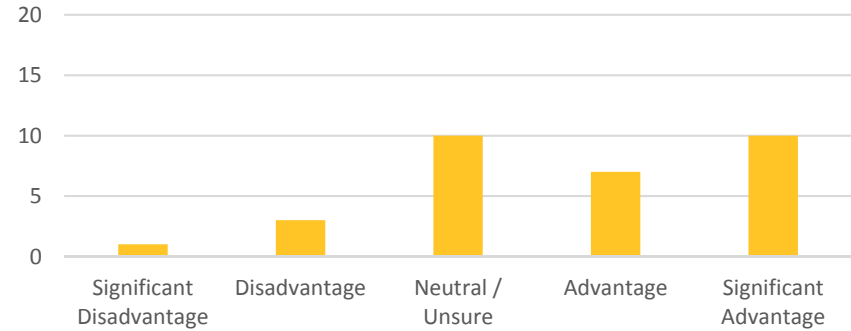
What were the advantages of participating?



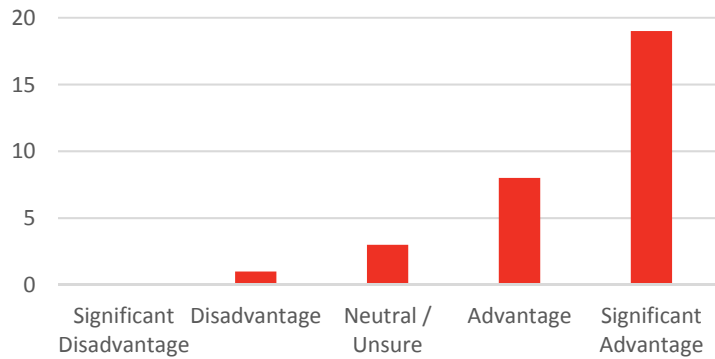
Better Pricing



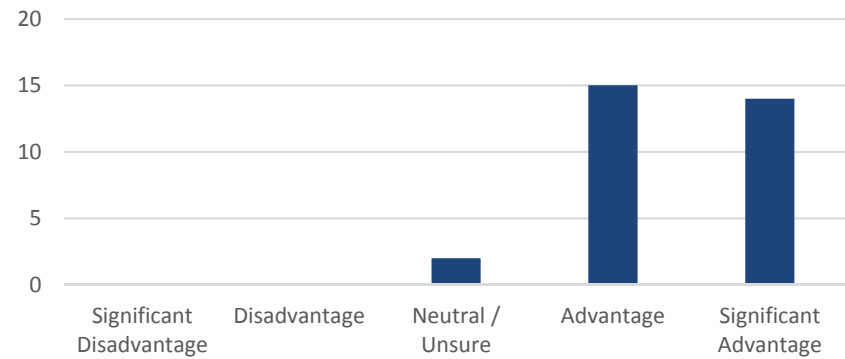
Fast Entry to Market



Reduced Staff Time



Peer Learning





What were the benefits of participating?

“Significantly reduced city expenditures in terms of contract drafting, proposal vetting, and overall staff time required to participate.”

“Our city attorney advised an RFP was required and we would not have the capacity to manage this with our current staffing.”

“Educational and financial analysis tools provided helped with communicating to elected officials.”

“It created a "bigger than just us" environment and that helped others in our organization feel more comfortable with the topic and the process.”

What brought you here?



Image credit: <http://totallydogtraining.com/puppy-training-aids/>

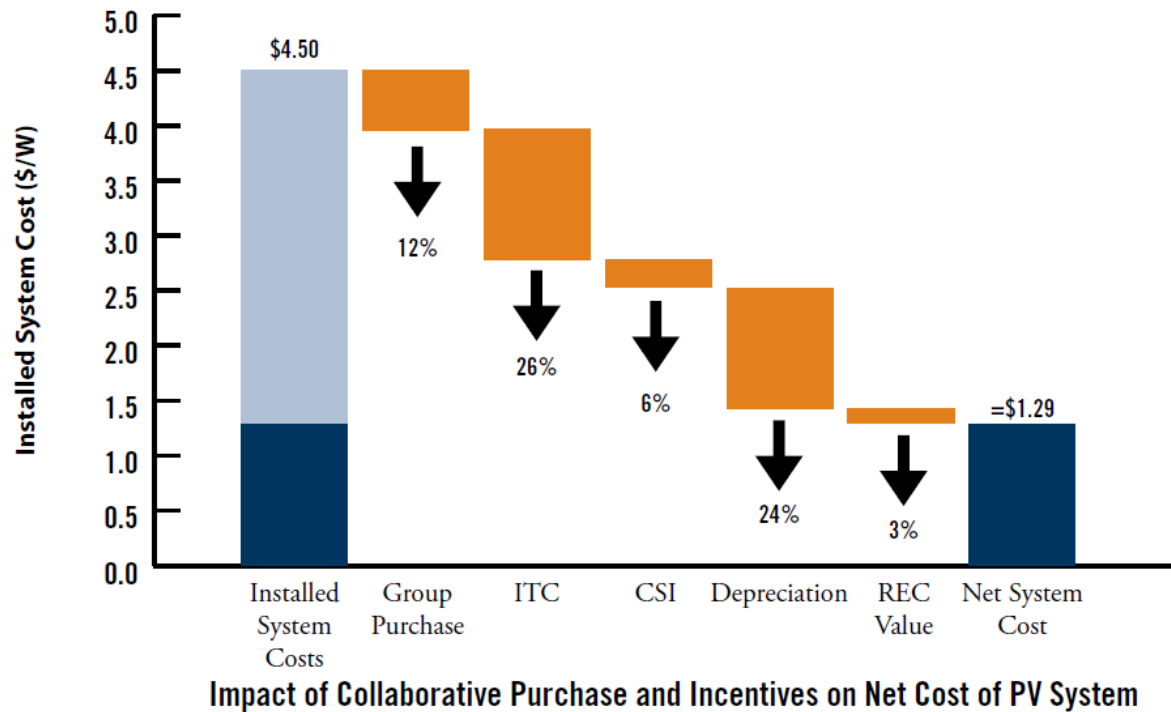


Why Collaborative Procurement?

- **Reduced Staff Time**
 - ✓ Pre-designed, structured process
 - ✓ Procurement led by a single entity (including contract negotiations)
- **Structure for Collaboration and Learning**
 - ✓ Structured technical assistance (step by step)
 - ✓ Build internal capacity
 - ✓ Peer learning
- **Economy of scale**
 - ✓ Better pricing for equipment and financing
 - ✓ More competitive contract terms

Figure 1

Impact of Collaborative Purchase and Incentives on Net Cost of PV System



Source: World Resources Institute and Optony based on 2010 data in Northern California

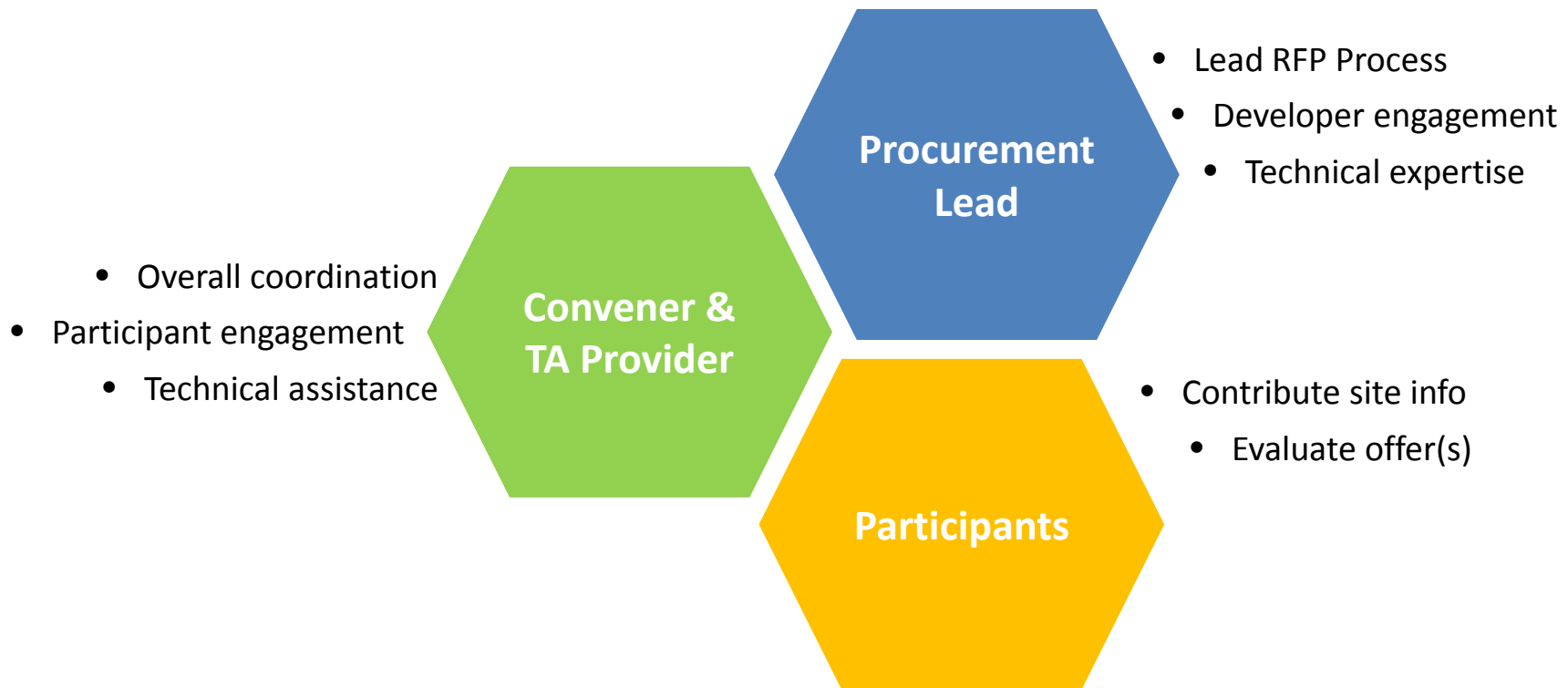


Why *NOT* Collaborative Procurement?

- **Better pricing not guaranteed**
 - ✓ Only way to know is by issuing RFP
- **Standardized Process**
 - ✓ Less ability for customization
 - ✓ Less individual control
- **Speed of the Group**
 - ✓ May not move as fast as a single actor



Roles and Responsibilities



Request for Proposal: RFP

Larry Herke, Director of Office of Enterprise Sustainability
Jordan Wentz, Enterprise Sustainability Program Administrator

March 14th, 2017



Introduction: OES Mission Statement

The Office of Enterprise Sustainability (OES) supports state agencies by helping to ensure state government operations save money by implementing socially and environmentally responsible solutions.

- OES helps State government to achieve sustainability goals
- Renewable energy procurement
 - Lever towards 30% reduction in GHG emissions relative to a 2005 baseline
- OES with collaboration from the Office of State Procurement wrote a “Solar Master Contract Request for Proposal” to begin systematic, bulk purchasing approach to solar procurement
- 1st State in the U.S. to pursue this type of solar procurement strategy

- **What is a request for proposals (RFP)?**
 - “Document that solicits proposal, often made through a bidding process, by an agency or company interested in procurement of a commodity, service, or valuable asset, to potential suppliers to submit business proposals.”
- **Why pursue an RFP for collective solar purchasing?**
 - Competitive
 - Transparent
 - Streamlined
 - Contract experience: Department of Admin. Purchases more than \$2b in goods and services each year
- **What does the Solar RFP do?**
 - Pre-qualify vendors
 - Solicits competitive proposals
 - Sets price ceilings
 - Minimum requirements

- **RFP specifies:**

- Warranties on production and performance of the panels
- Technical efficiencies and quality
- Construction details and specifications
 - Ex) Type of ground mounting, roof top
 - Pollinator friendly installations
 - National electric code standards
 - Institute of Electrical and Electronics Engineers (IEEE) standards

- **RFP solicits:**

- Design and engineering work
- Installation of modules and balance of system
- Operation and maintenance



State Master Contract Approach

RFP divided into 4 categories by utility service territory:

1. Xcel
2. Minnesota Power
3. Otter Tail Power
4. municipal utilities and rural electric coops

RFP covers 3 conceptual installations:

- Ground mount
 - 200 kWp DC
- Low slope (flat) roof
 - 100 kWp DC
- Pitched roof
 - 30 kWp DC

RFP Outline:

- 1) Special Terms and Conditions
- 2) Insurance Requirements
- 3) Specifications (Solar Installation specific, technical)
- 4) Design Services Post-Award
- 5) Evaluation Process
- 6) Proposal Content





Master Contract Vendor Selection

- RFP responses are scored
- Seeking 2 vendors are chosen per utility service area
- Establishes formal and legal relationship between the State and vendor for subsequent projects
- Prices for the 3 conceptual installations considered price ceilings
- Projects solicited against the master contract called site specific RFP

- Points awarded based on level of acceptance of the State’s terms and conditions.
- 4 phases in selection:
 - I. Review and select responsive, compliant responses
 - II. Evaluate responses
 - III. Select finalists
 - IV. Sign contracts

Acceptance of Terms & Conditions	100 Points
Experience/Qualifications	300 Points
Quality	300 Points
Diversity and Inclusion	200 Points
Cost Component	<u>100 Points</u>
Total	1000 Points
TG/ED/VO Preference Points (If applicable)	60 Points

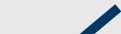
Master RFP Process:



Master RFP issued: 02/02



Vendors Respond by 03/23

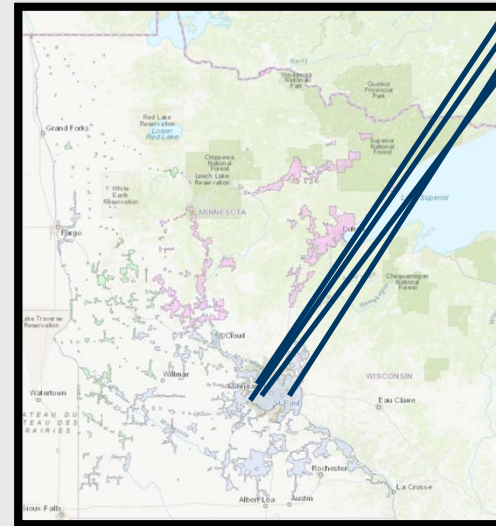


Contracts awarded to vendors



Terms and conditions, prices

Solar Possible



MN Utility Service Areas (blue = Xcel)

- Solar Possible participants screen sites and prepare site specific data:

- 1. General information**

- Location and orientation
- Square footage of unobstructed space..
- Solar resource data (MN LiDAR solar app)

- 2. Ground mount/Roof top data**

- Replacement schedule for rooftops
- Current use of land (farming, lawn etc..)

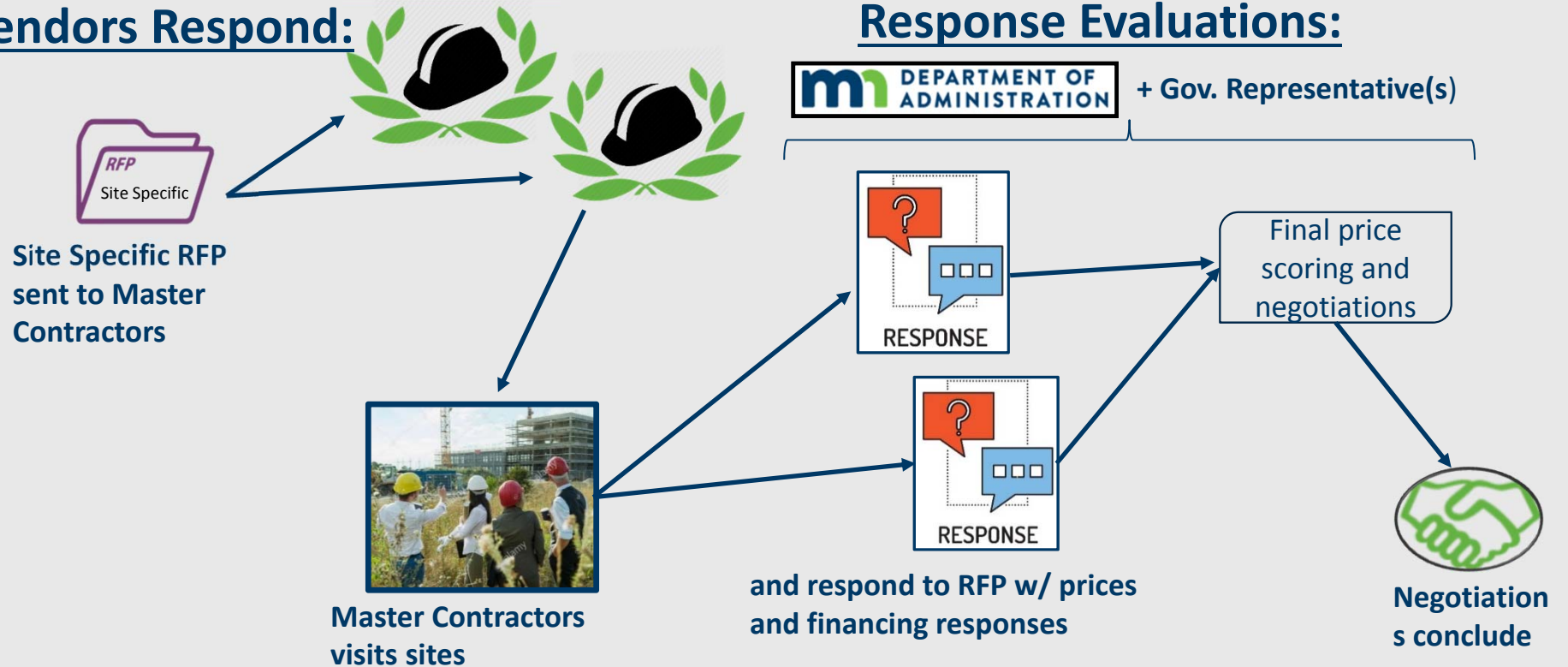
- 3. Utility data**

- Utility bills
- Rates and demand charges



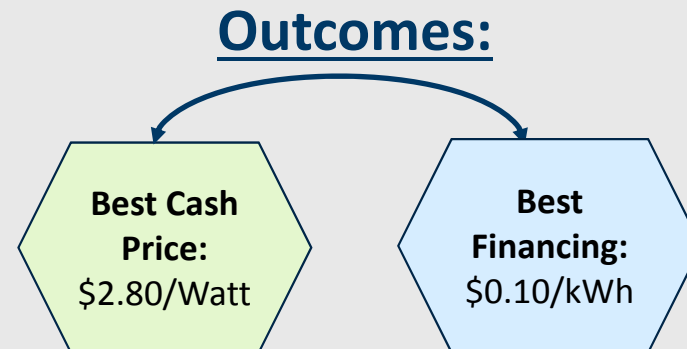
Vendors Respond:

Response Evaluations:



- Contains all agreements in master contract
- Allows for negotiated price deviations
 - Site X less expensive than Y etc..
- 2nd site specific RFP round negotiates for best price and best financing on behalf of all

- Questions?





Project Phases

1
Sign up

Notes of Interest
Letters of Intent
Site Self-Assessments

2
RFP
Process

Issue Request for Proposals
Developer site visits
Proposal evaluation and selection
Proposals provided to participants

-----NO CONSEQUENCE EXIT OPPORTUNITY-----

3
Action

Decisions to move forward
Installations
Review and Celebration

Timeline

Action	Date
Brief Notes of Interest	Due March 30th
Collect Letters of Intent	Due April 30th
Conduct Site Self-Assessments	May 2018
Issue Request for Proposals	Expected June 1st 2018
Conduct Developer Site Visits	June – July 2018
Offer Evaluation and Selection	August 2018
Offers Provided	August 2018
Decisions to Move Forward	Due October 15th, 2018
Installations	Fall 2018 – Spring 2019
Project Promotion and Celebration	Summer 2019



Next Steps

1. Casual note of interest

- Email to Peter Lindstrom by March 30th

2. Letters of Intent including potential sites

- Due by April 30th

3. Site Self-Assessments

- Webinar in early May
- Assessments due end of May

Solar Possible

Capturing Savings for Minnesota Governments

Questions?

