# 2020 Q3 Community Solar

# Missouri Public Service Commission (PSC) report File Nos. EA-2016-0207 & ET-2020-0022

# **Key Observations and Recommendations**

### Performance of program:

- Customer demand for the program continues to be robust, with over 4,500 blocks enrolled during just 2 months of active marketing for the 2<sup>nd</sup> facility.
- The program is meeting subscribed customers' expectations, with 93% of subscribers surveyed satisfied with the program.
- The program provides access to solar generation not otherwise possible for 84% of subscribers surveyed. The program is fulfilling its goal of expanding access to solar generation for Missouri customers.

#### Recommendations:

• Based on program popularity (>4500 blocks enrolled in just 2 months of marketing for the 2<sup>nd</sup> facility) and the increase in satisfaction scores when waitlist customers become subscribed (increase of >20%), the program should be considered for further expansion beyond the pilot scale.

# Introduction

# Background

In 2018, Ameren Missouri received PSC approval for a Community Solar pilot program.

An overall goal of this program is to provide access to solar generation to Ameren Missouri residential and small business customers who are interested in solar generation but may not have the ability or desire to install and maintain their own solar panels.

Program participants enroll and agree to pay for solar blocks of 100 kilowatt-hours (kWh) each that will replace an equivalent kWh amount of electricity they receive from their standard class of service. Customers can replace up to fifty percent of their average annual electric energy usage. Through its support of this program, Missouri has established itself as a leader in making renewable generation accessible, affordable, and reliable for its residents.

In June 2020, Ameren Missouri received PSC approval for expansion of the Community Solar program.

The purpose of this report is to provide a quarterly update on program enrollment, planning and construction, customer billing, future considerations, lessons learned, and recommendations to the PSC.

### **Program Enrollment**

The Community Solar program has been open for enrollment since October 15, 2018, via an online application process.

The first facility marketing campaign was very successful and fully subscribed the program in 55 days, on December 10, 2018. After December 10, 2018, first facility marketing concluded; however customers were still able to enroll and be placed on the waitlist through the Community Solar webpage. Between December 10, 2018 and June 8, 2020, customers continued to be very interested in participating in the Community Solar program, with 3,600 blocks joining the waitlist in the absence of marketing.

Ameren Missouri launched 2<sup>nd</sup> facility active marketing upon approval of the tariff to allow a 2<sup>nd</sup> facility on June 8, 2020. During the 2 months of active marketing, from June to August 2020, over 4,500 blocks joined.

### Lambert Community Solar Facility

The first Community Solar facility is located on St. Louis Lambert International Airport property, which is an ideal location for solar panels with an abundance of open land that would otherwise go unused. Panel layout is designed to be positioned away from runways and out of the line-of-sight of pilots taking off or coming in for a landing.

The construction of this site started in February 2019, and the site was placed in-service on August 9, 2019. Participating customers received their first energy statement that reflected the new energy charges in August 2019 and have continued to be billed monthly.

# **Future Considerations**

Appendix D to the *Non-Unanimous Stipulation and Agreement* submitted in File No. EA-2016-0207 on September 23, 2016 ("*Stipulation*") identifies topics for Learning Opportunities, Key Questions to Explore, and Planned Activities to Gain Insight. Information from this analysis will assist Ameren Missouri in determining first-hand how best to structure supply options related to distributed solar generation. The intent is to engage customers, solicit their feedback and provide a basis to continually adjust the program offering in order to meet their expectations. The lessons learned through this pilot program should provide insights into the advantages and challenges associated with a pilot solar program.

Based on additional program data from a July 2020 program survey, updated responses to learning opportunity questions and other lessons learned are addressed, below. The survey instrument and results are included as attachments with this report.

### **Learning Opportunities**

Q: How did customers react to the various pricing opportunities presented?

**A** (based on program data): The enthusiastic customer response to active marketing indicates that pricing of the Community Solar program was appropriate for this segment of customers.

**A** (based on survey results): Participants surveyed responded positively to the price points and kWh caps. Sixty-three percent of participants surveyed were satisfied with the block pricing. Seventy-five percent of participants surveyed felt that the 100 kWh blocks were sized just right.

Q: Did the offering of the community solar program provide customers who didn't have access to Net Energy Metering an opportunity to participate in adding solar to the grid?

A (based on survey results): Surveyed participants were satisfied to see an offering of a solar opportunity where the option did not previously exist for them.

- A large percentage of subscriber respondents (84%) felt that the program
  provides them a solar option that would otherwise not be possible for their
  household. This indicates those customer households which may not have
  access to Net Energy Metering are taking advantage of the opportunity to
  participate in adding solar to the grid.
- Q: What value or benefits do customers perceive from adding solar at the distribution level, compared to adding large-scale solar at the transmission level?
- A (based on survey results): As a way for survey participants to differentiate between distribution-level and transmission-level solar, participants were asked if they had a preference on where community solar fields are located. Sixty-two percent of survey participants did not have a preference on location, which indicates they do not have a preference on whether solar is added at a distribution or transmission level.
- Q: What were customers' reactions and sensitivity to other program design aspects?

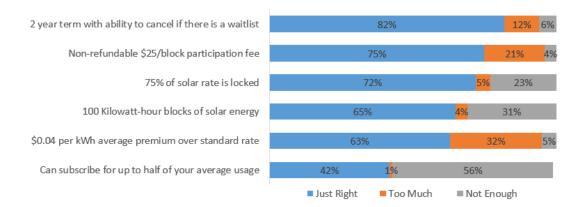
(e.g. Timing, Fees, Quantities, Length, Commitments, Transferability, Caps, and potential for pricing to increase through facilities charge)

A (based on survey results):

# Impression of the Program Terms



Most of the terms were viewed as just right by the majority of respondents. The one term that most felt was not enough is *subscribing up to half of average usage*.



Q. Thinking about the various aspects of the Community Solar program, please indicate if you feel the terms are just right, too much or not enough.

# **Survey Feedback on Quantities Available through the Pilot Program:**

Fifty-six percent of surveyed customers indicated a desire to expand eligibility of Community Solar to more than 50% of their annual average energy usage.

# July 2020 Survey Results Analysis

In accordance with Appendix D of the *Stipulation*, Ameren Missouri conducted a survey of the program participants after the first 18 months of program operation.

Overall, the survey indicated that Community Solar participants are satisfied with the program and its offerings with 93% of subscribers selecting ratings of Very Satisfied or Somewhat Satisfied.

#### Is the program meeting customer expectations?

- Yes, 93% of program participants who are actively subscribed are very or somewhat satisfied.
- There is an opportunity to more quickly expand program capacity to improve waitlist satisfaction levels (currently at 69%).

#### What areas of the program need improvement?

- Program participants would like to see more communication and interaction from Ameren Missouri, with 42% of respondents asking for monthly communications and 9% asking for weekly communications.
- Also, customers are interested in subscribing for more than 50% of their energy usage. Fifty-six percent of respondents preferred a higher cap or no cap.

# What aspects of the program do the customers like and dislike?

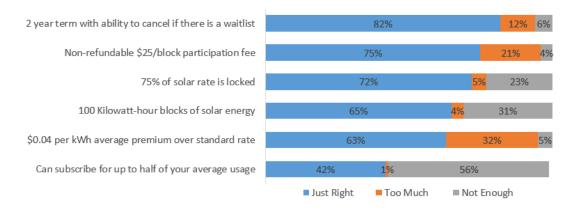
- Positive feedback on:
  - offering a new way to participate in solar
  - appropriate price points

- greater knowledge of solar energy as a result of the program
- being included in producing renewable energy
- Opportunities for improvement:
  - No cap on usage that can be subscribed (i.e., up to 100%)
  - Additional or expanded community solar programs
  - More communication and interaction from Ameren Missouri
  - Native/pollinator plantings at solar facilities
  - Diverse workforce development programs as part of construction for facilities (note that Ameren has ongoing supplier diversity efforts for all construction projects)
- Do participants find the timing, level, and refund limitation of the up-front reservation fee reasonable?

# Impression of the Program Terms



Most of the terms were viewed as just right by the majority of respondents. The one term that most felt was not enough is *subscribing up to half of average usage*.



- Q. Thinking about the various aspects of the Community Solar program, please indicate if you feel the terms are just right, too much or not enough.
- Are current and potential subscribers willing to commit to a two-year subscription (with option to cancel with a waitlist available)?
  - Yes, 82% satisfied with two year commitment period under these terms.
- Would a shorter mandatory subscription period (or no period at all) be more appropriate?
  - o This may increase satisfaction levels, but since cancellation is allowed given the existence of a waitlist, this does not appear to be an issue for most subscribers.
- Would current or potential subscribers be interested in the ability to transfer subscriptions to other customers without penalty?
  - Since we have a waitlist of customers who want to participate, the penalty does not apply and therefore the survey did not ask questions on this topic. As the program matures, this and other topics may be more appropriate for future surveys.
- Is the block size appropriate?
  - While 65% of participants feel the block size is appropriate, there appears to be mixed feedback on block size. Almost a third of respondents would prefer a larger

block size. This may be a proxy for desiring a higher (or no) usage cap, which was also a desire of many customers on the survey.

- Do current or potential subscribers want to be able to subscribe to more than 50% of their usage?
  - Yes, 56% of program participants surveyed would like to subscribe for more than 50% of their annual average energy usage.
- Should the 50% energy usage limitation be relaxed or eliminated for customers exhibiting high load factors?
  - High load factor customers are usually non-residential customers. Since only residential customers have subscribed in the current program, this question was not included in the survey but will be considered for future surveys.
- Are customers aware of the potential for part of the subscription fee to increase with potential rate increases? With this knowledge, are they still willing to participate?
  - Yes, based on the survey, customers appear to be aware of this potential, and are still willing to participate. Seventy-two percent were satisfied with potential for increased fees due to potential rate increases.
- Are there any aspects of the program that provide the customer with a greater understanding of solar energy generation?
  - Yes, participants indicated at a rate of 51% that they have a better understanding of solar energy generation. Based on the fact that 49% of respondents have visited the Community Solar webpage, these educational outreach efforts appear to have been effective.
  - Opportunities exist to more frequently communicate with and educate customers on Community Solar. Ninety-six percent of participants want to be kept informed and updated at some frequency between weekly and quarterly.
- What is the impact of the program on non-participating customers?
  - There is negligible financial impact to non-participants as the revenues from participants are expected to cover the cost of the solar facility over its life.