

DATE: June 4, 2013
STAFF: Lisa Rosintoski
Norm Weaver

AGENDA ITEM SUMMARY
FORT COLLINS CITY COUNCIL

24

SUBJECT

Second Reading of Ordinance No. 075, 2013, Authorizing the Purchasing Agent to Enter into Standard Power Purchase Program Agreements with Solar Photovoltaic System Owners for up to 20 Years.

EXECUTIVE SUMMARY

Fort Collins Utilities' Solar Power Purchase Program (FCSP3) encourages the installation of new local solar systems on behalf of all Utilities customers in support of Fort Collins renewable energy commitments under the Colorado Renewable Energy Standard (RES). The basis of the FCSP3 is a fixed-price, 20-year Power Purchase Agreement (PPA) between Fort Collins Utilities and photovoltaic system owners for solar energy generation. Program funding was approved through the budget process. This Ordinance, unanimously adopted on First Reading on May 21, 2013, is necessary to authorize the required long-term (20 year) purchase power agreements.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on Second Reading.

ATTACHMENTS

1. First Reading Agenda Item Summary without attachments - May 21, 2013
2. Staff PowerPoint Presentation Slides

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16

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BACKGROUND / DISCUSSION

The basis of the FCSP3 is a fixed-price, 20-year Power Purchase Agreement (PPA) between Fort Collins Utilities and photovoltaic system owners for solar energy generation. This arrangement is commonly known within the solar industry as a "feed-in-tariff model." The customer may enter agreements with solar developers for the installation of the system, which also may include financing, lease-purchase and rooftop property leasing.

The energy output of the solar system goes directly to Fort Collins Utilities' electric grid and customers are paid based on the metered output of the system, according to the PPA. The agreement does not alter the customer's electric bill. This approach is sometimes referred to as "in front of the meter", implying that the interconnection with the grid is on the utility side of the customer's billing meter. The PPAs also convey the Renewable Energy Credits (RECs)—the right to claim the renewable energy attributes of a project—to Utilities to be used toward compliance with the Colorado RES.

Expanding customer-sited solar renewable energy supports the community's Climate Action Plan and Energy Policy greenhouse gas reduction goals while supporting local investment.

Key Issues

Two key issues were discussed at length to arrive at the proposed program, (1) incentive pricing approach and, (2) "in front of" vs. "behind" the meter. For the first issue, a competitive bidding approach to set offer prices was considered. After tracking the limited success of several other utility programs that used a bidding approach, staff concluded that a standard price approach was recommended. The recommendations related to the second key issue are based on balancing benefits to all rate paying customers, participating customers and the solar industry. Customers understand, and some have asked for the net metered approach because it provides for a "hedge" against future utility price increases. While attractive to the participating customer, the "hedge" is an uncertain financial element which is borne by all other ratepayers. The FCSP3 offers benefits to all rate payers by obtaining renewable energy at a price competitive with other paths to RES commitments. The FIT approach ("in front of the meter") makes the offer simple and well defined for all parties and limits uncertainty related to future electricity rates. The stable contract price provides financial certainty for all parties and encourages partnerships between solar developers, host customer sites and sources of financing.

The FCSP3 fact sheet is included as **Attachment 1**. Page three lists key attributes of the proposed program along with the purpose and benefits of each attribute.

Renewable Energy Standard

The Colorado Renewable Energy Standard (RES) was originally established by voters as Amendment 37, and has been modified by the Colorado legislature. Fort Collins' commitments are a minimum of 3% through 2014, 6% in 2015 and 10% in 2020.

Year	Minimum	Actual	Electricity Amount (megawatt-hours)
2012	3.0%	3.4%	53,000
2015	6.0%	TBD	90,000
2020	10.0%	TBD	150,000

Utilities current renewable energy commitments are met through a mix of wind energy projects, renewable energy credits and local solar installations. Faced with making new investments in renewable energy, Utilities proposed to meet a portion of its commitment through a program that focuses on the installation of solar systems on local customers' premises. Similar successful programs are in place in a number of locations throughout the country and world.

It is important to note that voluntary renewable energy purchases through Utilities' Green Energy Program do not count towards the overall renewable energy commitments under the RES.

The 2015 renewable energy target corresponds to an increase from current renewable energy levels of approximately 40,000 megawatt-hours (MWh). There are several ways Utilities could meet the increased requirements, including:

1. Purchase of qualified renewable energy credits.
2. Wind energy, through development or participation in new utility-scale projects.
3. Solar energy, through development or participation in new utility-scale projects.
4. Solar energy, through a program which supports the installation of systems located locally on customer premises (e.g., on Utilities' electric distribution system).

The RES includes the option to use "multipliers" that provide additional benefits based on renewable energy technology and location. The RES multiplier for locally based solar energy is 3X, meaning that solar energy produced counts three times towards the RES obligation. The multiplier was designed to make solar energy investments competitive with wind energy investments.

The solar projects from this program are expected to generate approximately 7,500 megawatt-hours annually. Utilizing the 3x multiplier, this amount will meet approximately 25 percent of the overall renewable energy commitment for 2015 (50% of the additional 2015 gap). Additional resources will still be required to meet the total 2015 commitment, and are expected to be met via additional purchases from Platte River Power Authority.

Next Steps

Utilities will develop the application materials in order to open an initial application period in July 2013. A second application period will occur in the first quarter of 2014. All solar systems need to be installed by July 2015 in order to meet the RES commitments.

Other Solar Options

Utilities also offers small-scale solar rebates with net metering and voluntary green energy purchase options. Customers can visit fcgov.com/solar to view current programs that support solar installations.

FINANCIAL / ECONOMIC IMPACTS

PPA purchases under the FCSP3 are to be capped at \$1million per year funded by a 1/2% electric rate increase in each of years 2013 and 2014. Funding commitments for these power purchases will persist for the 20 year term of the agreements. At the end of the agreement term, Utilities will consider the option to establish new agreements based on continuing needs for community renewable energy.

The installation of approximately five megawatts of new solar energy within Fort Collins is also expected to provide local economic benefits through the purchase and installation of the solar systems. The distribution amongst local companies of on-going power purchase payments (\$1million annually) will depend upon the structure of agreements between customers, solar developers and financial partners.

Under the preferential treatment by the Colorado RES of locally deployed solar electric generation, these green power purchases are competitive with other alternatives (wind power) available currently.

ENVIRONMENTAL IMPACTS

The solar projects from this program are expected to generate approximately 7,500 megawatt-hours of electricity. Using current conversion factors, this will result in avoiding over 6,000 metric tons of carbon emissions. The program will also greatly expand local generation, helping to support the transition to a dynamic and distributed smart grid system. Successful program results may also provide the groundwork for continued program expansion in future years.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BOARD / COMMISSION RECOMMENDATION

Staff presented information about the program to the Energy Board at its regular meeting on May 2. The Board completed a memo (**Attachment 2**) which noted that, "The Energy Board has reviewed the pilot program with staff and supports the overall objectives and proposed attributes. Therefore, the Board requests City Council approve the Purchasing Manager be granted authority to energy into 20 year agreements for the Fort Collins Solar Power Purchase Program."

PUBLIC OUTREACH

Utilities began seeking feedback from business customers and solar industry stakeholders in January. In addition to one-on-one meetings with key account customers, Utilities initiated an on-line survey of business customers in April with 112 responses. Survey results indicated strong interest in the program and general agreement with the overall goals (**Attachment 3**). Roughly half of respondents indicate interest to participate.

The survey results and additional feedback were discussed at a public open house April 23rd, attended by 28 people. Four key questions were:

- direct to grid program proposal versus benefits of net metering
- whether property tax will be assessed against the PV installations
- how businesses as building tenants might be able to participate
- how these systems will be treated at the head of the 20-year PPA term.

Solar industry feedback was solicited through the Colorado Solar Energy Industries Association (COSEIA). Specific solar industry stakeholders also participated in the survey and open house.

ATTACHMENTS

1. Fort Collins Solar Power Purchase Program factsheet (draft)
2. Memo from Energy Board on Fort Collins Solar Power Purchase Program
3. Summary of customer and stakeholder survey results

Fort Collins Solar Power Purchase Program



Fort Collins City Council
May 21, 2013

1



Fort Collins Solar Power Purchase Program (FCSP3)

Pilot program criteria

- Approved by Council in 2013/2014 BFO
- Contribute to Renewable Energy Standard commitments with local solar
- Two year application window (2013/2014)
- Specific funding limit, \$1M per year for 20 years

2



Fort Collins Solar Power Purchase Program (FCSP3)

Pilot program criteria

- Establish
 - Purchase power agreements (PPA)
 - Program administration
- Maximize benefit and minimize risk for all ratepayers
- Understand interest and demand for customer-sited solar systems
- Inform future budget cycles

3



FCSP3 Purpose

The **purpose** of the pilot Fort Collins Solar Power Purchase Program is to procure new locally installed solar capacity on behalf of all ratepayers to help meet the community's renewable energy commitments under the Colorado Renewable Energy Standard.

4



Why Local Solar?

- Contributes to RES commitments (3X)
 - 5 megawatt program meets 25% of the 2015 RES commitment
- Supports
 - Local investment and benefits
 - Climate Action Plan
 - Energy Policy
 - Grid modernization



5



Outreach

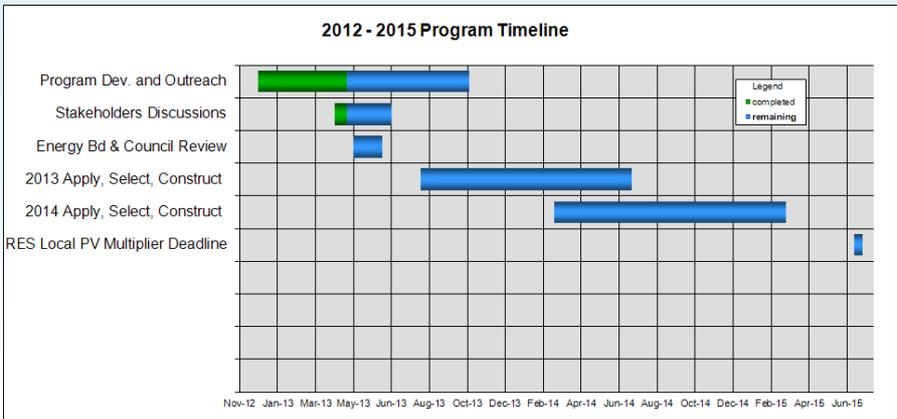
- Colorado Solar Energy Industries Association (COSEIA)
- On-line survey of customers and service providers
- Stakeholder meeting / open house
- Utilities BizED program
- One-on-one customer meetings



6



Provisional Program Timeline



7



Fort Collins Solar Power Purchase Program

Questions



8



ORDINANCE NO. 075, 2013
OF THE COUNCIL OF THE CITY OF FORT COLLINS
AUTHORIZING THE PURCHASING AGENT TO ENTER INTO STANDARD
POWER PURCHASE PROGRAM AGREEMENTS WITH SOLAR
PHOTOVOLTAIC SYSTEM OWNERS FOR UP TO 20 YEARS

WHEREAS, the Fort Collins Utilities Solar Power Purchase Program (FCSP3) encourages installation of new local solar systems in support of the City's renewable energy commitments under the Colorado Renewable Energy Standard (RES) and Amendment 37; and

WHEREAS, solar system projects under the program are expected to generate up to 7,500 megawatt-hours annually, meeting approximately 25 percent of the City's renewable energy commitment for 2015; and

WHEREAS, implementation of FCSP3 relies upon fixed-rate, 20-year Power Purchase Agreements (PPAs) between the City and individual photovoltaic system owners; and

WHEREAS, Fort Collins Utilities is preparing requests for proposals to determine available capacity relative to FCSP3 commitment requirements, as well as a process for equitable award of PPAs to interested local solar system owners; and

WHEREAS, individual PPAs will be capped at annual purchase amounts, and total FCSP3 purchases are capped at \$1,000,000 per year, pursuant to funding approved through the City's budget process and subject to annual appropriation; and

WHEREAS, entering into PPAs with 20 year terms enhances the City's ability to plan and implement systematic improvements to the City's electric utility toward meeting the City's renewable energy commitments, and incentivizes investment in local solar systems; and

WHEREAS, pursuant to Section 8-186 of the City Code, no contract for services shall be made for a longer period than five years unless authorized by the City Council by ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS that the Purchasing Agent is hereby authorized and directed to enter into power purchase agreements with individual photovoltaic system owners for the purchase of solar-generated electric power, consistent with the approved budget, the Fort Collins Utilities Solar Power Purchase Program, and this Ordinance.

Introduced, considered favorably on first reading, and ordered published this 21st day of May, A.D. 2013, and to be presented for final passage on the 4th day of June, A.D. 2013.

Mayor

ATTEST:

City Clerk

Passed and adopted on final reading on the 4th day of June, A.D. 2013.

Mayor

ATTEST:

City Clerk