



CITY OF DELRAY BEACH

CITY MANAGER'S OFFICE

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TO: Mark Lauzier, CM

THROUGH: India Adams, ACM

FROM: Ana Puszkin-Chevlin, Sustainability Officer

DATE: December 21, 2018

SUBJECT: Florida Power & Light Solar Together Program

Introduction

On November 30, CM Lauzier requested research and a recommendation on participating in Solar Together, a new Florida Power and Light shared solar program. In response, information was gathered from the following sources to form the recommendation to move forward with pre-registration for Solar Together.

The Solar Together Introduction powerpoint deck provided by FPL was reviewed and additional information from the website was considered. ACM India Adams and I listened to the informational webinar on the program on December 13th. Following the webinar, we submitted questions for clarification, and had a call with FPL representative, Jennifer Schaffer on December 19th regarding the program specifics, billing, and timing. The Solar Together program was discussed by the Green Implementation Advancement Board (GIAB) at their December 20th meeting. GIAB the passed a motion to proceed with the program, provisional on a favorable review of the contract terms by legal counsel. Additionally, on December 20th, the Florida Sustainability Directors Network held an hour-long conference call regarding Solar Together in which cities throughout the state compared notes, comments and concerns about the efficacy, economics, costs, and sustainability benefits and impacts of the program. We also sought to gage whether other cities were likely to participate.

Based on the information gathered (see attachments A,B & C), below is a summary of how program operates, the costs and return on investment estimates, and reasons it is believed it would be advantageous to commit to an initial subscription. As the subscription window is narrow, closing on January 25th, and cities' requested subscriptions will be prioritized based on date of pre-registration, I ask that the City Manager's office promptly evaluate and determine Delray Beach's willingness to participate in Solar Together, authorizing us to participate in the pre-registration process with a 100% subscription in early January.

Program Summary

Solar Together is a shared-solar program whereby FPL develops new large-scale solar facilities, typically ground mount solar "farms" in rural part of their service area, and invite its customer-base to purchase a

subscription for a fractional amount of the energy produced at that location commensurate to the users' consumption demand. The Solar Together program is designed to allow FPL customers to offset up to 100% of their electric demand with renewal-sourced energy by contributing to the production of large-scale solar facilities that feed the FPL grid, but are not located on the customers' buildings' rooftops or property.

Program features

- Pre-registration is a binding commitment to participate in the program, but the commitment is only for the first month of the program. The subscription is a month-to-month agreement, so subscribers can cancel their subscription after just one-month, or drop out anytime. However users that drop out will not be eligible to re-enroll for one-year. Re-enrollment will be predicated on availability of subscription shares.
- A user can pre-register for a subscription amount that covers 1% to 100% of their electrical consumption. The amount of the subscription can be changed once a year on the anniversary, as long as there is subscription capacity.
- At Pre-registration, a user can elect to have Renewal Energy Certificates retired on their behalf for participating in the program.
- For a municipality with multiple account meters, the subscription is apportioned to whichever meters they choose. The subscription amount can be transfer to any meter within the same account, allowing flexibility for construction or demolition. The subscription cannot be transferred to a different entity. The subscription does not include non-metered accounts.
- Timeline – the Program will be filed with the Florida Public Service Commission (PSC) in the Q1 2019, and PSC approval is anticipated in Q4 2019. The solar program is anticipated to become active in the Q1 2020, which would be the first time a subscription member would be responsible for paying the subscription fee. This allows time to accommodate the subscription fee in budgeting for Fiscal 19/20.

Benefits- For large commercial and institutional customers striving to reduce CO2 emissions and achieve goals of moving to 100% renewable energy, the Solar Together program offers a very simple way to achieve target goals -- paying FPL to build and deliver renewable energy rather than constructing proprietary installations, or engaging in a leased solar system installed at the customer's location.

- Paying the subscription fee is faster and easier than hiring a consultant to assess solar feasibility on each structure, issuing and awarding an RFP for solar contractor to install the array, and assuming responsibility for occasional maintenance and repair.
- Given the large electrical demand of commercial, institutional and municipal users, it is unlikely that they could accommodate a solar array large enough to offset all their demand on their property. Thus, purchase of offsite generation would likely be part of any effort to achieve 100% renewable targets.
- The shared solar approach leverages economies of scale achieved with large systems, and as FPL is eligible for federal tax incentives, whereas municipalities are not, they have lower costs for bringing solar energy on line.

Drawbacks- The Florida Sustainability Directors' Network convened a conference call to examine the drawbacks of this proposed program, as there is deep distrust of FPL in this professional organization. A initial review raised the following issues.

- There was a concern that the simplicity of 'paying for subscription' would thwart efforts of cities to invest in putting solar their assets to generate more clean energy capacity.
- There were concerns about the assumptions in the model regarding solar-output production and its impact on the subscription credit. What happens if a storm wipes out the solar system? (This was satisfactory answered by FPL)
- The pre-registration agreement states that FPL makes no guarantee of savings. We assume that statement is there because a customer's usage could rise and offset the positive credit offered by the subscription. The rate increase in the subscription credit would be approved by the Florida Public Service Commission, as would the subscription rate.
- FPL's large-scale ground mount solar farms consume valuable and productive agricultural land, and their land acquisition strategy may adversely impact the land economics of rural/agricultural areas. It could also impact the number of agricultural jobs.

The Sustainability Directors Network will be setting up group conference call the first week of January with FPL representatives to discuss the program in great detail and to dispel the consensus notion that this seems "too good to be true, what are we missing here." In the absence of discovering something unforeseen, several Florida sustainability professionals felt they would recommend participating in the program.

Financial implications

As illustrated on page 3 of the FPL Solar Together Introductory Powerpoint, a users' monthly kilowatt subscription share is charged at a fix rate of \$6.76 and added to the monthly FPL bill. However, the subscription share also produces electricity based on 212 sun hours. The electricity produced by the solar panels is credited back to the subscription costs at a rate of \$0.0308 cents/kWh. The net difference between the subscription cost and the subscription credit is charged onto your monthly FPL bill. During the first four years of the program, the subscription rate is higher than the credit, increasing bills slightly, but by year five, the credit exceeds the subscription cost and the user experiences lower monthly outlay. The ROI becomes positive in year 8, at which time the city is benefiting from lower electric bills.

FPL was asked to illustrate the financial benefit of the program for the City of Delray Beach based on our usage and the maximum subscription to offset 100% of demand with clean energy. As noted on Attachment B, based on an annual usage of approximately 22,071,202 kilowatt hours, the city's subscription amount to offset 100% would be 8.706 kilowatts. The fixed subscription cost for this this allotment would be \$706,231. This subscription cost remains constant. In the first year of participation, the subscription credit would be \$682,294, resulting in a next increase of \$23,936 on our electric bill. Given that our annual electricity expenditure is nearly \$2,800,000, the additional cost for participation represents slightly less than 1% of our energy expenditure.

In terms of the financial risk for pre-registering for the program, the month-to-month terms and ease of cancellation commits the city to only paying for one-month of the first year. If the annual net difference between the subscription costs and subscription credit is \$23,936 in year one, then the only financial

obligation the city is making by pre-registering is \$1994.66. This sum, and the \$23,936 annual sum is within the authority of the CM to approve. As the payments would not begin until 2020, the cost of the program can be accounted for in next year's operation budget and there is plenty of time to bring a resolution forth to City Commission.

Recommendation

Based on the information received from FPL representatives and analysis of the programs costs, benefits, and risks, it seems appropriate to move forward quickly with a pre-subscription of 100% of kw usage. (This is predicated on review by legal counsel of the Pre-registration Agreement.) This program directly supports goals of the City's Strategic Plan to look at sustainability comprehensively, and the goals of the draft Comprehensive Plan, which should be adopted in Q1 2019. As presented, Solar Together has relatively low risks, since it is easy to cancel participation or reduced the subscription amount. On the other hand, if the program is popular, it may be more challenging to increase subscription. The breakeven ROI is approximately 7 to 8 years, which is comparable to procuring a proprietary system. However, a proprietary system would likely not achieve comparable levels of offset: we could not achieve 100% renewable energy and would take longer to procure and install. Finally the favorable public image of being able to claim that the City of Delray Beach operates on 100% clean energy in 2020 is immeasurable. It would be extremely difficult to achieve the goal of operating on 100% clean energy with a budget of \$48,486, which is the total outlay for the first four years of participation.