Business Item 2015-164: Authorization to Award and Execute Community Solar Garden Lease, Subscription and Power Purchase Agreement with Oak Leaf Energy Partners

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Environment Committee: July 14, 2015



#### **Presentation Overview**

- Metropolitan Council Solar Overview
- Project Overview
- Evaluation/Selection Process
- Recommended Developer
- Proposed Action



#### **Metropolitan Council Solar Overview**

- Transit's solar
- Two "behind-the-meter" solar facilities
- Up to 4 community solar gardens
- Portfolio solar request for proposal (at 10 sites)
- Opportunity for local government collaboration





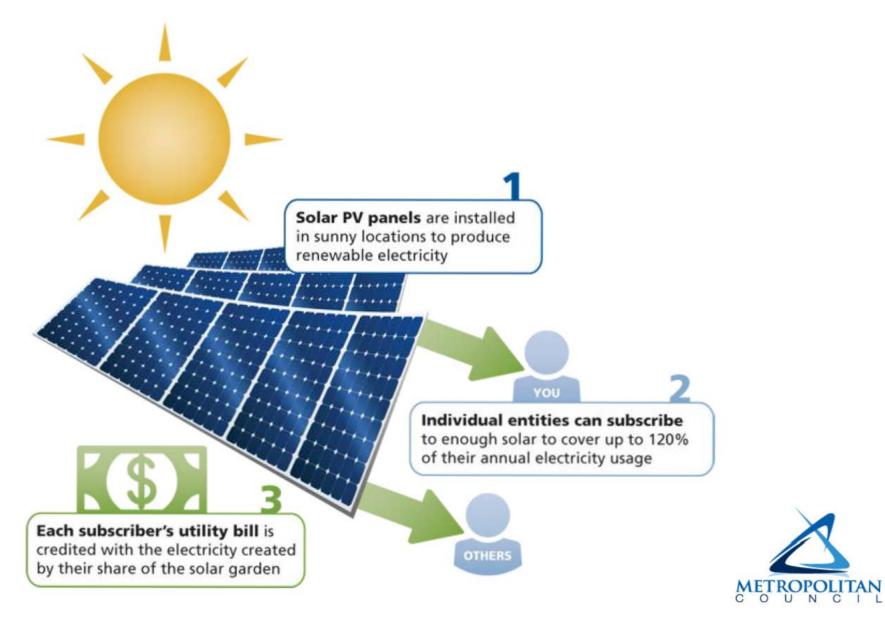


#### **Behind the Meter Solar Facilities**

- Council leases land to developer
- Developer designs, builds, owns and operates facilities
- Systems connected directly to Council facility
- Council pays developers for power produced (rate defined in a "Power Purchase Agreement.")



#### **Community Solar Garden Program**



# Community Solar Garden: Public Utilities Commission Motion\*

- Maximum of 5 megawatts (MW) at one site (if projects deemed complete by Xcel Energy by September 25, 2015)
- Completeness includes at least 3 of the following:
  - Deposit (to be paid by developer)
  - Proof of site control
  - Proof of sufficient project financing
  - At least 50% of subscriptions filled
  - Possession of required local permits
  - Equipment and panel procurement contracts
  - Insurance

\*written PUC order not published yet



## **Project Overview**

#### **1. Behind the Meter**

- Regional Maintenance Facility (300 kilowatts (kWh))
- 6 Transit Rooftops (still under review)

#### 2. Community Solar Garden

Subscriptions: 40% MCES and 40% Transit

- Empire Wastewater Treatment Plant (5 MW)
- Seneca Closed Landfill Site at Plant (955 kWh)
- Woodbury Lift Station (679 kWh)



#### **Evaluation/Selection Process**

- 5 proposals met initial completeness screening
- Evaluation team:
  - 3 MCES staff
  - 2 Transit staff
  - 1 City of Minneapolis staff
- Evaluation team met 3 times



## **Evaluation Criteria**

- Quality of proposal
  - Completeness of required submittals
- Quality of product
  - Equipment productivity and efficiency
- Qualifications of the proposer
  - General and specific qualifications
- Experience of proposer
  - Demonstrated successful completion of comparable projects
- Financial benefit
  - Net Present Value of the Council's cost savings



# Financial Model for Community Solar Gardens

#### Inputs

- Size of solar facility (MW) Capacity
- Subscriber payment to developer (\$\$ per kWh produced)
- Xcel Energy bill credit escalation (applicable retail rate)
- Discount rate
- Annual equipment degradation rate
- Subscription percentage





# Recommended Developer: Oak Leaf Energy Partners

- Only proposal to address replacement of components as part of the overall performance of the system and cost.
- Developed ground mounted sites on behalf of the Metropolitan Council as part of 12P075.
- Demonstrated experience in different markets nationally.
- Quality of the product exceeded the evaluation panel expectations.
- Proposed the most competitive price per kWh for ground mounted sites based on market rates and our current rates.



# Oak Leaf Energy Partners / Metropolitan Council Current Projects

Blue Lake Wastewater Treatment Plant (Shakopee)

- 1.25 MW behind the meter (operational fall 2015)
- 4 1 MW Community Solar Gardens



# **Solar Construction**







#### **Proposed Action**

 That the Metropolitan Council authorize the Regional Administrator to sign land leases (4 sites), community solar subscription agreements (3 sites), and power purchase agreement (1 site) with Oak Leaf Energy Partners.



#### **Questions**

