

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Evergy)
Metro, Inc. d/b/a Evergy Missouri Metro and)
Evergy Missouri West, Inc. d/b/a Evergy)
Missouri West for Permission and Approval of)
a Certificate of Public Convenience and)
Necessity Authorizing It to Construct, Install,)
Own, Operate, Maintain and Otherwise Control)
and Manage Solar Generation Facilities in)
Kansas City, Missouri.)

Case No. EA-2022-0043

NOTICE

COME NOW, Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (collectively, the “Company”) and respectfully state as follows to the Missouri Public Service Commission (“Commission”):

1. On May 4, 2022, the Company and other parties to this docket filed a *Unanimous Stipulation and Agreement* (“Stipulation”) which included an agreement between the Company, Staff (“Staff”) for the Commission, the Office of the Public Counsel (“OPC”), and Renew Missouri Advocates (“Renew MO”) (collectively, the “Signatories”) to resolve the issues in this docket.¹
2. On May 12, 2022, the Commission issued its *Order Approving Stipulation and Agreement* (“Order”) which approved the Agreement referenced above.
3. Pursuant to the provisions of the Agreement, the Company is filing the attached report reflecting an evaluation of the program and lessons learned designated as **Exhibit A**.

¹“Staff recommends that the Commission require the Company to submit reports in this case docket in EFIS detailing an evaluation of the program and lesson learned, filed quarterly until this facility is fully constructed and annually thereafter for the following four years and then thereafter every three years until this pilot facility is retired as outlined in a Stipulation and Agreement from Case No. ER-2018-0145.” See Agreement, p. 4, Paragraph 10, Staff Proposed Condition 13.

WHEREFORE, the Company respectfully requests the Commission take notice of the attached.

Respectfully submitted,

/s/ Roger W. Steiner

Roger W. Steiner, #39586

Evergy, Inc.

1200 Main Street, 16th Floor

Kansas City, MO 64105

Phone: (816) 556-2314

Fax: (816) 556-2787

roger.steiner@evergy.com

**ATTORNEYS FOR EVERGY MISSOURI
METRO AND EVERGY MISSOURI
WEST**

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 3rd day of March 2023.

Roger W. Steiner

Roger W. Steiner

Evergy Missouri Metro and
Evergy Missouri West
Solar Subscription Rider
2022 Q4 Program Report
Case Nos. ER-2018-0145,
ER-2018-0146, and
EA-2022-0043



Table of Contents

Project Overview	3
Project Milestones and Deliverables to Date.....	4
Program Activities	7
Customer Enrollments.....	7
Newsletter and Marketing.....	8
Program Insights.....	13
Lessons Learned.....	14
Appendix.....	16

Project Overview

Background

In reference to Case No. EA-2022-0043 (“CCN Case”), Evergy Metro, Inc. d/b/a Evergy Missouri Metro (“Missouri Metro”) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (“Missouri West”) (collectively, “Evergy” or the “Company”) submitted a Certificate of Convenience and Necessity (“CCN”) request in December 2021 to seek approval for 5 MWac of a 10 MWac solar array to be utilized to serve the needs of customers under the Solar Subscription Rider, Schedule SSP. The remaining 5 MWac will be used to fulfill the requirements of SB564 legislation (393.1665 RSMo.). Per footnote 5 of the CCN Stipulation & Agreement; “the Company agreed that over time the portion of the Project will transition to serve the future needs for Evergy Missouri West and Evergy Missouri Metro Solar Subscription participants and described herein.” As the waiting list of Missouri Metro and Missouri West customers reach 1,000 shares (0.5 MWac), Evergy will include each additional 0.5 MWac portion in the total portions of the program designated as Solar Subscription assets. Evergy also indicated in that CCN filing that it intended, as part of its rate case filing, ER-2022-0129/0130, to propose that 1 MWac of the 5 MWac portion of SB564-required solar be allocated equally between Missouri Metro and Missouri West to meet low-income customers’ needs through a Low-Income Solar Subscription Pilot Program, Schedule LIS.

Evergy’s Solar Subscription program was designed to help address the physical and financial barriers customers may encounter with adopting solar. The Company’s Solar Subscription programs provide customers that face these barriers with an affordable product with a fixed solar block charge and a solar installation sited in the Company’s service territory.

As part of the Unanimous Stipulation and Agreement approved by the Commission in its Order on May 12, 2022, for the CCN Case, the Company agreed to the following condition:

“Staff Proposed Condition 13. Staff recommends that the Commission require the Company to submit reports in this case docket in EFIS detailing an evaluation of the program and lesson learned, filed quarterly until this facility is fully constructed and annually thereafter for the following four years and then thereafter every three years until this pilot facility is retired as outlined in a Stipulation and Agreement from Case No. ER-2018-0145.”

On October 21, 2022, the initial 3rd quarter Solar Subscription Rider Report was filed in the ER-2018-0145 docket but inadvertently not concurrently filed in docket EA-2022-0043. This report is in addition to that Q3 report and is offered in compliance with this stipulated term.

Hawthorn Solar Facility

Overview

The Company’s first solar subscription facility is located at its existing Hawthorn Generating Station, which is in its Missouri Metro service territory. The Company selected its Hawthorn facility as the point of interconnection due to the existing infrastructure that could be utilized. This reduced the total cost of the project by eliminating the need to procure a large specialty transformer.

- The Hawthorn facility was completed in approximately **7 months** from ground-breaking to Commercial Operation Date (“COD”).
- **70 acres** of land were developed for this installation.
- **22,000 solar panels** were installed.
- Live EarthCam footage of the construction was updated every **5 minutes** and shared with enrolled customers throughout the process.
- Hawthorn’s 10 MW solar facility is anticipated to produce **21,000 MWh of energy** in its first year.

Construction of this site began in July 2022, and the site was placed in-service on January 11, 2023. Participating customers will receive their first energy statement reflecting the new energy solar charges beginning in mid to late March 2023. Solar will be billed monthly reflecting the prior month’s solar generation production.

Rate

All final costs associated with the solar project have been reviewed and accounted for. The final solar block charge for the resource is \$0.09311/kWh. The service and access charge are \$0.05125/kWh. The cumulative total and levelized cost of energy (LCOE) for the resource is \$0.14436/kWh

Project Construction

Major Milestones and Deliverables

Month	Activity
July	Construct laydown area, roads, temporary power
August	Pile installation, inverter foundations, underground electrical
September	Pile installation, tracker installation, electrical
October	Tracker installation, module installation, electrical
November	Module installation, electrical
December	Electrical, commissioning and testing

Beams in the ground

A solar array needs to be well anchored. Starting in August, our team laid out a grid and then used a heavy-duty machine to drive support beams (also known as piles) deep into the ground. Caps were then bolted on top, which will help connect the solar panels later. To make sure these

beams can withstand forces such as wind and snow, we tested them out by pulling on them with a powered pulley system.

Install tracker motors

Starting in September, our team installed a solar tracking system, which will rotate solar panels on a single point to track the sun from east to west. Using GPS data, it will determine the optimal angle, and a motor will rotate the previously installed torque tubes. A driveline connects this motor to many other rows of solar panels, rotating them all simultaneously.



Attach solar panels

In the last three months of 2022, over 22,000 panels were installed. Our team attached them using brackets that wrap around the torque tubes, and then bolted them to the panel frames. A solar panel is made up of special photovoltaic cells designed to absorb light and convert it into electricity. As the sun shines, photons of light will strike these cells, knock electrons loose, and generate an electrical current.



Connect wiring and harnesses

Once the panels are attached, they need to be wired together (also known as stringing) to create an electrical circuit for the current to flow. Panels in this array are strung via a method called parallel wiring, so that if one panel has any issue, the rest of the panels can still operate normally. Each row will then be fed to an inverter to be converted to Alternating Current (AC) before it is sent on to the grid.



Start Producing Electricity

This solar array commissioning was finalized, and the array became operational January 11, 2023. In early December, our team received training on various components of the system. We then conducted performance testing and brought the system online to the grid before the end of the year. The performance test consisted of a 72-hour test to ensure reliable functionality of each and every system, including but not limited to the inverters, trackers, weather station, and

controls. The array is now doing what it was built to do – harvesting clean, renewable energy from the sun.



Program Activities

Schedule SSR Customer Enrollment

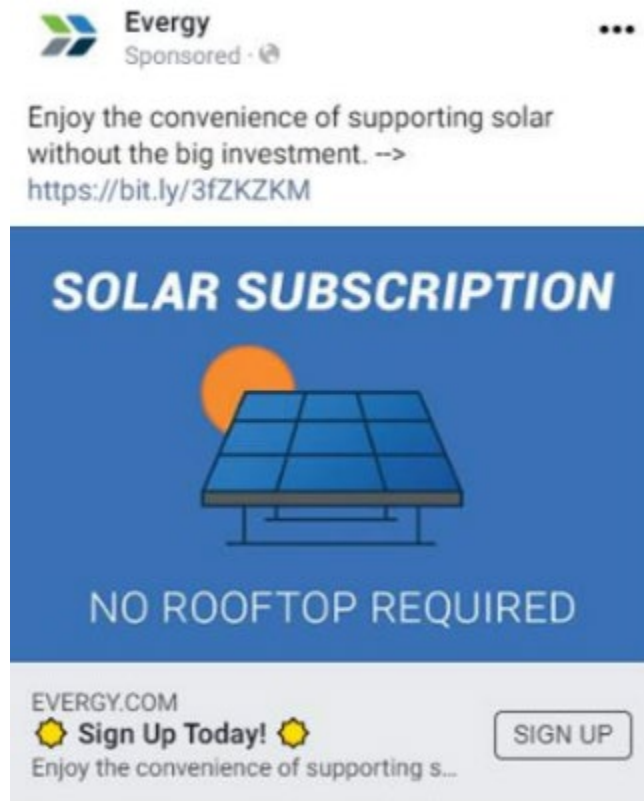
The enrollment goal for 2022 was to see customer subscriptions in the program surpass 100% and have a waitlist. Per the original program tariff (Schedule SSP) the resource was split between jurisdictions based on the same ratio as the expected customer subscriptions. As part of the Company's CCN filing, allocations were locked in based on enrollment percentages at that time. The Company allocated costs into five separate buckets utilizing the jurisdictional subscribed share percentage for the Schedule SSP program for Evergy Missouri Metro, Evergy Missouri West, and Evergy Kansas Metro and also incorporating 393.1665 RSMo. requirements for Evergy Missouri Metro and Evergy Missouri West.

By the end of 2022, Evergy Missouri Metro was over 117% subscribed, and Evergy Missouri West was over 128% subscribed, exceeding the established goal.

Marketing outreach efforts in 2022 consisted of two branches of activities. First, continued recruitment of customers into the program. Second, ongoing engagement with current subscribers to maintain program participation as the site is built out.

Recruitment efforts:

- By focusing on low/no cost owned channels, namely email, increased participation in the program was achieved. By targeting customers based on industry expert research, promotion of the program was sent to through multiple marketing channels to drive awareness and enrollments in the program.
- Email outreach was supplemented with a few other channels:
 - Facebook targeted ads (example below):



- Greenability digital magazine ads (example below):



- Cross promotion with synergistic programs like placing program signup information in the Clean Charge Network newsletter

Subscriber maintenance efforts:

- In 2022, four separate construction updates and renewable focused content newsletters provided consistent updates to subscribers about the status of the buildout. These email communications were designed to deliver pertinent information and keep the participant engaged with Evergy.
 - Example: Link to October 2022 issue: [Solar & Renewable News: The Making of Our New Solar Site \(evergy.com\)](https://www.evergy.com/news/solar-renewable-news-the-making-of-our-new-solar-site)



Marketing outreach activities in 2023 will focus on the following priorities below:

- Participant Confirmation and Waitlist Management- The Company will actively confirm participants once the final subscription cost has been finalized and provide communication around billing expectation and provide ongoing support to ensure a seamless onboarding process.
- Low Income Solar Deployment- The Company will finalize all go to market coordination efforts including but not limited to collaboration with Renew Missouri and Division of Energy on program design, website and collateral design, channel and marketing outreach strategy and customer communication and support.
- Ongoing Schedule SSR and LIS Promotion- The Company will continue to actively promote the Solar Subscription program in Missouri, maintaining an active waitlist queue and continue recurring communications to engage existing participants.

Customer Newsletter

Evergy has been communicating with subscribed Solar Subscription customers since inception of the program. Over the past couple of years, communication has occurred quarterly through an email newsletter to participants. Recurring communication with participants through this

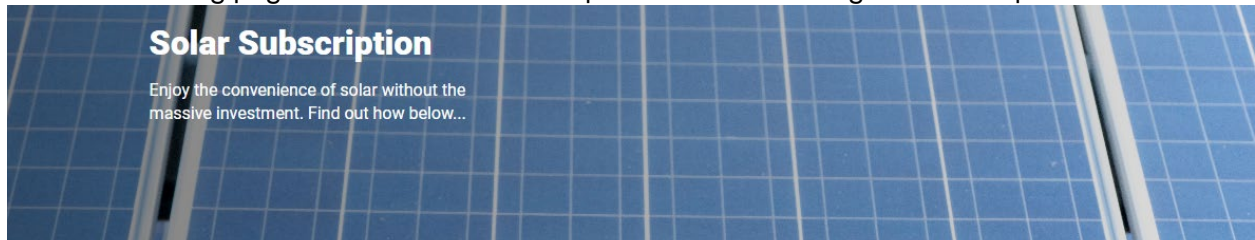
program newsletter has been an effective way to keep participants engaged and highlight major project milestones as the array nears completion and energy production begins.

In addition to the recurring newsletter, additional communications will be sent to subscribers in February. This communication will be via a letter and email with the final solar rate information and billing example. It will also give customers a final opportunity to opt out.

Web Content

The [Solar Subscription webpage](#) serves as the primary destination for all marketing outreach efforts and has been crucial in providing key detail to landing page visitors interested in joining the program. The last quarter of 2022 focused on revamping the webpage content to make it more visually appealing, include more customer friendly language, with the goal of further increasing the subscription total.

New web landing page for both Solar Subscription and Income Eligible Subscription:



Making our environment cleaner and offering options that let *all* of our customers participate is a foundational piece of what we're working toward. As a result, **we offer a program that lets you use solar energy (for all or a portion of your energy) without having to pay for solar installation or maintenance on your home—yes, this means renters and low-income customers too.**



Standard

Sign up for Solar Subscription and you'll be able to use solar to provide a percentage (of your choice) of your energy for a small monthly cost.

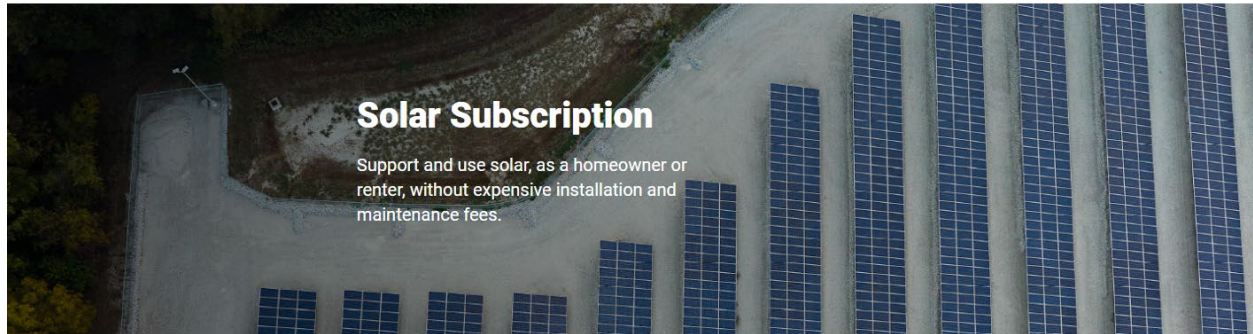


Discount

We offer a no additional cost option for those who wouldn't be able to participate financially otherwise (that could save you money long-term). [See if you're eligible.](#)

“Standard” Solar Subscription Webpage:

[Home](#) | [Smart Energy](#) | [Renewable Resources](#) | [Subscription Programs](#) | [Solar Subscription Options](#) | [Solar Subscription](#)



Solar Subscription is a hassle-free option for homeowners and renters who want to support and use solar energy with only a small increase to your monthly bill, and avoid expensive solar panel installations and maintenance costs at your home.

Once you join Solar Subscription, you'll have a share of the energy produced at the solar site located near downtown Kansas City, MO, which helps power the homes of thousands of your neighbors who also belong to the Solar Subscription program.

To join Solar Subscription, you'll pay a small additional fee based on how much solar you would like to subscribe to, much less than the cost to install and maintain your own solar panels on your home. You decide the percentage of your average annual home energy usage you'd like to come from this local solar site... and we'll do the rest of the work! Your small additional fee will be added to your monthly energy bill.

[Sign Up Today](#)

What are the benefits to you?



Easily Contribute to Clean Energy

- ✓ A part or all of your energy comes from locally produced solar (and you choose what percentage)
- ✓ No rooftop or expensive investment on your end
- ✓ No long term commitment- if you don't like it, stop after 12 months



Financially Helpful

- ✓ Your subscription rate is fixed, which means even if standard energy rates go up, your solar rate stays the same
- ✓ No maintenance or operational costs to you or your home

[Sign Up Today](#)

“Discount” or Income Eligible Solar Subscription Webpage

Income Eligible Solar Subscription

As a homeowner or renter, support and use solar at little to no additional monthly cost to you.



Income Eligible Solar Subscription is a hassle-free, simple option for homeowners or renters who want to **support local solar energy with little to no increase to your monthly bill** or expensive solar installation and maintenance costs. With thousands of subscribers, a large solar energy installation located in North Kansas City on the grounds of the Hawthorn Power Plant creates megawatts of clean solar energy each year. This installation stands as a visual of our commitment to increase the amount of renewable energy that goes into the power grid and to give our customers opportunities to support that renewable energy.

[See if you're eligible](#) and [learn more below](#)

[Sign Up Today](#)

What are the benefits to you?

What are the benefits to you?



Easy to Use

- ✓ Choose to make up to 50% of your energy usage local solar (you choose your percentage in increments of 10%)
- ✓ No rooftop needed or expensive investments on your end
- ✓ No commitment—if you change your mind, stop whenever
- ✓ First-come first-serve and spots are filling up fast so sign up today



Financially Helpful

- ✓ Currently, the price of solar is the same or less than the standard residential rate
- ✓ No additional insurance costs and no additional fees
- ✓ Even if standard rates increase, your solar subscription portion of the bill stays the same (which could save you money long-term)*

** Evergy expects the price of participation in income eligible solar subscription to be the same or less than the standard residential rate. However, this could change in the future.*

How can you apply?

Below are what you need to be eligible for the program:

- Have an Evergy account in good standing, and
- [Meet the income criteria](#)

[Sign Up Today](#)

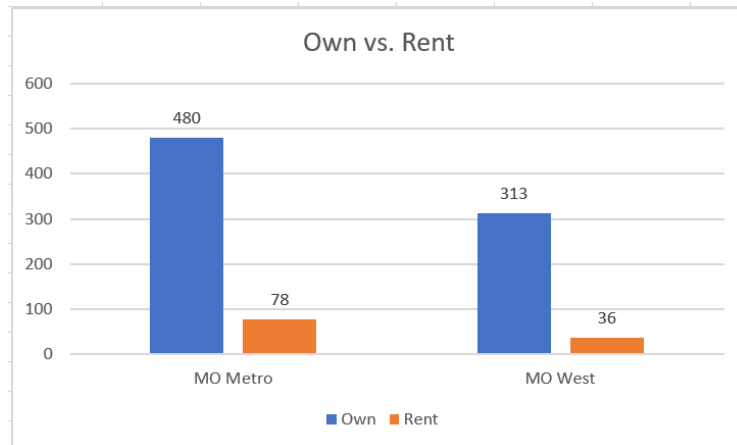
[Terms and More Details](#)



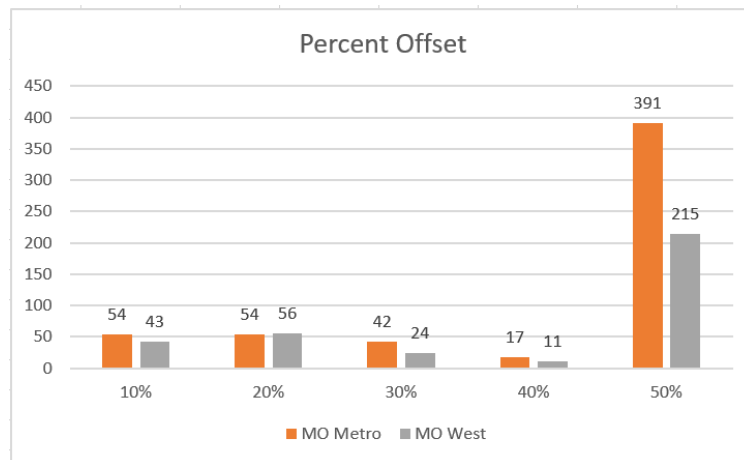
Program Insights

Analysis of the Schedule SSR enrollment for Missouri customers provides several key insights:

- Own vs. Rent: A majority own their home vs. rent



- Percent Offset: A majority selected the maximum offset of 50% at the time of enrollment



- Zip Code: A majority live in Kansas City metro and Lee's Summit
 - Missouri Metro: 480/558 customers (Kansas City)
 - Missouri West: 89/349 customers (Lee's Summit)

Program Survey and Pilot Evaluation

The Company will complete and submit to Staff an evaluation of the Solar Subscription Pilot within three years of operation. The evaluation will include:

- A. Tracking of program costs and revenues (participants, all ratepayers, Company),
- B. Numbers and types of subscribers (by rate class and participation by low and moderate-income customers if available),
- C. Annual customer satisfaction surveys of participating customers covering, but not limited to, economic considerations and customer service, and
- D. Impact or benefits of the facility on the utility distribution system.

Marketing Spend

\$13,214 was spent in 2022 on marketing and communication efforts for the Solar Subscription program.

Month	Amount
January	\$1,295
February	\$304
April	\$2,603
June	\$2,450
July	\$328
August	\$328
October	\$2,350
December	\$3,556
Total	\$13,214

Lessons Learned

Enrollment

- There was a long timeline between when the tariff became effective, and customers enrolled to when the array was approved and constructed. This adversely affected the customer experience.

Marketing

- The most effective campaign outreach was the targeted email campaign. This was due to the no direct cost to the program, and the higher level of enrollments that were achieved. All other marketing outreach tactics performed as expected, but did not achieve the scale and efficiency of enrollments as emails.
- The quarterly newsletter was also key to maintain communication and engagement with enrolled customers, especially with the long lead time.

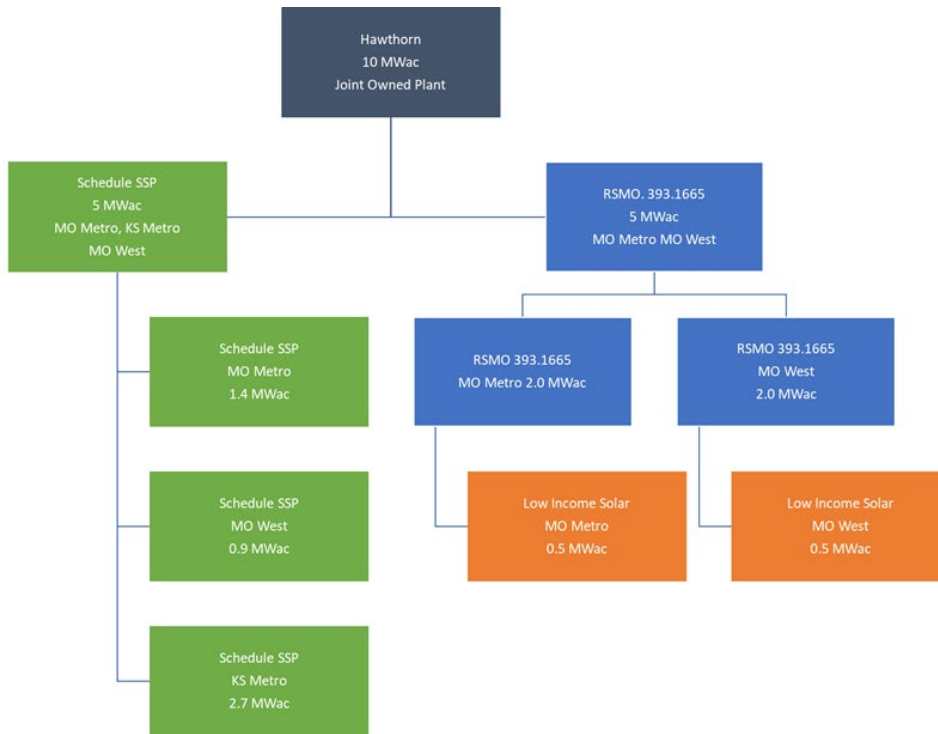
Construction

- Supply chain issues during the procurement/construction process caused delays and cost increases to the overall timeline and budget. These issues were mostly logistics and tariff related and were similarly experienced by all solar developers around the country. While global supply chain issues are impossible to fully mitigate, developing a list of strategic suppliers and ensuring that contractual liquidated damages are in place for delays, are two strategies that could be deployed in the future.

- By combining the solar array site for meeting the needs of the SSP program, LIS program, and fulfilling the requirements of RSMo. 393.1665, this resource achieved economies of scale which reduced costs for customers.

Appendix

Hawthorn Solar Resource Allocation



As part of Case No. EO-2022-0043, the Commission ordered that over time portions of the RSMO 393.1665 portion of the array will transition to serve the future needs for Evergy Missouri West and Evergy Missouri Metro Solar Subscription Pilot Rider participants as customer demand in those programs meet certain thresholds.