CITY COUNCIL AGENDA REPORT

DEPARTMENT: Public Works **MEETING DATE:** December 16, 2025

STAFF REFERENCE: Alex Tachiki, Public Works Director **AGENDA LOCATION:** AR-4

GOVERNMENT CODE SECTION 84308 APPLIES: Yes

TITLE: Power Purchase Agreement with JNG Power Corporation Related to a Solar and Energy Storage Project at the Mountain Avenue Reservoir

OBJECTIVE: To approve a Power Purchase Agreement with JNG Power Corporation for the Mountain Avenue Reservoir

BACKGROUND: A power purchase agreement (PPA) is a contract used by private, non-profit, and public entities that allows them to have a formal agreement to purchase the power from an electricity generating project. The primary parties in a PPA are the customer, generally a city, company or utility, and a seller, which is usually a utility or developer of the electricity project. PPAs are used by customers who wish to utilize electricity generated from private renewable sources in order to reduce their carbon footprint or meet specific energy efficiency goals. The revenue generated by PPAs that sell renewable-sourced electricity financially supports the buildout of new renewable projects.

The purpose of a PPA is to memorialize four key factors:

1. The parties' responsibility for construction and operation of an electricity generation project
2. volume of electricity generated from the project
3. The price of purchase of the renewable energy
4. Contract length for which the electricity will be sold

The financing, construction, operations and maintenance of the new electricity generating project are the responsibility of the project developer. The project developer in turn may be eligible to receive tax benefits to build, own, and maintain the project for the duration of the contract. The project developer for this proposed contract, JNG Power Corporation, proposes to develop the project and then sell the City electricity generated from it at a rate that is calculated at a 15% discount from Southern California Edison's current market rate. So with the PPA, the City would buy electricity from renewable sources at a price that is 15% below the market value of the power the City uses.

ANALYSIS: The City is proposing to enter into a power purchase agreement with JNG Power Corporation for three key reasons: First, to obtain the electricity to operate a City facility from clean and sustainable energy source. Second, to reduce the City's costs of purchasing electricity. Third, to take the key financial advantages that a PPA offers in comparison to the City owning, constructing, and maintaining a renewable generating project. In May 2025, staff presented to City Council a conceptual renewable generating project at the Mountain Avenue Reservoir site that would place a solar panel array on the roof of the reservoir and would produce enough energy to power the facility throughout the year. In addition, the solar panel array would also include a battery backup storage system that would provide emergency power for when the system would need to shut down for maintenance, replacement or periods of time when the panels do not generate as much energy due to lack of sunlight.

The City Council directed staff to pursue this project, but to also survey the market to ensure that the City was getting the best possible project. Staff surveyed other cities and engaged with multiple vendors on alternative proposals for a renewable generating project but did not find a vendor who could offer the same terms and conditions that JNG Power Corporation offered. While some vendors offered to work with the City on a power purchase agreement, they could not match the discount rate of 15%. Alternatively, other vendors offered to work with the City under a project development agreement, a different procurement method in which the City would enter into an agreement with a project developer, set the terms of the agreement, and agree to a one-time payment, all before moving forward with the construction of the renewable generating project. Staff has found the PPA model offered by JNG Power Corporation to be the most advantageous for the City after surveying the market for similar or alternative models.

The PPA with JNG Power Corporation also offers the City the ability to purchase the renewable generating project outright after the completion of the 6th year of the contract. The City would have the ability to purchase and own the project on an annual basis based on proposed buyout pricing. It is anticipated that at Year 7, the City would have the ability to purchase the project for approximately $1.4 million.

Some additional benefits that the PPA model offers include:

- The City does not have to commit any City funds for the design, development or construction of the project.
- The City “leases” the rooftop to the seller so the City always maintains ownership of the land and space on which the project is built.
- The seller operates and maintains the system, at the seller’s expense. This ensures that the system is always in working order and does not require the City to commit to additional operations and maintenance funds to perform repairs to the system.
- The City does not lose the ability to purchase energy from SCE or the Clean Power Alliance. The City would always have an SCE “interconnection” should the City choose or need to use SCE or CPA generated electricity.

Staff and JNG Power Corporation identified the Mountain Avenue Reservoir as the ideal site for a renewable generating project, due to the ability to install the solar panel array with little to no visibility from the surrounding residential neighborhoods. In addition, the project would provide much needed emergency power generation at the Mountain Avenue Reservoir. By approving this project, the City’s water system would then have emergency power capabilities at the Mountain Avenue Reservoir as well as their Wellfield. Through a separate project, staff is finalizing the installation of a back-up generator at the Wellfield. By installing a renewable generating project with emergency battery backup, the City’s water system would have emergency power at the two most critical facilities within the system and would further protect and ensure the City’s ability to deliver water throughout the system in case of an emergency or power outage.

ENVIRONMENTAL IMPACT: The approval of a power purchase agreement would further promote the City’s use of renewable energy, reduce greenhouse gas emissions and help the State meet the Renewable Portfolio Standards mandates of Senate Bill 100. Given that the City is already enrolled in the Clean Power Alliance, the renewable energy produced through the power purchase agreement would reinforce the positive environmental benefits of utilizing renewable energy and be consistent with the City’s strategic policy of promoting good environmental stewardship.

FISCAL IMPACT: If approved, the power purchase agreement would guarantee that the City is paying 15% below the Southern California Edison rates approved by the CPUC. On an annual basis, the Mountain Avenue Reservoir’s costs for electricity usage is above $200,000. For example, in 2024, the City spent approximately $211,917 for this particular facility, and based on this amount, it is anticipated that the City could save approximately $32,000 in annual energy costs at this facility moving forward.

OPTIONS: The following options are presented for consideration:

1. Approve a Power Purchase Agreement with JNG Power Corporation related to a Solar and Energy Storage Project at the Mountain Avenue Reservoir

2. Reject the proposed Power Purchase Agreement with JNG Power Corporation and provide staff with further direction

RECOMMENDATION: Staff recommends Option 1.

COUNCIL ACTION REQUIRED: If the City Council concurs, the appropriate action would be a motion to approve a Power Purchase Agreement with JNG Power Corporation related to a Solar and Energy Storage Project at the Mountain Avenue Reservoir and authorize the City Manager to execute the necessary documents in a form approved by the City Attorney.

JNG POWER CORPORATION

510 Mountain Reservoir PPA

Monrovia Public Works

510 Mountain Ave -
Monrovia CA 91016

(626) 703-9203
atachiki@monroviaca.gov

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1 ABOUT US

JNG POWER CORPORATION

OUR HISTORY

JNG Power Corporation is one of California's premier commercial developer of solar and energy storage projects. With over 20 years of experience in design, engineering, and installation, JNG Power is the turnkey solar solution for commercial energy users. JNG Power coordinates and manages all project functions including engineering, permitting, installation, utility interconnection, and long term system operating and maintenance. JNG Power is proud of its long track record of providing customers with cost competitive pricing and maximum energy savings.

OUR MISSION

Our mission is to enable solar and energy storage customers to realize projects with the maximum energy savings and reliability. We provide a cohesive suite of project design, quality installations, and energy asset. We are a customer centric organization that takes great pride in the services we provide to our customers. Since our company's founding our projects have been guided by the same three core principles of: Quality, Maximum Cost Savings, and Reliability.

2 PROJECT PORTFOLIO

CATHEDRAL HIGH SCHOOL

System Rating: ROOFTOP - 255kW-DC SOLAR, 360kWh BATTERY STORAGE

Services Provided: Design, Development, Installation, and Monitoring

Location: Los Angeles, CA

PROVEN TRACK RECORD & PERFORMANCE GUARANTEES

SHOWPRO CORPORATION

System Rating: CARPORT - 40kW-DC SOLAR, 77kWh BATTERY STORAGE

Services Provided: Design, Development, Installation, and Monitoring

Location: Los Angeles, CA

SCOTTISH RITE CATHEDRAL

System Rating: CARPORT - 105 kW DC SOLAR, 60kWh BATTERY STORAGE

Services Provided: Design, Development, Installation, and Monitoring

Location: Pasadena, CA

DOLORES MISSION SCHOOL

System Rating: ROOFTOP 55kW-DC SOLAR, 60kWh BATTERY STORAGE

Services Provided: Development, design, and Installation

Location: Los Angeles, CA

3 PROJECT SUMMARY

Payment Options	510 Mountain Reservoir PPA
Total Payments	$4,403,180
Total Incentives	$0
Net Payments	$4,403,180
Payback Period	0.0 Years
IRR (20 Year)	0.0%
NPV (20 Year)	$446,595
Term Length	20 Years
Upfront Payment	$0
PPA Starting Rate	$0.11/ PV kWh
PPA Annual Escalation	7%

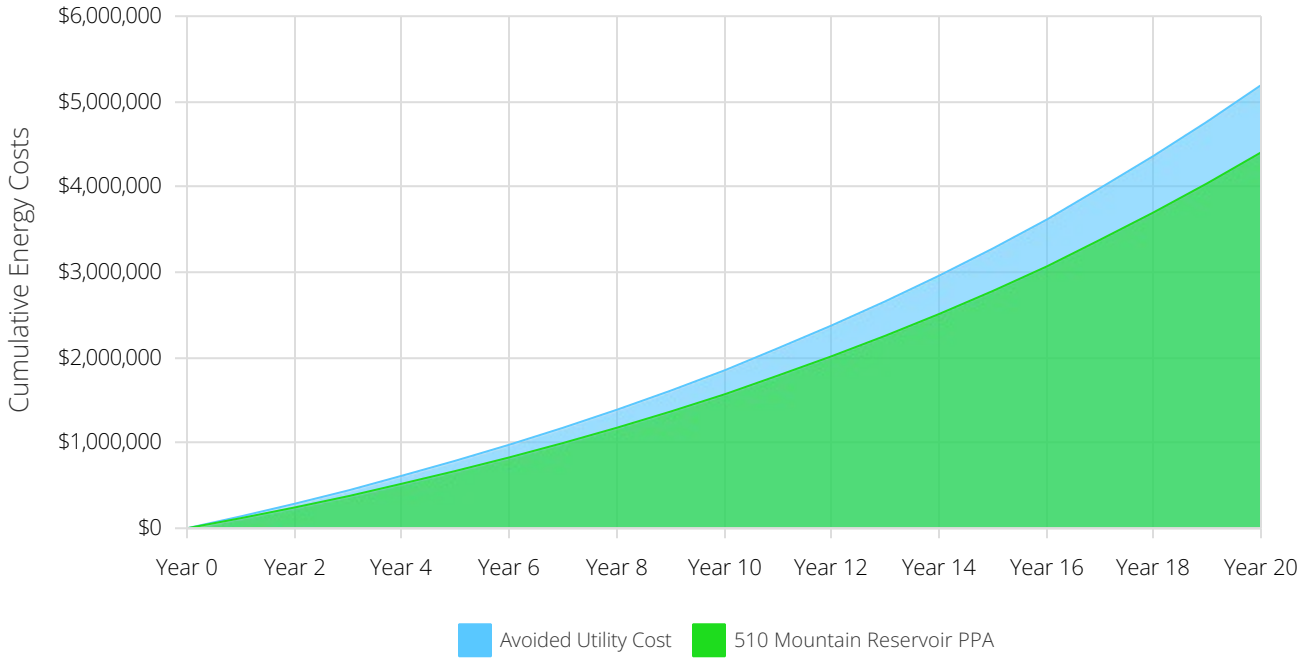
COMBINED SOLAR PV RATING

Power Rating: 650,000 W-DC
Power Rating: 580,691 W-AC-CEC

COMBINED ESS RATINGS

Energy Capacity: 0.0 kWh
Power Rating: 0.0 kW

CUMULATIVE ENERGY COSTS BY PAYMENT OPTION



4.1.1 PV SYSTEM DETAILS

GENERAL INFORMATION

Facility: Meter #1
Address: 510 Mountain Ave Monrovia CA 91016

SOLAR PV EQUIPMENT DESCRIPTION

Solar Panels: 650.0 kW-DC Premium Modules
Inverters: Standard Inverter

SOLAR PV EQUIPMENT TYPICAL LIFESPAN

Solar Panels: Greater than 30 Years
Inverters: 15 Years

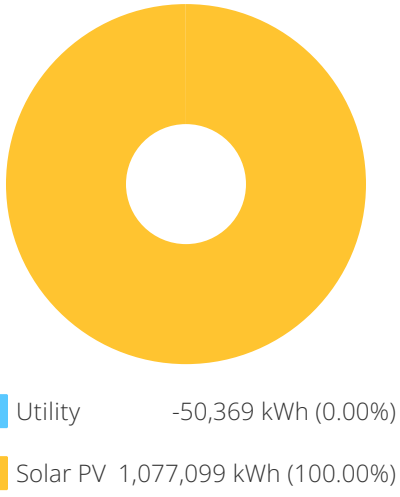
Solar PV System Cost and Incentives	
Solar PV System Cost	-
Net Solar PV System Cost	**$0**

SOLAR PV SYSTEM RATING

Power Rating: 650,000 W-DC
Power Rating: 580,691 W-AC-CEC

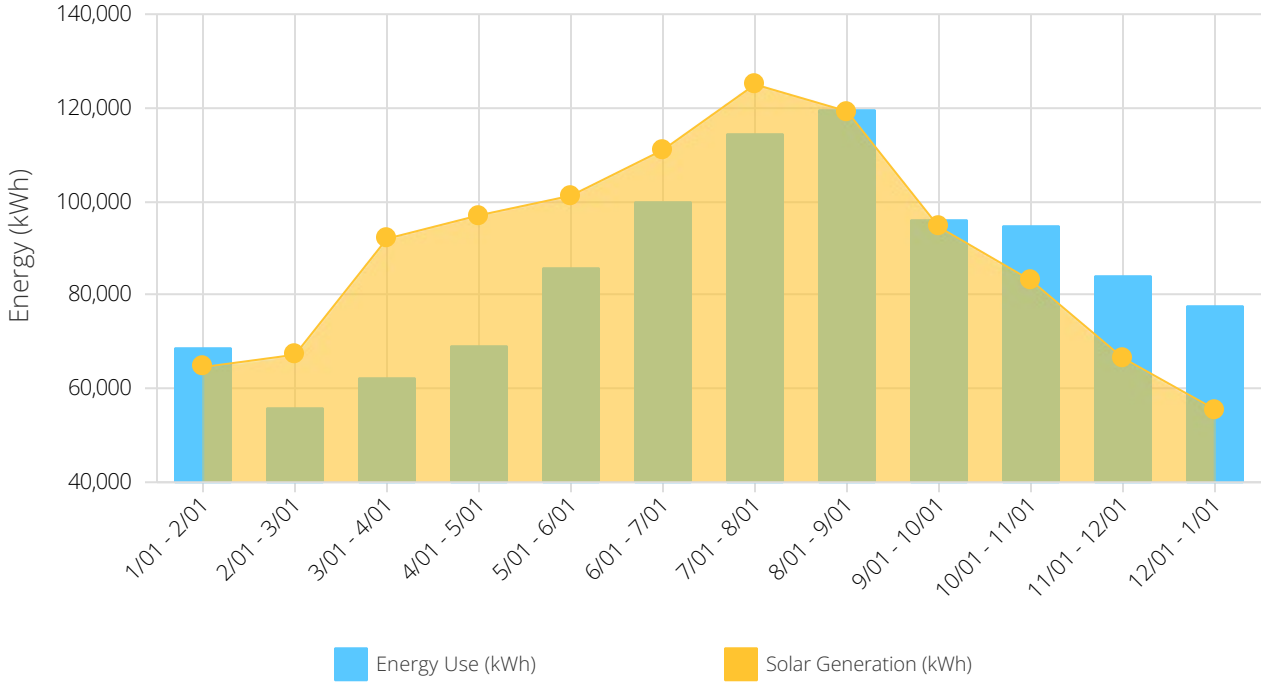
ENERGY CONSUMPTION MIX

Annual Energy Use: 1,026,730 kWh



Utility -50,369 kWh (0.00%)
Solar PV 1,077,099 kWh (100.00%)

MONTHLY ENERGY USE VS SOLAR GENERATION



4.1.2 REBATES & INCENTIVES

This section summarizes all incentives available for this project. The actual rebate and incentive amounts for this project are shown in each example.

4.1.3 UTILITY RATES

You have the option to remain on your current rate schedule (TOU-PA-3 (Effective Date: 6/1/24)) or switch to an alternative rate schedule (TOU-PA-3 (Effective Date: 3/1/25)). The rates for each are shown below and your estimated electric bills are shown on the following page for each rate schedule.

Customer Charges					Energy Charges					Demand Charges				
Season	Charge Type	Rate Type	TOU-PA-3	TOU-PA-3	Season	Charge Type	Rate Type	TOU-PA-3	TOU-PA-3	Season	Charge Type	Rate Type	TOU-PA-3	TOU-PA-3
W	Flat Rate per billing period		$524.81	$550.43	W	Mid Peak	Import	$0.20331	$0.18795	W	Flat Rate	Import	$13.71	$14.91
S	Flat Rate per billing period		$524.81	$550.43	W	Off Peak	Import	$0.16913	$0.15845	S	Flat Rate	Import	$13.71	$14.91
					W	Super Off Peak	Import	$0.08403	$0.08497					
					S	On Peak	Import	$0.4836	$0.41957					
					S	Mid Peak	Import	$0.21106	$0.2015					
					S	Off Peak	Import	$0.12655	$0.12157					

4.1.4 CURRENT ELECTRIC BILL

The table below shows your annual electricity costs based on the most current utility rates and your previous 12 months of electrical usage.

RATE SCHEDULE: SCE - TOU-PA-3 (Effective Date: 6/1/24)

Time Periods	Energy Use (kWh)				Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/1/2024 - 2/1/2024 W	-	11,316	12,049	45,112	331	$525	$1,774	$6,355	$4,538	$13,192
2/1/2024 - 3/1/2024 W	-	13,021	7,892	34,782	270	$525	$1,443	$5,462	$3,702	$11,131
3/1/2024 - 4/1/2024 W	-	13,831	10,872	37,720	472	$525	$1,617	$6,203	$6,471	$14,816
4/1/2024 - 5/1/2024 W	-	15,108	8,505	45,371	268	$525	$1,787	$6,535	$3,674	$12,522
5/1/2024 - 6/1/2024 W	-	19,495	16,593	49,438	268	$525	$2,216	$8,708	$3,674	$15,123
6/1/2024 - 7/1/2024 S	16,905	8,732	74,086	-	373	$525	$2,584	$16,810	$5,114	$25,032
7/1/2024 - 8/1/2024 S	25,248	7,277	81,666	-	367	$525	$2,959	$21,122	$5,032	$29,637
8/1/2024 - 9/1/2024 S	24,552	10,585	84,231	-	372	$525	$3,093	$21,674	$5,100	$30,392
9/1/2023 - 10/1/2023 S	4,612	2,133	89,080	-	271	$525	$2,483	$11,471	$3,715	$18,194
10/1/2023 - 11/1/2023 W	-	15,885	14,528	64,177	271	$525	$2,451	$8,629	$3,715	$15,320
11/1/2023 - 12/1/2023 W	-	11,493	13,603	59,103	270	$525	$2,182	$7,422	$3,702	$13,830
12/1/2023 - 1/1/2024 W	-	7,351	12,674	57,705	271	$525	$2,014	$6,473	$3,715	$12,727
Total	71,317	136,227	425,779	393,408	-	$6,298	$26,603	$126,864	$52,153	$211,917

4.1.5 NEW ELECTRIC BILL

RATE SCHEDULE OPTION 1: SCE - TOU-PA-3 (Effective Date: 6/1/24)

Time Periods	Energy Use (kWh)				Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/1/2024 - 2/1/2024 W	-	9,485	10,952	-16,565	268	$525	$749	$2,288	$3,674	$7,236
2/1/2024 - 3/1/2024 W	-	10,400	6,331	-28,277	269	$525	$581	$1,108	$3,688	$5,902
3/1/2024 - 4/1/2024 W	-	2,169	9,775	-41,558	472	$525	$562	$631	$6,471	$6,928
4/1/2024 - 5/1/2024 W	-	848	6,732	-35,622	268	$525	$497	$956	$3,674	$3,740
5/1/2024 - 6/1/2024 W	-	3,232	13,542	-32,472	253	$525	$737	$626	$3,469	$5,356
6/1/2024 - 7/1/2024 S	2,997	2,212	-16,491	-	372	$525	$776	$122	$5,100	$6,522
7/1/2024 - 8/1/2024 S	8,506	1,504	-20,797	-	265	$525	$779	$2,078	$3,633	$7,015
8/1/2024 - 9/1/2024 S	10,874	5,222	-15,977	-	323	$525	$981	$4,336	$4,428	$10,269
9/1/2023 - 10/1/2023 S	-3,677	-1,866	6,854	-	268	$525	$1,700	$1,339	$3,674	$4,560
10/1/2023 - 11/1/2023 W	-	8,242	13,652	-10,417	268	$525	$874	$2,812	$3,674	$7,885
11/1/2023 - 12/1/2023 W	-	10,235	11,253	-3,825	268	$525	$803	$3,205	$3,674	$8,207
12/1/2023 - 1/1/2024 W	-	6,631	11,343	4,186	268	$525	$853	$3,044	$3,674	$8,096
Total	18,700	58,314	37,169	-164,550	-	$6,298	$9,891	$16,694	$48,835	$81,717

NEW RATE SCHEDULE OPTION 2: SCE - TOU-PA-3 (Effective Date: 3/1/25)

Time Periods	Energy Use (kWh)				Max Demand (kW)	Charges			
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	Other	Energy	Demand	Total
1/1/2024 - 2/1/2024 W	-	9,485	10,952	-16,565	268	$550	$2,111	$3,996	$6,657
2/1/2024 - 3/1/2024 W	-	10,400	6,331	-28,277	269	$550	$555	$4,011	$5,116
3/1/2024 - 4/1/2024 W	-	2,169	9,775	-41,558	472	$550	$1,575	$7,038	$6,013
4/1/2024 - 5/1/2024 W	-	848	6,732	-35,622	268	$550	$1,801	$3,996	$2,746
5/1/2024 - 6/1/2024 W	-	3,232	13,542	-32,472	253	$550	$6	$3,772	$4,317
6/1/2024 - 7/1/2024 S	2,997	2,212	-16,491	-	372	$550	$302	$5,547	$5,795
7/1/2024 - 8/1/2024 S	8,506	1,504	-20,797	-	265	$550	$1,344	$3,951	$5,845
8/1/2024 - 9/1/2024 S	10,874	5,222	-15,977	-	323	$550	$3,672	$4,816	$9,039
9/1/2023 - 10/1/2023 S	-3,677	-1,866	6,854	-	268	$550	$1,086	$3,996	$3,461
10/1/2023 - 11/1/2023 W	-	8,242	13,652	-10,417	268	$550	$2,827	$3,996	$7,373
11/1/2023 - 12/1/2023 W	-	10,235	11,253	-3,825	268	$550	$3,382	$3,996	$7,928
12/1/2023 - 1/1/2024 W	-	6,631	11,343	4,186	268	$550	$3,399	$3,996	$7,946
Total	18,700	58,314	37,169	-164,550	-	$6,605	$12,521	$53,109	$72,236

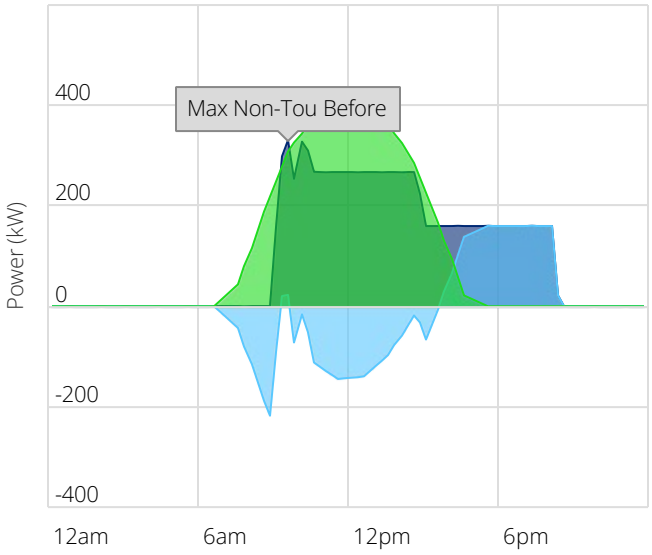
ANNUAL ELECTRICITY SAVINGS: $139,681

4.1.6 DEMAND PROFILES

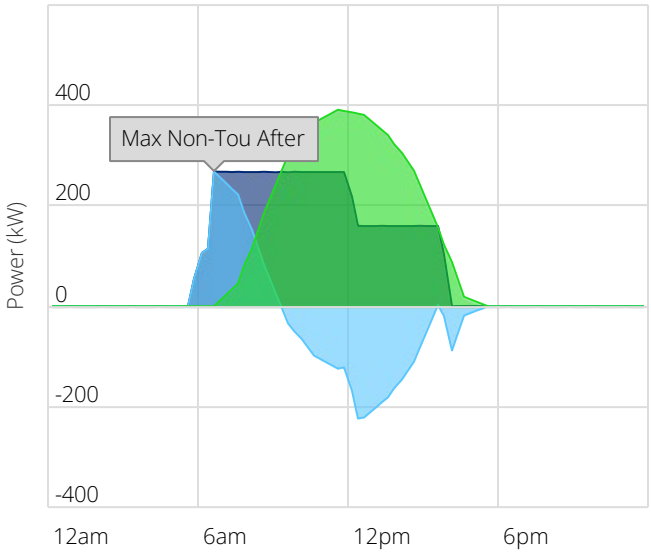
Date Range: 1/1/2024 - 2/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 1/3/2024



Max Demand After 1/1/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

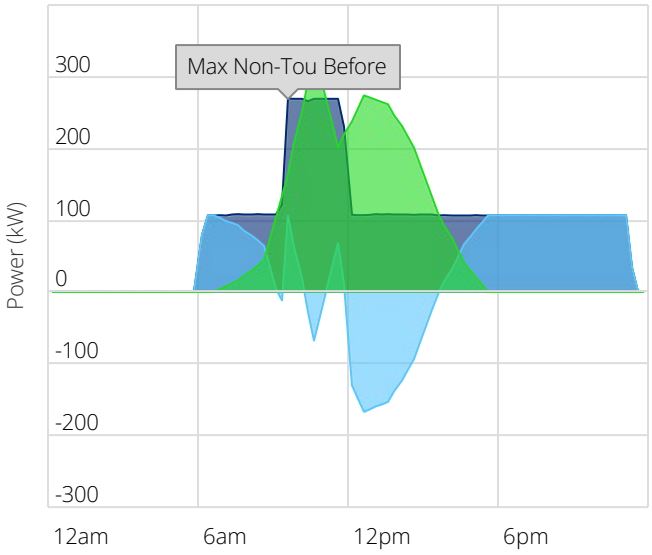
Charts Not Applicable

DEMAND PROFILES

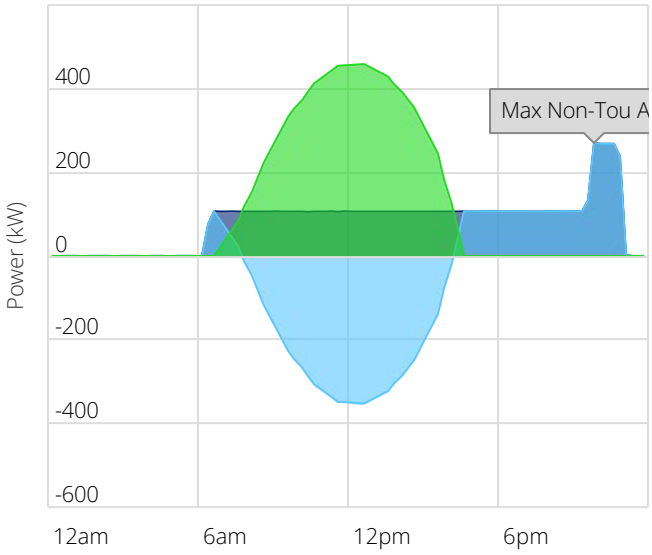
Date Range: 2/1/2024 - 3/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 2/6/2024



Max Demand After 2/18/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

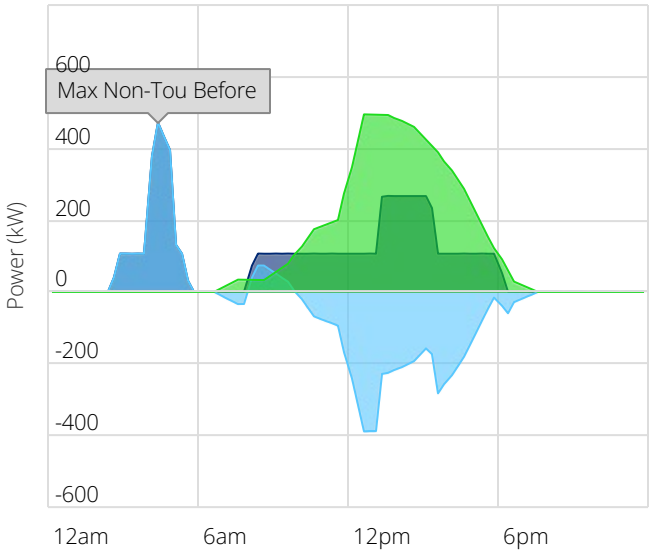
Charts Not Applicable

DEMAND PROFILES

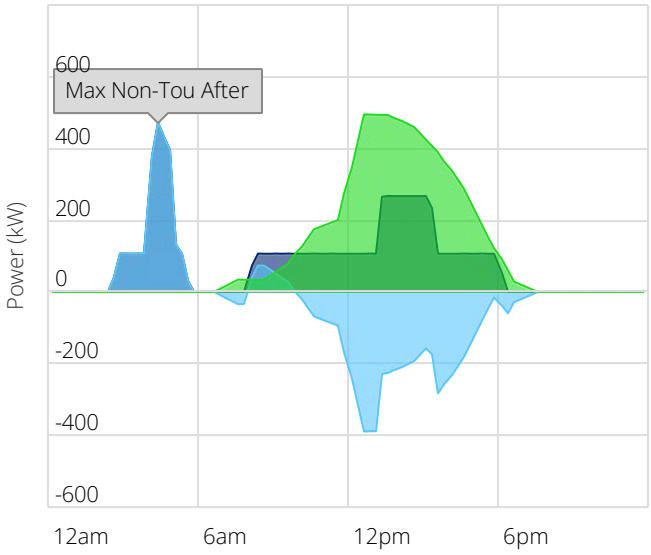
Date Range: 3/1/2024 - 4/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 3/24/2024



Max Demand After 3/24/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

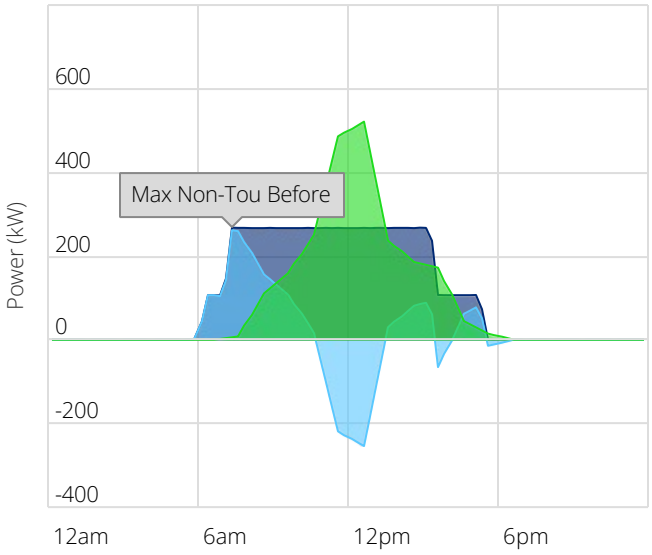
Charts Not Applicable

DEMAND PROFILES

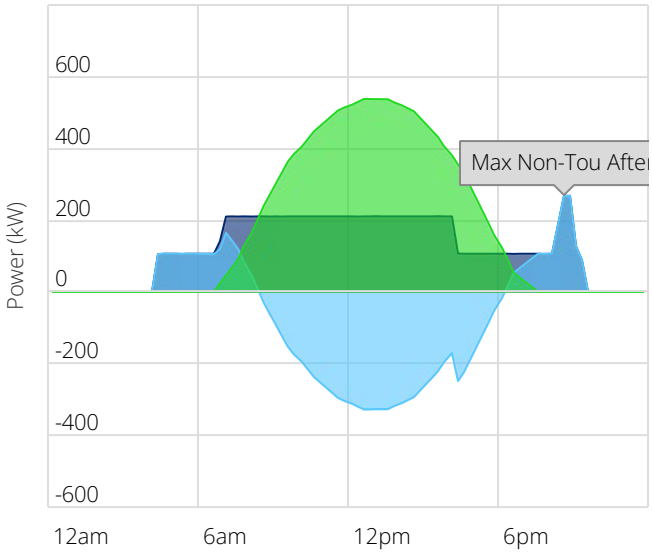
Date Range: 4/1/2024 - 5/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 4/2/2024



Max Demand After 4/16/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

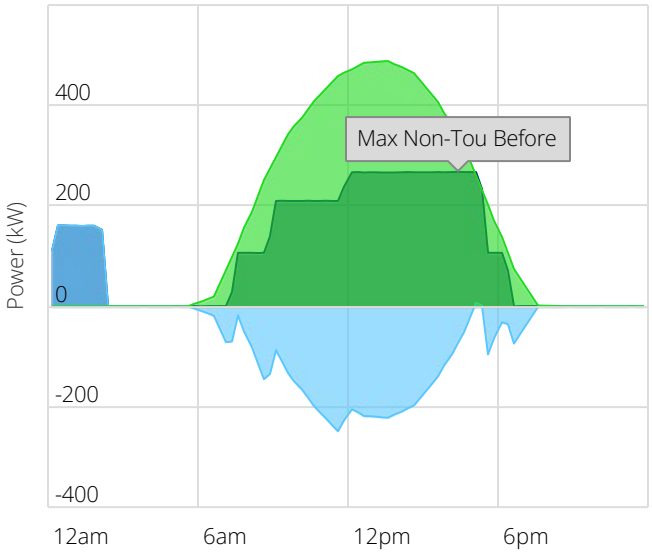
Charts Not Applicable

DEMAND PROFILES

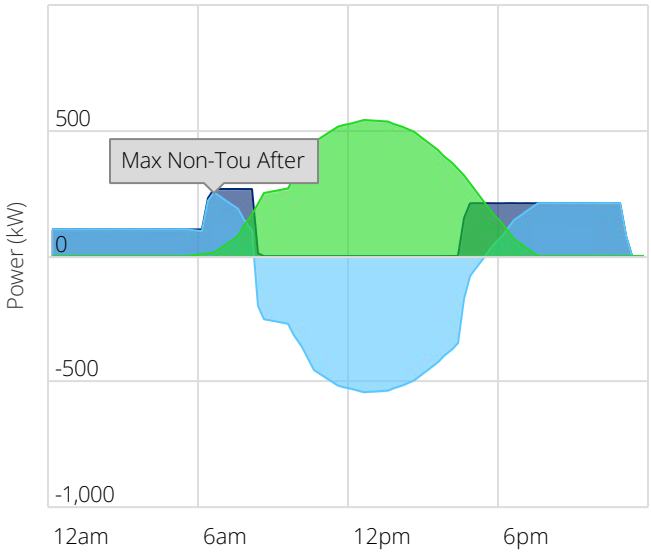
Date Range: 5/1/2024 - 6/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 5/17/2024



Max Demand After 5/4/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

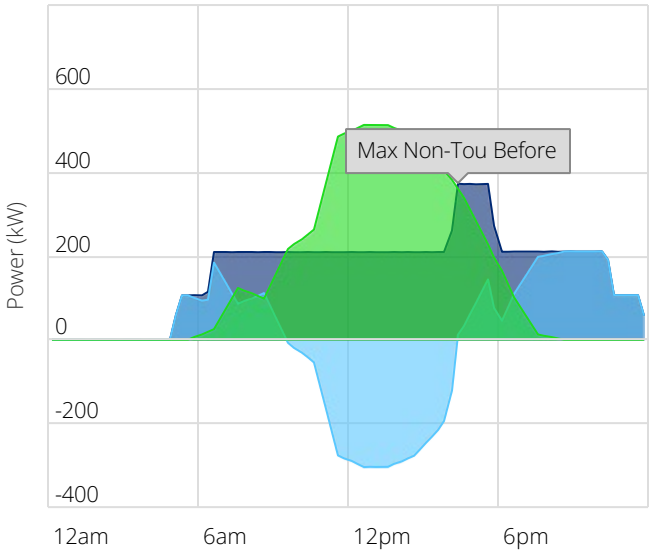
Charts Not Applicable

DEMAND PROFILES

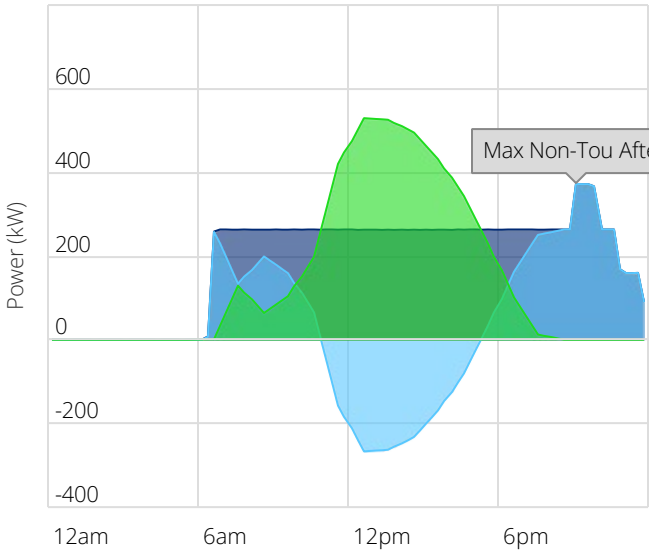
Date Range: 6/1/2024 - 7/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 6/22/2024



Max Demand After 6/20/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

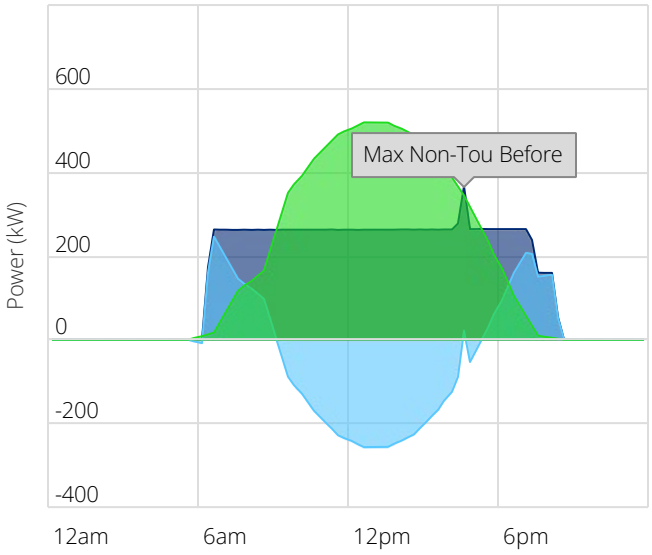
Charts Not Applicable

DEMAND PROFILES

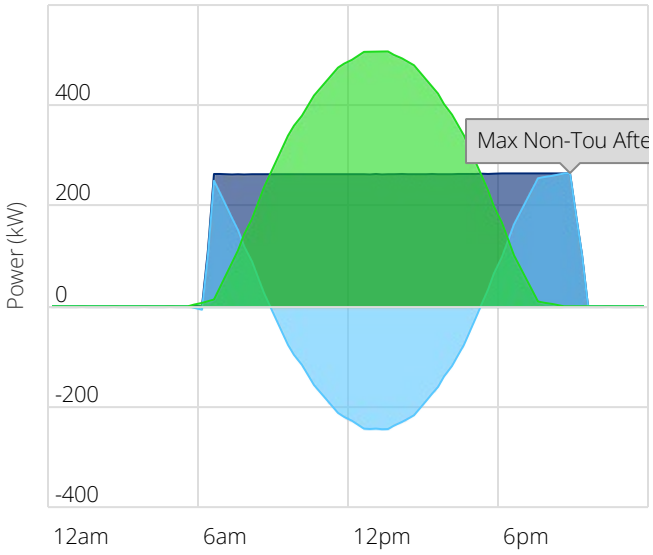
Date Range: 7/1/2024 - 8/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 7/9/2024



Max Demand After 7/12/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

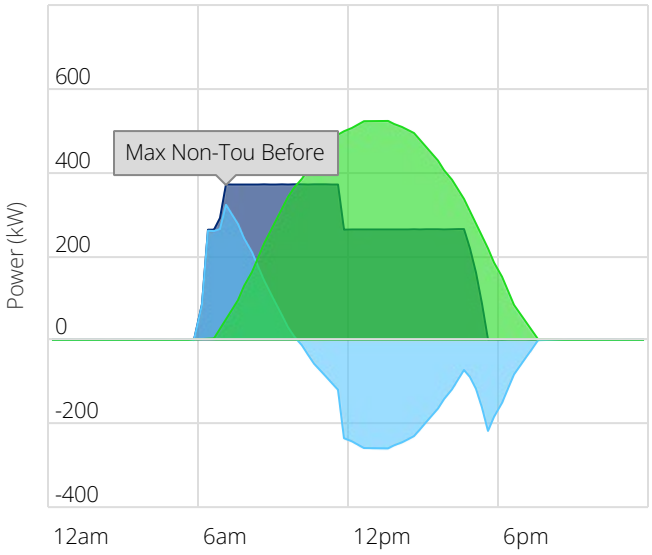
Charts Not Applicable

DEMAND PROFILES

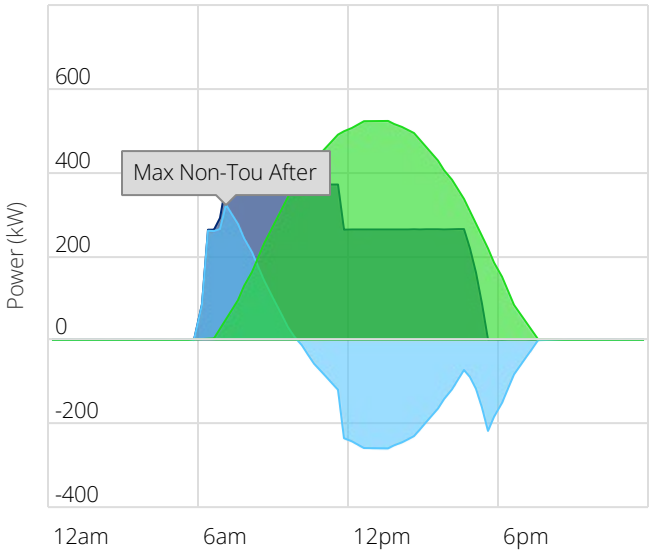
Date Range: 8/1/2024 - 9/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 8/6/2024



Max Demand After 8/6/2024



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

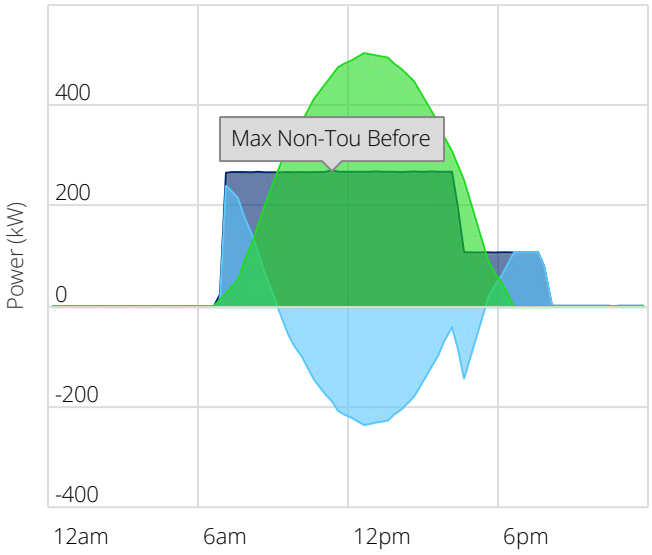
Charts Not Applicable

DEMAND PROFILES

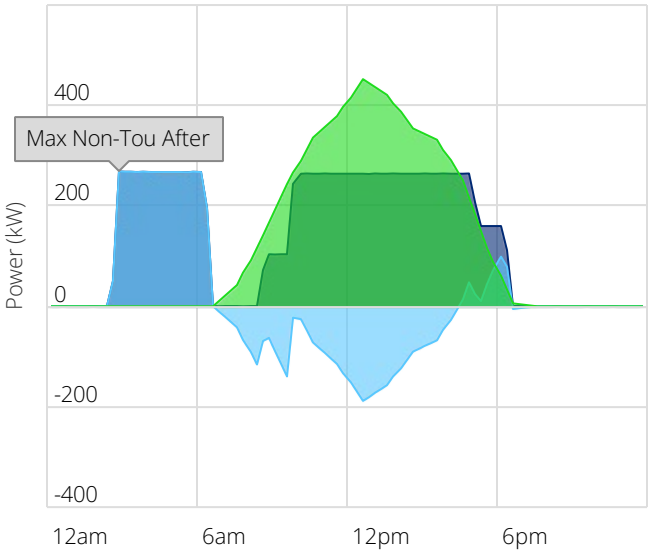
Date Range: 9/1/2023 - 10/1/2023

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 9/30/2023



Max Demand After 9/22/2023



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

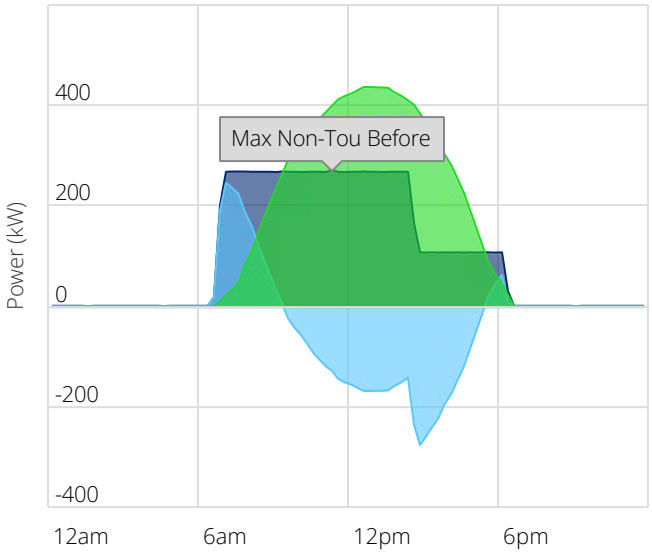
Charts Not Applicable

DEMAND PROFILES

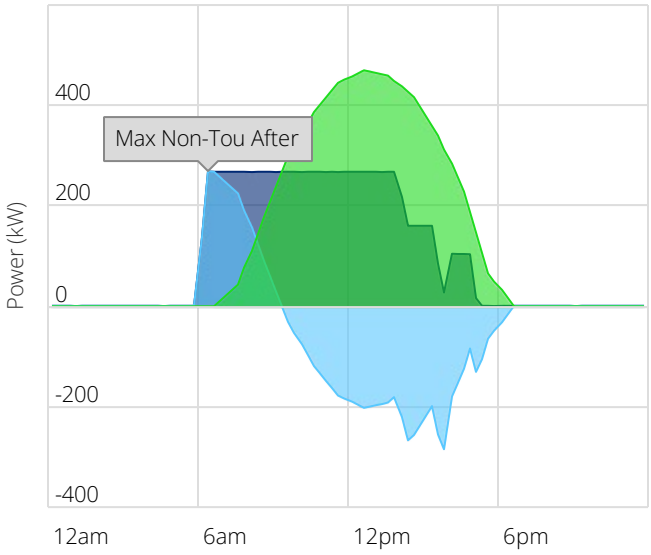
Date Range: 10/1/2023 - 11/1/2023

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 10/1/2023



Max Demand After 10/3/2023



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

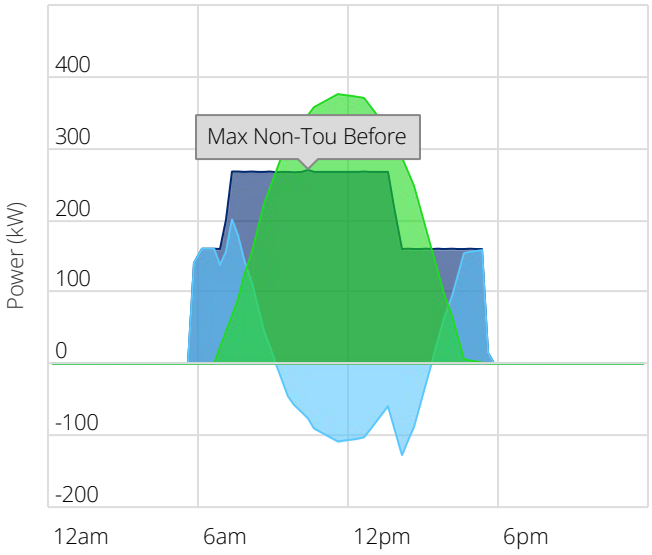
Charts Not Applicable

DEMAND PROFILES

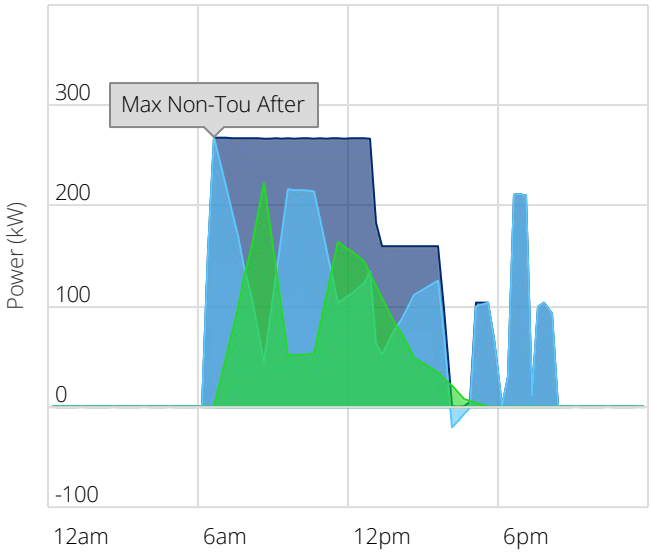
Date Range: 11/1/2023 - 12/1/2023

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 11/26/2023



Max Demand After 11/12/2023



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

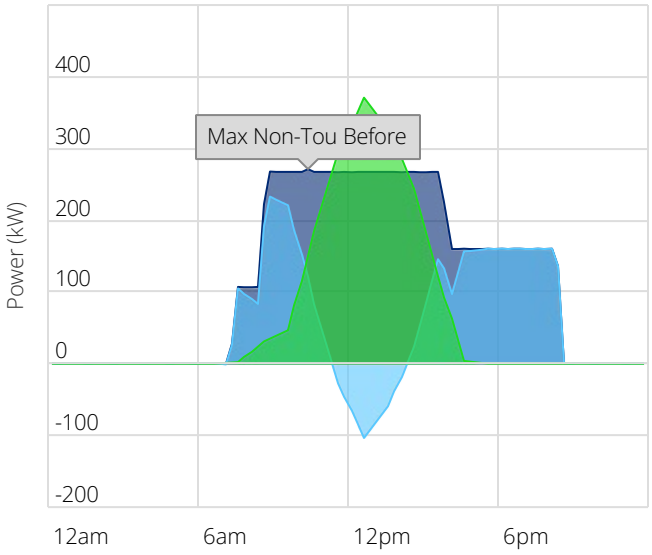
Charts Not Applicable

DEMAND PROFILES

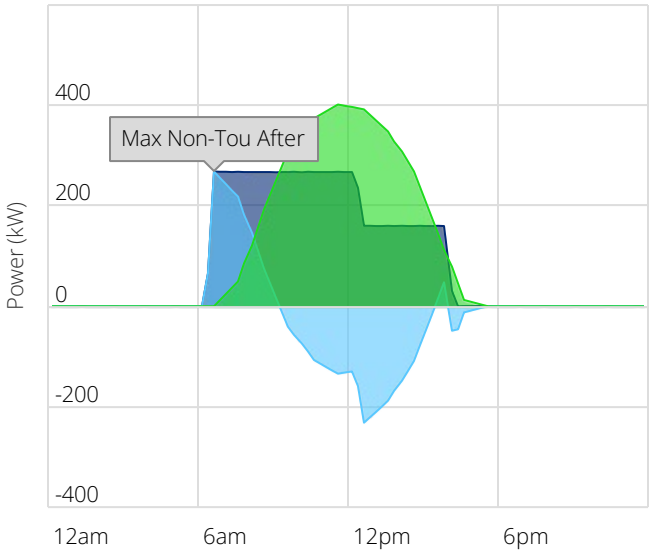
Date Range: 12/1/2023 - 1/1/2024

Max NC Demand: The charts below show when the maximum non-coincident (NC) demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Max Demand Before 12/2/2023



Max Demand After 12/23/2023



Legend: Demand Before | Solar PV | Energy Storage | Demand After

Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the hybrid Solar PV with Storage system simulation.

Charts Not Applicable

5.1 510 Mountain Reservoir PPA

Assumptions and Key Financial Metrics

Discount Rate	5.0%	Federal Tax Rate	0.0%	State Tax Rate	0.0%
Average Annual Utility Escalation	7.0%	PV Generation (kWh/kW-DC)	1,657 kWh/kW-DC	Average PV Degradation Rate	0.80%
Average ESS Degradation Rate	0.00%	Term Length	20 Years	PPA Starting Rate	$0.11/ PV kWh
PPA Annual Escalation	7%				

Years	PPA Payments	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-	-	-	-
1	-$118,481	$139,681	$21,200	$21,200
2	-$125,760	$148,263	$22,503	$43,704
3	-$133,478	$157,362	$23,884	$67,588
4	-$141,661	$167,009	$25,348	$92,936
5	-$150,334	$177,235	$26,900	$119,836
6	-$159,528	$188,074	$28,545	$148,381
7	-$169,273	$199,562	$30,289	$178,670
8	-$179,600	$211,737	$32,137	$210,807
9	-$190,543	$224,638	$34,095	$244,902
10	-$202,139	$238,309	$36,170	$281,072
11	-$214,424	$252,792	$38,368	$319,440
12	-$227,439	$268,136	$40,697	$360,137
13	-$241,225	$284,388	$43,164	$403,301
14	-$255,826	$301,603	$45,777	$449,078
15	-$271,290	$319,834	$48,544	$497,621
16	-$287,665	$339,139	$51,474	$549,095
17	-$305,004	$359,580	$54,576	$603,671
18	-$323,360	$381,220	$57,861	$661,532
19	-$342,791	$404,129	$61,338	$722,869
20	-$363,359	$428,377	$65,018	$787,887
Totals:	-$4,403,180	$5,191,067	$787,887	-

6.1 510 Mountain Reservoir PPA

Assumptions and Key Financial Metrics

Discount Rate	5.0%	Federal Tax Rate	0.0%	State Tax Rate	0.0%
Average Annual Utility Escalation	7.0%	PV Generation (kWh/kW-DC)	1,657 kWh/kW-DC	Average PV Degradation Rate	0.80%
Average ESS Degradation Rate	0.00%	Term Length	20 Years	PPA Starting Rate	$0.11/ PV kWh
PPA Annual Escalation	7%				

Years	Upfront	1	2	3	4	5	6	7	8	9	10	11	12
Cash													
PPA Payments	-	-$118,481	-$125,760	-$133,478	-$141,661	-$150,334	-$159,528	-$169,273	-$179,600	-$190,543	-$202,139	-$214,424	-$227,439
Electric Bill Savings	-	$139,681	$148,263	$157,362	$167,009	$177,235	$188,074	$199,562	$211,737	$224,638	$238,309	$252,792	$268,136
Cash Total	-	$21,200	$22,503	$23,884	$25,348	$26,900	$28,545	$30,289	$32,137	$34,095	$36,170	$38,368	$40,697
Total Cash Flow	-	$21,200	$22,503	$23,884	$25,348	$26,900	$28,545	$30,289	$32,137	$34,095	$36,170	$38,368	$40,697
Cumulative Cash Flow	-	$21,200	$43,704	$67,588	$92,936	$119,836	$148,381	$178,670	$210,807	$244,902	$281,072	$319,440	$360,137

6.1 510 Mountain Reservoir PPA

Assumptions and Key Financial Metrics

Discount Rate	5.0%	Federal Tax Rate	0.0%	State Tax Rate	0.0%
Average Annual Utility Escalation	7.0%	PV Generation (kWh/kW-DC)	1,657 kWh/kW-DC	Average PV Degradation Rate	0.80%
Average ESS Degradation Rate	0.00%	Term Length	20 Years	PPA Starting Rate	$0.11/ PV kWh
PPA Annual Escalation	7%				

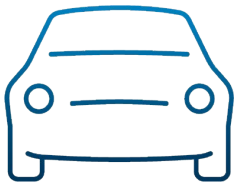
Years	13	14	15	16	17	18	19	20	Totals
Cash									
PPA Payments	-$241,225	-$255,826	-$271,290	-$287,665	-$305,004	-$323,360	-$342,791	-$363,359	-$4,403,180
Electric Bill Savings	$284,388	$301,603	$319,834	$339,139	$359,580	$381,220	$404,129	$428,377	$5,191,067
Cash Total	$43,164	$45,777	$48,544	$51,474	$54,576	$57,861	$61,338	$65,018	$787,887
Total Cash Flow	$43,164	$45,777	$48,544	$51,474	$54,576	$57,861	$61,338	$65,018	$787,887
Cumulative Cash Flow	$403,301	$449,078	$497,621	$549,095	$603,671	$661,532	$722,869	$787,887	-

7 ENVIRONMENTAL BENEFITS

OVER THE NEXT 20 YEARS, YOUR SYSTEM WILL DO MORE THAN JUST SAVE YOU MONEY. ACCORDING TO THE EPA'S GREENHOUSE GAS EQUIVALENCIES CALCULATOR (SOURCE), YOUR SOLAR PV SYSTEM WILL HAVE THE IMPACT OF REDUCING:

16,878

tons of CO2 Offset



38,366,266

Miles Driven By Cars

253,118

Trees Planted