DESERT WATER AGENCY
AUGUST 18, 2020

BOARD OF DIRECTORS
REGULAR MEETING AGENDA

8:00 A.M. OPERATIONS CENTER - 1200 SOUTH GENE AUTRY TRAIL – PALM SPRINGS – CALIFORNIA

Pursuant to the Governor's Executive Order N-29-20, there will be no public location for attending in person. Members of the public who wish to participate may do so by calling in at:

Toll Free: (877) 309-2073
Access Code: 297-633-613

Members of the public who wish to comment on any item within the jurisdiction of the Agency or any item on the agenda should submit comments by emailing sbaca@dwa.org before 5:00 p.m. August 17. Comments will become part of the Board meeting record. Board members and staff will be participating in this meeting via teleconference.

**In order to reduce feedback, please mute your audio when you are not speaking.*

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE — STUART
2. ROLL CALL — BACA
3. APPROVAL OF MINUTES - August 4, 2020 — STUART
4. GENERAL MANAGER'S REPORT — KRAUSE
5. COMMITTEE REPORTS – Executive – August 12, 2020 — STUART
6. PUBLIC COMMENT: Members of the public may comment on any item not listed on the agenda, but within the jurisdiction of the Agency. In addition, members of the public may speak on any item listed on the agenda as that item comes up for consideration. Speakers are requested to keep their comments to no more than three (3) minutes. As provided in the Brown Act, the Board is prohibited from acting on items not listed on the agenda.
7. ACTION ITEM
   A. Request Authorization for General Manager to Execute MOU with GSR Energy for Commercial Battery Energy Storage System (BESS) Installation; Authorize Filing of Notice of Exemption Under CEQA (Minor Alteration of Existing Facilities, Guidelines Section 15301) — JOHNSON
   B. Request Approval of Second Amendment to Sites Reservoir Project — KRAUSE
8. DISCUSSION ITEMS
   A. July Water Use Reduction Figures — METZGER
   B. Palm Springs Airport Demonstration Garden — METZGER
   C. COVID-19 Financial Impact Update — SAENZ
   D. Directors' report on NWRA Virtual Conference Attendance — BLOOMER, CIOFFI, STUART
9. DIRECTORS COMMENTS/REQUESTS
10. CLOSED SESSION
    A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
       Pursuant to Government Code Section 54956.9 (d) (1)
       Name of Case: Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al (2 cases)
    B. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
       Pursuant to Government Code Section 54956.9 (d) (1)
       Name of Case: Mission Springs Water District vs. Desert Water Agency

C. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Albrecht et al vs. County of Riverside

D. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Abbey et al vs. County of Riverside

E. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Bonnie Kessner, et al vs. Desert Water Agency, et al

F. CONFERENCE WITH LEGAL COUNSEL – PENDING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (2)
Possible Intervention in Case: AT&T vs. County of Riverside

11. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

12. ADJOURN

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting is asked to contact Desert Water Agency's Assistant Secretary of the Board, at (760) 323-4971, at least 48 working hours prior to the meeting to enable the Agency to make reasonable arrangements. Copies of records provided to Board members that relate to any agenda item to be discussed in open session may be obtained from the Agency at the address indicated on the agenda.

MINUTES OF THE REGULAR MEETING OF THE DESERT WATER AGENCY BOARD OF DIRECTORS

3

August 4, 2020

DWA Board via Teleconference:	Joseph K. Stuart, President	)
	Kristin Bloomer, Vice President	)
	Craig Ewing, Secretary-Treasurer	)
	Patricia G. Oygar, Director	)
	James Cioffi, Director	)
DWA Staff via Teleconference:	Mark S. Krause, General Manager	)
	Steve Johnson, Assistant General Manager	)
	Sylvia Baca, Asst. Secretary of the Board	)
	Kris Hopping, Human Resources Director	)
	Ashley Metzger, Outreach & Conserv. Mgr.	)
Consultants via Teleconference:	Michael T. Riddell, Best Best & Krieger	)
Public via Teleconference:	David Freedman, PS Sustainability Commission	)
	Randy Duncan, Mission Springs Water District	)
	Ray Amico, Palm Springs Resident	)
	Paul Ortega, Palm Springs Resident	)

Pledge of Allegiance

18833. President Stuart opened the meeting at 8:00 a.m. and asked everyone to join him in the Pledge of Allegiance.

Roll Call

18834. President Stuart called upon Assistant Secretary of the Board Baca to conduct the roll call:

Present: Cioffi, Oygar, Ewing, Bloomer, Stuart

Approval of 07/21/20 Regular Board Mtg. Minutes

18835. President Stuart called for approval of the July 21, 2020 Regular Board Meeting Minutes.

Secretary-Treasurer Ewing moved for approval. After a second by Director Cioffi, the minutes were approved by the following roll call vote:

AYES:	Cioffi, Oygar, Ewing, Bloomer, Stuart
NOES:	None
ABSENT:	None
ABSTAIN:	None

18836. President Stuart called upon General Manager Krause to provide an update on Agency operations.

General Manager's Report

Mr. Krause provided an update on Agency operations and noted his meetings and activities for the past several weeks.

Committee Reports
Executive 07/30/20

18837. President Stuart noted the minutes for the July 30, 2020 Executive Committee meeting were provided in the Board's packet.

18838. President Stuart opened the meeting for public comment.

Public Comment

Mr. Freedman

Mr. Freedman provided an update regarding the Palm Springs Sustainability Commission meeting on July 21, noting the Commission members provided a recommendation on the design for the Airport Demonstration Garden as well as additional areas under consideration. It will then go the Airport Commission and then to the City Council.

There being no one else from the public wishing to address the Board, President Stuart closed the public comment period.

18839. President Stuart called upon Assistant General Manager Johnson to provide a report regarding Seven Lakes Country Club recycled water service.

Discussion Items:
Seven Lakes Country Club Recycled Water Service

Mr. Johnson noted on July 20, 2020, he and General Manager Krause held a conference call with members of the Seven Lakes HOA Board to discuss providing recycled water service to their golf course. He reported that the HOA Board indicated they are experiencing mechanical issues with their private well pump and that they are looking at proposals for a new booster pump distribution system for the golf course and the club members expressed interest in the possibility of receiving recycled water. The Agency indicated that extending DWA facilities would be costly and the need to discuss the source of funding with the Board of Directors at today's Board meeting.

Mr. Johnson noted in addition to crossing the wash, the preferred alignment crosses the Resort Course at Tahquitz Creek west of Gene Autry Trail. To minimize disruption on the golf course and minimize impacts to the wash, the preferred installation method is direct drilling. Agency staff contacted an expert in horizontal directional drilling, the type of construction necessary for this recycled water service. The expert reviewed the site and determined that the best option for installing the recycled water service pipeline would require a drill length of approximately 1,500 feet and estimated a cost of approximately $750,000 and an additional $315,000 to complete the service installation for a total cost of approximately $1,065,000. It is estimated that the drilling would take 6 weeks to complete.

Discussion Items: (Cont.)
Seven Lakes Country Club Recycled Water Service

Mr. Johnson indicated staff is looking into ways funds may be obtained to supplement these costs by contacting local government, conservation partners, and investigating the availability of grant funding. However, because Seven Lakes Country Club is having operational difficulties they must move forward quickly with a solution. It may be difficult to secure supplementary funding in such a short time frame and may require supplementary funding directly from the Agency.

In response to Director Cioffi, Mr. Johnson noted staff wanted to present this to the Board first before discussing a long-term agreement to recover costs over time.

Secretary-Treasurer Ewing concurred with Director Cioffi regarding additional funding, noting the difficult timing and the need at this time for Seven Lakes Country Club.

President Stuart noted his concern about the cost

Secretary-Treasurer Ewing suggested having a study session.

General Manager Krause indicated his next task is to go back to Seven Lakes Country Club to discuss comments from today's Board meeting: 1) Supplemental funding; 2) Not the current time for the Agency to pick up costs; and, 3) Talk about working the costs into the service charges which has never been done before.

President Stuart noted at this time he cannot approve the cost of drilling and expressed his opposition with rate payers subsidizing costs. He would like further information on how to recoup costs and the Regional Board's decision.

In response to Secretary-Treasurer Ewing, Mr. Krause indicated the Agency has used capital funds in the past without being reimbursed and some potential customers could be hooked up to the current purple pipe.

President Stuart suggested having a study session to map territory and purple pipe to see if there are potential customers. Director Cioffi concurred and mentioned that groundwater quality should be taken into consideration.

Public Comment

18840. Due to earlier technical issues, President Stuart re-opened public comment.

Mr. Amico

Mr. Amico announced he is running for Board Director Division 5 in the upcoming general election.

Public Comment (Cont.) Mr. Ortega

Mr. Ortega noted he attended the last DWA Board Meeting virtually, and was pleased about the progress of the Airport Demonstration Garden. He thanked Outreach and Conservation Manager Metzger for the webinars that she organized. He announced he is in the process of filing nomination papers to run for Board Director Division 4 in the upcoming general election.

There being no one else from the public wishing to address the Board, President Stuart closed the public comment period.

Discussion Items:

Outreach & Conservation

18841. President Stuart noted that Board packets included Outreach & Conservation reports for July 2020.

Outreach & Conservation Manager Metzger reported on the following: 1) She will be hosting a webinar on August 20 on leak check and leak detection technology with Flume as a guest; and, 2) The new website is up and running.

Directors' Report on ACWA Virtual Conference Attendance

Secretary-Treasurer Ewing

18842. Secretary-Treasurer Ewing provided his notes on his attendance at the ACWA Virtual Conference noting points of interest; 1) the Voluntary Agreements; 2) the Governor's Water Resilience Portfolio was released last week; 3) Water Industry Trends Program "Maximum Contaminant Level Economic Feasibility"; and 4) Tim Quinn, Retired Executive Director ACWA gave a presentation on Collaborative Leadership and the difference between collaboration and the warrior mentality.

President Stuart

President Stuart reported he virtually attended the following; The Lieutenant Governor's question and answer period with a moderator; Secretary Crowfoot power point presentation; a virtual presentation by Mission Springs Water District with the General Manager, three Board Members and John Soulliere regarding smart metering systems, and he attended several other virtual presentations by water districts.

Vice President Bloomer

Vice President Bloomer reported she attended the same virtual meetings as Secretary-Treasurer Ewing and President Stuart mentioned. She found the PFOS & PFOA presentation interesting and she noted that because the conference was virtual she could visit all of the break-out sessions.

Director's Comments/Requests Director Cioffi

18843. Director Cioffi reported he attended the ACWA/JPIA Board meeting. He noted the following: 1) The Board reviewed and approved the Operating Budget for fiscal year 2020/2021; 2) The Liability refunds and Workers Compensation refunds will continue; 3) The Workers Compensation Program had a 10% decrease; 4) There were increases in the Employee Benefits Program, the PPO rates had no changes and an increase in HMO and Kaiser, no increase in vision or dental and a decrease in Life Insurance and Disability Insurance and there are no pending lawsuits.

18844. At 9:08 a.m., President Stuart convened into a Teleconference Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al (2 cases); (B) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Mission Springs Water District vs. Desert Water Agency; (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Albrecht et al vs. County of Riverside; (D) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Abbey et al vs. County of Riverside; (E) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1) Bonnie Kessner, et al vs. Desert Water Agency, et al; and (F) Pending Litigation, Pursuant to Government Code Section 54956.9 (d) (2), Possible Intervention in Case: AT&T vs. County of Riverside.

Closed Session:
A. Existing Litigation – ACBCI vs. CVWD, et al. (2 cases)
B. Existing Litigation – MSWD vs. DWA
C. Existing Litigation – Albrecht et al vs. Riverside County
D. Existing Litigation – Abbey et al vs. Riverside County
E. Existing Litigation- Bonnie Kessner, et al vs. Desert Water Agency et al
F. Pending Litigation - Possible Intervention in Case: AT&T vs. County of Riverside

18845. At 10:17 a.m., General Manager Krause reconvened the meeting into open session and announced there was no reportable action taken.

Reconvene – No Reportable Action

18846. In the absence of any further business, General Manager Krause adjourned the meeting at 10:18 a.m.

Adjournment

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Sylvia Baca
Assistant Secretary of the Board

GENERAL MANAGER'S REPORT
AUGUST 18, 2020

Damaged Backflow

On August 9 at approximately 5:30 p.m., Construction stand-by responded to a hit 2-inch backflow on 34st and Golf Club Dr. The property management gave the Agency authorization to repair the backflow and is now back in service. The management company is going to file a police report. The water loss was metered.

Seven Lakes Country Club Recycled Water Service Update

Staff contacted Seven Lakes to continue discussions about possible recycled water service from the Agency. The estimated cost of extending the recycled water system and the annual cost of service were presented by Agency staff. We explained that the Agency was looking for funding opportunities and that unless supplemental funding was found, Seven Lakes would be required to finance the project themselves. They thanked the Agency for contacting them and providing the information. It appears that unless supplemental funding is obtained, they will find alternative means other than recycled water for water supply to their golf course.

Whitewater River Groundwater Replenishment Facility Right of Way Grant Project/ Soil Sampling Report of Results Sediment Collection, Leach Testing, and Analysis

Below are excerpts from the recently released Soil Sampling Report:

As part of the Whitewater River Groundwater Replenishment Facility Right of Way Grant project, Coachella Valley Water District (Project Applicant) and the U.S. Department of Interior, Bureau of Land Management (National Environmental Policy Act [NEPA] Lead Agency) have retained ECORP Consulting, Inc. to conduct technical studies and prepare an Environmental Impact Statement (EIS) in support of the Project. One of the technical studies to support the EIS includes sampling and analysis of soils and sediment within and adjacent to the Project site.

The purpose of the field program was to obtain soil and sediment samples from within and adjacent to the replenishment ponds that are appropriate to evaluate whether constituents that could affect water quality are accumulating in or leaching from the soils and sediments within the Facility.

Overall, the data obtained during this study demonstrate that the Colorado River Aqueduct water has not left any significant dissolved solids behind on the soils beneath the Facility and that the soils are not leaching any significant quantity of minerals, salts, or metals into the Colorado River Aqueduct water as it percolates to the underlying aquifer. These results indicate that changes to facility operations, such as a change in the amount of recharge or a change in the TDS level of the recharge water, would not result in the release of additional TDS to the groundwater, since there is no significant mass of salts, minerals, or metals being retained in the soils.

Human Resource's Meetings and Activities

Meetings:

07/21/2020	DWA Board Meeting	Virtual Meeting
07/27/2020	Weekly Staff Meeting	Virtual Meeting
08/03/2020	Weekly Staff Meeting	Virtual Meeting
08/04/2020	DWA Board Meeting	Virtual Meeting
08/17/2020	Weekly Staff Meeting	Virtual Meeting

Activities:

07/21/2020	CalPERS and Employers: Fiscal Year Returns, Cost Impacts, and Our Path Forward	Virtual Meeting
07/30/2020	Water Service Worker I Interviews	Virtual Meetings

SYSTEM LEAK DATA

(PERIOD BEGINNING JULY 28, 2020 THRU AUGUST 10, 2020)

STREET NAME	NUMBER OF LEAKS	PIPE DIAMETER (INCHES)	YEAR INSTALLED	PIPE MATERIAL	PIPE CONSTRUCTION
VISTA CHINO	3	20	1949	STEEL	BARE/UNLINED
STEVENS RD	3	8	1951	STEEL	BARE/UNLINED
SATURMINO DR	3	4	1957	STEEL	BARE/UNLINED
MARISCAL RD	2	12	1983	STEEL	CML/C
AVENIDA CABALLEROS	1	14	1953	STEEL	BARE/UNLINED
S PALM CANYON DR	1	10	1938	STEEL	BARE/UNLINED
TAHQUITZ CANYON WY	1	8	1946	STEEL	BARE/UNLINED
ARABY DR	1	6	1947	STEEL	BARE/UNLINED
INDIAN CANYON DR	1	6	1951	STEEL	BARE/UNLINED
E PALM CANYON DR	1	6	1953	STEEL	BARE/UNLINED
E PALM CANYON DR	1	6	1955	STEEL	BARE/UNLINED
DEL LAGO RD	1	6	1957	STEEL	BARE/UNLINED
ANDREAS RD	1	6	1958	STEEL	BARE/UNLINED
PASEO CAROLETA	1	6	1958	STEEL	BARE/UNLINED
SANTA ROSA DR	1	4	1936	STEEL	BARE/UNLINED
CALLE DE CARLOS	1	4	1946	STEEL	BARE/UNLINED
PARK DR	1	4	1946	STEEL	BARE/UNLINED
POWELL RD	1	4	1957	STEEL	BARE/UNLINED
BERNE DR	1	4	1959	STEEL	BARE/UNLINED
PABLO DR	1	2	1936	STEEL	BARE/UNLINED
TOTAL LEAKS IN SYSTEM:	**27**				

Streets highlighted in green are being proposed as part of the
2020/2021 Replacement Pipeline Project

SYSTEM INFORMATION:	
OLDEST PIPE IN THE SYSTEM (YEAR OF INSTALLATION):	1935
AVERAGE YEAR OF INSTALLATION OF UNLINED STEEL PIPE (SYSTEMWIDE):	1952
AVERAGE AGE OF UNLINED STEEL PIPE (SYSTEMWIDE):	66 YEARS
AVERAGE AGE OF PIPELINE AT THE TIME OF REPLACEMENT:	68 YEARS
TOTAL LENGTH OF PIPE IN SYSTEM OLDER THAN 70 YEARS (LINEAR FEET):	**128,186**
TOTAL LENGTH OF UNLINED PIPE SYSTEMWIDE (LINEAR FEET):	297,672
*AVERAGE LENGTH OF PIPE REPLACED ANNUALLY (LINEAR FEET):	14,500
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF UNLINED STEEL PIPE:	21 YEARS
PROJECTED TIME FRAME FOR 100% REPLACEMENT OF PIPE OLDER THAN 70 YEARS:	**9 YEARS**
YEAR AGENCY TRANSITIONED TO CEMENT LINED STEEL PIPE:	1960

***PLEASE NOTE THIS FIGURE REPRESENTS THE AVERAGE LINEAR FOOTAGE OF PIPELINE REPLACED ANNUALLY GIVEN AN AVERAGE ANNUAL BUDGET OF $3 MILLION.**


SYSTEM LEAKS:
(Period beginning July 28, 2020 thru August 10, 2020)
AVENIDA CABALLEROS - 2020/21 REPLACEMENT PIPELINES
ARABY DR - 2020/21 REPLACEMENT PIPELINES
W San Rafael Dr
E San Rafael Dr
E Racquet Club Rd
E Vista Chino
Vista Chino
Palm Springs
Christopher Columbus Transcontinental Hwy
Varner Rd
111
Google Earth
© 2020 Google
1 mi
N

General Manager's Meetings and Activities

Meetings:

08/04/20	DWA Bi-Monthly Board Mtg.	Conf Call
08/04/20	Coachella Valley SNMP Review and Prep for RWQCB Mtg.	Conf Call
08/05/20	DCF Contractor Participation Mtg.	Conf Call
08/06/20	Coachella Valley SNMP RWQCB Kickoff Meeting	Conf Call
08/06/20	Sites Reservoir – Participating SWC Mtg.	Conf Call
08/10/20	CVWD/DWA SGMA Issues Mtg.	Conf Call
08/10/20	SGMA Indio SB GSA Workshop Materials Review	Conf Call
08/11/20	SWC Sites Res. Participants DWR Mtg	Conf Call
08/11/20	Whitewater RF BLM R/W Permit Cooperators Mtg.	Conf Call
08/11/20	SWC's Caucus on Water Management Cont. Amendment	Conf Call
08/12/20	SWC's DCF process towards Agency Board Approvals	Conf Call
08/12/20	Executive Committee Mtg.	Conf Call
08/13/20	Sites Strategic Planning Session	Conf Call
08/17/20	SWC's Class 8 Mtg.	Conf Call
08/17/20	DWA Weekly Staff Mtgs.	Conf Call
08/17/20	DWA/CVWD/MWD Coordination Mtg.	Conf Call
08/18/20	DWA Bi-Monthly Board Mtg	Conf Call
08/18/20	Mission Creek Subbasin SGMA Management Mtg	Conf Call

Activities:

1) SWP Contract Extension Amendment
2) DWA Remote Meter Reading Fixed Network
3) Whitewater Hydro – Automatic Re-start
4) State and Federal Contractors Water Authority and Delta Specific Project Committee (Standing)
5) Whitewater River Surface Water Recharge
6) Lake Oroville Spillway FEMA funding
7) Replacement Pipelines 2020-2021
8) DC Project – Finance JPA Committee (Standing)
9) DWA/CVWD/MWD Operations Coordination/Article 21/Pool A/Pool B/Yuba Water (Standing)
10) DWA/CVWD/MWD Exchange Agreement Coordination Committee (Standing)
11) SWP 2020 Water Supply
12) ACBCI Water Rights Lawsuit
13) Whitewater Hydro Operations Coordination with Recharge Basin O&M
14) SGMA Tribal Stakeholder Meetings
15) Whitewater Spreading Basins – BLM Permits
16) Lake Perris Dam Seepage Recovery Project Participation
17) Delta Conveyance Project Cost Allocation
18) DWA Surface Water Filtration Feasibility Snow Creek Village/Palm Oasis
19) MCSB Delivery Updates
20) Well 6 Meaders Cleaners RWQB Meetings
21) SWP East Branch Enlargement Cost Allocation
22) UWMP Population Calculation Update/Valley-Wide UWMP
23) RWQCB Update to the SNMP
24) SGMA – San Gorgonio Pass Subbasin

Minutes
Executive Committee Meeting
August 12, 2020

Directors Present: Joseph Stuart, Kristin Bloomer
Staff Present: Mark Krause, Steve Johnson, Esther Saenz, Sylvia Baca

1. Discussion Items

   A. Review Agenda for August 18, 2020 Regular Board Meeting
   The proposed agenda for the August 18, 2020 meeting was reviewed.

   B. LAFCO Special District Member Alternate Nominees Request
   Staff informed the Committee that LAFCO is starting a new appointment process for an Alternate Member of the Riverside LAFCO. The nomination period began on August 10 and closes on September 21. Alternate Special District Members must be a board member from any district with the majority of its assessed value within Riverside County. Nomination forms must be signed and dated by the presiding officer or designee of the Agency's Board of Directors. Following the nomination period, a ballot and voting instructions will be sent to members. If only one candidate is nominated, that candidate will be deemed selected with no further proceedings.

2. Other - None

3. Adjourn

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

AUGUST 18, 2020

RE: REQUEST BOARD AUTHORIZATION FOR GENERAL MANAGER TO EXECUTE MOU WITH GOLDEN STATE RENEWABLE ENERGY (GSRE) FOR SGIP APPLICATION FOR COMMERCIAL BATTERY ENERGY STORAGE SYSTEM (BESS) INSTALLATION

The California Public Utilities Commission's (CPUC) Self-Generation Incentive Program (SGIP) offers rebates for installing energy storage technology at both residential and non-residential facilities. These storage technologies include battery storage systems that can function during a power outage. In preparation for the next wildfire season, the CPUC has authorized funding of more than $1 billion through 2024 for SGIP. This funding includes prioritization of communities living in high fire-threat areas, communities that have experienced two or more utility Public Safety Power Shut-off (PSPS) events, as well as low income and medically vulnerable customers. The funds are also available for "critical facilities" that support community resilience in the event of a PSPS or wildfire.

Recently, JTN Energy reached out to the Agency regarding the SGIP rebate program and how it may be beneficial to the Agency. JTN Energy assisted the Agency with its negotiation of the SCE ReMat tariffs for both the Whitewater Hydro and Snow Creek Hydro and has partnered with Golden State Renewable Energy (GSRE) to secure free backup battery systems for agencies like DWA. GSRE is a solar and battery storage developer that focuses on designing and constructing cost-effective, moderately sized solar+storage and standalone battery storage projects in California.

The Agency currently deploys three mobile diesel powered electrical generators and one diesel powered mobile booster pump during extended power outages. This equipment is sent out to our lift station on Cathedral Canyon Drive and to booster pumping stations throughout the system. We do not have enough equipment to backup all of our 9 booster/lift stations. The equipment must be rotated from site to site during an electrical power emergency. Battery storage backup could provide un-interrupted service for our sites for up to 4 hours after a power outage avoiding the labor and equipment necessary to rotate our pump and generators and avoid purchasing additional generators and pumps to permit, transport and operate and maintain. It should be noted that battery storage backup will take care of most of the short duration power interruptions we experience but would not be able to provide adequate backup in a power outage extending beyond approximately 4 hours.

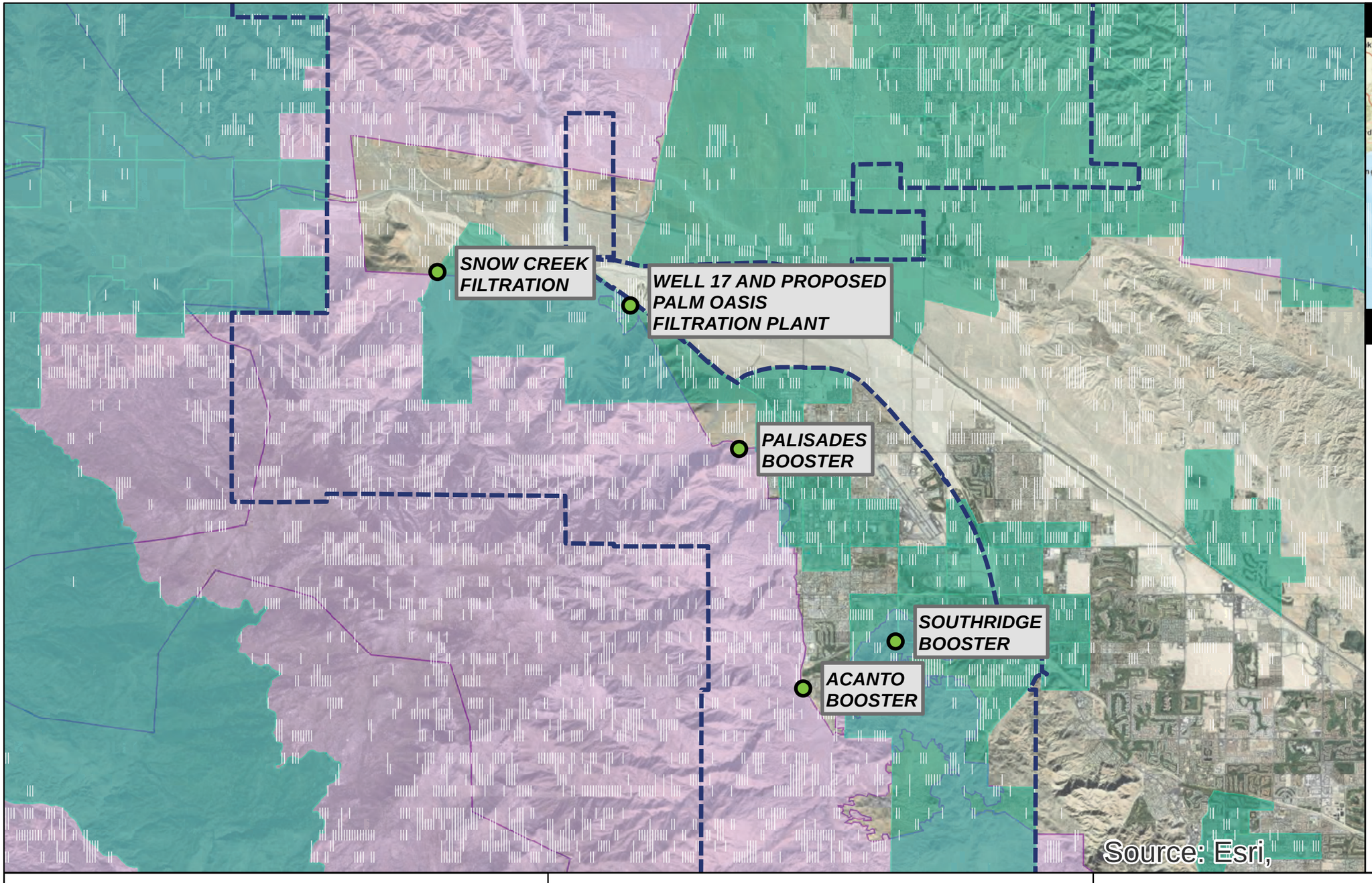
Agency staff identified six site locations that fell within the State's high fire-threat boundary and provided the electrical demand and billing data for these sites to JTN Energy and GSRE for analyses. For the past month, GSRE has reviewed the data and has determined that the sites qualify for up to approximately $1.46M in rebate money for the installation of commercial battery energy storage systems. JTN Energy and GSRE would like to secure these funds for themselves to use to fund the install the systems. GSRE proposes covering all project costs including materials and labor for installation of the battery energy storage systems (BESS), including system sizing, managing all aspects of the Self Generation Incentive Program (SGIP) incentive mechanism, design and engineering, interconnection, sales tax, shipping and handling of all equipment and materials, site preparation, construction, and clean up.

The analyses also indicates that by utilizing the battery energy storage systems during peak demand periods the Agency will save, on average, between $6,200 and $6,500 annually on energy costs at these sites. As part of the proposal, GSRE would share in the annual energy savings and is asking for 30% of the annual savings (approximately $1,900) between years 1-5, and 20% (approximately $1,300) between years 6-15.

Staff finds that thier proposal presents an opportunity for the Agency to save a modest amount on electrical costs. We find the real value in this proposal in that it will provide back-up power to some crucial facilities and not require any financing from the Agency. This arrangement is not unlike a Power Purchase Agreement (PPA) one would enter into for solar power. GSRE will be taking all of the Agency's rebates and sharing in the energy savings in exchange for providing all the work and equipment necessary to provide the Agency fully functioning battery backup systems. The alternative would be for the Agency to do the work itself to file all the necessary applications, solicit proposals from consultants for engineering, and finally to produce the documents necessary to go out to public bid for construction of the facilities.

The attached MOU is necessary for GSRE to secure the funding that will be necessary for this project. It is anticipated that this funding will be exhausted within 4 to 6 weeks, therefore the timely submission of an application to secure the funding is important. DWA or GSR Energy may cancel this MOU at any time within 90 days, except that DWA may not cancel for the purposes of proceeding with the installation of a BESS at the project location with another contractor or vendor for a period of 12 months.

Staff requests Board authorization for the General Manager to execute the MOU with Golden State Renewable Energy for SGIP Application for Battery Energy Storage System installation. Staff also requests Board authorization to file a Notice of Exemption under the California Environmental Quality Act for a minor alteration of existing facilities that will not expand system capacity at any of the locations where the batteries will be installed.



Location

Legend

- DWA Facilities
- DWA Boundary
- Eligible Communities
- High Fire Threat District (Tiers 2 & 3)

DESERT WATER AGENCY

1200 Gene Autry Trail South
www.dwa.org
Ph. (760) 323-4971
Fx. (760) 325-6505

0 8,000 16,000 32,000 Feet

Figure 1
High Fire Threat Map

File Name: High Fire Threat Map.mxd
File Location: U:\Exhibits\2020\High Fire Threat Map
Date Updated: Thursday, August 13, 2020 @ 1:22:24 PM
Updated By: Maya
Department: DWA Engineering


CA EXEMPT
1310977


KOHLER
1310977


KOHLER
120/240
480
1310977
CA EXEMPT


KOHLER
56
CA EXEMPT
1310977


ON
120/240
ON
480
OFF
CA EXEMPT
1310977


KOHLER. POWER SYSTEMS
50


MANUAL
TRANSFER SWITCH
Zenith ZTS
Transfer Switch
1.254
0.900
1.237
2 3 4
SIEMENS
ON
OFF

COMMERCIAL BATTERY ENERGY STORAGE SYSTEM (BESS) INSTALLATION
Memorandum of Understanding at SGIP Application

GSR Energy	**Desert Water Agency**
1 Clipper Cove San Francisco, CA 94130 Phone: (925) 548-8826	1200 S Gene Autry Trail Palm Springs, CA 92264 Phone: (760) 323-4971

INSTALLATION SITES (the "Premises")
See section 1.2 below for description of six sites

This agreement (the "**MOU**") is entered into by and between __Desert Water Agency__ ("**Client**") and GSR Energy Services, Inc. ("**GSR Energy**") to memorialize the initial steps toward the installation of a battery energy storage system ("**BESS**") to be installed by GSR Energy. GSR Energy is licensed in California (License No. 1021183) and any subcontractors that perform work of a material nature will also be licensed in California. This MOU provides an overview of our agreement and will be followed up with a detailed Contract that describes all commercial and technical aspects of the BESS (the **"Contract"),** that shall be signed by Client and GSR Energy within 90 days of the date of this MOU.

MOU TERMS

1.1 Contract Price and Rebate Amount

The total price for GSR Energy to complete the Project shall be $__1,462,756__ and the calculated California Self Generation Incentive Program (SGIP) rebate is $__1,462,756__. This price shall cover all project costs including materials and labor for installation of the battery energy storage system, including system sizing based on Client provided information, managing all aspects of the Self Generation Incentive Program (SGIP) incentive mechanism, design and engineering, interconnection, sales tax, shipping and handling of all equipment and materials, site preparation, construction, and clean up. The total price and SGIP rebate amount may change upon further site investigation. If the price and/or the SGIP rebate amount change and the SGIP rebate does not cover 100% of the price, this MOU shall be voidable by either Client or GSR Energy

1.2 Description of BESS Installation Project

The Project shall be completed in accordance with the following Project description:

Portfolio Size: six sites with total 383 kW / 1,484 kWh battery storage.
Technology: 7 Tesla Powerpack units, each 58 kW Real Power / 232 kWh Usable Energy and 7 Powerwall units, each 5 kW Real power / 13.2 kWh Usable energy.
Expected Energy Savings:

- **Year 1-5:** year one savings $6,253 (Client retains 70%, or $4,377, GSR Energy paid 30%, or $1,876)
- **Years 6-15:** average savings $6,523 per year, (Client retains 80%, or average $5218, GSR Energy paid 20%, or average $1,305)

Operations and Warranty: Operated by GSR Energy for 15 years, warranted by battery manufacturer for 15 years for Powerpacks and 10 years for Powerwalls.
Project Site, Account(s), and Meter(s):

Facility Name:	Service Account ID#:	Meter number:
Accanto Booster	3001323330	259000-071581
Palisades Booster	3046139527	256000-221796
Snowcreek	3000436045	V345N-000380
Southridge Booster	3000436073	259000-004735
Well 17 Palm Oasis	3000436046	359150-001803
Well 17 new filtration Plant	TBD	TBD

Description of back-up capabilities:

GSR Energy will design and install a state-of-the-art BESS to provide back-up power capabilities upon loss of normal power from Client's utility provider during weather events, planned Public Safety Power Shutoffs and other grid reliability issues.

The duration (i.e., number of hours) of back-up power will depend on final system design, average load and daily energy consumption. As part of the project design, GSR Energy will ensure that the facility's circuits that are backed up during an outage are isolated from the grid through the use of an Automatic Transfer Switch. This is to ensure that during an outage, your facility's system will still operate and power the circuits/appliances being backed up while not posing a safety risk to the utility. The duration of power during the power outage will vary depending on consumption and GSR Energy recommends energy conservation during outage events

1.3 Additional Terms

Client authorizes GSR Energy to act as its Incentive Provider to facilitate qualifying the BESS for the Self Generation Incentive Program ("**SGIP**") rebate provided by California. GSR Energy shall submit a Refundable Deposit with the SGIP rebate application for this project in the amount of 5% of the calculated SGIP rebate or $__73,138__. Client shall work in good faith to permit GSR Energy to prepare and submit required rebate forms, execute the contract, and complete the Project by required SGIP rebate deadlines. GSR Energy agrees to secure financing to pay for the capital

expense of the BESS, at no cost to Client. Client shall complete and submit all forms required to assign the SGIP rebate to GSR Energy.

Client or GSR Energy may cancel this MOU at any time within 90 days, except that Client may not cancel for the purposes of proceeding with the installation of a BESS at the Project Location with another contractor or vendor for a period of 12 months.

IN WITNESS WHEREOF, the parties have executed this Contract as of the Effective Date.

CLIENT:	**GSR ENERGY:**
_____	_____
Signature	Signature
_____	Mark Tholke
Print Name	Print Name
_____	Founding Principal
Title	Title
_____	_____
Date	Date

GOLDEN STATE RENEWABLE ENERGY

PALISADES BOOSTER

Prepared For

DWA

Prepared By

GSR Energy

7/21/2020

Golden State Renewable Energy (GSR Energy) is a solar and battery storage developer that focuses on designing and constructing cost-effective solar+storage and standalone battery storage projects in California. The company was founded on the principle that local, in-county renewable energy and energy storage infrastructure interconnected at the distribution-level provides the most benefits to community stakeholders and electricity providers.

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1.1.1 Energy Storage System (ESS) Details

General Information
Facility: PALISADES BOOSTER
Address: Palm Springs CA

ESS Equipment Description
Battery Banks: (2) Tesla Powerwall.
Inverters: (2) Tesla Powerwall.

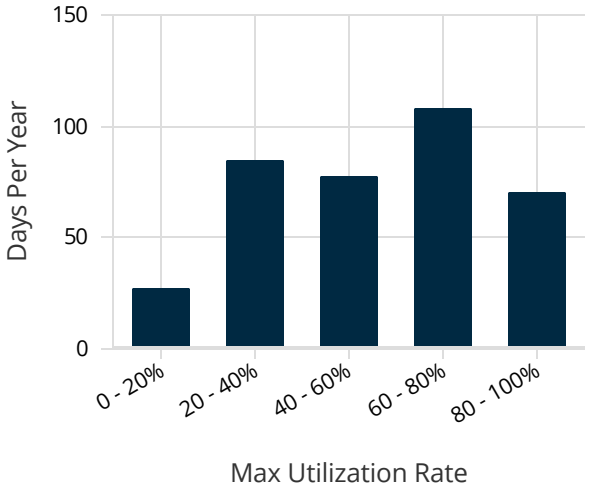
ESS Equipment Typical Lifespan
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost And Incentives

ESS System Cost	$26,004
SGIP Incentive	-$26,004
Net ESS System Cost:	**$0**

ESS System Ratings
Energy Capacity: 26.4 kWh
Power Rating: 10.0 kW

Energy Storage Annual Utilization



Energy Output and Demand Savings From Energy Storage			
Date Range	ESS Energy Discharge	Solar PV Generation	Total Demand Savings
1/14/2020 - 2/14/2020	101	0	$11
2/14/2020 - 3/14/2020	300	0	$54
3/14/2020 - 4/14/2020	107	0	$9
4/14/2020 - 5/14/2020	132	0	$11
5/14/2020 - 6/14/2020	153	0	$17
6/14/2019 - 7/14/2019	212	0	$31
7/14/2019 - 8/14/2019	179	0	$25
8/14/2019 - 9/14/2019	164	0	$25
9/14/2019 - 10/14/2019	108	0	$22
10/14/2019 - 11/14/2019	131	0	$2
11/14/2019 - 12/14/2019	83	0	$9
12/14/2019 - 1/14/2020	98	0	$11
-	1,768	0	$229

1.1.2 Rebates and Incentives

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

SGIP 2020 – Equity Resiliency Budget ($1,000/kWh) - GSRE

The Self-Generation Incentive Program (SGIP) Equity Resiliency Budget incentive was established to provide storage rebates for residential or "critical facility" non-residential customers in disadvantaged or low-income communities that are also in Tier 2 or Tier 3 High Fire Threat Districts (HFTD) and other areas that have experienced two or more Public Safety Power Shut-offs (PSPS). The Equity Resiliency Budget incentive level will be set at $1,000/kWh, which the CPUC has stated was a "level likely to fully or nearly fully subsidize the installation of a storage system." The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Small storage projects (< 10 kW) will receive the entire incentive paid upfront. Larger projects (> 10 kW) will receive a portion upfront and a portion paid as a Performance Based Incentive (PBI) over a 5-year period. Equity Resiliency Budget incentives levels for large systems (> 10 kW) are reduced if: (a) the ESS capacity is greater than 2 MWh; (b) the ESS duration is greater than 4-hours; and/or (c) the system cycles less than 104/cycles per year. Note that the incentive calculation assumes that the storage system reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in the PBI amount.

Total Incentive Value: $26,004

1.1.3 Utility Rates

The table below shows the rates associate with your current utility rate schedule (GS-1-TOU). Your estimated electric bills after storage are shown on the following page.

Fixed Charges		Energy Charges		Demand Charges	
Type	GS-1-TOU	Type	GS-1-TOU	Type	GS-1-TOU
W Daily	$0.40	W Mid Peak	$0.14746	W NC	$9.29
S Daily	$0.40	W Off Peak	$0.09992	S NC	$9.29
		W Super Off Peak	$0.08074	W Mid Peak	$3.47
		S On Peak	$0.15294	S On Peak	$17.84
		S Mid Peak	$0.14389		
		S Off Peak	$0.09171		

1.1.4 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 - GS-1-TOU

Time Periods	Energy Use (kWh)				Max Demand (kW)			Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	On Peak	Mid Peak	Other	NBC	Energy	Demand	Total
1/14/2020 - 2/14/2020 W	0	122	268	197	2	0	2	$12	$15	$46	$26	$98
2/14/2020 - 3/14/2020 W	0	114	253	196	11	0	1	$11	$14	$44	$106	$175
3/14/2020 - 4/14/2020 W	0	130	287	206	2	0	1	$12	$16	$49	$22	$99
4/14/2020 - 5/14/2020 W	0	151	304	220	2	0	2	$12	$17	$54	$26	$108
5/14/2020 - 6/14/2020 W/S	61	111	437	125	2	2	2	$12	$18	$59	$38	$127
6/14/2019 - 7/14/2019 S	155	69	546	0	3	2	0	$12	$19	$64	$64	$159
7/14/2019 - 8/14/2019 S	189	78	932	0	2	2	0	$12	$30	$96	$54	$192
8/14/2019 - 9/14/2019 S	162	59	755	0	2	2	0	$12	$24	$78	$54	$169
9/14/2019 - 10/14/2019 S/W	48	78	377	84	2	2	1	$12	$15	$46	$40	$113
10/14/2019 - 11/14/2019 W	0	128	291	229	2	0	1	$12	$16	$50	$22	$101
11/14/2019 - 12/14/2019 W	0	115	250	183	2	0	1	$12	$14	$43	$22	$91
12/14/2019 - 1/14/2020 W	0	120	262	190	2	0	2	$12	$14	$45	$26	$97
Totals:	615	1,275	4,962	1,630	-	-	-	$145	$212	$674	$498	$1,529

1.1.5 New Electric Bill

Rate Schedule: SCE - GS-1-TOU

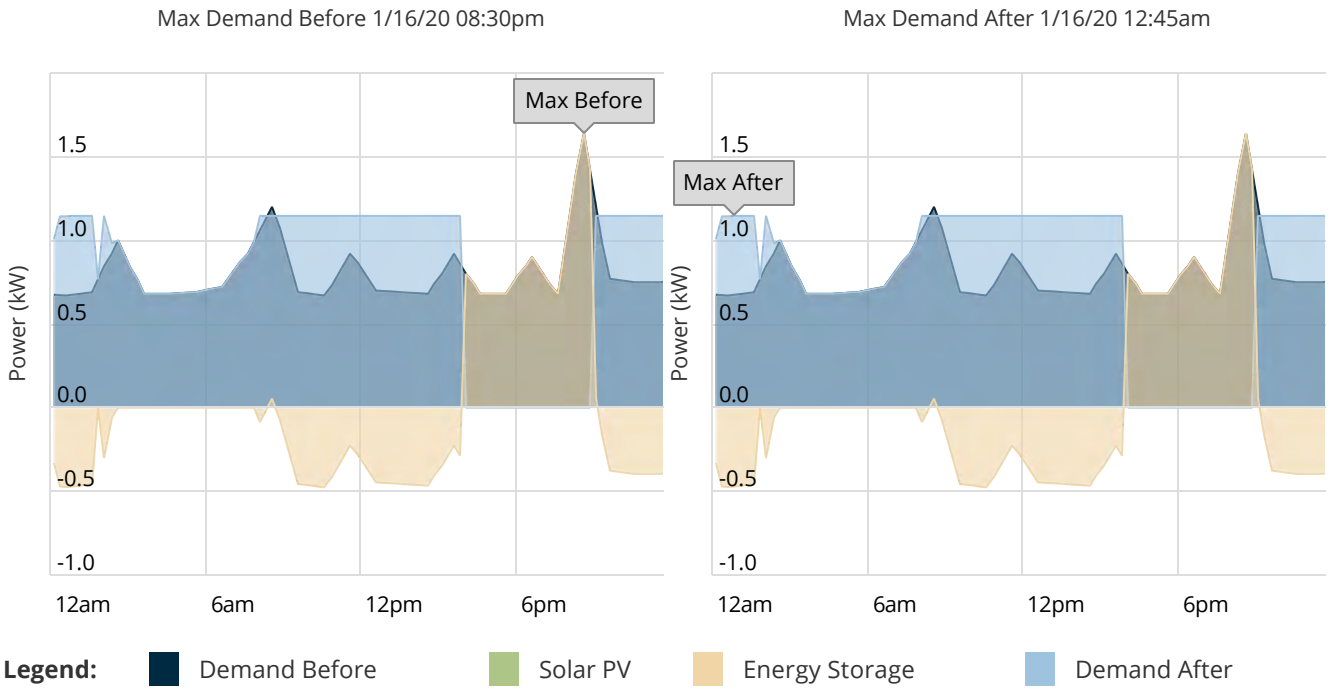
Time Periods	Energy Use (kWh)				Max Demand (kW)			Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	On Peak	Mid Peak	Other	NBC	Energy	Demand	Total
1/14/2020 - 2/14/2020 W	0	26	329	244	1	0	1	$12	$15	$41	$14	$83
2/14/2020 - 3/14/2020 W	0	1	82	515	5	0	0	$11	$15	$35	$51	$113
3/14/2020 - 4/14/2020 W	0	28	348	254	1	0	0	$12	$16	$44	$13	$85
4/14/2020 - 5/14/2020 W	0	30	380	283	1	0	1	$12	$17	$48	$14	$91
5/14/2020 - 6/14/2020 W/S	2	35	552	163	2	1	1	$12	$19	$52	$21	$104
6/14/2019 - 7/14/2019 S	8	12	773	0	2	1	0	$12	$20	$54	$32	$118
7/14/2019 - 8/14/2019 S	24	71	1,120	0	2	1	0	$12	$30	$86	$29	$158
8/14/2019 - 9/14/2019 S	18	48	934	0	2	1	0	$12	$25	$70	$29	$137
9/14/2019 - 10/14/2019 S/W	12	30	445	105	1	1	0	$12	$15	$42	$19	$87
10/14/2019 - 11/14/2019 W	0	1	354	314	2	0	0	$12	$17	$44	$20	$93
11/14/2019 - 12/14/2019 W	0	37	300	219	1	0	0	$12	$14	$39	$13	$78
12/14/2019 - 1/14/2020 W	0	25	320	237	1	0	1	$12	$15	$40	$14	$81
Totals:	64	344	5,937	2,334	-	-	-	$145	$217	$596	$269	$1,227

Annual Electricity Savings: $302

1.1.6 Demand Profiles

Date Range: 1/14/2020 - 2/14/2020

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



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

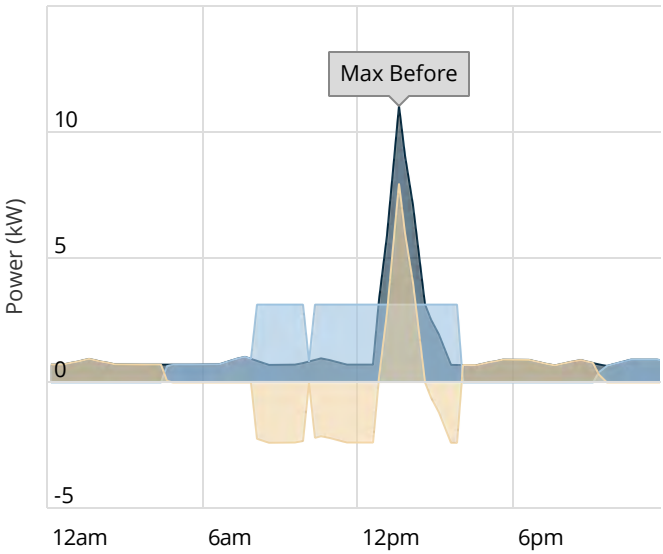
Charts Not Applicable

Demand Profiles

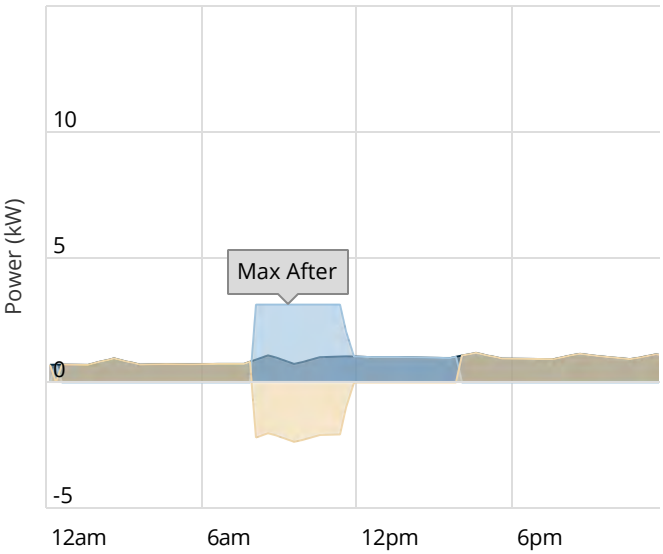
Date Range: 2/14/2020 - 3/14/2020

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

Max Demand Before 3/6/20 01:30pm



Max Demand After 2/14/20 09:15am



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

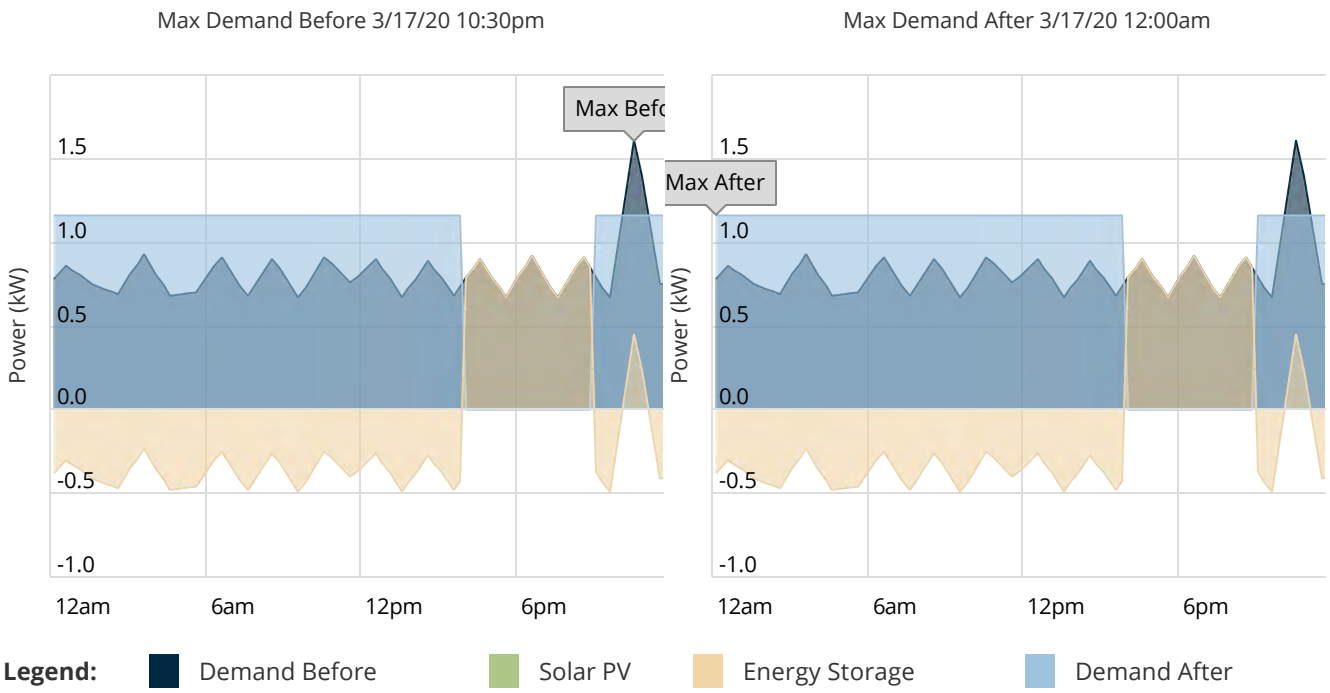
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 3/14/2020 - 4/14/2020

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



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

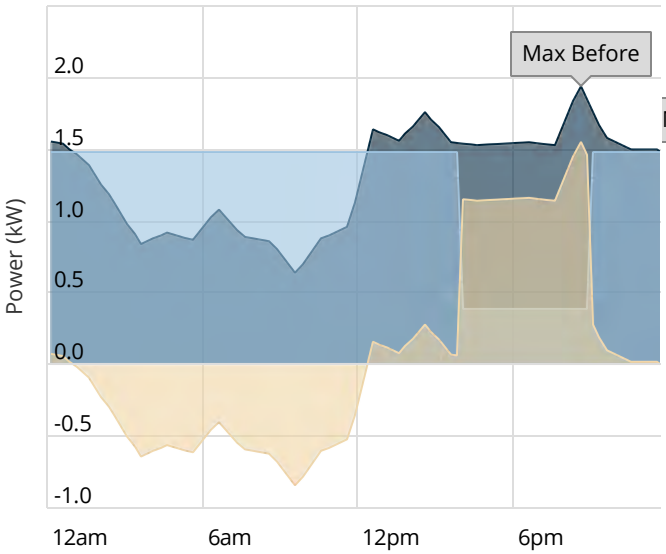
Charts Not Applicable

Demand Profiles

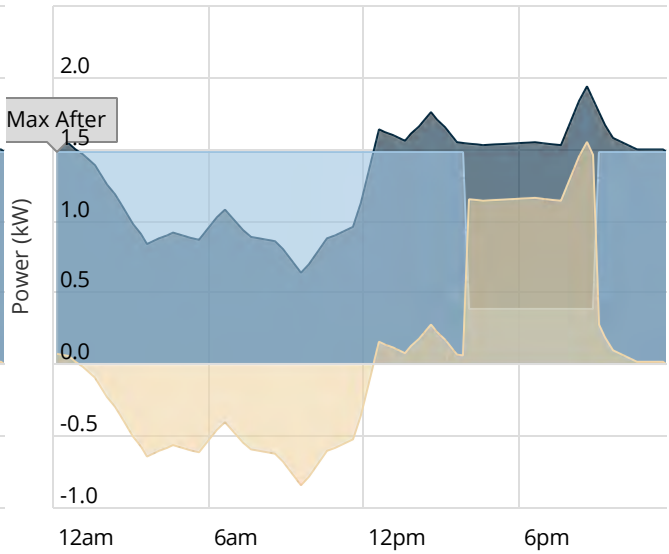
Date Range: 4/14/2020 - 5/14/2020

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

Max Demand Before 5/6/20 08:30pm



Max Demand After 5/6/20 12:00am



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

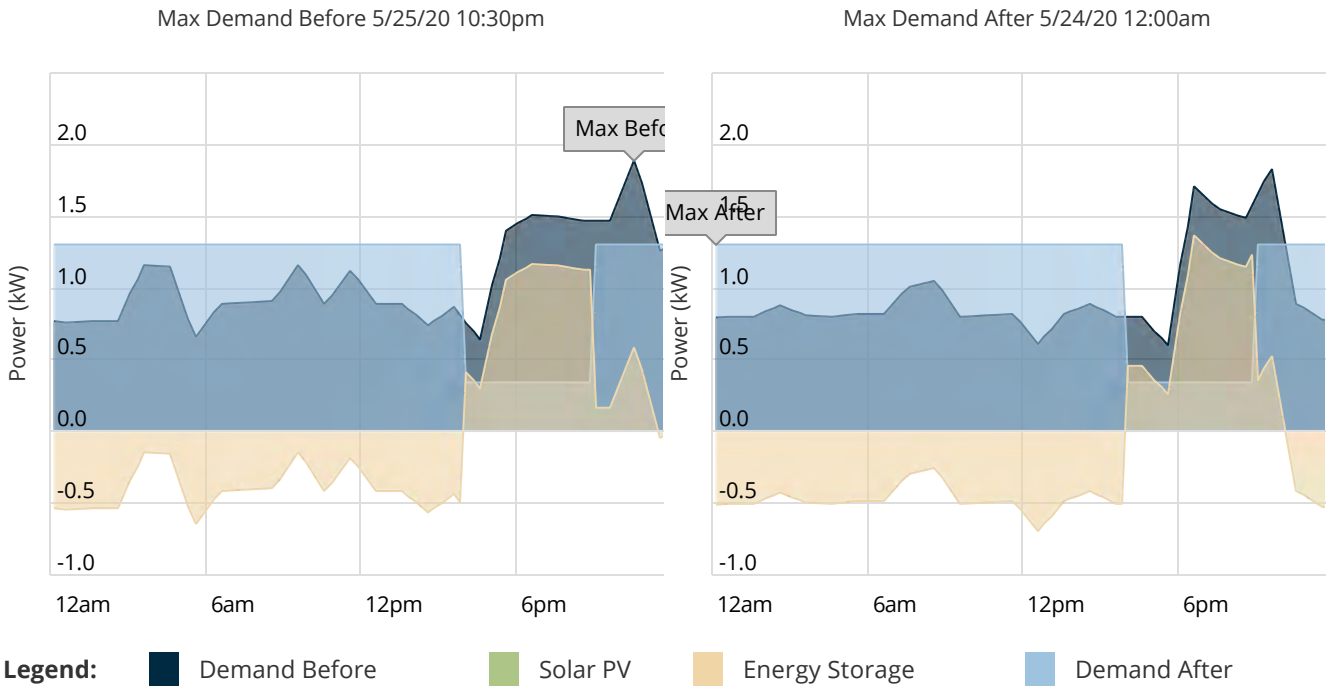
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 5/14/2020 - 6/14/2020

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



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

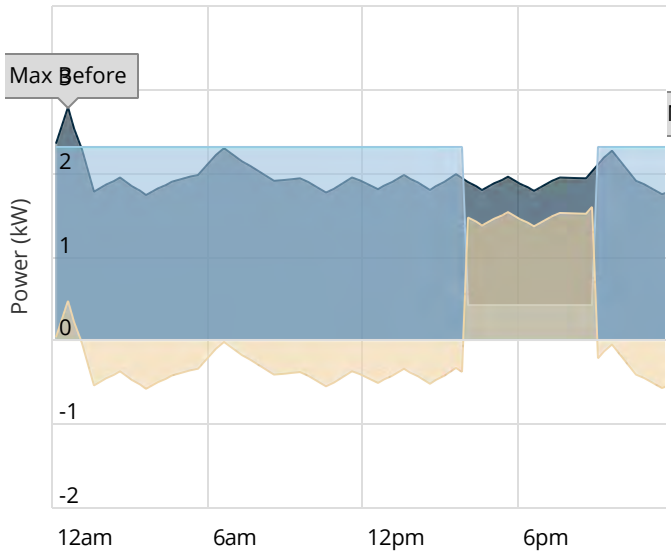
Charts Not Applicable

Demand Profiles

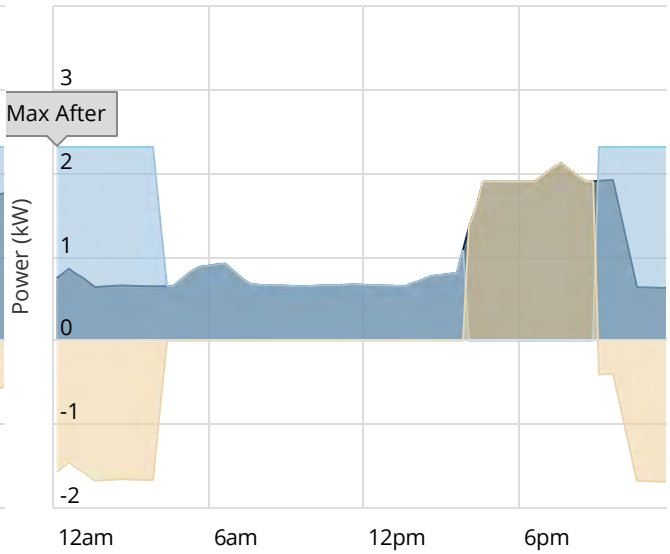
Date Range: 6/14/2019 - 7/14/2019

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

Max Demand Before 7/11/19 12:30am



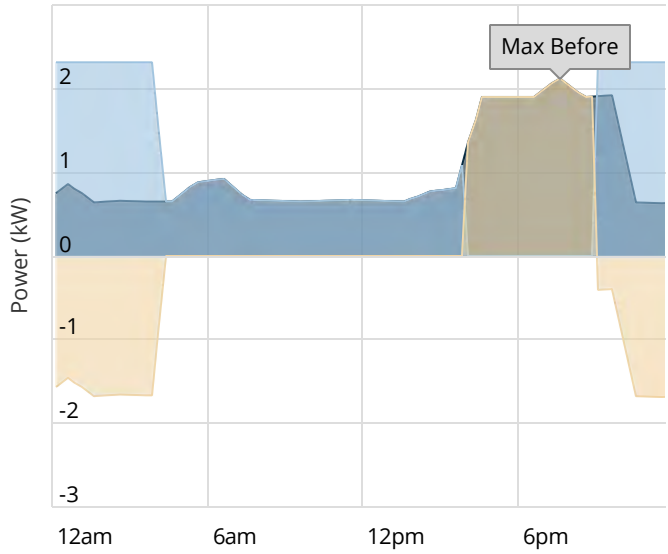
Max Demand After 6/24/19 12:00am



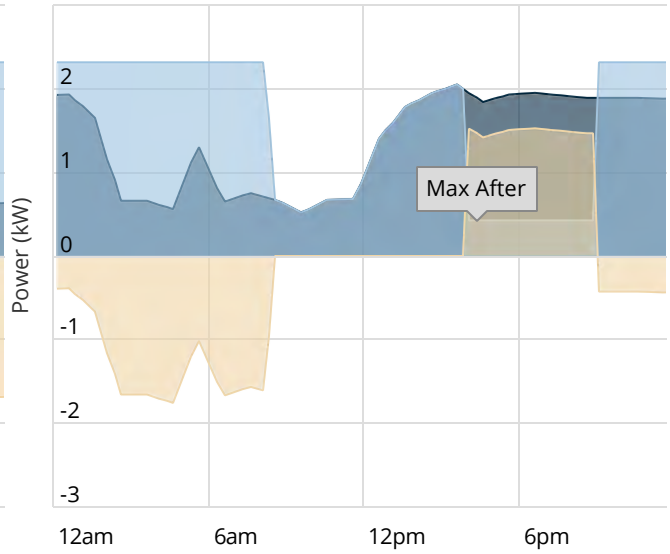
Legend: Demand Before | Solar PV | Energy Storage | Demand After

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

Max Demand Before 6/24/19 07:30pm



Max Demand After 7/9/19 04:15pm



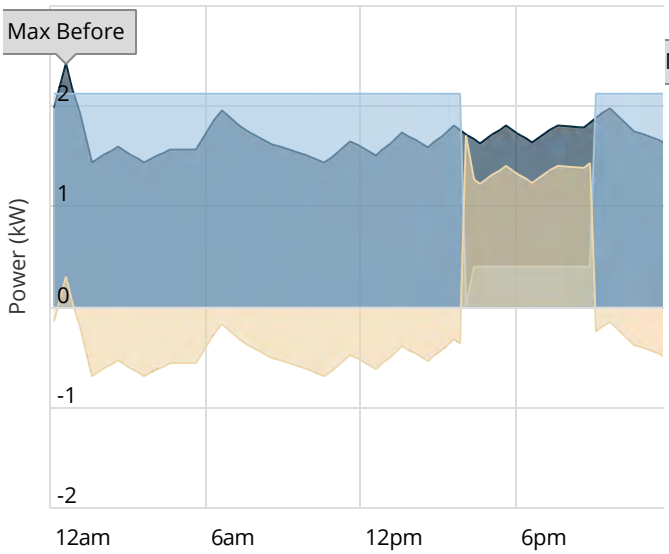
Legend: Demand Before | Solar PV | Energy Storage | Demand After

Demand Profiles

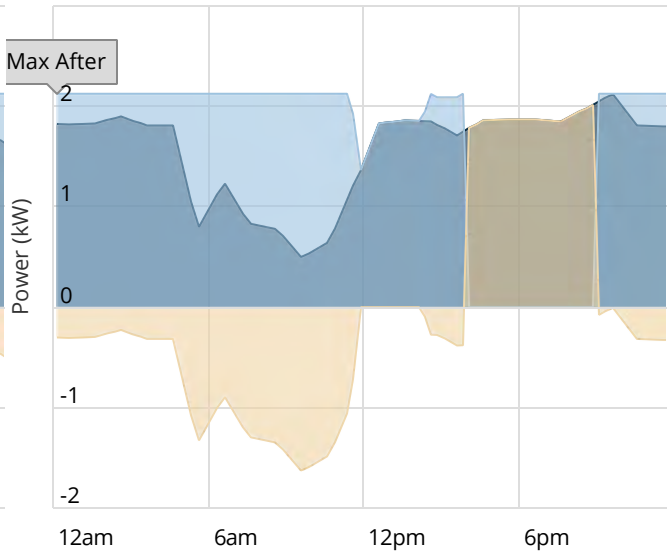
Date Range: 7/14/2019 - 8/14/2019

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

Max Demand Before 8/1/19 12:30am



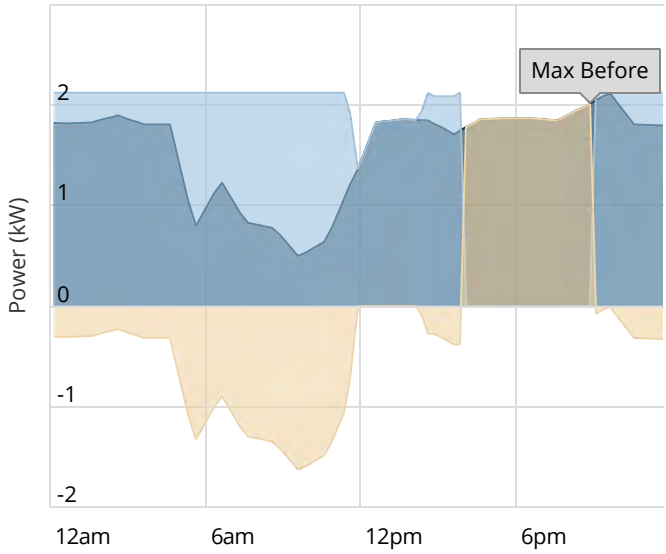
Max Demand After 7/15/19 12:00am



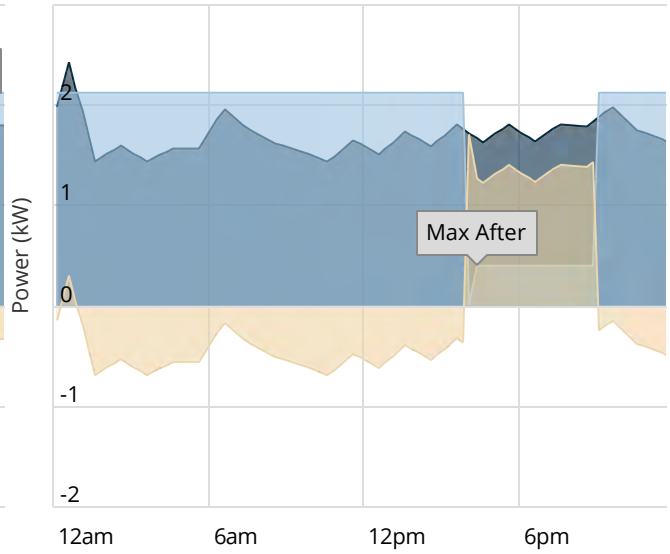
Legend: Demand Before | Solar PV | Energy Storage | Demand After

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

Max Demand Before 7/15/19 08:45pm



Max Demand After 8/1/19 04:15pm



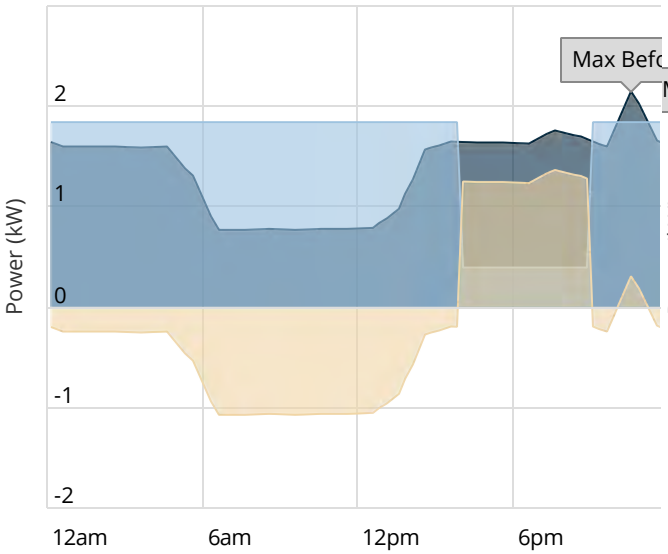
Legend: Demand Before | Solar PV | Energy Storage | Demand After

Demand Profiles

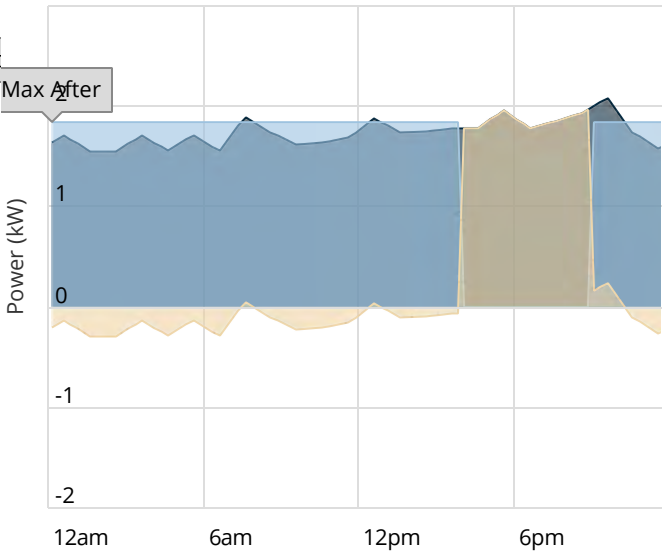
Date Range: 8/14/2019 - 9/14/2019

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

Max Demand Before 8/20/19 10:30pm



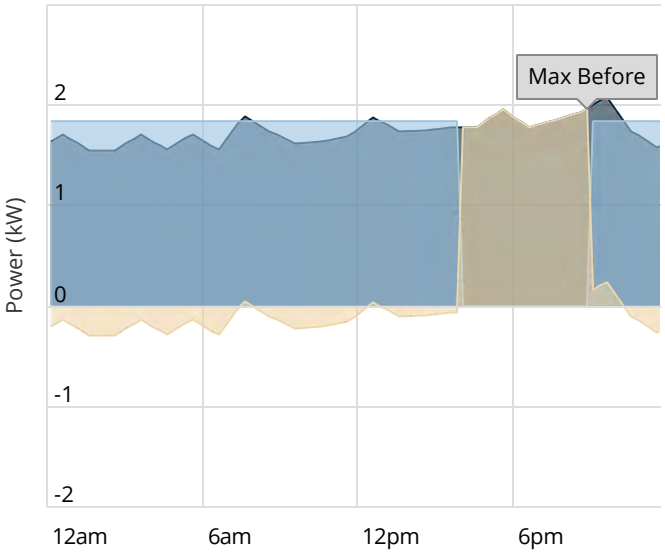
Max Demand After 8/16/19 12:00am



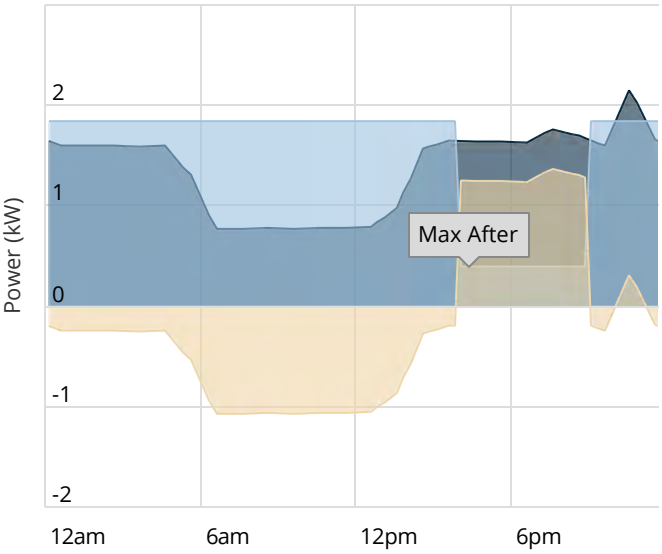
Legend: Demand Before | Solar PV | Energy Storage | Demand After

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

Max Demand Before 8/16/19 08:45pm



Max Demand After 8/20/19 04:15pm



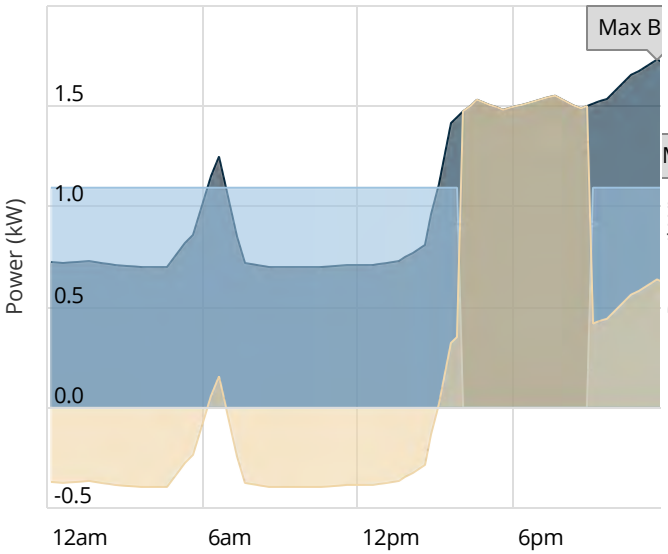
Legend: Demand Before | Solar PV | Energy Storage | Demand After

Demand Profiles

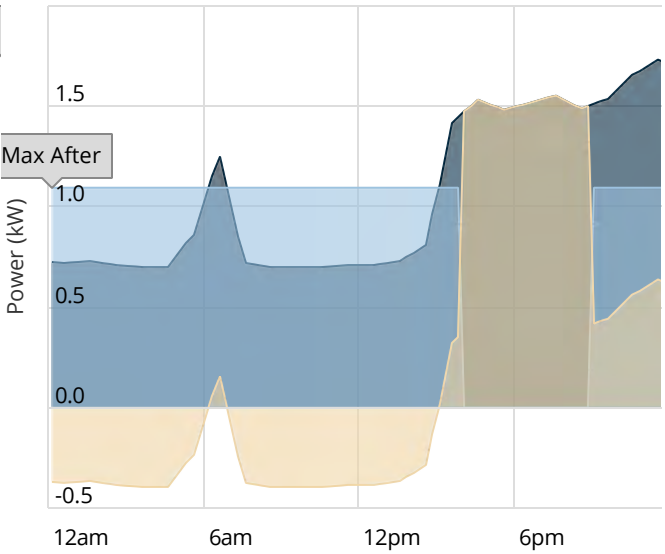
Date Range: 9/14/2019 - 10/14/2019

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

Max Demand Before 9/16/19 11:30pm



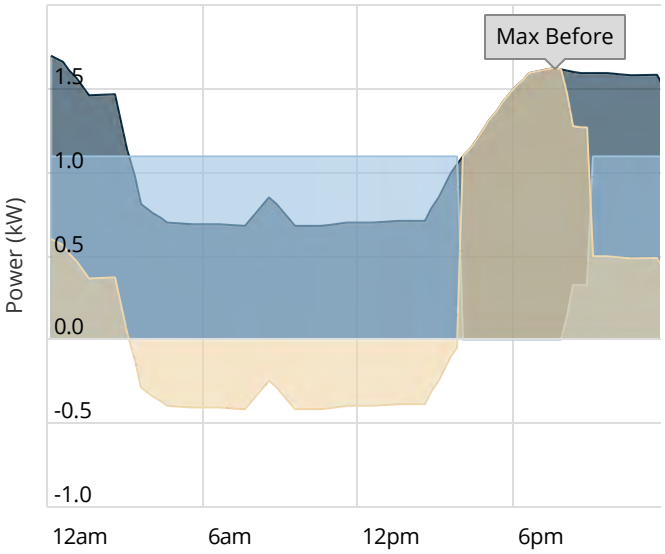
Max Demand After 9/16/19 12:00am



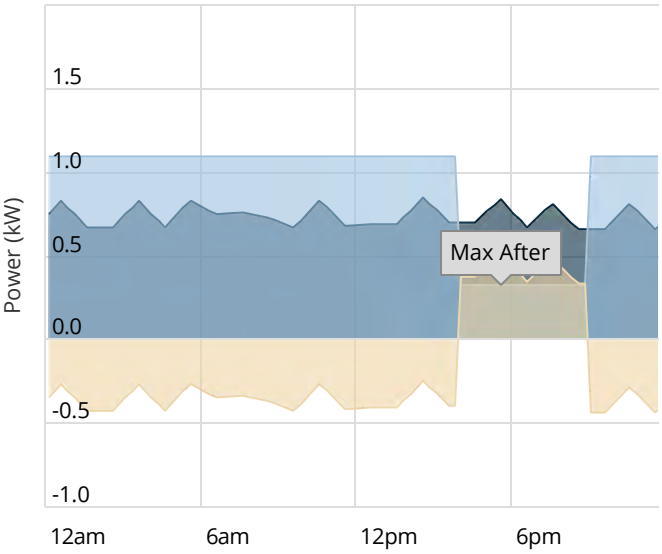
Legend: Demand Before | Solar PV | Energy Storage | Demand After

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

Max Demand Before 9/17/19 07:30pm



Max Demand After 9/30/19 05:30pm



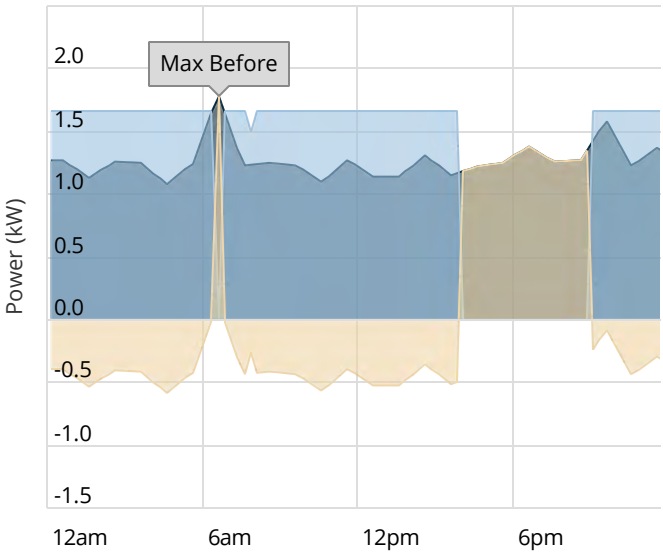
Legend: Demand Before | Solar PV | Energy Storage | Demand After

Demand Profiles

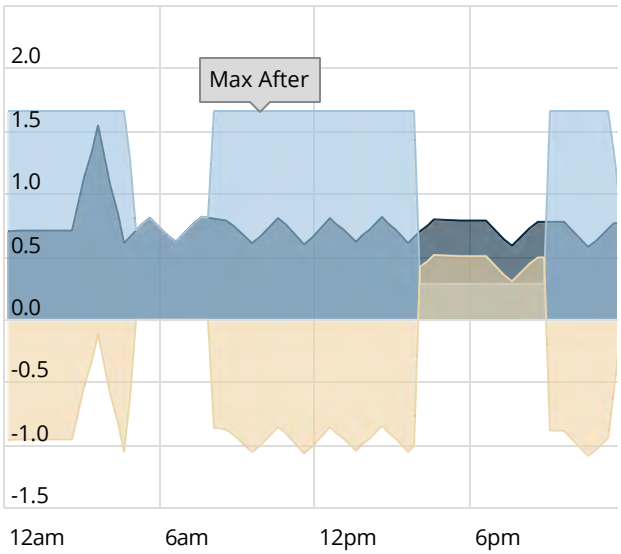
Date Range: 10/14/2019 - 11/14/2019

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

Max Demand Before 10/14/19 06:30am



Max Demand After 11/13/19 09:45am



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 Energy Storage system simulation.

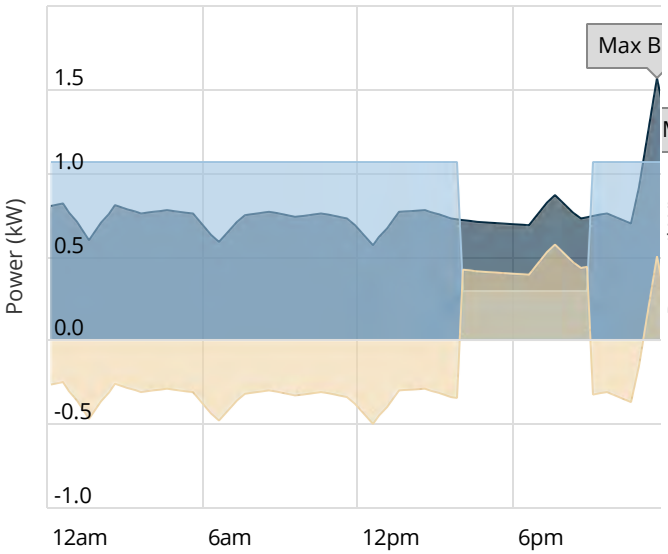
Charts Not Applicable

Demand Profiles

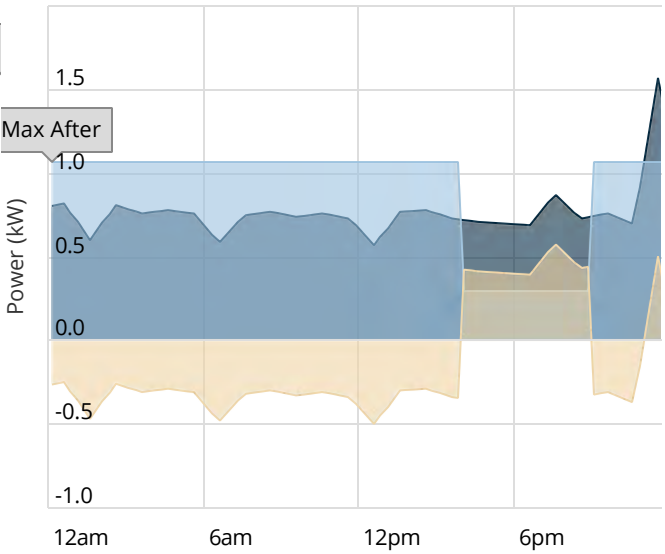
Date Range: 11/14/2019 - 12/14/2019

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

Max Demand Before 11/20/19 11:30pm



Max Demand After 11/20/19 12:00am



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 Energy Storage system simulation.

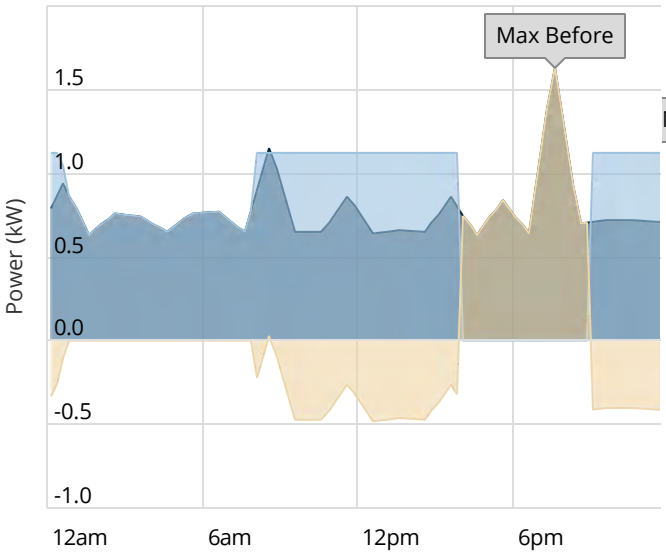
Charts Not Applicable

Demand Profiles

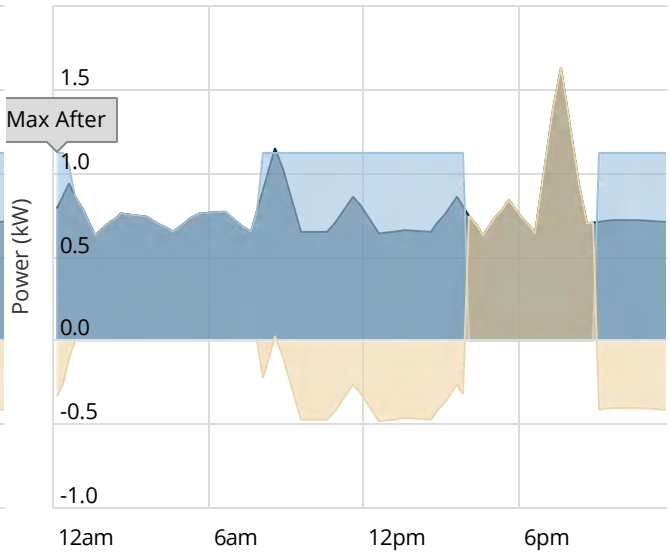
Date Range: 12/14/2019 - 1/14/2020

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

Max Demand Before 12/16/19 07:30pm



Max Demand After 12/16/19 12:00am



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 Energy Storage system simulation.

Charts Not Applicable

2.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	$26,004	Federal Income Tax Rate	21%	State Income Tax Rate	8%
Electricity Escalation Rate	3%				

Years	Project Costs	SGIP Incentive	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$26,004	$13,002	-	-$13,002	-$13,002
1	-	$2,600	$302	$2,902	-$10,100
2	-	$2,600	$302	$2,902	-$7,198
3	-	$2,600	$301	$2,901	-$4,296
4	-	$2,600	$300	$2,901	-$1,396
5	-	$2,600	$299	$2,899	$1,504
6	-	-	$297	$297	$1,801
7	-	-	$296	$296	$2,097
8	-	-	$293	$293	$2,390
9	-	-	$291	$291	$2,681
10	-	-	$288	$288	$2,968
11	-	-	$284	$284	$3,252
12	-	-	$280	$280	$3,532
13	-	-	$275	$275	$3,808
14	-	-	$270	$270	$4,078
15	-	-	$265	$265	$4,343
Totals:	-$26,004	$26,004	$4,343	$4,343	-

GOLDEN STATE RENEWABLE ENERGY

ACCANTO BOOSTER - 3 POWERPACK

Prepared For

DWA

Prepared By

GSR Energy

7/28/2020

Golden State Renewable Energy (GSR Energy) is a solar and battery storage developer that focuses on designing and constructing cost-effective solar+storage and standalone battery storage projects in California. The company was founded on the principle that local, in-county renewable energy and energy storage infrastructure interconnected at the distribution-level provides the most benefits to community stakeholders and electricity providers.

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2.1 Cash Purchase ---- 20

1.1.1 Energy Storage System (ESS) Details

General Information
Facility: ACCANTO BOOSTER
Address: Palm Springs CA

ESS Equipment Description
Battery Banks: (3) Tesla Powerpack (58 kW | 232 kWh)
Inverters: (3) Tesla Powerpack (58 kW | 232 kWh)

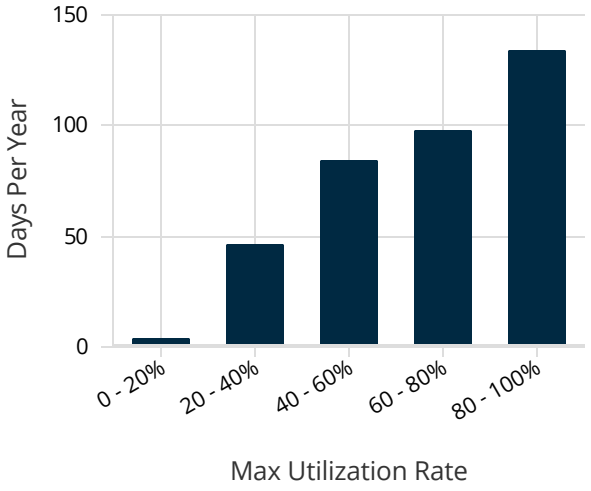
ESS Equipment Typical Lifespan
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost And Incentives

ESS System Cost	$685,560
SGIP Incentive	-$685,560
Net ESS System Cost:	**$0**

ESS System Ratings
Energy Capacity: 696.0 kWh
Power Rating: 174.0 kW

Energy Storage Annual Utilization



Energy Output and Demand Savings From Energy Storage			
Date Range	ESS Energy Discharge	Solar PV Generation	Total Demand Savings
1/14/2020 - 2/14/2020	8,371	0	$165
2/14/2020 - 3/14/2020	6,730	0	$175
3/14/2020 - 4/14/2020	8,313	0	$151
4/14/2020 - 5/14/2020	8,150	0	$264
5/14/2020 - 6/14/2020	9,702	0	$103
6/14/2019 - 7/14/2019	7,523	0	$349
7/14/2019 - 8/14/2019	9,570	0	$94
8/14/2019 - 9/14/2019	9,763	0	$99
9/14/2019 - 10/14/2019	8,643	0	$379
10/14/2019 - 11/14/2019	8,161	0	$429
11/14/2019 - 12/14/2019	6,930	0	$184
12/14/2019 - 1/14/2020	7,265	0	$179
-	99,121	0	$2,573

1.1.2 Rebates and Incentives

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

SGIP 2020 – Equity Resiliency Budget ($1,000/kWh) - GSRE

The Self-Generation Incentive Program (SGIP) Equity Resiliency Budget incentive was established to provide storage rebates for residential or "critical facility" non-residential customers in disadvantaged or low-income communities that are also in Tier 2 or Tier 3 High Fire Threat Districts (HFTD) and other areas that have experienced two or more Public Safety Power Shut-offs (PSPS). The Equity Resiliency Budget incentive level will be set at $1,000/kWh, which the CPUC has stated was a "level likely to fully or nearly fully subsidize the installation of a storage system." The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Small storage projects (< 10 kW) will receive the entire incentive paid upfront. Larger projects (> 10 kW) will receive a portion upfront and a portion paid as a Performance Based Incentive (PBI) over a 5-year period. Equity Resiliency Budget incentives levels for large systems (> 10 kW) are reduced if: (a) the ESS capacity is greater than 2 MWh; (b) the ESS duration is greater than 4-hours; and/or (c) the system cycles less than 104/cycles per year. Note that the incentive calculation assumes that the storage system reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in the PBI amount.

Total Incentive Value: $685,560

1.1.3 Utility Rates

The table below shows the rates associate with your current utility rate schedule (TOU-PA-2). Your estimated electric bills after storage are shown on the following page.

Fixed Charges		Energy Charges		Demand Charges	
Type	TOU-PA-2	Type	TOU-PA-2	Type	TOU-PA-2
W Monthly	$41.40	W Mid Peak	$0.11181	W NC	$6.74
S Monthly	$41.40	W Off Peak	$0.07279	S NC	$6.74
		S On Peak	$0.33131		
		S Mid Peak	$0.13649		
		S Off Peak	$0.08231		

1.1.4 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-2

Time Periods	Energy Use (kWh)			Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/14/2020 - 2/14/2020 W	0	3,771	11,531	66	$41	$383	$878	$445	$1,747
2/14/2020 - 3/14/2020 W	0	3,158	8,814	69	$41	$299	$695	$465	$1,501
3/14/2020 - 4/14/2020 W	0	4,792	12,017	69	$41	$420	$990	$465	$1,917
4/14/2020 - 5/14/2020 W	0	9,686	15,009	114	$41	$617	$1,558	$768	$2,985
5/14/2020 - 6/14/2020 W/S	2,685	7,948	17,385	67	$41	$700	$2,468	$449	$3,659
6/14/2019 - 7/14/2019 S	948	6,351	19,726	132	$41	$676	$2,129	$890	$3,736
7/14/2019 - 8/14/2019 S	2,741	6,414	20,401	66	$41	$739	$2,724	$445	$3,949
8/14/2019 - 9/14/2019 S	2,693	6,356	18,800	68	$41	$696	$2,611	$458	$3,807
9/14/2019 - 10/14/2019 S/W	1,899	5,689	13,569	178	$41	$529	$1,850	$881	$3,301
10/14/2019 - 11/14/2019 W	0	8,581	14,126	152	$41	$568	$1,420	$1,024	$3,054
11/14/2019 - 12/14/2019 W	0	4,316	7,387	67	$41	$293	$728	$452	$1,513
12/14/2019 - 1/14/2020 W	0	2,679	9,865	66	$41	$314	$704	$445	$1,504
Totals:	10,966	69,741	168,630	-	$497	$6,233	$18,755	$7,187	$32,673

1.1.5 New Electric Bill

Rate Schedule: SCE - TOU-PA-2

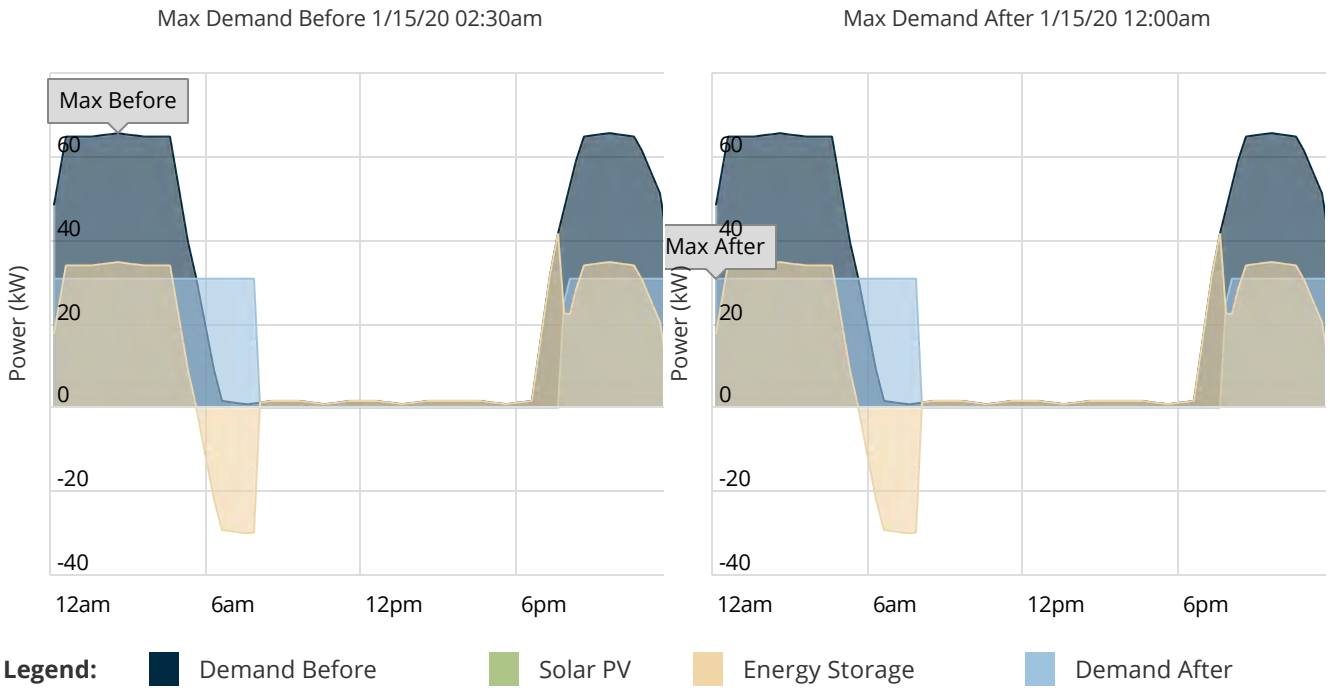
Time Periods	Energy Use (kWh)			Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/14/2020 - 2/14/2020 W	0	6,088	10,141	42	$41	$406	$1,013	$280	$1,740
2/14/2020 - 3/14/2020 W	0	2,929	9,920	43	$41	$321	$728	$290	$1,381
3/14/2020 - 4/14/2020 W	0	4,756	13,033	47	$41	$445	$1,036	$314	$1,836
4/14/2020 - 5/14/2020 W	0	6,506	19,165	75	$41	$642	$1,481	$504	$2,668
5/14/2020 - 6/14/2020 W/S	1,957	9,516	17,675	53	$41	$729	$2,427	$345	$3,542
6/14/2019 - 7/14/2019 S	857	8,248	18,803	80	$41	$698	$2,260	$541	$3,539
7/14/2019 - 8/14/2019 S	5,186	8,272	17,168	52	$41	$766	$3,495	$350	$4,652
8/14/2019 - 9/14/2019 S	4,214	8,407	16,341	53	$41	$724	$3,165	$359	$4,289
9/14/2019 - 10/14/2019 S/W	114	5,713	16,359	95	$41	$555	$1,461	$502	$2,558
10/14/2019 - 11/14/2019 W	0	4,224	19,514	88	$41	$593	$1,299	$595	$2,529
11/14/2019 - 12/14/2019 W	0	3,750	8,767	40	$41	$313	$745	$268	$1,366
12/14/2019 - 1/14/2020 W	0	4,079	9,264	39	$41	$334	$797	$266	$1,437
Totals:	12,328	72,488	176,150	-	$497	$6,524	$19,905	$4,614	$31,540

Annual Electricity Savings: $1,133

1.1.6 Demand Profiles

Date Range: 1/14/2020 - 2/14/2020

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



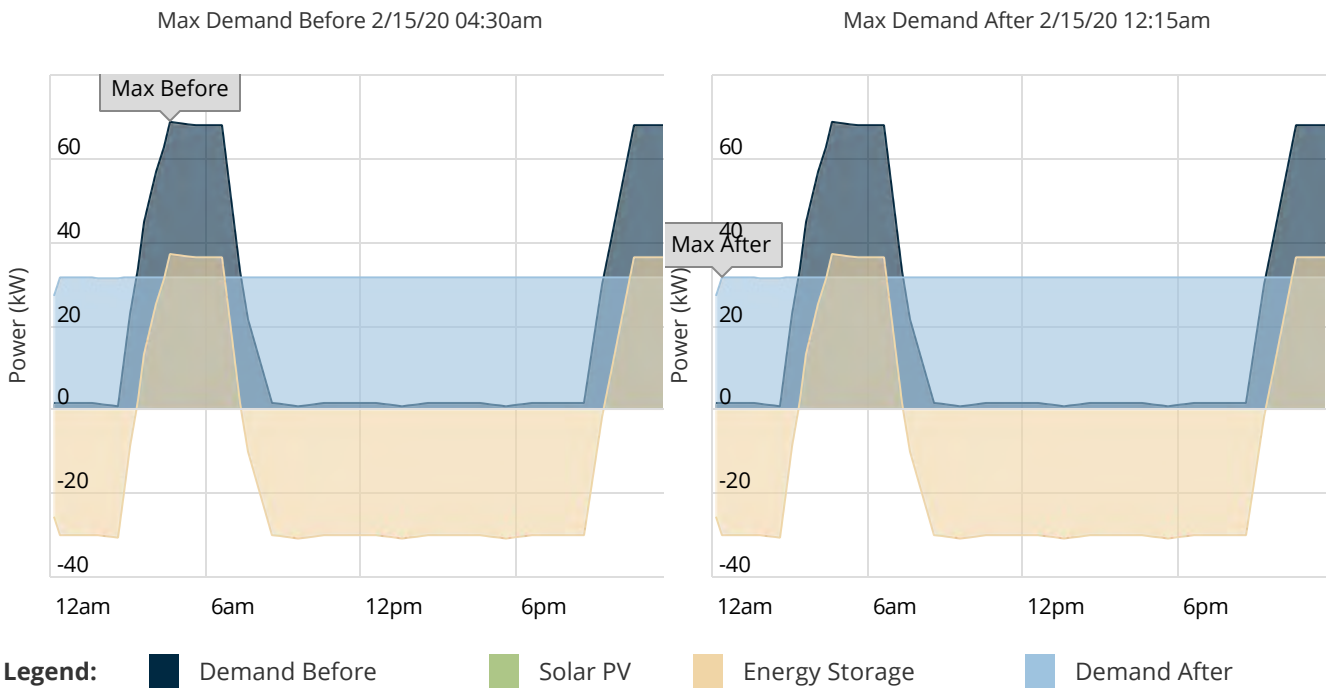
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 2/14/2020 - 3/14/2020

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



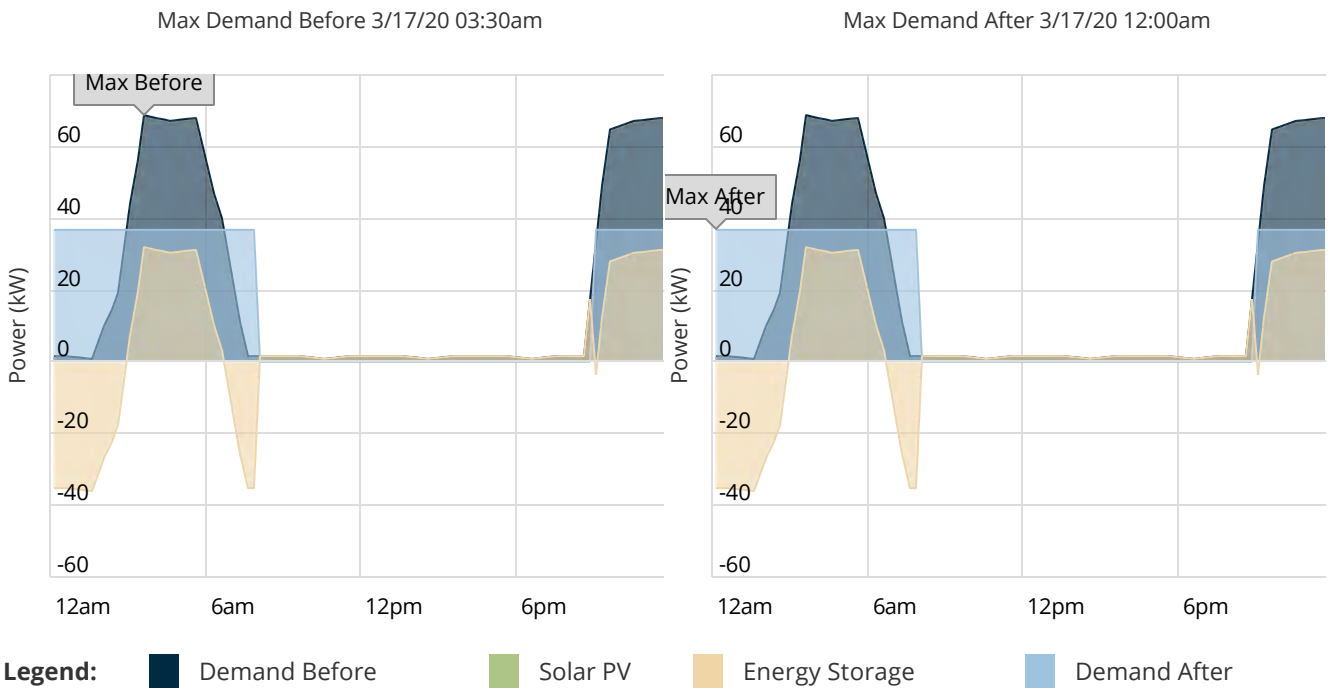
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 3/14/2020 - 4/14/2020

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



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

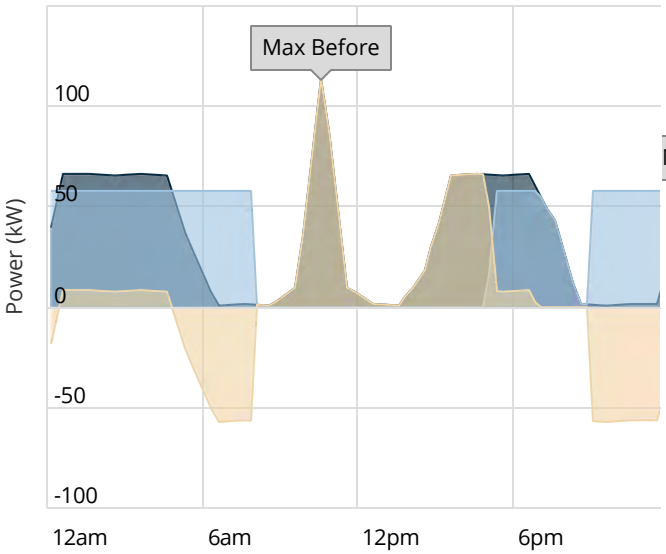
Charts Not Applicable

Demand Profiles

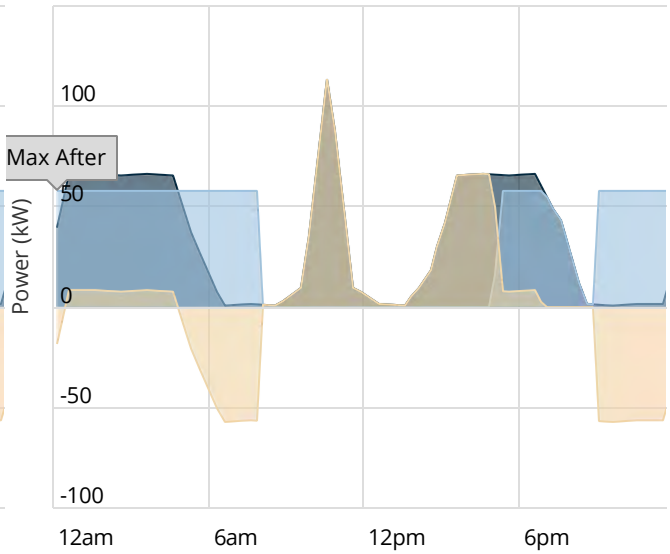
Date Range: 4/14/2020 - 5/14/2020

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

Max Demand Before 5/11/20 10:30am



Max Demand After 5/11/20 12:00am



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 Energy Storage system simulation.

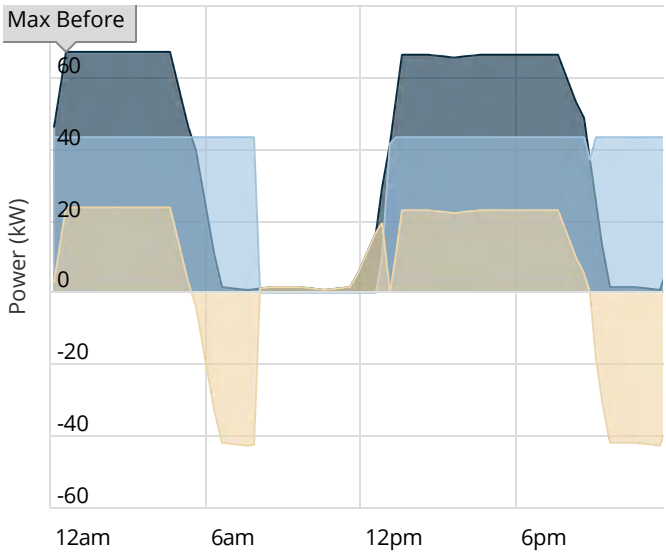
Charts Not Applicable

Demand Profiles

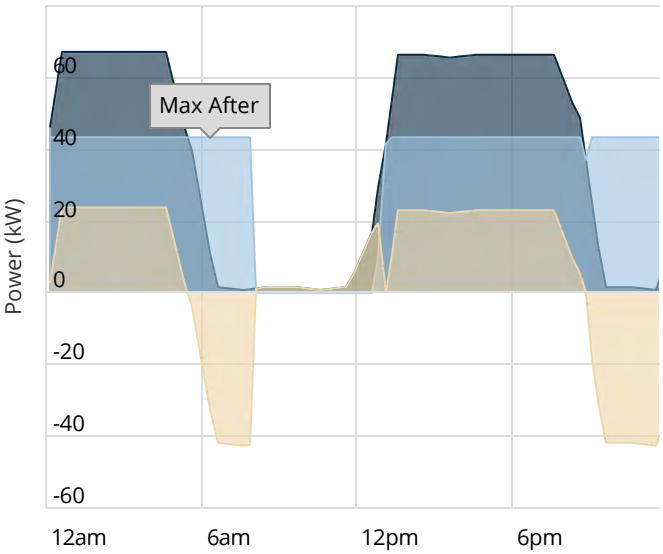
Date Range: 5/14/2020 - 6/14/2020

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

Max Demand Before 5/14/20 12:30am



Max Demand After 5/14/20 06:15am



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 Energy Storage system simulation.

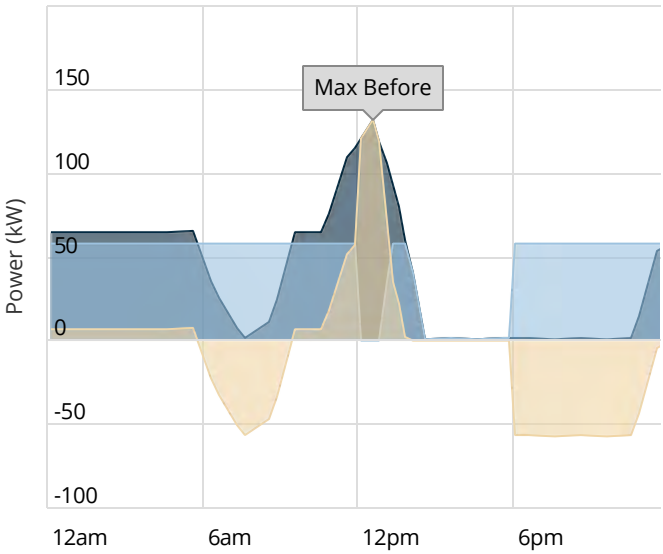
Charts Not Applicable

Demand Profiles

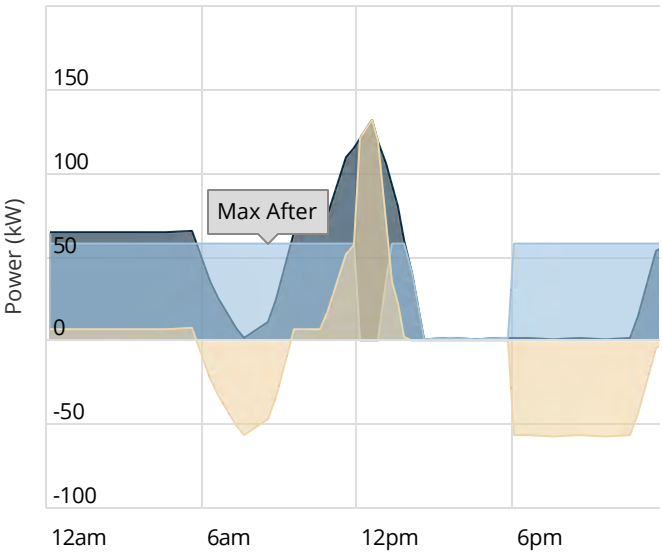
Date Range: 6/14/2019 - 7/14/2019

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

Max Demand Before 7/11/19 12:30pm



Max Demand After 7/11/19 08:30am



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 Energy Storage system simulation.

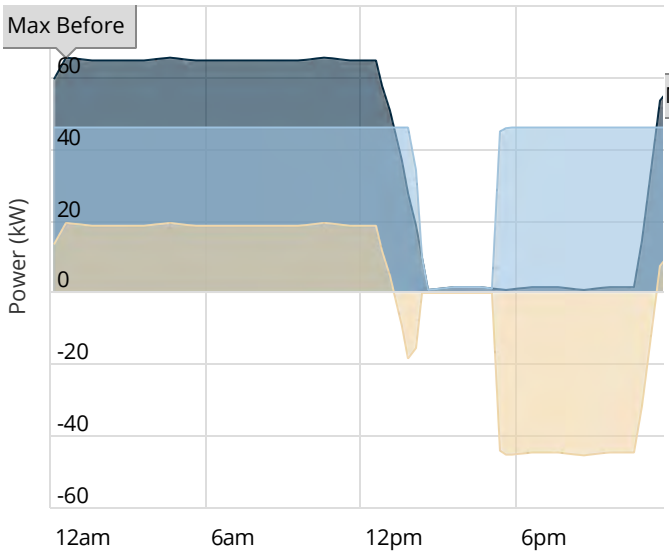
Charts Not Applicable

Demand Profiles

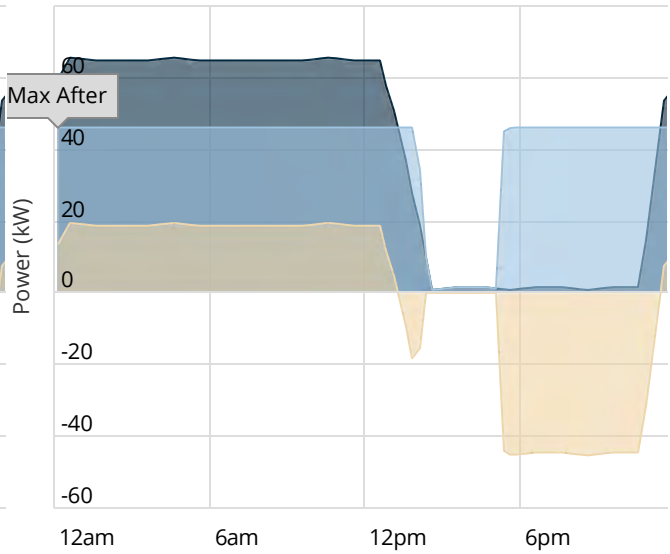
Date Range: 7/14/2019 - 8/14/2019

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

Max Demand Before 7/14/19 12:30am



Max Demand After 7/14/19 12:00am



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 Energy Storage system simulation.

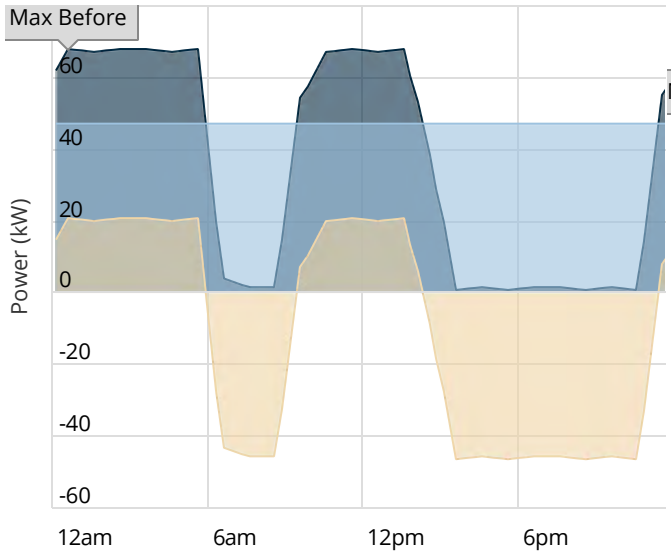
Charts Not Applicable

Demand Profiles

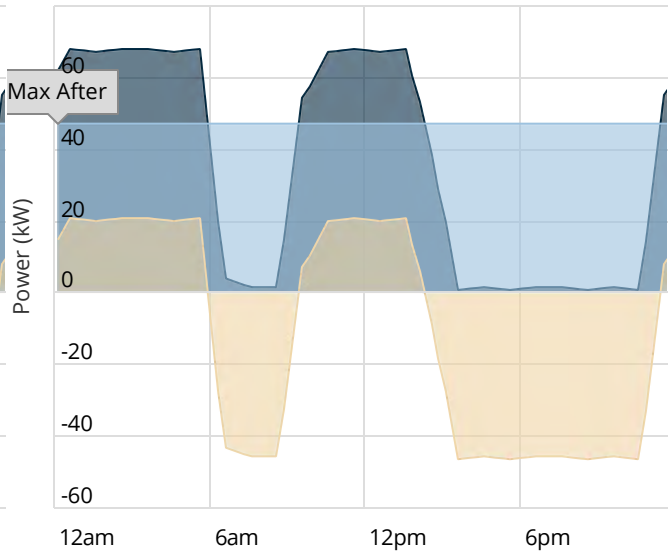
Date Range: 8/14/2019 - 9/14/2019

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

Max Demand Before 9/1/19 12:30am



Max Demand After 9/1/19 12:00am



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 Energy Storage system simulation.

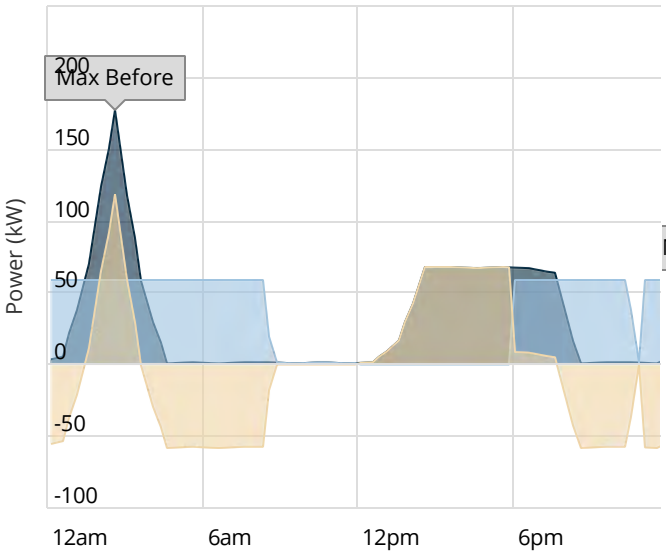
Charts Not Applicable

Demand Profiles

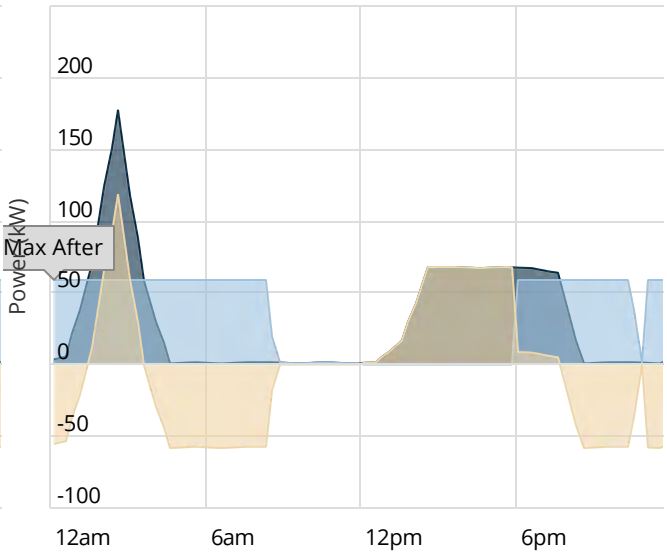
Date Range: 9/14/2019 - 10/14/2019

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

Max Demand Before 9/17/19 02:30am



Max Demand After 9/17/19 12:00am



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 Energy Storage system simulation.

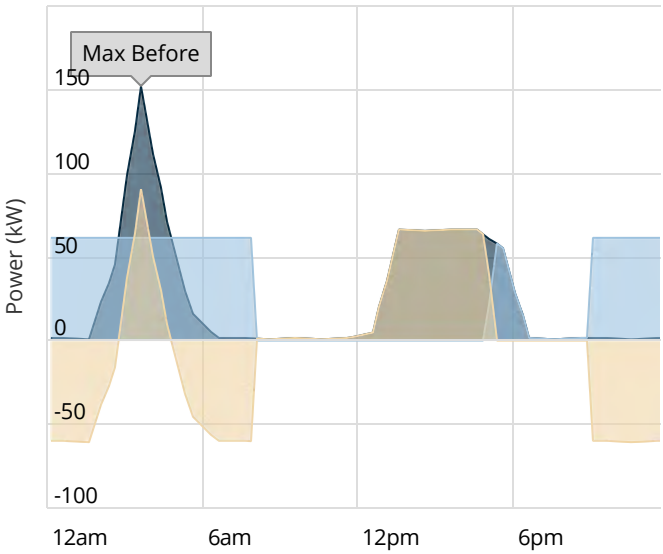
Charts Not Applicable

Demand Profiles

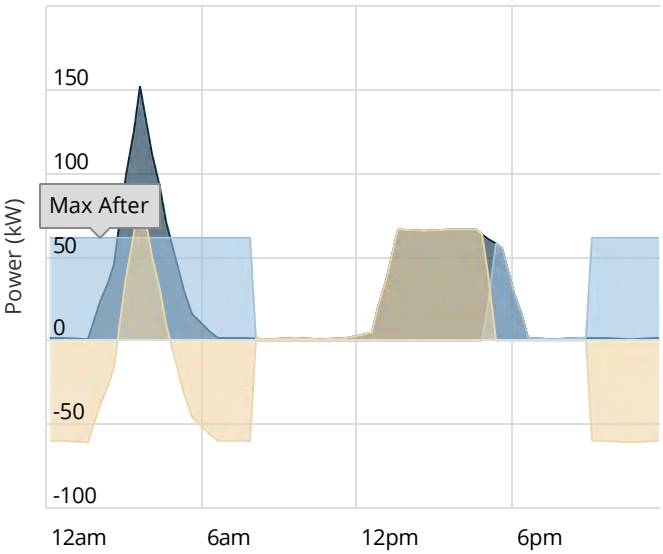
Date Range: 10/14/2019 - 11/14/2019

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

Max Demand Before 11/7/19 03:30am



Max Demand After 11/7/19 02:00am



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

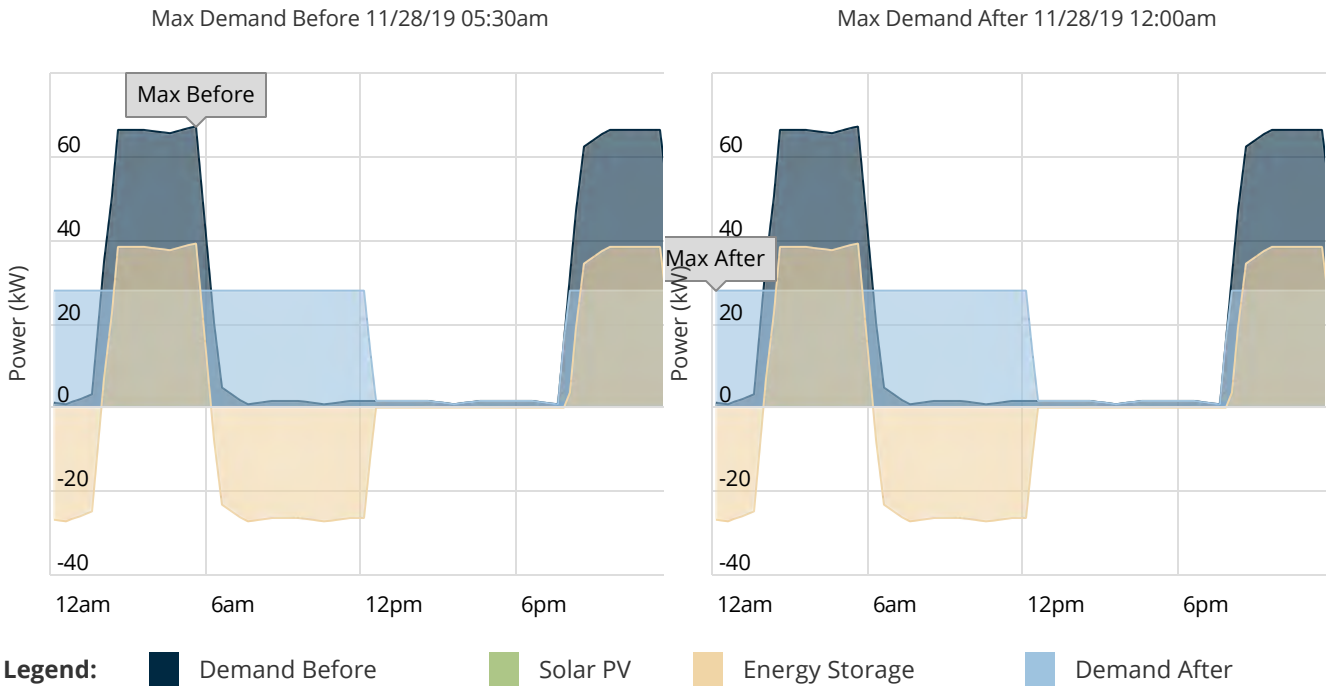
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 11/14/2019 - 12/14/2019

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



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

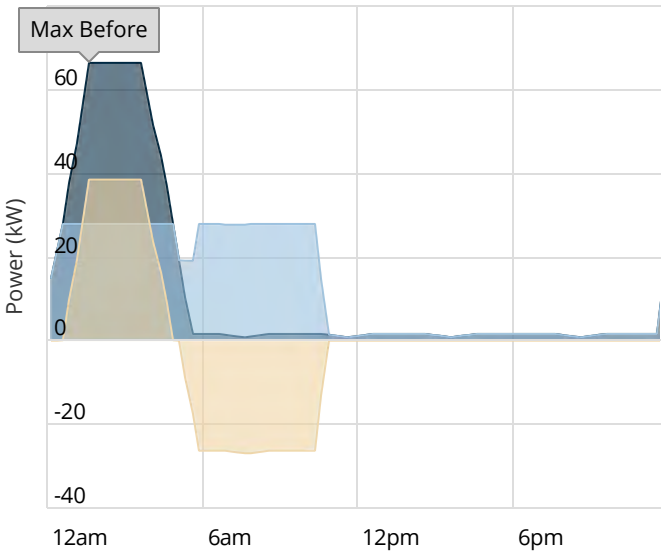
Charts Not Applicable

Demand Profiles

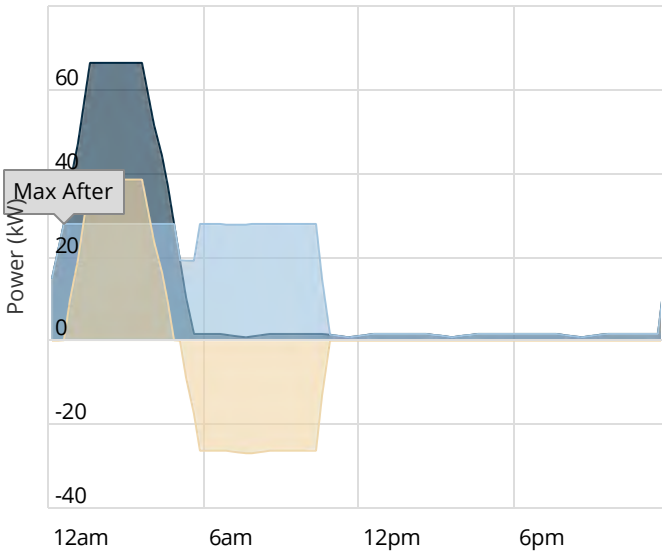
Date Range: 12/14/2019 - 1/14/2020

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

Max Demand Before 12/14/19 01:30am



Max Demand After 12/14/19 12:30am



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 Energy Storage system simulation.

Charts Not Applicable

2.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	$685,560	Federal Income Tax Rate	21%	State Income Tax Rate	8%
Electricity Escalation Rate	3%				

Years	Project Costs	SGIP Incentive	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$685,560	$342,780	-	-$342,780	-$342,780
1	-	$68,556	$1,133	$69,689	-$273,091
2	-	$68,556	$1,144	$69,700	-$203,391
3	-	$68,556	$1,154	$69,710	-$133,682
4	-	$68,556	$1,164	$69,720	-$63,962
5	-	$68,556	$1,173	$69,729	$5,767
6	-	-	$1,182	$1,182	$6,949
7	-	-	$1,190	$1,190	$8,140
8	-	-	$1,198	$1,198	$9,338
9	-	-	$1,206	$1,206	$10,544
10	-	-	$1,212	$1,212	$11,756
11	-	-	$1,218	$1,218	$12,974
12	-	-	$1,223	$1,223	$14,197
13	-	-	$1,228	$1,228	$15,425
14	-	-	$1,231	$1,231	$16,656
15	-	-	$1,234	$1,234	$17,890
Totals:	-$685,560	$685,560	$17,890	$17,890	-

GOLDEN STATE RENEWABLE ENERGY

PALM OASIS WELL 17 - 2 POWERPACK

Prepared For
DWA

Prepared By
GSR Energy

7/28/2020

Golden State Renewable Energy (GSR Energy) is a solar and battery storage developer that focuses on designing and constructing cost-effective solar+storage and standalone battery storage projects in California. The company was founded on the principle that local, in-county renewable energy and energy storage infrastructure interconnected at the distribution-level provides the most benefits to community stakeholders and electricity providers.

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2.1 Cash Purchase ---- 20

1.1.1 Energy Storage System (ESS) Details

General Information
Facility: PALM OASIS WELL 17
Address: Whitewater CA 92282

ESS System Ratings
Energy Capacity: 464.0 kWh
Power Rating: 116.0 kW

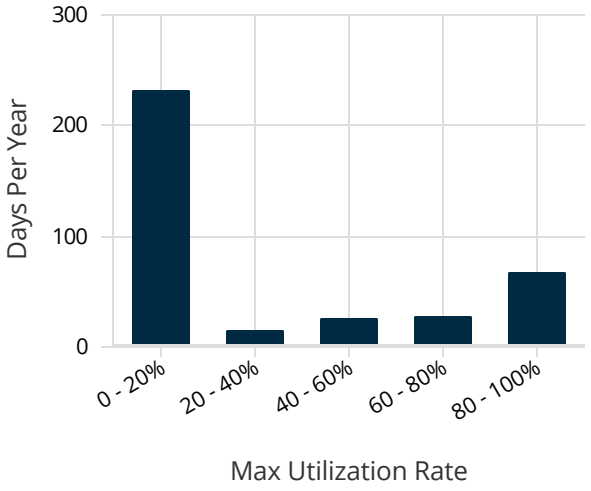
ESS Equipment Description
Battery Banks: (2) Tesla Powerpack (58 kW | 232 kWh)
Inverters: (2) Tesla Powerpack (58 kW | 232 kWh)

ESS Equipment Typical Lifespan
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost And Incentives

ESS System Cost	$457,040
SGIP Incentive	-$457,040
Net ESS System Cost:	**$0**

Energy Storage Annual Utilization



Energy Output and Demand Savings From Energy Storage			
Date Range	ESS Energy Discharge	Solar PV Generation	Total Demand Savings
1/22/2020 - 2/22/2020	22	0	$85
2/22/2020 - 3/22/2020	3	0	$5
3/22/2020 - 4/22/2020	3,705	0	$250
4/22/2020 - 5/22/2020	4,973	0	$245
5/22/2020 - 6/22/2020	5,480	0	$241
6/22/2019 - 7/22/2019	48	0	$165
7/22/2019 - 8/22/2019	1,572	0	$203
8/22/2019 - 9/22/2019	5,217	0	$259
9/22/2019 - 10/22/2019	4,213	0	$251
10/22/2019 - 11/22/2019	2,190	0	$250
11/22/2019 - 12/22/2019	14	0	$5
12/22/2019 - 1/22/2020	21	0	$5
-	27,458	0	$1,964

1.1.2 Rebates and Incentives

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

SGIP 2020 – Equity Resiliency Budget ($1,000/kWh) - GSRE

The Self-Generation Incentive Program (SGIP) Equity Resiliency Budget incentive was established to provide storage rebates for residential or "critical facility" non-residential customers in disadvantaged or low-income communities that are also in Tier 2 or Tier 3 High Fire Threat Districts (HFTD) and other areas that have experienced two or more Public Safety Power Shut-offs (PSPS). The Equity Resiliency Budget incentive level will be set at $1,000/kWh, which the CPUC has stated was a "level likely to fully or nearly fully subsidize the installation of a storage system." The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Small storage projects (< 10 kW) will receive the entire incentive paid upfront. Larger projects (> 10 kW) will receive a portion upfront and a portion paid as a Performance Based Incentive (PBI) over a 5-year period. Equity Resiliency Budget incentives levels for large systems (> 10 kW) are reduced if: (a) the ESS capacity is greater than 2 MWh; (b) the ESS duration is greater than 4-hours; and/or (c) the system cycles less than 104/cycles per year. Note that the incentive calculation assumes that the storage system reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in the PBI amount.

Total Incentive Value: $457,040

1.1.3 Utility Rates

The table below shows the rates associate with your current utility rate schedule (TOU-PA-2). Your estimated electric bills after storage are shown on the following page.

Fixed Charges		Energy Charges		Demand Charges	
Type	TOU-PA-2	Type	TOU-PA-2	Type	TOU-PA-2
W Monthly	$41.40	W Mid Peak	$0.11181	W NC	$6.74
S Monthly	$41.40	W Off Peak	$0.07279	S NC	$6.74
		S On Peak	$0.33131		
		S Mid Peak	$0.13649		
		S Off Peak	$0.08231		

1.1.4 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-2

Time Periods	Energy Use (kWh)			Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/22/2020 - 2/22/2020 W	0	22	7	22	$41	$1	$2	$148	$193
2/22/2020 - 3/22/2020 W	0	2	1	1	$41	$0	$0	$7	$48
3/22/2020 - 4/22/2020 W	0	4,534	6,452	128	$41	$275	$702	$863	$1,881
4/22/2020 - 5/22/2020 W	0	4,458	10,205	128	$41	$367	$875	$863	$2,145
5/22/2020 - 6/22/2020 W/S	1,898	4,688	9,446	126	$41	$401	$1,556	$849	$2,847
6/22/2019 - 7/22/2019 S	2	-	78	44	$41	$2	$5	$297	$345
7/22/2019 - 8/22/2019 S	544	2,255	1,853	133	$41	$116	$524	$896	$1,578
8/22/2019 - 9/22/2019 S	625	5,592	6,190	133	$41	$310	$1,170	$896	$2,418
9/22/2019 - 10/22/2019 S/W	21	3,684	6,712	132	$41	$260	$684	$890	$1,875
10/22/2019 - 11/22/2019 W	0	1,560	3,734	131	$41	$132	$314	$883	$1,371
11/22/2019 - 12/22/2019 W	0	7	10	1	$41	$0	$1	$7	$50
12/22/2019 - 1/22/2020 W	0	10	15	1	$41	$1	$2	$7	$50
Totals:	3,090	26,812	44,703	-	$497	$1,865	$5,834	$6,605	$14,802

1.1.5 New Electric Bill

Rate Schedule: SCE - TOU-PA-2

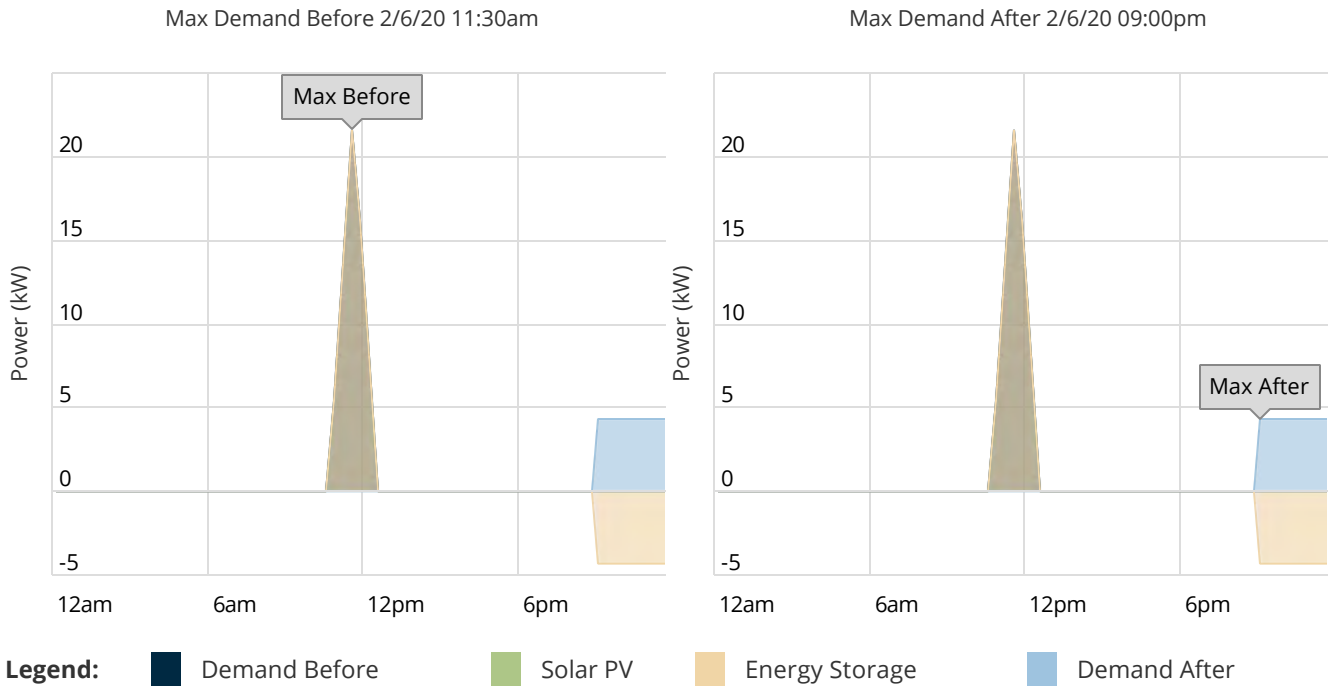
Time Periods	Energy Use (kWh)			Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/22/2020 - 2/22/2020 W	0	-	31	9	$41	$1	$1	$63	$107
2/22/2020 - 3/22/2020 W	0	-	4	0	$41	$0	$0	$2	$44
3/22/2020 - 4/22/2020 W	0	2,792	8,629	91	$41	$286	$655	$613	$1,594
4/22/2020 - 5/22/2020 W	0	2,342	12,905	92	$41	$381	$820	$617	$1,860
5/22/2020 - 6/22/2020 W/S	946	2,808	12,788	90	$41	$414	$1,261	$609	$2,325
6/22/2019 - 7/22/2019 S	-	-	86	20	$41	$2	$5	$131	$180
7/22/2019 - 8/22/2019 S	65	1,700	3,072	103	$41	$121	$385	$694	$1,241
8/22/2019 - 9/22/2019 S	182	3,142	9,695	95	$41	$325	$962	$637	$1,965
9/22/2019 - 10/22/2019 S/W	4	1,844	9,064	95	$41	$273	$629	$638	$1,582
10/22/2019 - 11/22/2019 W	0	701	4,850	94	$41	$139	$293	$633	$1,106
11/22/2019 - 12/22/2019 W	0	-	19	0	$41	$0	$1	$2	$45
12/22/2019 - 1/22/2020 W	0	-	27	0	$41	$1	$1	$2	$45
Totals:	1,197	15,329	61,170	-	$497	$1,942	$5,014	$4,641	$12,094

Annual Electricity Savings: $2,708

1.1.6 Demand Profiles

Date Range: 1/22/2020 - 2/22/2020

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



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

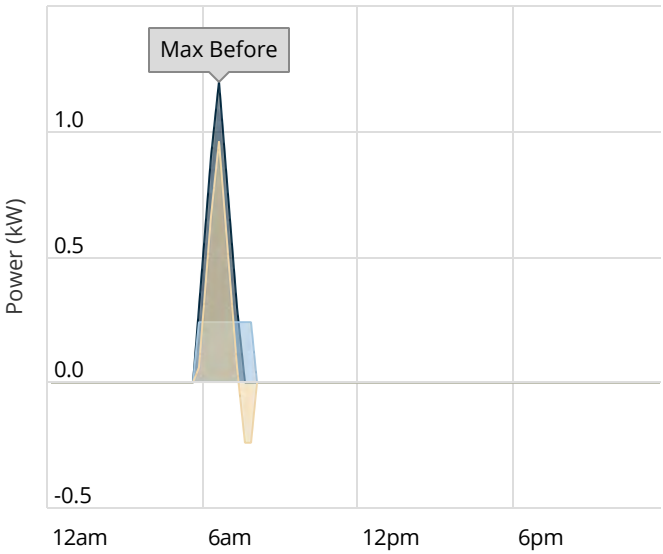
Charts Not Applicable

Demand Profiles

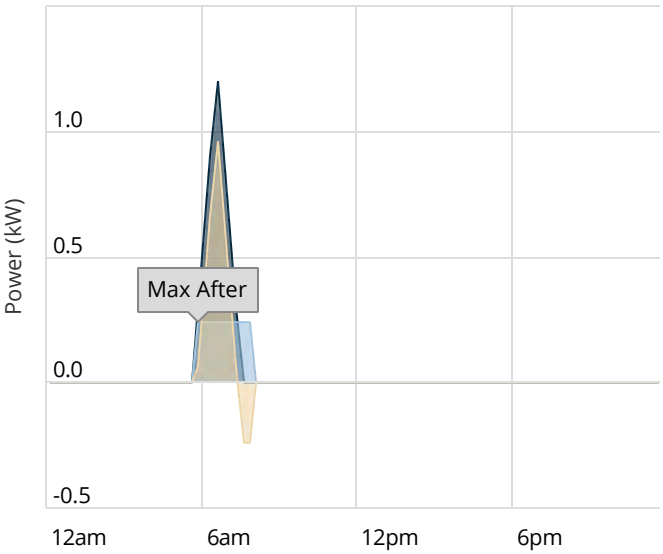
Date Range: 2/22/2020 - 3/22/2020

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

Max Demand Before 2/26/20 06:30am



Max Demand After 2/26/20 05:45am



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 Energy Storage system simulation.

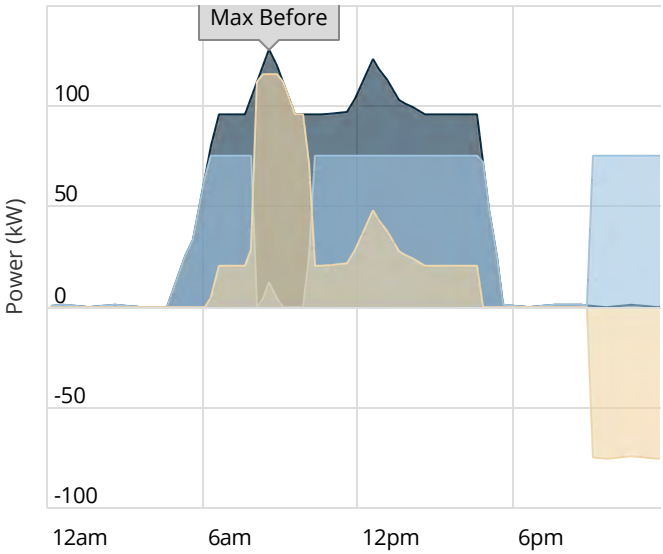
Charts Not Applicable

Demand Profiles

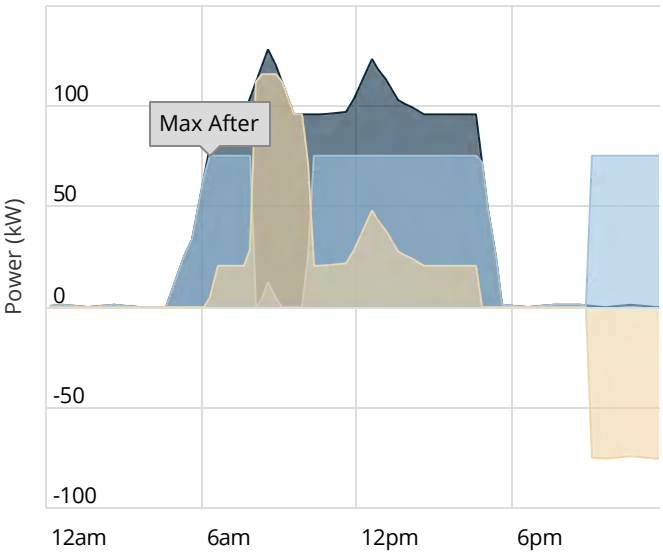
Date Range: 3/22/2020 - 4/22/2020

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

Max Demand Before 4/7/20 08:30am



Max Demand After 4/7/20 06:15am



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 Energy Storage system simulation.

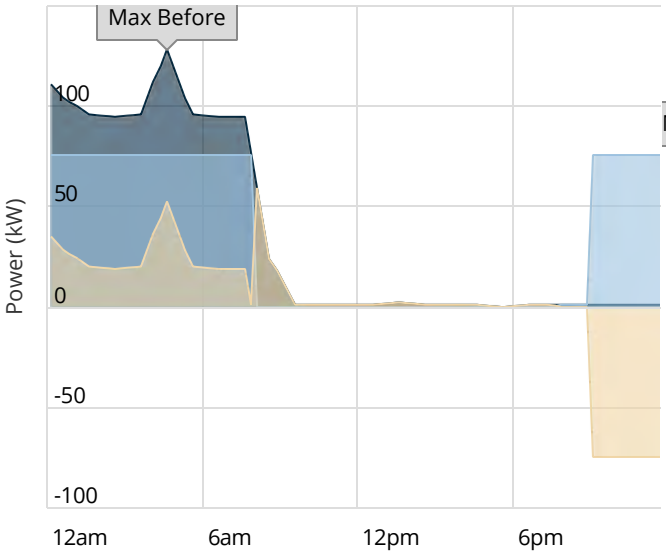
Charts Not Applicable

Demand Profiles

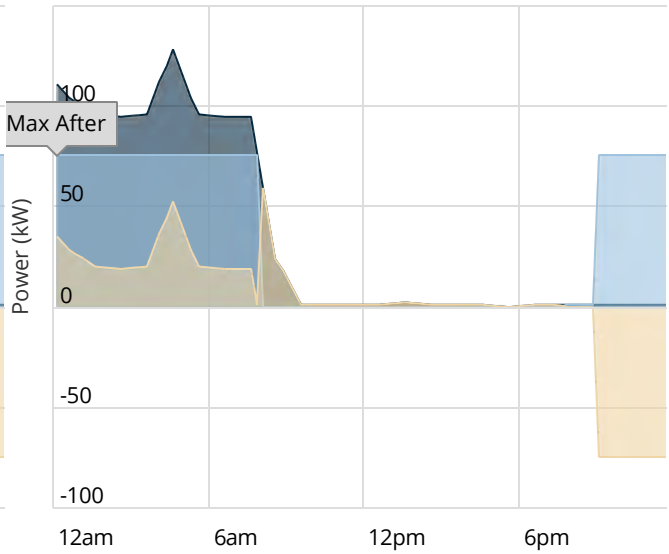
Date Range: 4/22/2020 - 5/22/2020

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

Max Demand Before 4/24/20 04:30am



Max Demand After 4/24/20 12:00am



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 Energy Storage system simulation.

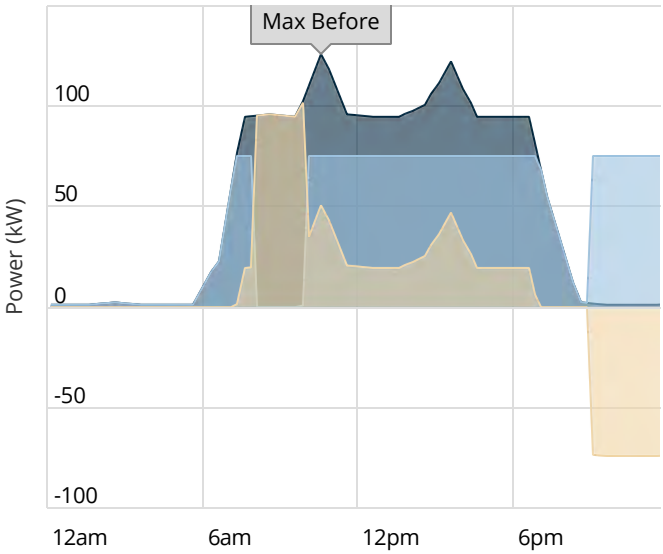
Charts Not Applicable

Demand Profiles

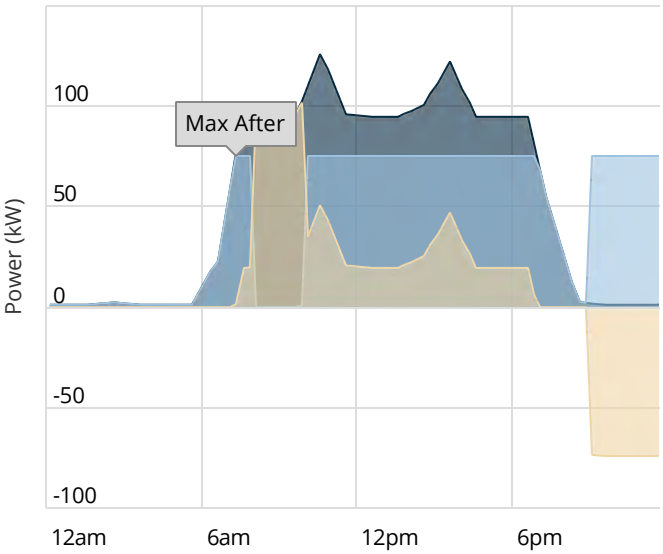
Date Range: 5/22/2020 - 6/22/2020

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

Max Demand Before 5/22/20 10:30am



Max Demand After 5/22/20 07:15am



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 Energy Storage system simulation.

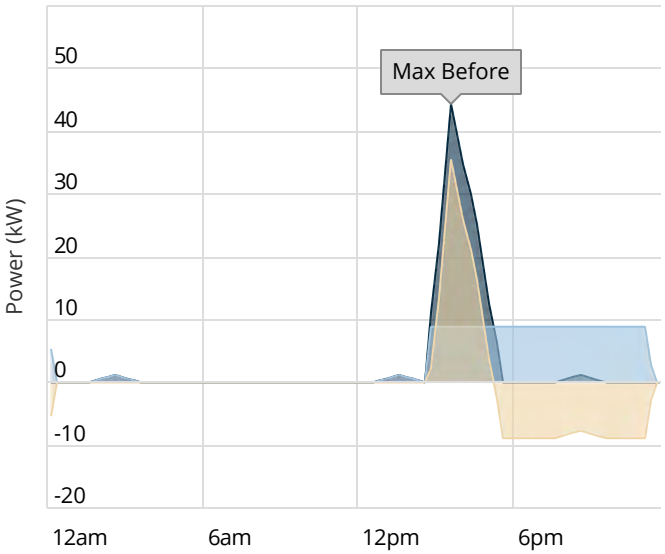
Charts Not Applicable

Demand Profiles

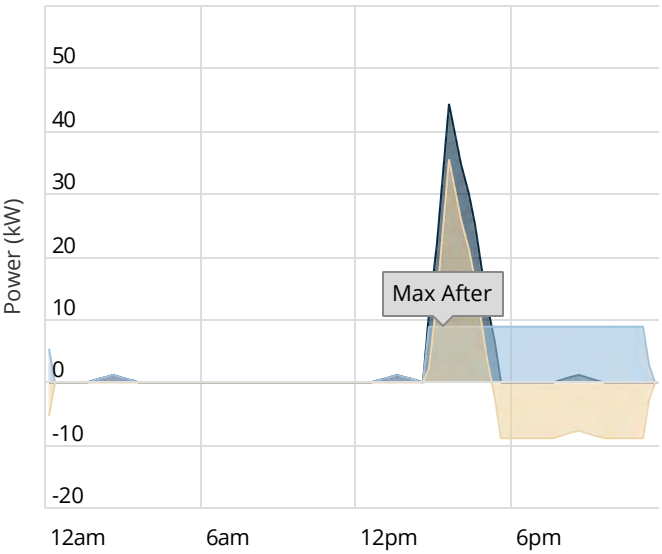
Date Range: 6/22/2019 - 7/22/2019

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

Max Demand Before 7/21/19 03:30pm



Max Demand After 7/21/19 03:15pm



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 Energy Storage system simulation.

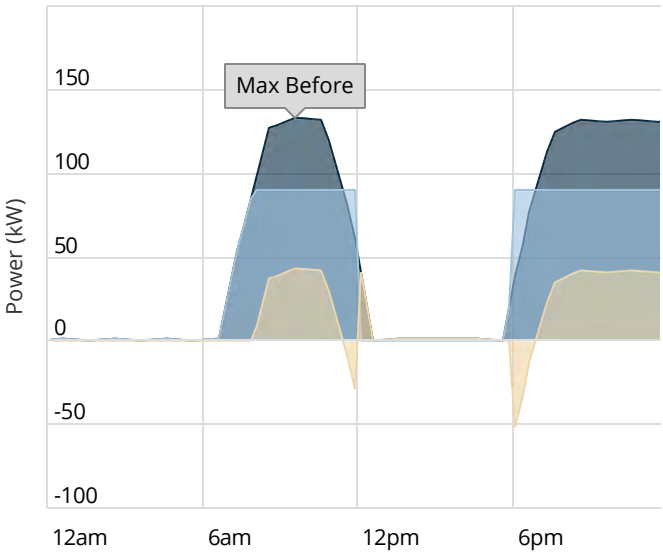
Charts Not Applicable

Demand Profiles

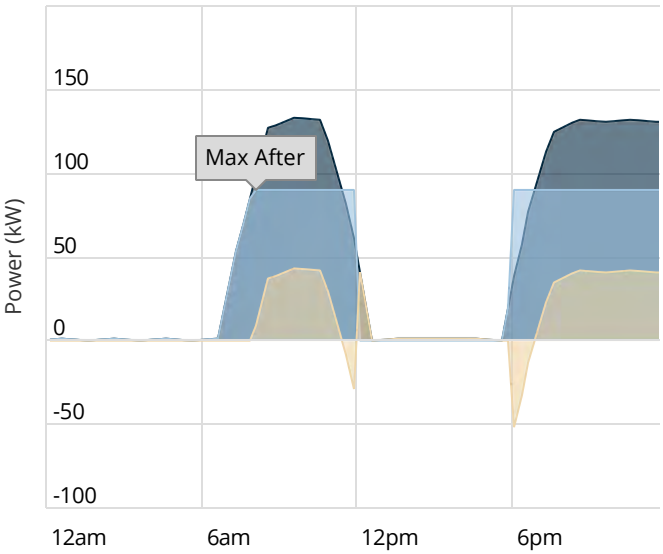
Date Range: 7/22/2019 - 8/22/2019

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

Max Demand Before 8/14/19 09:30am



Max Demand After 8/14/19 08:00am



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 Energy Storage system simulation.

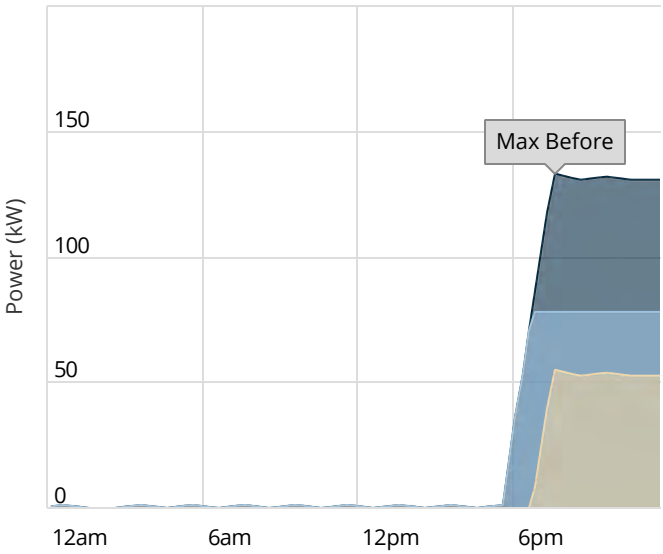
Charts Not Applicable

Demand Profiles

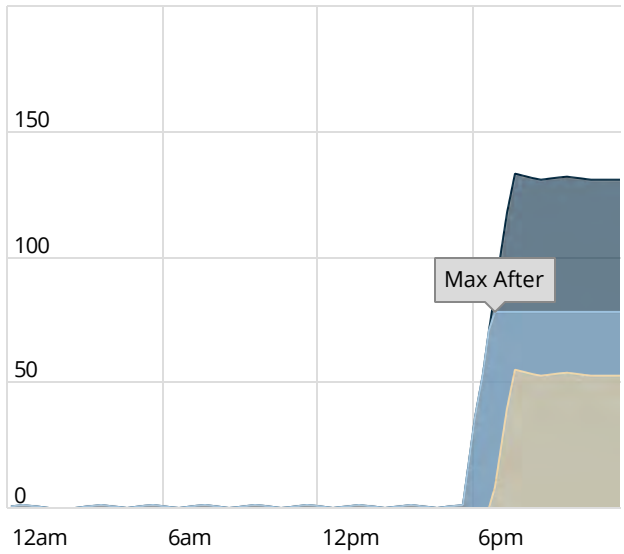
Date Range: 8/22/2019 - 9/22/2019

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

Max Demand Before 8/25/19 07:30pm



Max Demand After 8/25/19 06:45pm



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 Energy Storage system simulation.

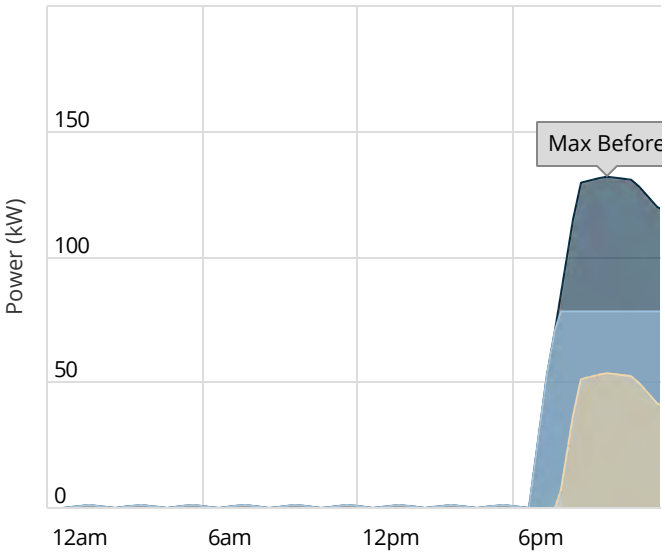
Charts Not Applicable

Demand Profiles

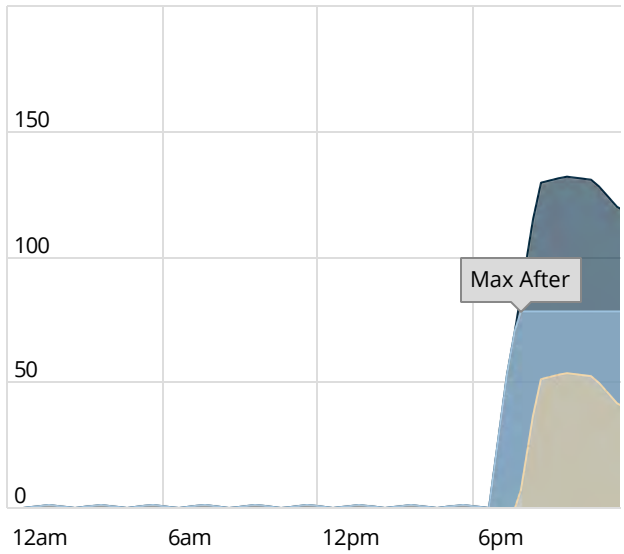
Date Range: 9/22/2019 - 10/22/2019

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

Max Demand Before 9/22/19 09:30pm



Max Demand After 9/22/19 07:45pm



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

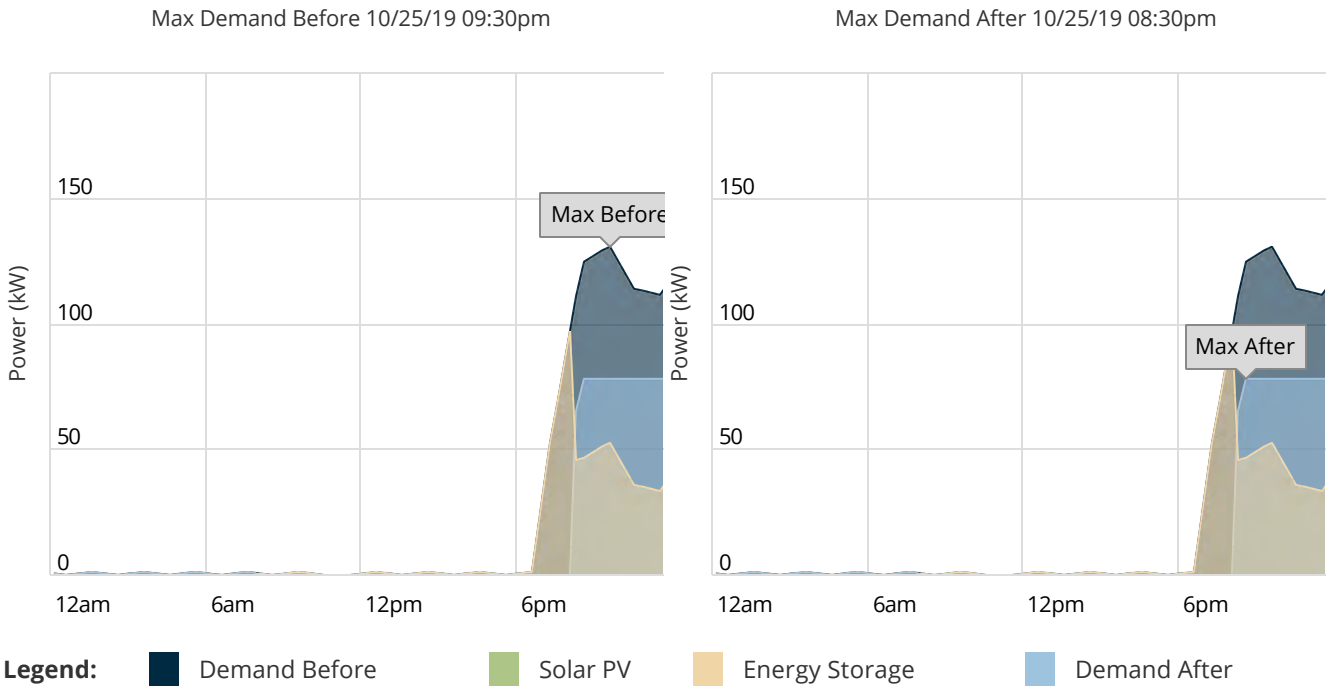
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 10/22/2019 - 11/22/2019

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



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

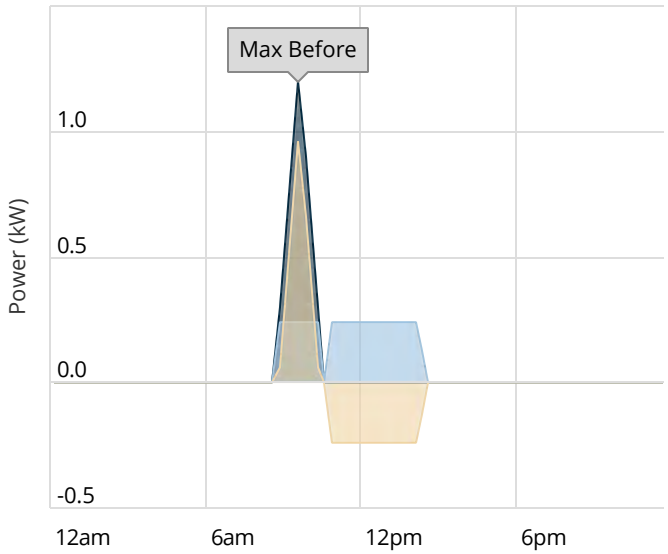
Charts Not Applicable

Demand Profiles

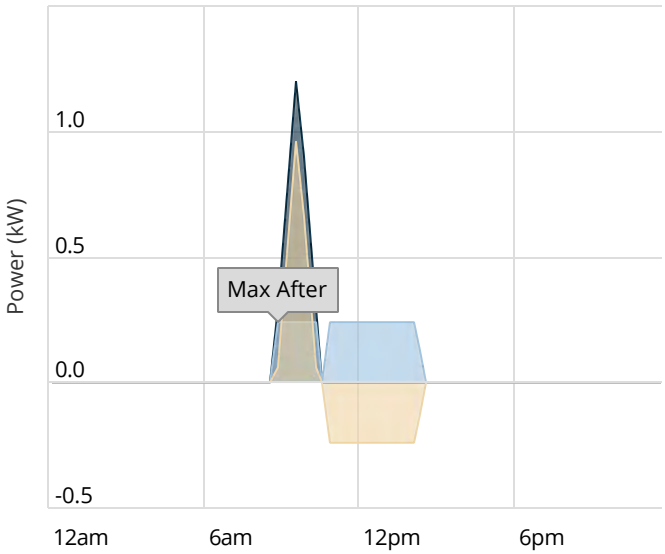
Date Range: 11/22/2019 - 12/22/2019

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

Max Demand Before 11/23/19 09:30am



Max Demand After 11/23/19 08:45am



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 Energy Storage system simulation.

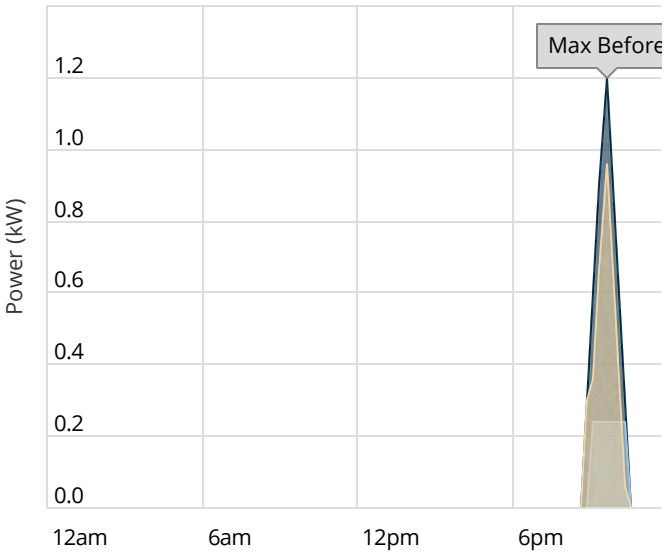
Charts Not Applicable

Demand Profiles

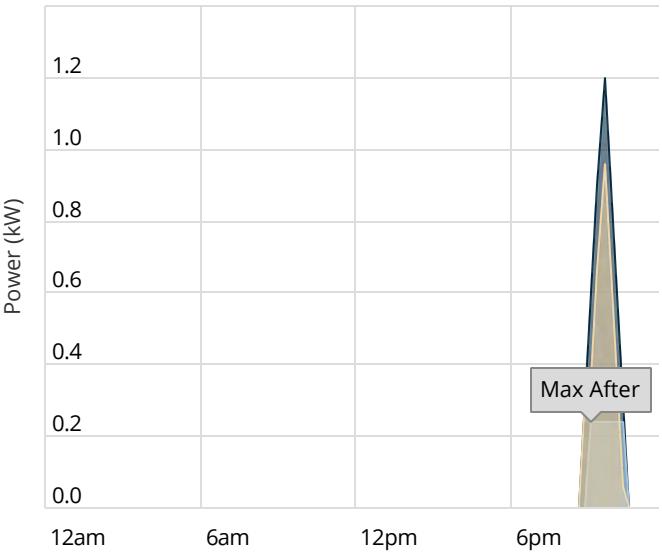
Date Range: 12/22/2019 - 1/22/2020

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

Max Demand Before 12/23/19 09:30pm



Max Demand After 12/23/19 09:00pm



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 Energy Storage system simulation.

Charts Not Applicable

2.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	$457,040	Federal Income Tax Rate	21%	State Income Tax Rate	8%
Electricity Escalation Rate	3%				

Years	Project Costs	SGIP Incentive	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$457,040	$228,520	-	-$228,520	-$228,520
1	-	$45,704	$2,708	$48,412	-$180,108
2	-	$45,704	$2,733	$48,437	-$131,671
3	-	$45,704	$2,758	$48,462	-$83,210
4	-	$45,704	$2,781	$48,485	-$34,725
5	-	$45,704	$2,804	$48,508	$13,783
6	-	-	$2,825	$2,825	$16,608
7	-	-	$2,845	$2,845	$19,453
8	-	-	$2,864	$2,864	$22,316
9	-	-	$2,881	$2,881	$25,197
10	-	-	$2,897	$2,897	$28,094
11	-	-	$2,911	$2,911	$31,005
12	-	-	$2,923	$2,923	$33,928
13	-	-	$2,934	$2,934	$36,862
14	-	-	$2,942	$2,942	$39,805
15	-	-	$2,949	$2,949	$42,753
Totals:	-$457,040	$457,040	$42,753	$42,753	-

GOLDEN STATE RENEWABLE ENERGY

SNOWCREEK CGEN

Prepared For

DWA

Prepared By

GSR Energy

7/21/2020

Golden State Renewable Energy (GSR Energy) is a solar and battery storage developer that focuses on designing and constructing cost-effective solar+storage and standalone battery storage projects in California. The company was founded on the principle that local, in-county renewable energy and energy storage infrastructure interconnected at the distribution-level provides the most benefits to community stakeholders and electricity providers.

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2.1 Cash Purchase ---- 20

1.1.1 Energy Storage System (ESS) Details

General Information
Facility: 15100 SNOWCREEK CGEN
Address: Whitewater CA 92282

ESS Equipment Description
Battery Banks: (4) Tesla Powerwall.
Inverters: (4) Tesla Powerwall.

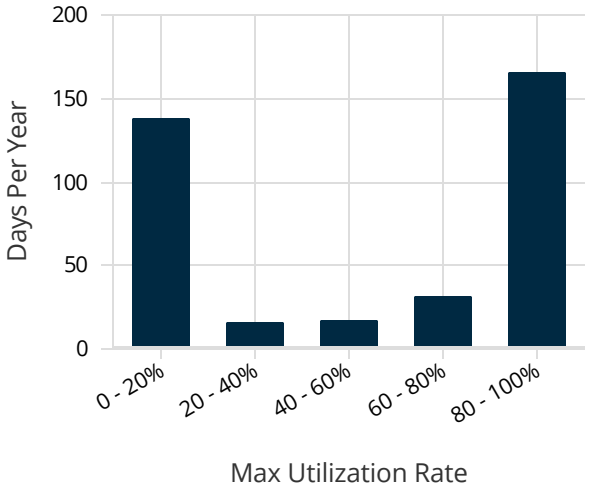
ESS Equipment Typical Lifespan
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost And Incentives

ESS System Cost	$52,008
SGIP Incentive	-$52,008
Net ESS System Cost:	**$0**

ESS System Ratings
Energy Capacity: 52.8 kWh
Power Rating: 20.0 kW

Energy Storage Annual Utilization



Energy Output and Demand Savings From Energy Storage			
Date Range	ESS Energy Discharge	Solar PV Generation	Total Demand Savings
1/14/2020 - 2/14/2020	564	0	$36
2/14/2020 - 3/14/2020	579	0	$21
3/14/2020 - 4/14/2020	436	0	$26
4/14/2020 - 5/14/2020	749	0	$36
5/14/2020 - 6/14/2020	162	0	$48
6/14/2019 - 7/14/2019	252	0	$52
7/14/2019 - 8/14/2019	133	0	$62
8/14/2019 - 9/14/2019	458	0	$42
9/14/2019 - 10/14/2019	264	0	$39
10/14/2019 - 11/14/2019	199	0	$42
11/14/2019 - 12/14/2019	473	0	$42
12/14/2019 - 1/14/2020	517	0	$26
-	4,786	0	$471

1.1.2 Rebates and Incentives

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

SGIP 2020 – Equity Resiliency Budget ($1,000/kWh) - GSRE

The Self-Generation Incentive Program (SGIP) Equity Resiliency Budget incentive was established to provide storage rebates for residential or "critical facility" non-residential customers in disadvantaged or low-income communities that are also in Tier 2 or Tier 3 High Fire Threat Districts (HFTD) and other areas that have experienced two or more Public Safety Power Shut-offs (PSPS). The Equity Resiliency Budget incentive level will be set at $1,000/kWh, which the CPUC has stated was a "level likely to fully or nearly fully subsidize the installation of a storage system." The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Small storage projects (< 10 kW) will receive the entire incentive paid upfront. Larger projects (> 10 kW) will receive a portion upfront and a portion paid as a Performance Based Incentive (PBI) over a 5-year period. Equity Resiliency Budget incentives levels for large systems (> 10 kW) are reduced if: (a) the ESS capacity is greater than 2 MWh; (b) the ESS duration is greater than 4-hours; and/or (c) the system cycles less than 104/cycles per year. Note that the incentive calculation assumes that the storage system reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in the PBI amount.

Total Incentive Value: $52,008

1.1.3 Utility Rates

The table below shows the rates associate with your current utility rate schedule (TOU-PA-2). Your estimated electric bills after storage are shown on the following page.

Fixed Charges		Energy Charges		Demand Charges	
Type	TOU-PA-2	Type	TOU-PA-2	Type	TOU-PA-2
W Monthly	$47.07	W Mid Peak	$0.12727	W NC	$7.42
S Monthly	$47.07	W Off Peak	$0.10649	S NC	$7.42
		W Super Off Peak	$0.09466		
		S On Peak	$0.41379		
		S Mid Peak	$0.15295		
		S Off Peak	$0.09038		

1.1.4 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-2

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
1/14/2020 - 2/14/2020 W	0	-580	308	-292	16	$47	$128	-$55	$119	$239
2/14/2020 - 3/14/2020 W	0	-4,659	-11,316	-7,655	16	$47	$107	-$1,932	$119	-$1,659
3/14/2020 - 4/14/2020 W	0	1,022	2,551	1,699	14	$47	$132	$431	$104	$714
4/14/2020 - 5/14/2020 W	0	-6,218	-13,637	-8,761	18	$47	$98	-$2,357	$134	-$2,079
5/14/2020 - 6/14/2020 W/S	-7,330	-14,911	-62,383	-19,869	16	$47	$11	-$10,331	$119	-$10,154
6/14/2019 - 7/14/2019 S	-16,753	-6,275	-87,076	0	18	$47	$26	-$13,009	$134	-$12,803
7/14/2019 - 8/14/2019 S	-17,436	-6,851	-90,490	0	20	$47	$7	-$13,572	$148	-$13,370
8/14/2019 - 9/14/2019 S	-10,279	-2,511	-44,737	0	18	$47	$60	-$7,243	$134	-$7,002
9/14/2019 - 10/14/2019 S/W	-5,228	-4,861	-33,694	-3,182	16	$47	$52	-$5,122	$110	-$4,913
10/14/2019 - 11/14/2019 W	0	-17,484	-37,298	-25,729	16	$47	$17	-$6,620	$119	-$6,437
11/14/2019 - 12/14/2019 W	0	-2,223	-5,545	-3,221	18	$47	$108	-$904	$134	-$615
12/14/2019 - 1/14/2020 W	0	1,120	2,705	1,792	14	$47	$140	$460	$104	$751
Totals:	-57,026	-64,431	-380,612	-65,218	-	$565	$886	-$28,365	$1,476	-$25,438

1.1.5 New Electric Bill

Rate Schedule: SCE - TOU-PA-2

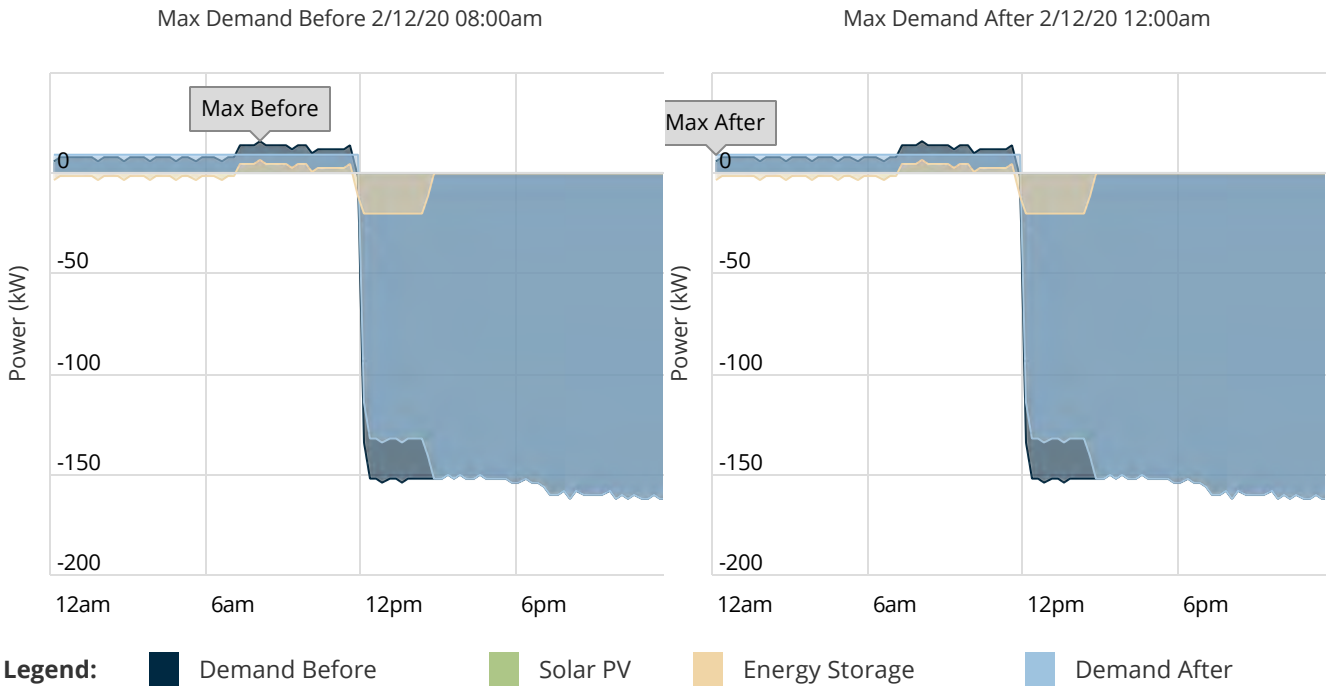
Time Periods	Energy Use (kWh)				Max Demand (kW)	Charges				
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	NC / Max	Other	NBC	Energy	Demand	Total
1/14/2020 - 2/14/2020 W	0	-992	414	76	11	$47	$128	-$62	$82	$195
2/14/2020 - 3/14/2020 W	0	-5,140	-11,186	-7,239	13	$47	$109	-$1,941	$98	-$1,688
3/14/2020 - 4/14/2020 W	0	796	2,611	1,912	11	$47	$133	$427	$78	$685
4/14/2020 - 5/14/2020 W	0	-6,825	-13,233	-8,476	13	$47	$97	-$2,367	$97	-$2,126
5/14/2020 - 6/14/2020 W/S	-7,339	-14,959	-62,375	-19,804	10	$47	$7	-$10,334	$71	-$10,210
6/14/2019 - 7/14/2019 S	-16,874	-6,302	-86,901	0	11	$47	$22	-$13,048	$82	-$12,898
7/14/2019 - 8/14/2019 S	-17,439	-6,865	-90,458	0	12	$47	$3	-$13,573	$86	-$13,436
8/14/2019 - 9/14/2019 S	-10,539	-2,581	-44,358	0	12	$47	$57	-$7,328	$92	-$7,131
9/14/2019 - 10/14/2019 S/W	-5,286	-4,993	-33,544	-3,115	10	$47	$51	-$5,143	$72	-$4,973
10/14/2019 - 11/14/2019 W	0	-17,553	-37,349	-25,587	10	$47	$14	-$6,621	$77	-$6,483
11/14/2019 - 12/14/2019 W	0	-2,611	-5,341	-2,986	12	$47	$109	-$910	$92	-$662
12/14/2019 - 1/14/2020 W	0	805	2,810	2,059	11	$47	$142	$455	$78	$722
Totals:	-57,477	-67,220	-378,910	-63,160	-	$565	$872	-$28,338	$1,005	-$25,897

Annual Electricity Savings: $459

1.1.6 Demand Profiles

Date Range: 1/14/2020 - 2/14/2020

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



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

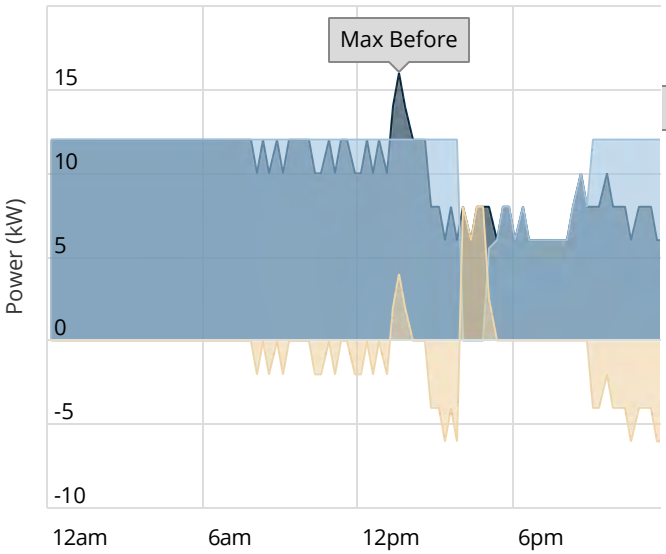
Charts Not Applicable

Demand Profiles

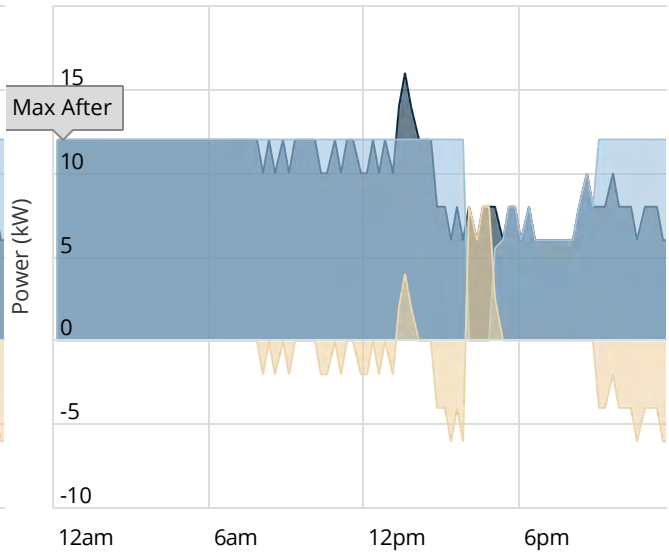
Date Range: 2/14/2020 - 3/14/2020

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

Max Demand Before 3/1/20 01:30pm



Max Demand After 3/1/20 12:15am



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

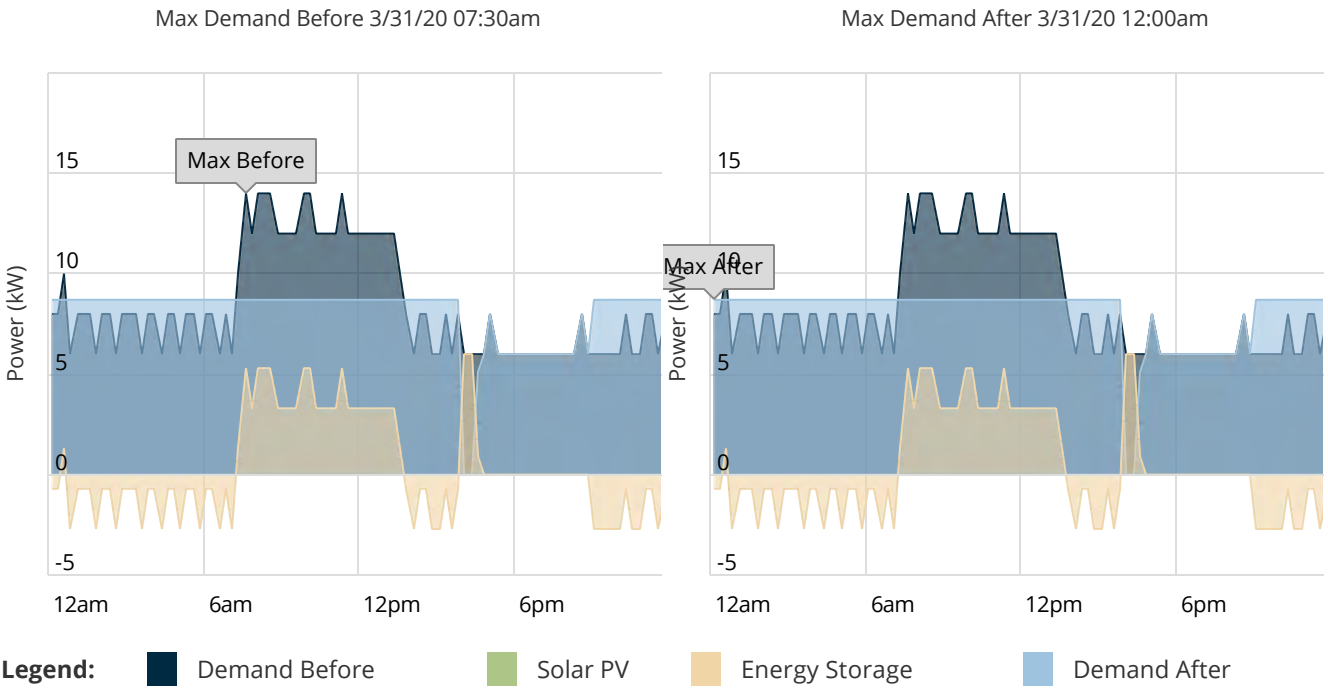
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 3/14/2020 - 4/14/2020

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



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

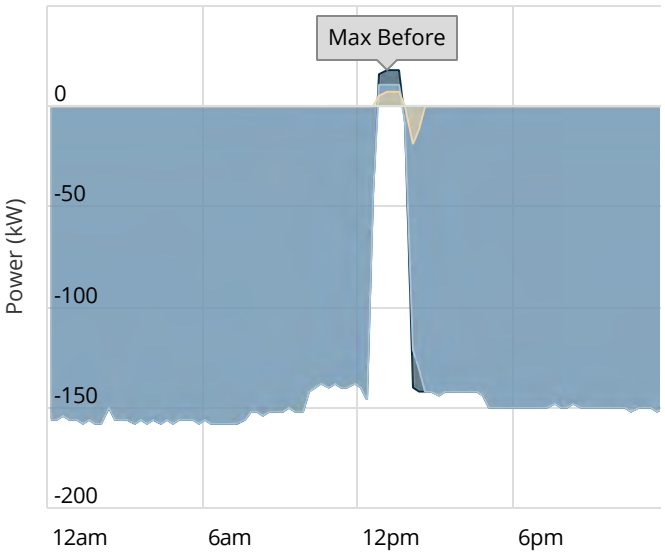
Charts Not Applicable

Demand Profiles

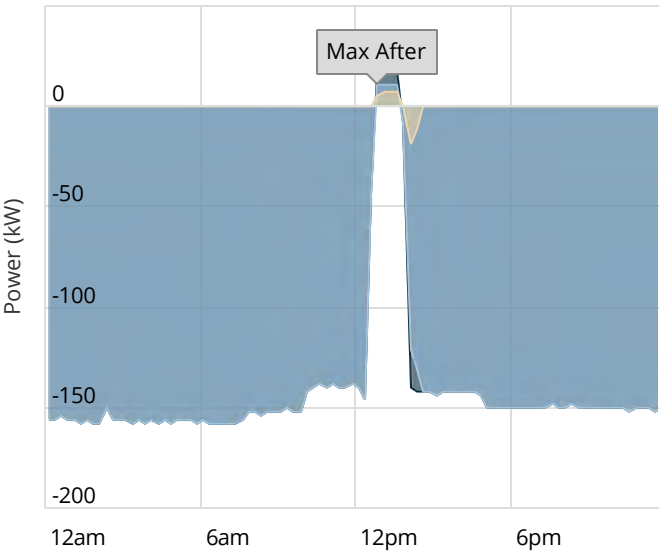
Date Range: 4/14/2020 - 5/14/2020

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

Max Demand Before 5/6/20 01:00pm



Max Demand After 5/6/20 12:45pm



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

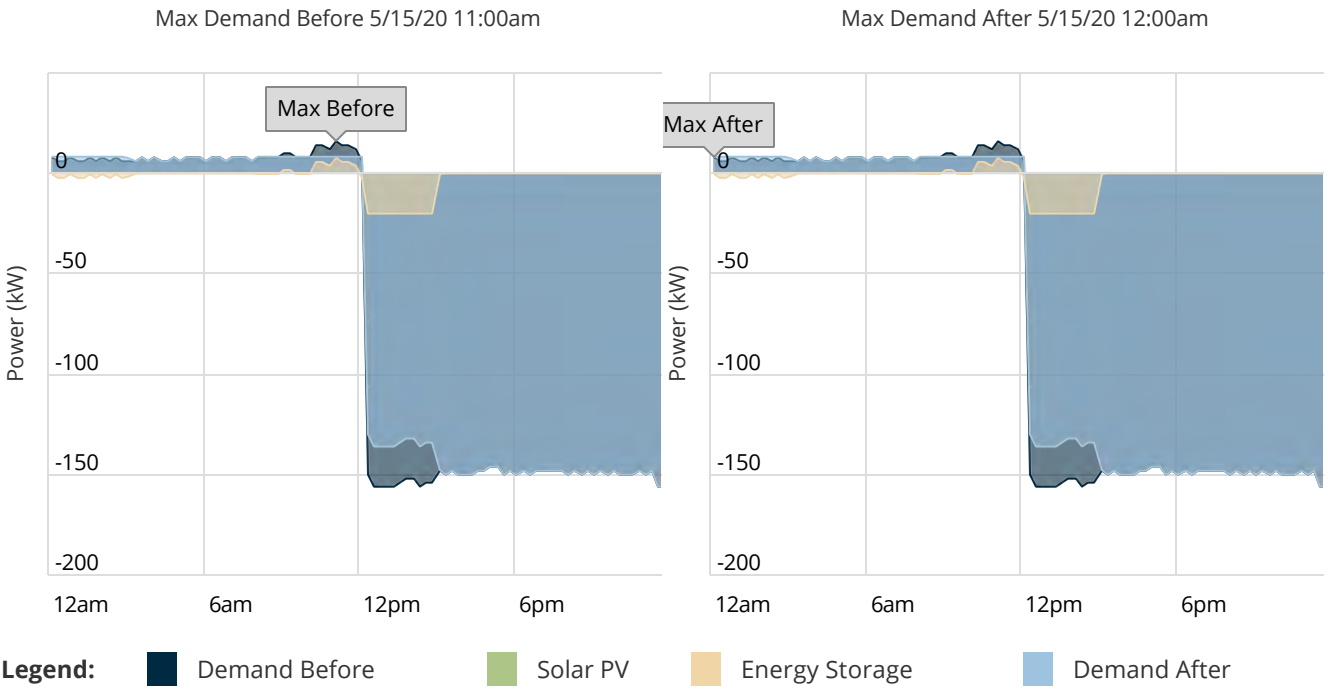
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 5/14/2020 - 6/14/2020

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



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

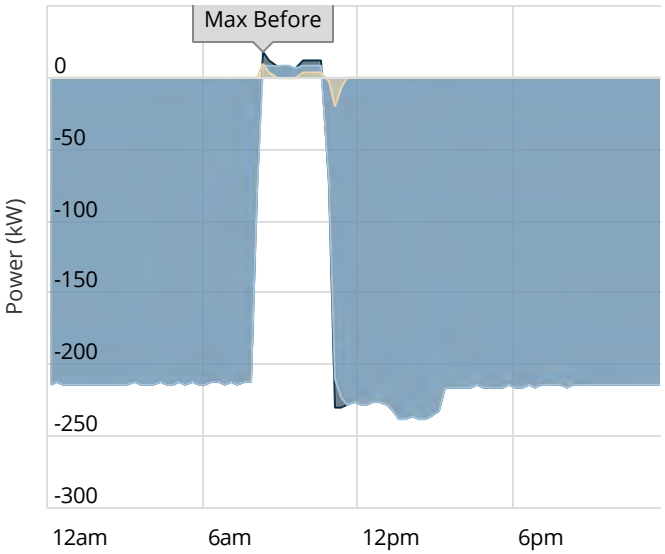
Charts Not Applicable

Demand Profiles

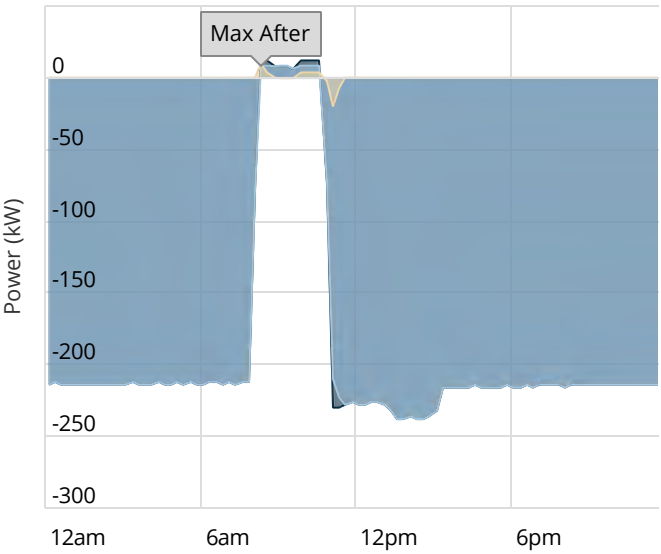
Date Range: 6/14/2019 - 7/14/2019

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

Max Demand Before 6/14/19 08:15am



Max Demand After 6/14/19 08:15am



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 Energy Storage system simulation.

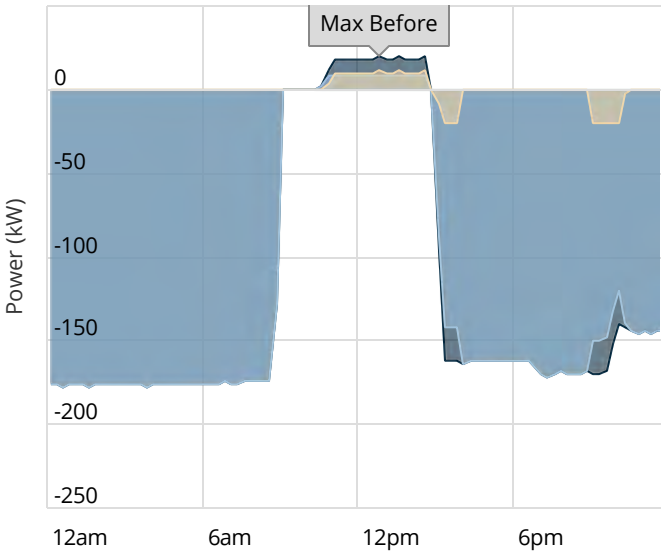
Charts Not Applicable

Demand Profiles

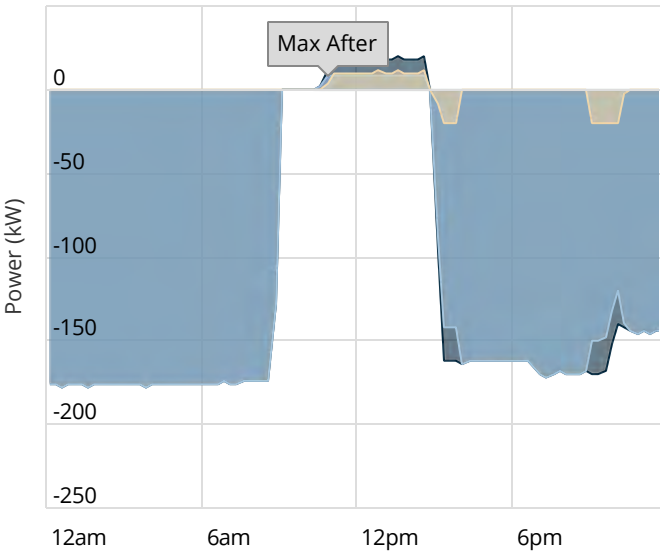
Date Range: 7/14/2019 - 8/14/2019

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

Max Demand Before 7/14/19 12:45pm



Max Demand After 7/14/19 10:45am



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

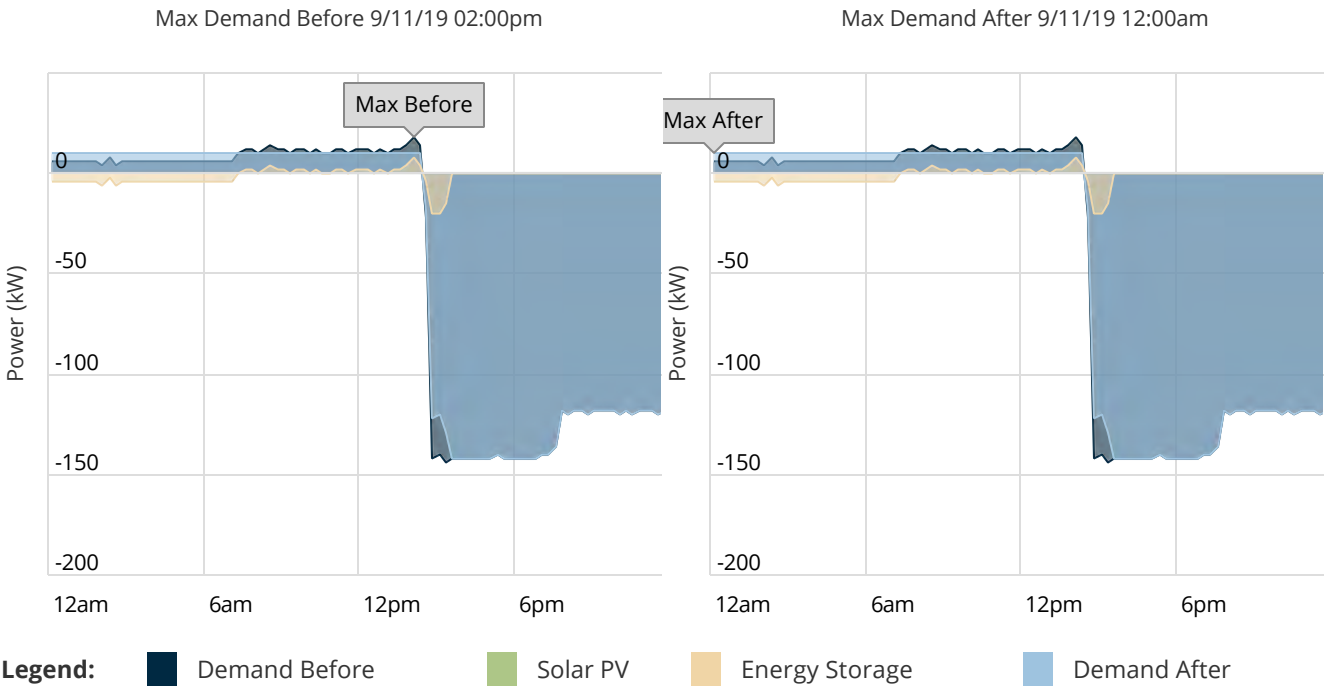
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 8/14/2019 - 9/14/2019

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



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

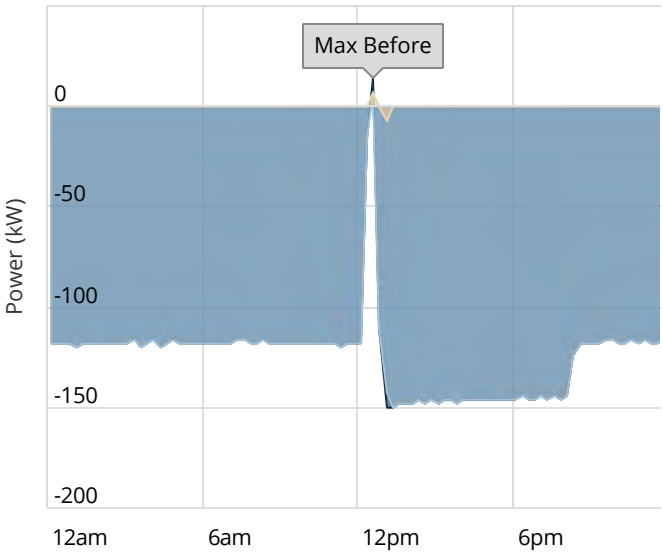
Charts Not Applicable

Demand Profiles

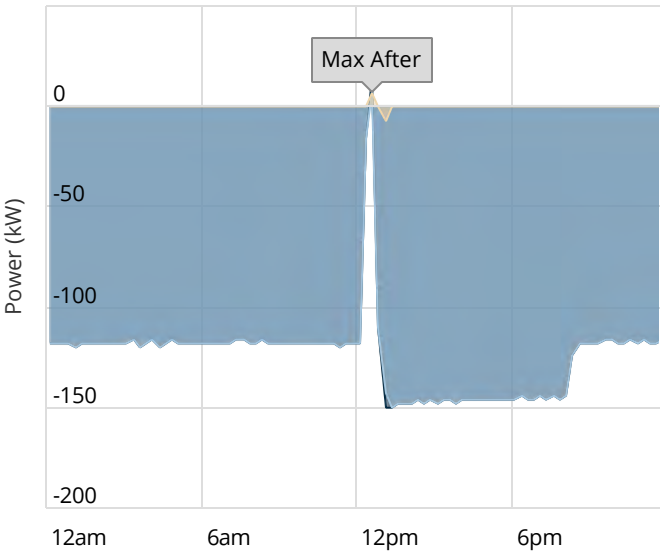
Date Range: 9/14/2019 - 10/14/2019

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

Max Demand Before 9/30/19 12:30pm



Max Demand After 9/30/19 12:30pm



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 Energy Storage system simulation.

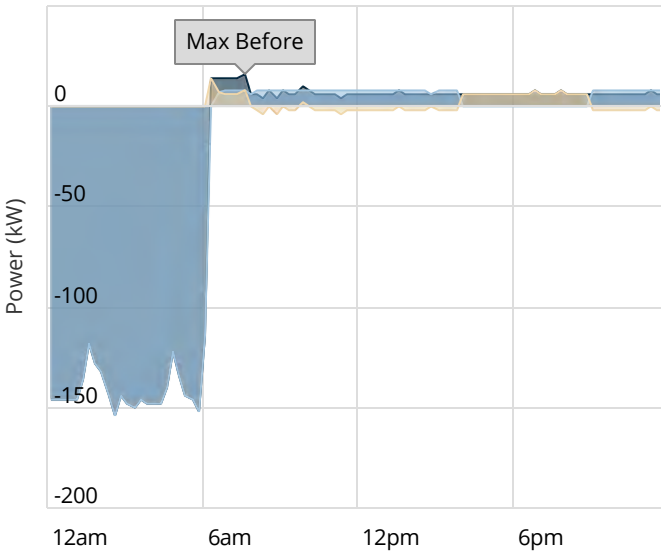
Charts Not Applicable

Demand Profiles

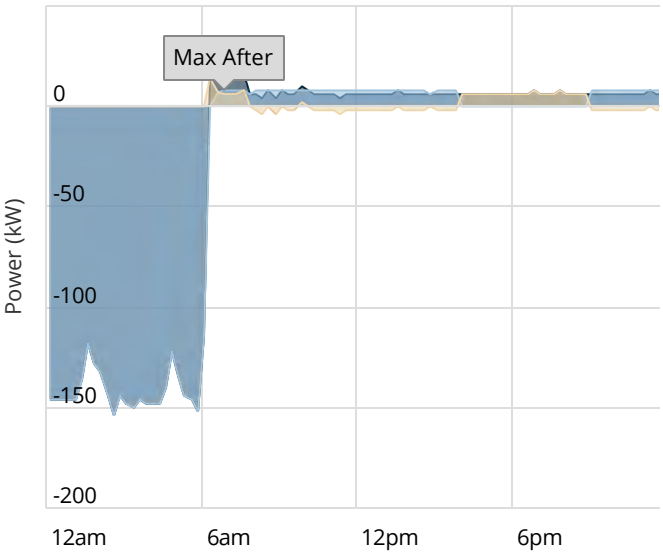
Date Range: 10/14/2019 - 11/14/2019

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

Max Demand Before 10/21/19 07:30am



Max Demand After 10/21/19 06:45am



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 Energy Storage system simulation.

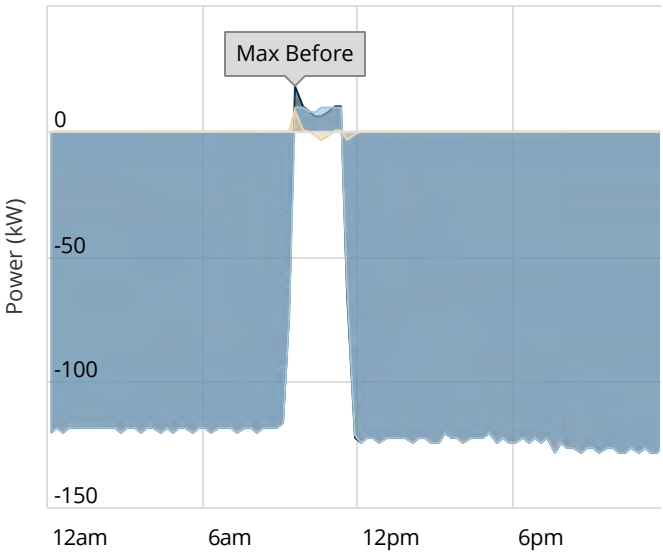
Charts Not Applicable

Demand Profiles

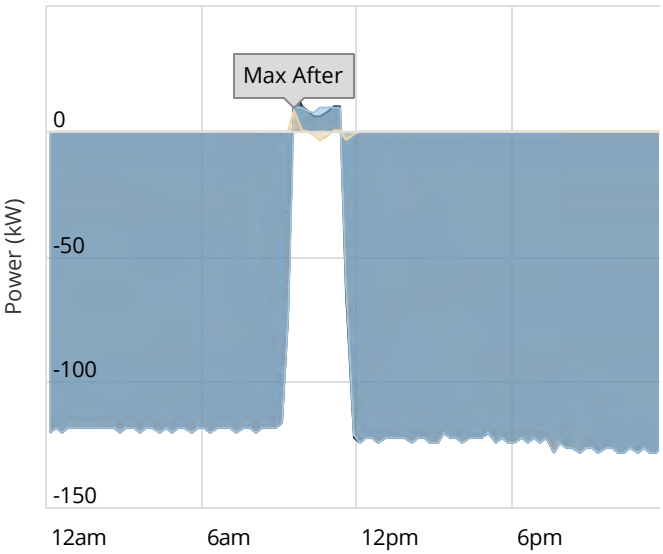
Date Range: 11/14/2019 - 12/14/2019

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

Max Demand Before 11/14/19 09:30am



Max Demand After 11/14/19 09:30am



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 Energy Storage system simulation.

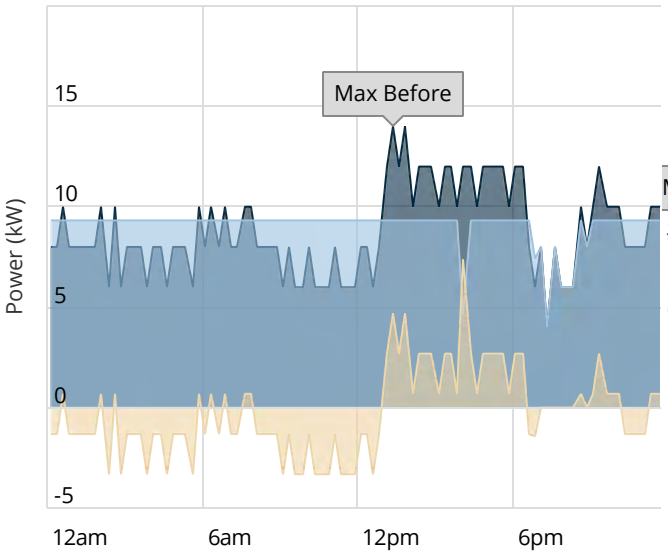
Charts Not Applicable

Demand Profiles

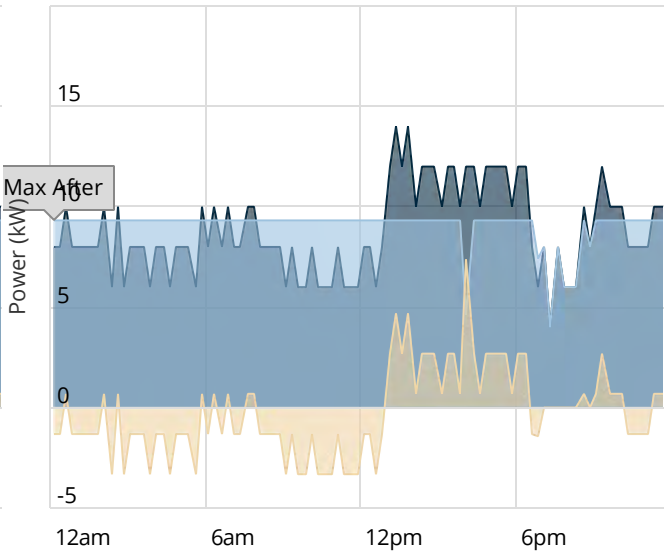
Date Range: 12/14/2019 - 1/14/2020

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

Max Demand Before 12/17/19 01:15pm



Max Demand After 12/17/19 12:00am



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 Energy Storage system simulation.

Charts Not Applicable

2.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	$52,008	Federal Income Tax Rate	21%	State Income Tax Rate	8%
Electricity Escalation Rate	3%				

Years	Project Costs	SGIP Incentive	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$52,008	$26,004	-	-$26,004	-$26,004
1	-	$5,201	$459	$5,660	-$20,344
2	-	$5,201	$458	$5,659	-$14,685
3	-	$5,201	$458	$5,658	-$9,027
4	-	$5,201	$456	$5,657	-$3,369
5	-	$5,201	$455	$5,655	$2,286
6	-	-	$452	$452	$2,738
7	-	-	$449	$449	$3,187
8	-	-	$446	$446	$3,633
9	-	-	$442	$442	$4,075
10	-	-	$437	$437	$4,512
11	-	-	$432	$432	$4,944
12	-	-	$426	$426	$5,369
13	-	-	$419	$419	$5,788
14	-	-	$411	$411	$6,199
15	-	-	$403	$403	$6,602
Totals:	-$52,008	$52,008	$6,602	$6,602	-

GOLDEN STATE RENEWABLE ENERGY

SOUTHRIDGE BOOSTER

Prepared For

DWA

Prepared By

GSR Energy

7/28/2020

Golden State Renewable Energy (GSR Energy) is a solar and battery storage developer that focuses on designing and constructing cost-effective solar+storage and standalone battery storage projects in California. The company was founded on the principle that local, in-county renewable energy and energy storage infrastructure interconnected at the distribution-level provides the most benefits to community stakeholders and electricity providers.

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1.1.1 Energy Storage System (ESS) Details

General Information
Facility: SOUTHRIDGE BOOSTER
Address: Whitewater CA 92282

ESS Equipment Description
Battery Banks: (1) Tesla Powerwall.
Inverters: (1) Tesla Powerwall.

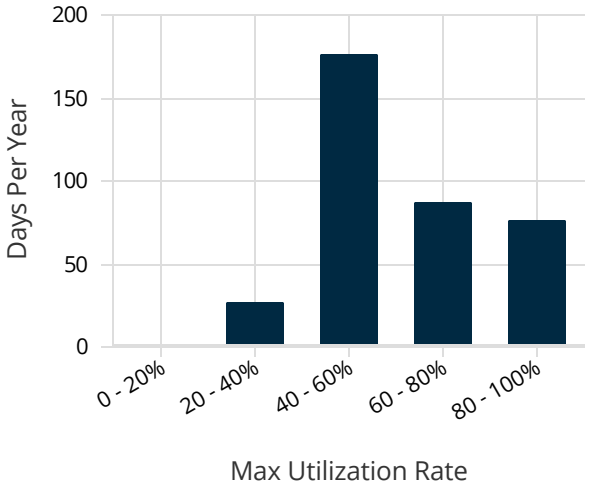
ESS Equipment Typical Lifespan
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost And Incentives

ESS System Cost	$13,002
SGIP Incentive	-$13,002
Net ESS System Cost:	**$0**

ESS System Ratings
Energy Capacity: 13.2 kWh
Power Rating: 5.0 kW

Energy Storage Annual Utilization



Energy Output and Demand Savings From Energy Storage			
Date Range	ESS Energy Discharge	Solar PV Generation	Total Demand Savings
1/18/2020 - 2/18/2020	259	0	$0
2/18/2020 - 3/18/2020	237	0	$0
3/18/2020 - 4/18/2020	295	0	$0
4/18/2020 - 5/18/2020	207	0	$0
5/18/2020 - 6/18/2020	294	0	$0
6/18/2020 - 7/18/2020	282	0	$0
7/18/2020 - 8/18/2020	295	0	$0
8/18/2019 - 9/18/2019	366	0	$0
9/18/2019 - 10/18/2019	271	0	$0
10/18/2019 - 11/18/2019	264	0	$0
11/18/2019 - 12/18/2019	230	0	$0
12/18/2019 - 1/18/2020	261	0	$0
-	3,261	0	$0

1.1.2 Rebates and Incentives

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

SGIP 2020 – Equity Resiliency Budget ($1,000/kWh) - GSRE

The Self-Generation Incentive Program (SGIP) Equity Resiliency Budget incentive was established to provide storage rebates for residential or "critical facility" non-residential customers in disadvantaged or low-income communities that are also in Tier 2 or Tier 3 High Fire Threat Districts (HFTD) and other areas that have experienced two or more Public Safety Power Shut-offs (PSPS). The Equity Resiliency Budget incentive level will be set at $1,000/kWh, which the CPUC has stated was a "level likely to fully or nearly fully subsidize the installation of a storage system." The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Small storage projects (< 10 kW) will receive the entire incentive paid upfront. Larger projects (> 10 kW) will receive a portion upfront and a portion paid as a Performance Based Incentive (PBI) over a 5-year period. Equity Resiliency Budget incentives levels for large systems (> 10 kW) are reduced if: (a) the ESS capacity is greater than 2 MWh; (b) the ESS duration is greater than 4-hours; and/or (c) the system cycles less than 104/cycles per year. Note that the incentive calculation assumes that the storage system reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in the PBI amount.

Total Incentive Value: $13,002

1.1.3 Utility Rates

The table below shows the rates associate with your current utility rate schedule (GS-1-TOU). Your estimated electric bills after storage are shown on the following page.

Fixed Charges		Energy Charges	
Type	GS-1-TOU	Type	GS-1-TOU
W Daily	$0.40	W Mid Peak	$0.26684
S Daily	$0.40	W Off Peak	$0.15173
		W Super Off Peak	$0.12046
		S On Peak	$0.43951
		S Mid Peak	$0.24673
		S Off Peak	$0.16174

1.1.4 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 - GS-1-TOU

Time Periods	Energy Use (kWh)				Charges	Charges		
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	Other	NBC	Energy	Total
1/18/2020 - 2/18/2020 W	0	139	291	137	$12	$14	$84	$110
2/18/2020 - 3/18/2020 W	0	143	248	163	$11	$14	$82	$107
3/18/2020 - 4/18/2020 W	0	133	267	174	$12	$14	$83	$109
4/18/2020 - 5/18/2020 W	0	150	277	181	$12	$15	$89	$116
5/18/2020 - 6/18/2020 W/S	87	120	435	95	$12	$18	$132	$162
6/18/2020 - 7/18/2020 S	147	45	508	0	$12	$18	$140	$170
7/18/2020 - 8/18/2020 S	141	56	521	0	$12	$18	$142	$172
8/18/2019 - 9/18/2019 S	204	91	909	0	$12	$30	$229	$271
9/18/2019 - 10/18/2019 S/W	56	123	465	92	$12	$18	$123	$153
10/18/2019 - 11/18/2019 W	0	149	342	161	$12	$16	$95	$123
11/18/2019 - 12/18/2019 W	0	154	313	157	$12	$16	$92	$119
12/18/2019 - 1/18/2020 W	0	139	282	126	$12	$14	$81	$107
Totals:	635	1,442	4,858	1,286	$145	$206	$1,371	$1,721

1.1.5 New Electric Bill

Rate Schedule: SCE - GS-1-TOU

Time Periods	Energy Use (kWh)				Charges	Charges		
Bill Ranges & Seasons	On Peak	Mid Peak	Off Peak	Super Off Peak	Other	NBC	Energy	Total
1/18/2020 - 2/18/2020 W	0	5	281	310	$12	$15	$66	$94
2/18/2020 - 3/18/2020 W	0	4	281	296	$11	$15	$65	$91
3/18/2020 - 4/18/2020 W	0	24	333	249	$12	$15	$72	$99
4/18/2020 - 5/18/2020 W	0	9	250	372	$12	$16	$69	$97
5/18/2020 - 6/18/2020 W/S	9	7	576	178	$12	$19	$100	$131
6/18/2020 - 7/18/2020 S	6	-	725	0	$12	$18	$102	$132
7/18/2020 - 8/18/2020 S	6	-	744	0	$12	$19	$104	$135
8/18/2019 - 9/18/2019 S	7	18	1,219	0	$12	$31	$174	$217
9/18/2019 - 10/18/2019 S/W	20	18	528	199	$12	$19	$102	$133
10/18/2019 - 11/18/2019 W	0	6	337	338	$12	$17	$76	$106
11/18/2019 - 12/18/2019 W	0	5	286	358	$12	$16	$72	$100
12/18/2019 - 1/18/2020 W	0	4	271	302	$12	$14	$64	$91
Totals:	48	100	5,831	2,602	$145	$215	$1,065	$1,424

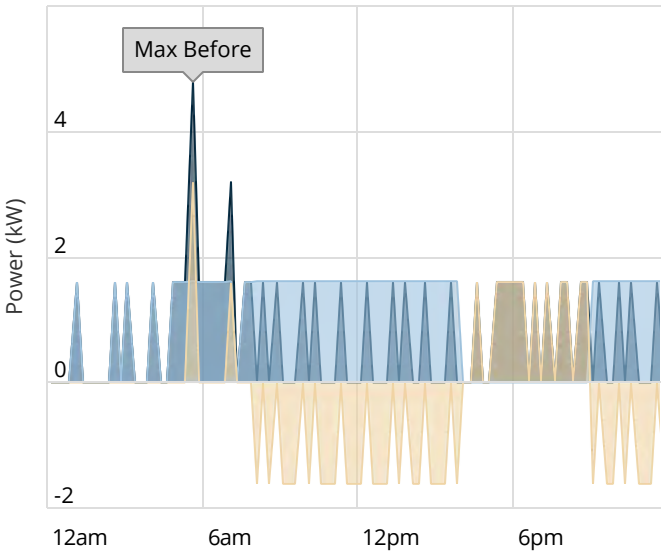
Annual Electricity Savings: $296

1.1.6 Demand Profiles

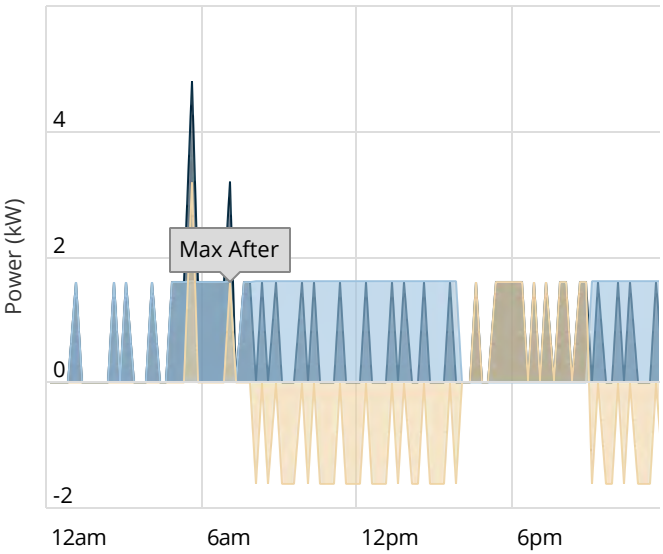
Date Range: 1/18/2020 - 2/18/2020

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

Max Demand Before 1/19/20 05:30am



Max Demand After 1/19/20 07:00am



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 Energy Storage system simulation.

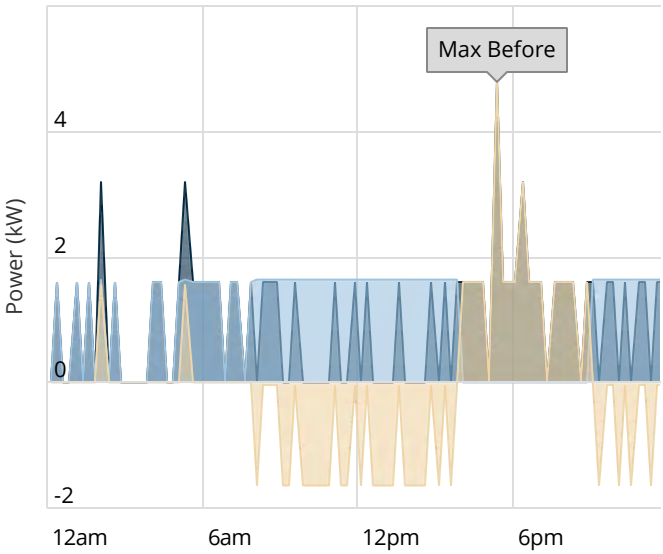
Charts Not Applicable

Demand Profiles

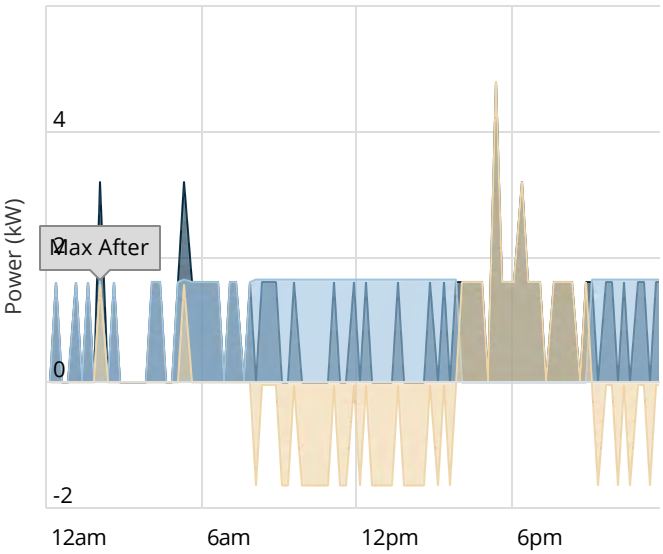
Date Range: 2/18/2020 - 3/18/2020

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

Max Demand Before 2/25/20 05:15pm



Max Demand After 2/25/20 02:00am



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

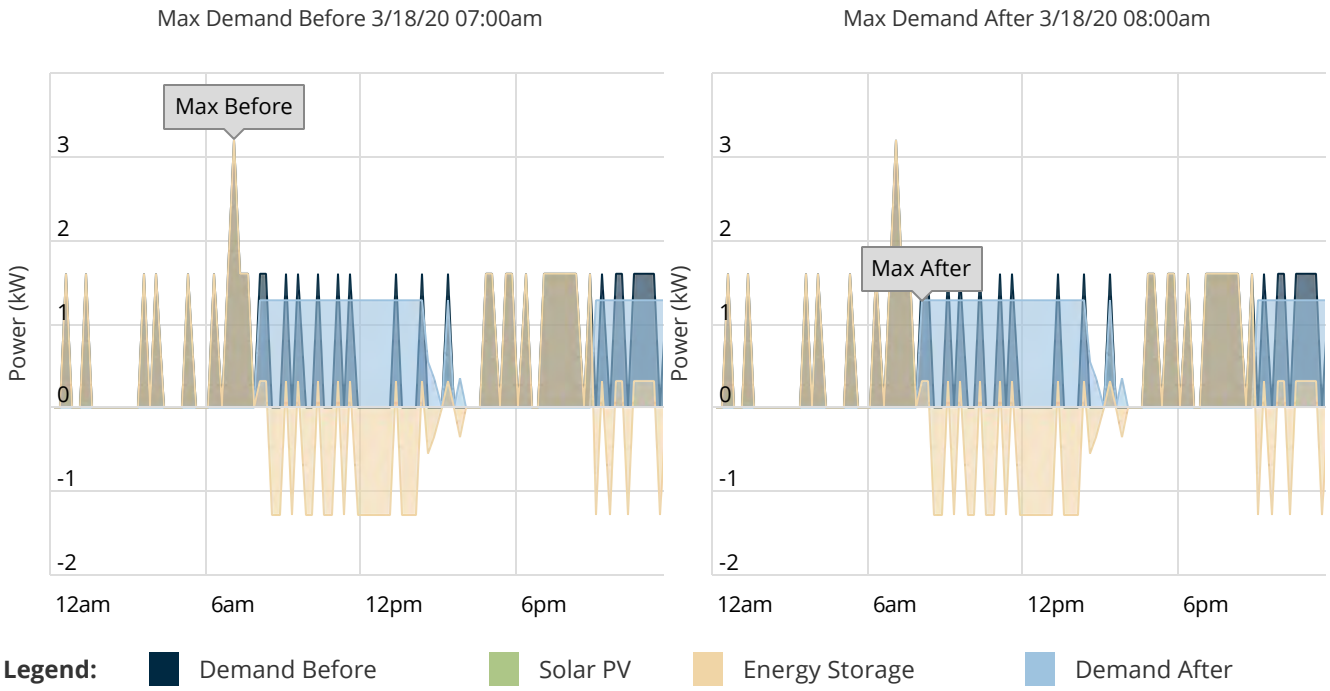
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 3/18/2020 - 4/18/2020

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



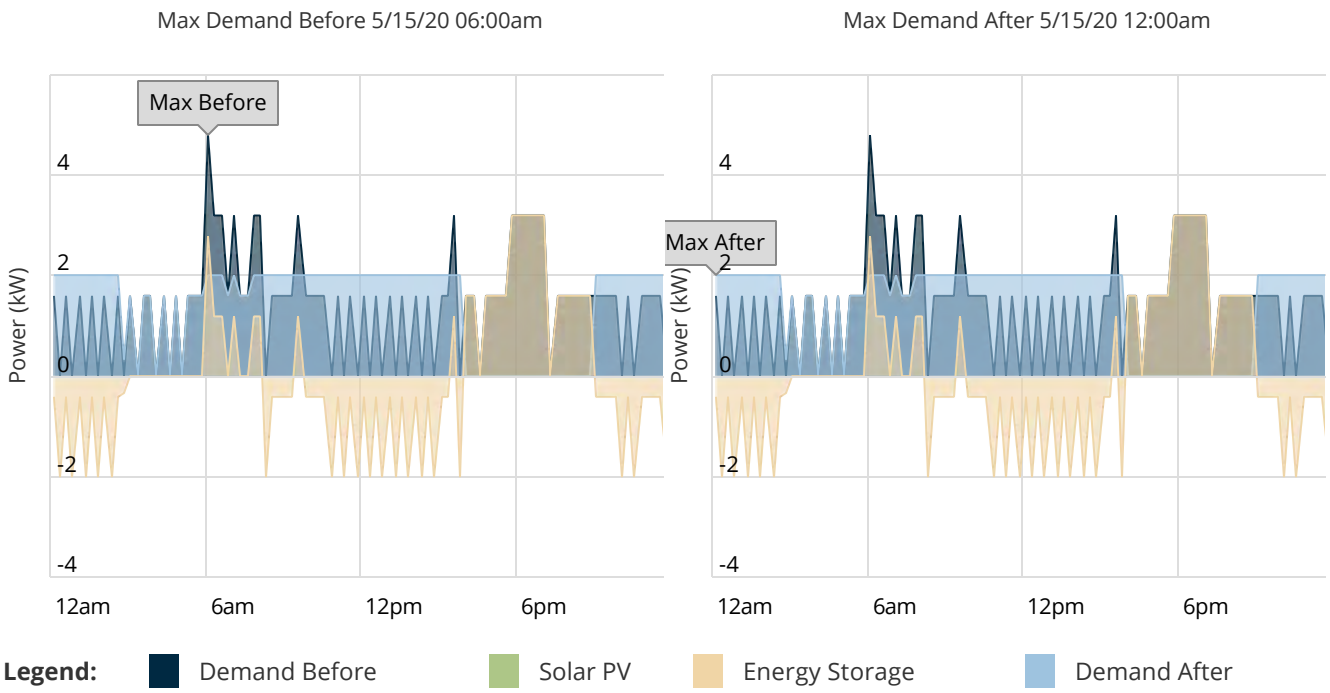
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 4/18/2020 - 5/18/2020

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



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

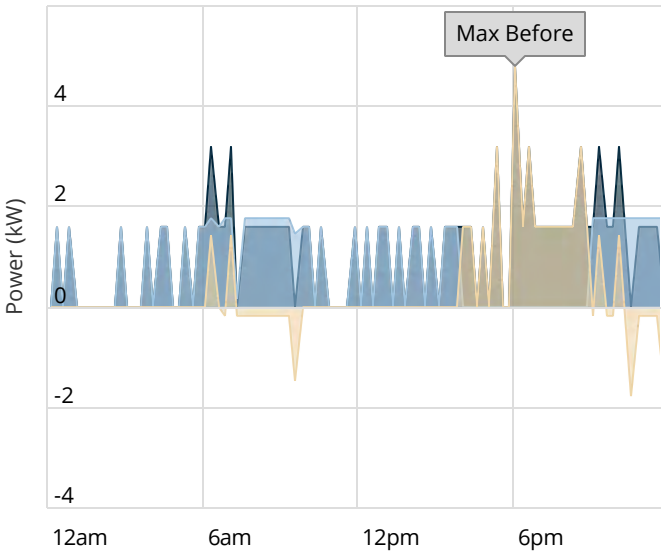
Charts Not Applicable

Demand Profiles

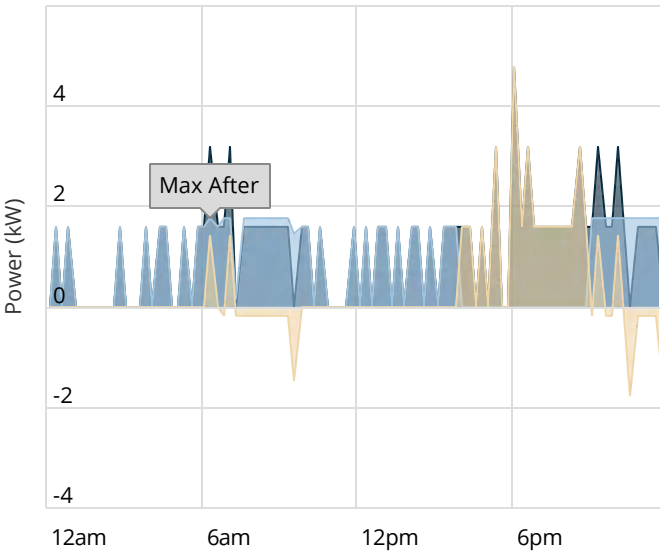
Date Range: 5/18/2020 - 6/18/2020

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

Max Demand Before 6/1/20 06:00pm



Max Demand After 6/1/20 06:15am



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

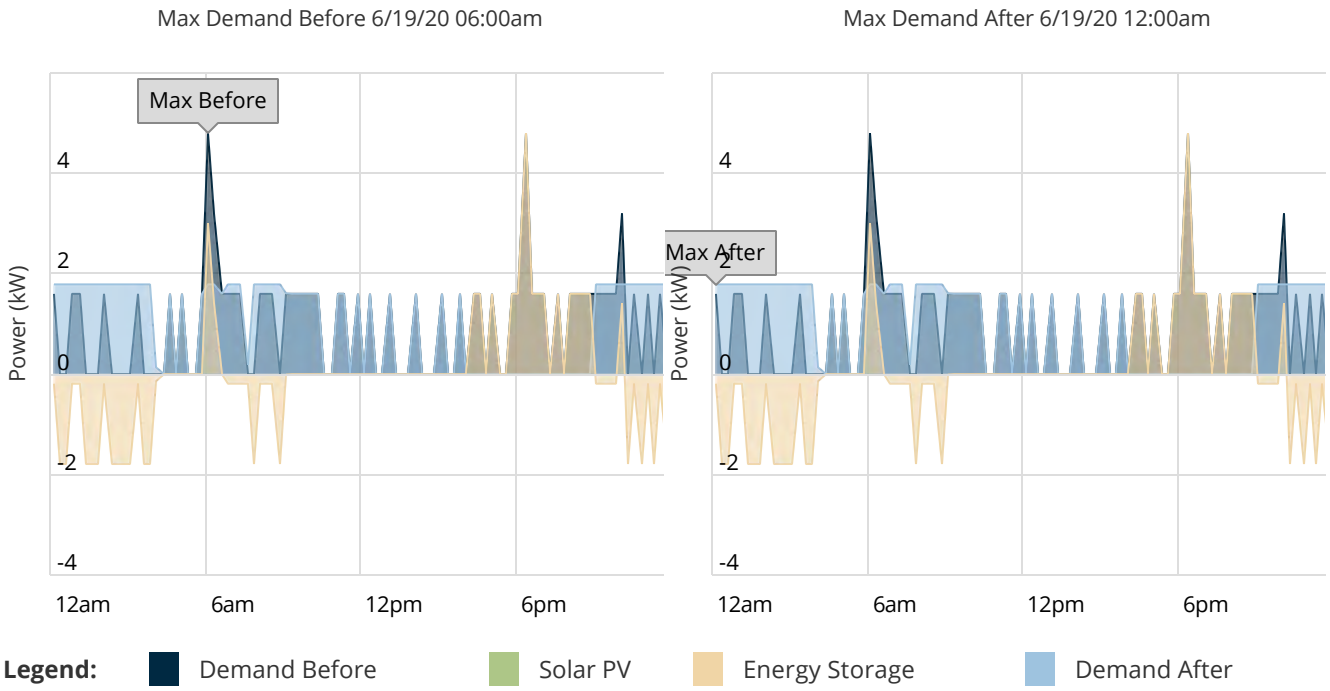
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 6/18/2020 - 7/18/2020

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



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

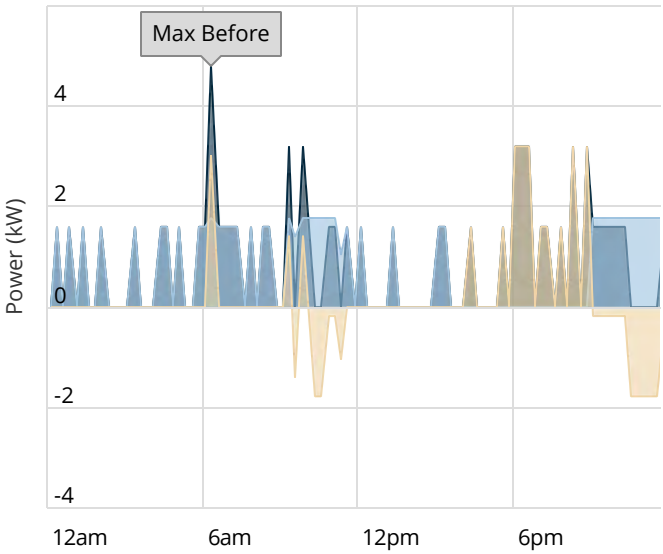
Charts Not Applicable

Demand Profiles

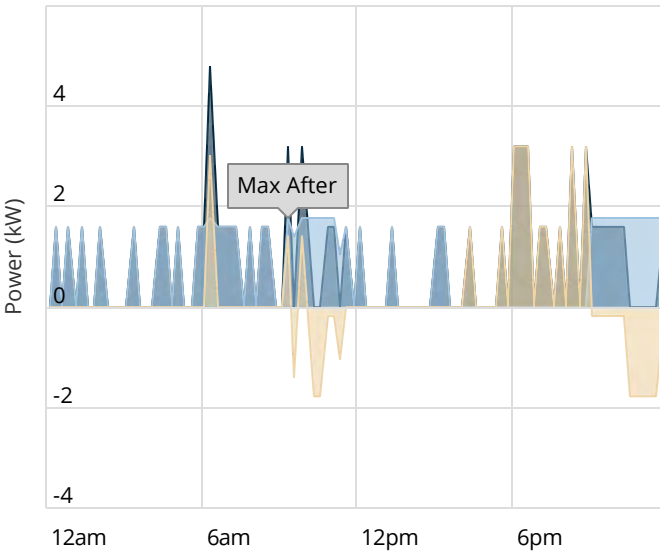
Date Range: 7/18/2020 - 8/18/2020

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

Max Demand Before 7/18/20 06:15am



Max Demand After 7/18/20 09:15am



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

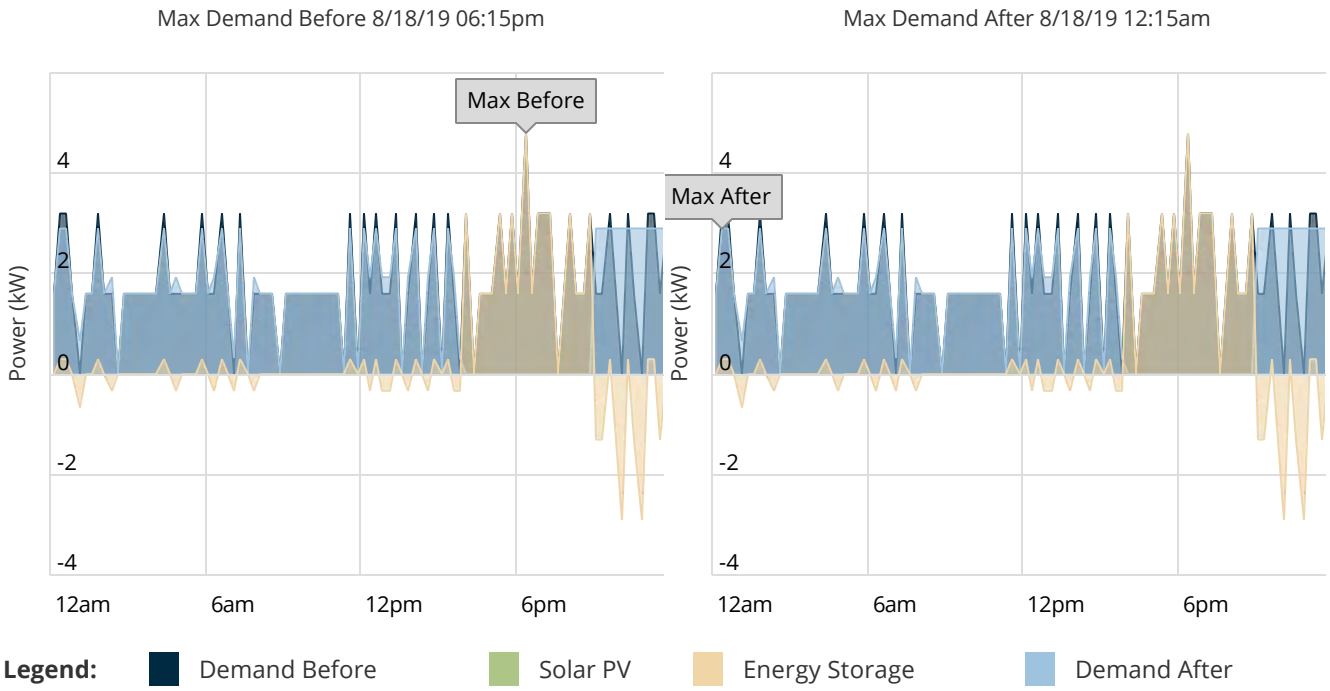
Max On-Peak Demand: The charts below show when the maximum on-peak demand for this facility occurred before and after the Energy Storage system simulation.

Charts Not Applicable

Demand Profiles

Date Range: 8/18/2019 - 9/18/2019

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



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

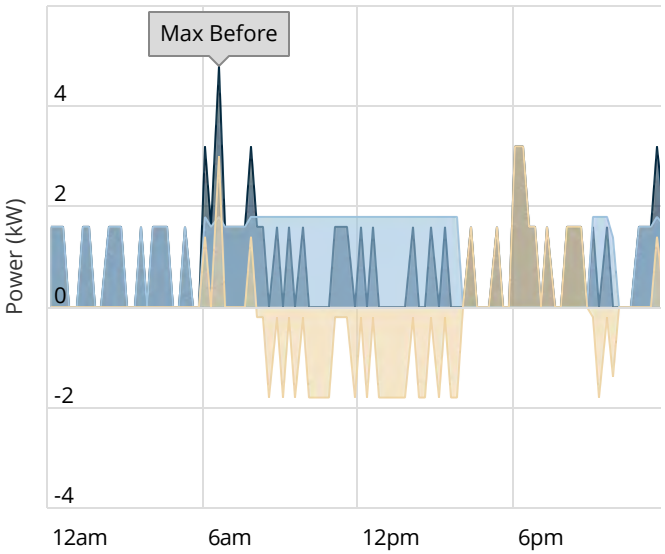
Charts Not Applicable

Demand Profiles

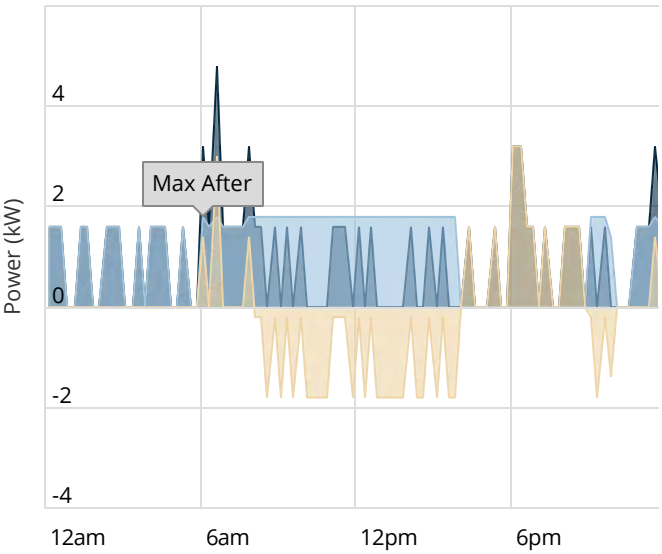
Date Range: 9/18/2019 - 10/18/2019

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

Max Demand Before 10/11/19 06:30am



Max Demand After 10/11/19 06:00am



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 Energy Storage system simulation.

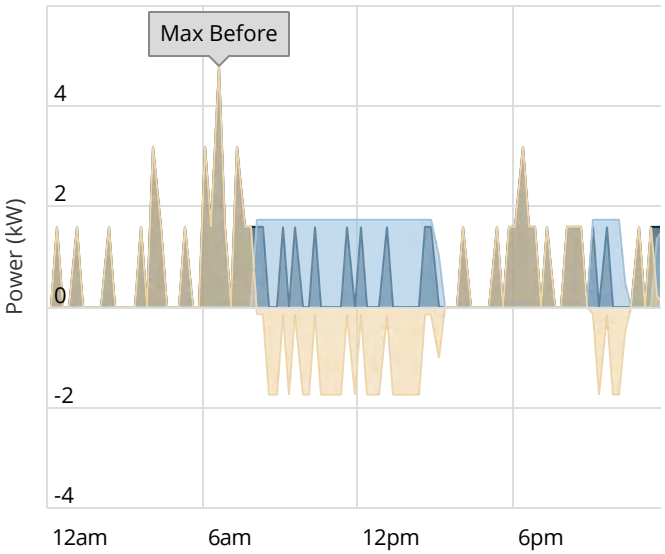
Charts Not Applicable

Demand Profiles

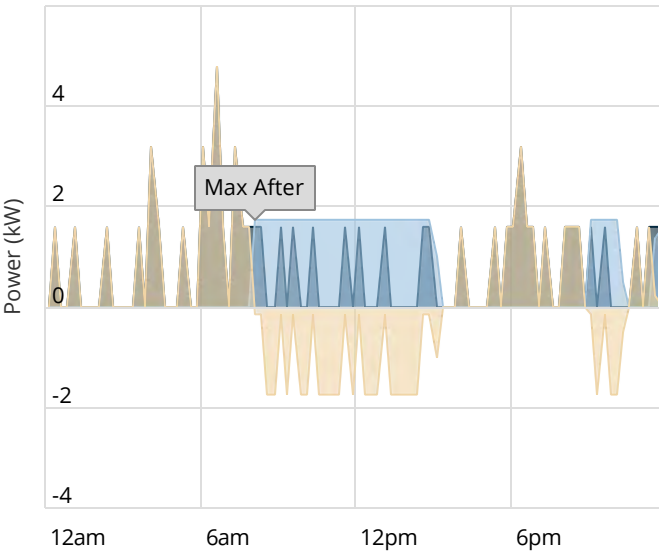
Date Range: 10/18/2019 - 11/18/2019

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

Max Demand Before 10/18/19 06:30am



Max Demand After 10/18/19 08:00am



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 Energy Storage system simulation.

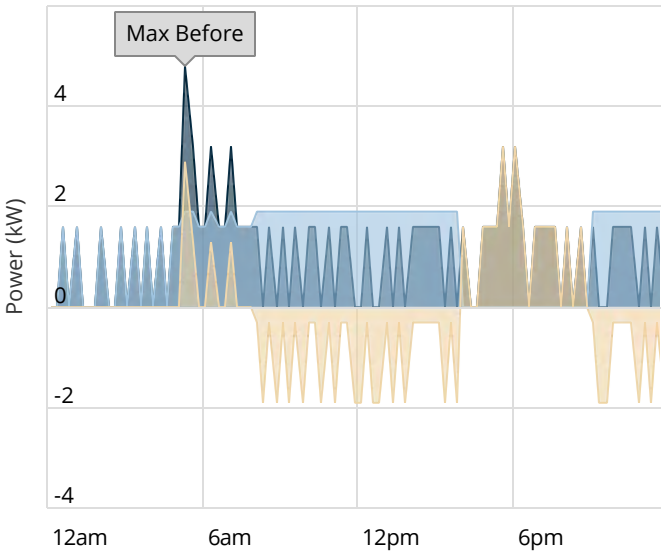
Charts Not Applicable

Demand Profiles

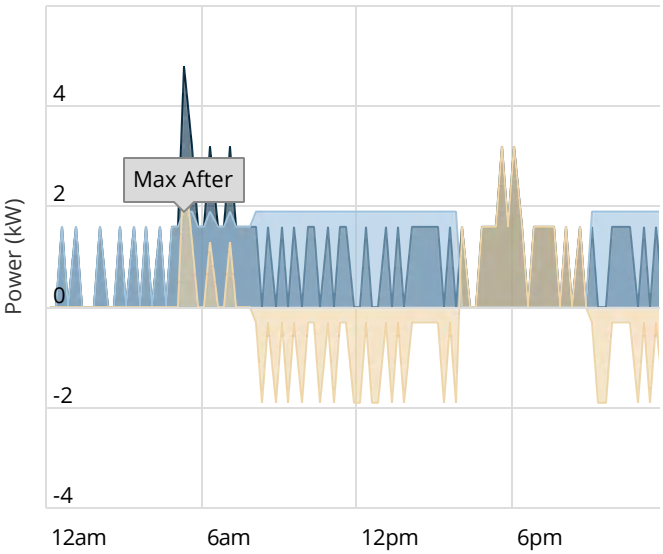
Date Range: 11/18/2019 - 12/18/2019

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

Max Demand Before 11/19/19 05:15am



Max Demand After 11/19/19 05:15am



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 Energy Storage system simulation.

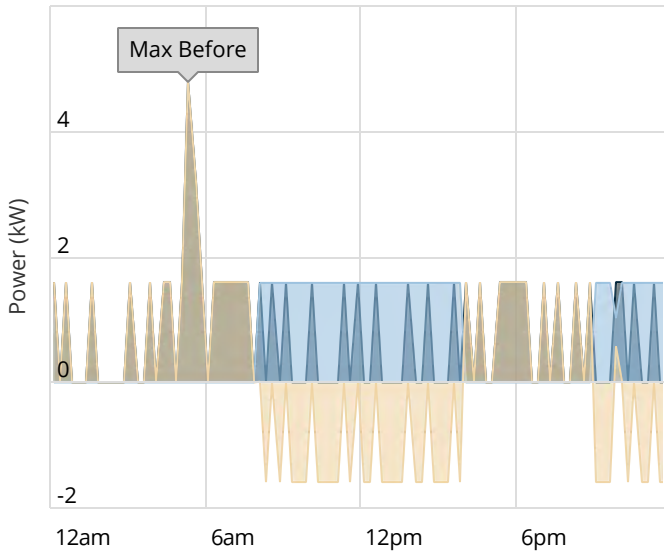
Charts Not Applicable

Demand Profiles

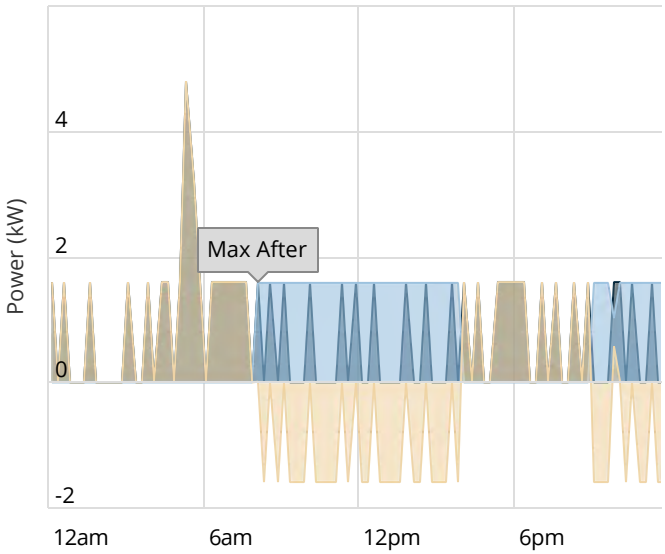
Date Range: 12/18/2019 - 1/18/2020

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

Max Demand Before 12/18/19 05:15am



Max Demand After 12/18/19 08:00am



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 Energy Storage system simulation.

Charts Not Applicable

2.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	$13,002	Federal Income Tax Rate	21%	State Income Tax Rate	8%
Electricity Escalation Rate	3%				

Years	Project Costs	SGIP Incentive	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-$13,002	$6,501	-	-$6,501	-$6,501
1	-	$1,300	$296	$1,597	-$4,904
2	-	$1,300	$296	$1,596	-$3,308
3	-	$1,300	$296	$1,596	-$1,712
4	-	$1,300	$295	$1,595	-$117
5	-	$1,300	$294	$1,594	$1,477
6	-	-	$292	$292	$1,769
7	-	-	$290	$290	$2,059
8	-	-	$288	$288	$2,347
9	-	-	$285	$285	$2,633
10	-	-	$282	$282	$2,915
11	-	-	$279	$279	$3,194
12	-	-	$275	$275	$3,469
13	-	-	$271	$271	$3,740
14	-	-	$266	$266	$4,005
15	-	-	$260	$260	$4,265
Totals:	-$13,002	$13,002	$4,265	$4,265	-

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

AUGUST 18, 2020

RE: REQUEST APPROVAL OF SECOND AMENDMENT TO 2019 SITES RESERVOIR PROJECT AGREEMENT

The second amendment to the 2019 Reservoir Project Agreement amends the original amended 2019 Reservoir Project Agreement dated January 1, 2020. The effective date of this second amendment to the agreement is September 1, 2020 with the term of the agreement ending on December 31, 2021. This amendment includes a work plan with an effective date of September 1, 2020, which is part of the second amendment as Exhibit B. Project Agreement Members, which includes DWA, are to contribute their pro-rata share to the budgeted sums reflected in the work plan. The total phase 2 project agreement budget is not to exceed $160 per acre-foot. The $160 per acre-foot includes $60 per acre-foot previously approved by the DWA Board; the increase provided by this agreement is $100 per acre-foot. The first installment will be in the amount up to $40 per acre-foot and is payable no later than April 1, 2021. A $100 per acre-foot commitment by DWA is equivalent to an increased investment in the project of $650,000.

The Project agreement allows project members to increase, decrease, and/or withdraw altogether from participation along with several options and formulas to make these transitions including remittance.

Each project agreement member must specific its participation level in the Sites Reservoir Project. Staff recommends maintaining our participation level at 6,500 acre-feet at an additional cost up to $650,000. DWA's 2020-2021 General Fund budget includes $650,000 for this purpose. This will increase the overall Board's authorization to $1,430,000.

Staff requests that the Board approve and authorize the General Manager to execute the Second Amendment to the 2019 Reservoir Project Agreement and the not to exceed expenditure of $650,000 for phase 2 tasks between September 2020 and December 2021.

SECOND AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT

BY AND AMONG

SITES PROJECT AUTHORITY

and

THE PROJECT AGREEMENT MEMBERS LISTED HEREIN

Dated as of July 1, 2020

THIS SECOND AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT (this "Second Amendment"), dated as of July 1, 2020, by and among SITES PROJECT AUTHORITY, a joint powers authority duly organized and existing under the laws of the State of California (the "Authority"), and the project agreement members listed in the Agreement referenced below (the "Project Agreement Members") and amends that certain 2019 Reservoir Project Agreement dated as of April 1, 2019 (the "Original Agreement"), as previously amended by the First Amendment to 2019 Reservoir Project Agreement dated as of January 1, 2020 (the "First Amendment" and, together with the Original Agreement, the "Agreement"), each by and among the Authority and the Project Agreement Members;

WITNESSETH:

WHEREAS, Authority and the Project Agreement Members have determined to approve an Amendment 2 Work Plan and to extend the term of the Agreement to December 31, 2021; and

WHEREAS, under Section 11 of the Agreement, the Agreement may be amended by a writing executed by the Authority and at least 75% of the total weighted vote of the then current Committee members as provided in Subsection 3(g); and

WHEREAS**,** all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and the entering into of this Second Amendment do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this Second Amendment;

NOW, THEREFORE, THIS SECOND AMENDMENT WITNESSETH, the Authority and the Project Agreement Members agree, as follows:

ARTICLE I

DEFINITIONS

Section 1.01. **Definitions.** All capitalized terms not otherwise defined herein shall have the meaning set forth in the Agreement.

ARTICLE II

AMENDMENTS TO AGREEMENT

Section 2.01. **Project Agreement Members**.

(a) Effective September 1, 2020, the Project Agreement Members attached as Exhibit A to the Agreement shall be succeeded in their entirety by the Project Agreement Members attached hereto as Exhibit A.

Section 2.02. **Work Plan**.

(a) Effective September 1, 2020, the 2019 Work Plan attached as Exhibit B to the Agreement shall be supplemented by the Work Plan attached hereto as Exhibit B (the "Amendment 2 Work Plan").

Section 2.03. **Funding**.

The Agreement is hereby amended to remove Section 4(a) in its entirety and replace it with the following:

"(a) Budget. The Committee shall, in cooperation with the Authority's Board, provide and approve both a Fiscal Year operating budget and reestablish a Phase 2 budget target, annually or more frequently as needed. The Project Agreement Members shall contribute their respective pro-rata share of the budgeted sums reflected in the 2019 Work Plan (prior to November 1, 2020) and the Amendment 2 Work Plan (on and after November 1, 2020) in accordance with Section 5 of this Project Agreement; provided, however, that in no event shall the amount paid by a Project Agreement Member exceed $160 per acre-foot (with $60 of such amount being attributable to the 2019 Work Plan and $100 of such amount being attributable to the Amendment 2 Work Plan) without the approval of such Project Agreement Member. The contribution with respect to the pro-rata budgeted sums reflected in the Amendment 2 Work Plan shall be payable by each Project Agreement Member in two installments. The first installment shall be in an amount equal to $60 per acre-foot and shall be payable by no later than November 1, 2020. The second installment shall be in an amount up to $40 per acre-foot and shall be payable by no later than April 1, 2021. The exact amount per acre-foot of the second installment shall be established by the Committee, in cooperation with the Authority's Board, and notice of such amount shall be provided by the Authority to each Project Agreement Member."

Section 2.04. **Future Development of the Sites Reservoir Project**.

The Agreement is hereby amended to remove Section 6(b) in its entirety and replace it with the following:

"(b) Without limiting the foregoing, any Project Agreement Member that elects to continue participating in the development, financing, and construction of the Sites Reservoir Project to the time when the Authority offers contracts for a water supply or other services, will be afforded a first right, equal to that Project Agreement Member's Participation Percentage, to contract for a share of any water supply that is developed, and for storage capacity that may be available from, the Sites Reservoir Project. In any successor phase agreements, Project Agreement Members who are parties to this Project Agreement that submitted a proposal to participate before February 28, 2019, shall be granted rights to contract for a share, in an amount equal to that Project Agreement Member's Participation Percentage as of the effective date of such successor phase agreement, of any water supply that is developed, and for storage capacity that may be available from the Sites Reservoir Project prior to the rights of those becoming parties to this Project Agreement after that date.

If a participating Project Agreement Member as of February 28, 2019 identifies a lesser amount in the Second Amendment than its Original Agreement requested amount, that participating Project Agreement Member's first rights of refusal in the future are to be based on the Second Amendment amounts and not the February 28, 2019 amounts.

Provided, however, that if a Project Agreement Member withdraws from the Project Agreement pursuant to Section 9 of this Agreement but later requests to be reinstated, then to the extent there is unsubscribed participation in the Project as determined by the Committee, the

Committee may vote to readmit said withdrawn Member with a reinstated first right of refusal provided said withdrawing Member provides funding to the Project commensurate with the funding requirements met by all current Project Agreement Members in the current phase of the Project as well as any prior phase, as adjusted for any credits, payments and/or reimbursements made under the Authority's credit reimbursement policy (the "Credit Reimbursement Policy").

Further provided, that if a Project Agreement Member desires to increase its participation after execution of the Second Amendment, then to the extent there is unsubscribed participation in the Project as determined by the Committee, the Committee may vote to approve said increase, or portion thereof, with a first right of refusal attendant thereto, provided said increasing Project Agreement Member provides funding to the Project commensurate with the funding requirements met by all current Project Agreement Members in the current phase of the Project as well as any prior phase, as adjusted for any credits, payments and/or reimbursements made under the Credit Reimbursement Policy.

The Authority and the Project Agreement Members will cooperate on the drafting of provisions in the water supply contract that will allow a Project Agreement Member or other eligible entity that commits to purchase a Sites Reservoir Project water supply to transfer water that the entity may not need from time to time on terms and conditions acceptable to the Project Agreement Member."

Section 2.05. **Term**. The Agreement is hereby amended to remove Section 8(b) in its entirety and replace it with the following:

"(b) The term of this Project Agreement shall continue until December 31, 2021. In the event that this Second Amendment is not approved by Project Agreement Members with the requisite percentage of the total weighted vote as set forth in the Agreement by June 30, 2020, the Agreement shall be revived immediately upon approval by such requisite percentage, without any additional approval of the Project Agreement Members, and this Second Amendment shall become effective."

Section 2.06. **Executive Director**. All references to the "General Manager" in the Agreement shall be changed to "Executive Director."

ARTICLE III

PROJECT AGREEMENT MEMBER PARTICIPATION

Section 3.01. **Project Agreement Participation.** Each Project Agreement Member shall specify its participation in the Sites Reservoir Project by indicating its elected water participation amount in the Sites Reservoir Project and the associated cost in the space provided therefor on the signature page to this Second Amendment. Based upon the respective participation elections of the Project Agreement Members, the Authority shall update Exhibit A pursuant to Section 5 of the Agreement.

ARTICLE IV

MISCELLANEOUS

Section 4.01. **Effectiveness of Agreement**. Except as expressly amended by this Second Amendment, the Agreement is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof. The amendments set forth in this Second Amendment shall be incorporated as part of the Agreement upon their effectiveness in accordance with Section 11 of the Agreement.

Section 4.02. **Execution in Several Counterparts**. This Second Amendment may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Authority and the Project Agreement Members shall preserve undestroyed, shall together constitute but one and the same instrument.

Section 4.03. **Authorization, Ratification and Confirmation of Certain Actions**. The Authority and the Project Agreement Members each hereby authorize, ratify and confirm the extension of the term of the Agreement, as previously extended pursuant to the First Amendment, to June 30, 2020, and the expenditure of funds collected under the Agreement with respect to the 2019 Work Plan on and prior to June 30, 2020.

Section 4.04. **Laws Governing Second Amendment**. The effect and meaning of this Second Amendment and the rights of all parties hereunder shall be governed by, and construed according to, the laws of the State.

IN WITNESS WHEREOF, the Authority and Project Agreement Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

Dated: _____

SITES PROJECT AUTHORITY

By: _____
Name:
Title:

[PROJECT AGREEMENT MEMBER]

Dated: _____

_____

(Authority & Project Agreement Member)

By: _____
Name:
Title:

PARTICIPATION AMOUNT

[PROJECT AGREEMENT MEMBER] hereby elects to participate in the Sites Reservoir Project in the amount and at the cost identified below.

Participation (Second Amendment Annualized Acre-Foot):

Second Amendment Cost: Not to Exceed $100 per Acre-Foot

EXHIBIT A

PROJECT AGREEMENT MEMBERS

Participant	Participation (Second Amendment Annualized Acre-Foot) Preliminary	Percent
American Canyon, City of		
Antelope Valley-East Kern Water Agency		
Carter Mutual Water Company #		
Coachella Valley Water District		
Colusa County		
Colusa County Water District		
Cortina Water District		
Davis Water District		
Desert Water Agency		
Dunnigan Water District		
Glenn-Colusa Irrigation District		
LaGrande Water District		
Metropolitan Water District of S. CA		
Pacific Resources Mutual Water Company #		
Reclamation District 108		
San Bernardino Valley Municipal Water District		
San Gorgonio Pass Water Agency		
Santa Clara Valley Water District		
Santa Clarita Valley Water Agency		
Westside Water District		
Wheeler Ridge-Maricopa Water Storage District		
Zone 7 Water Agency		
Potential new participants		
Total:		

Participation Percentages exclude State of California and United States Bureau of Reclamation share of the Project.

# Denotes a non-public agency. Refer to California Corporations Code Section 14300 et. seq. with additional requirements provided in both the Public Utilities Code and Water Code.

EXHIBIT B

AMENDMENT 2 WORK PLAN

Exhibit B
Reservoir Committee
2020 and 2021 Work Plan

Reservoir Committee Annual Budget for FY 2020 and FY 2021 ($000)

	Subject Area	2020	2021	Total
Revenue	Beginning Balance	$6,847	$0	$6,847
	Participation Revenue	$11,520	$7,680	$19,200
	Federal Revenue	$0	$4,000	$4,000
	State Revenue	$5,134	$5,502	$10,636
Revenue Total		$23,501	$17,182	$40,683
Expenses	Permitting	($2,558)	($5,011)	($7,569)
	Early Mitigation	($243)	($2,257)	($2,500)
	Environmental Planning	($3,511)	($2,376)	($5,887)
	Operations Modeling	($3,486)	($536)	($4,022)
	Engineering	($4,360)	($2,180)	($6,540)
	Geotechnical	($1,142)	($2,003)	($3,145)
	Real Estate	($145)	($272)	($417)
	Communications	($489)	($579)	($1,068)
	Project Controls	($1,333)	($1,528)	($2,861)
	Funding	($777)	($590)	($1,367)
	Growth	($819)	($910)	($1,729)
	Management	($461)	($1,219)	($1,681)
	Support	($248)	($388)	($636)
Expenses Total		($19,573)	($19,848)	($39,422)
Grand Total		**$3,928**	**($2,666)**	**$1,261**

Annual expense budgets are based on the projected spend rate for the Amendment 1B and Amendment 2 work plans combinded (Pg 2 and 3).

Amendment 1B Budget by Month ($000s)

Reservoir Committee Work Plan Summary

Subject Area		Jan 20	Feb 20	Mar 20	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Total
Revenue										
	Beginning Balance*	$6,847								$6,847
	Participation Revenue									$0
	Federal Revenue									$0
	State Revenue	$3,300								$3,300
Revenue Sum		**$10,147**								**$10,147**
Expenses										
	Environmental Planning	($269)	($245)	($269)	($269)	($245)	($257)	$0	$0	($1,555)
	Operations Modeling	($519)	($472)	($355)	($220)	($116)	($85)	($55)	($53)	($1,876)
	Engineering	$0	($151)	($237)	($239)	($247)	($272)	($248)	($205)	($1,600)
	Geotechnical	$0	$0	($27)	($118)	($107)	($118)	($118)	($113)	($601)
	Real Estate	($7)	($6)	($7)	($7)	($6)	($7)	($7)	($7)	($55)
	Communications	($38)	($35)	($38)	($38)	($35)	($38)	($38)	($36)	($297)
	Project Controls	($255)	($77)	($85)	($85)	($77)	($85)	($85)	($81)	($828)
	Funding	($74)	($109)	($120)	($121)	($104)	($61)	($37)	($35)	($661)
	Growth	($93)	($84)	($93)	($93)	($84)	($93)	($93)	($88)	($719)
	Management	$0	$0	$0	($1)	($23)	($25)	($9)	$0	($58)
	Support	($15)	($14)	($15)	($15)	($14)	($15)	($15)	($15)	($120)
Expenses Sum		**($1,271)**	**($1,194)**	**($1,247)**	**($1,206)**	**($1,059)**	**($1,056)**	**($705)**	**($633)**	**($8,370)**

**Adjusted from value published in work plan based on 2019 close-out*

Amendment 2 Budget by Month ($000s)

Reservoir Committee Work Plan Summary

Subject Area	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Oct 21	Sep 21	Nov 21	Dec 21	Total
Revenue																	
Participation Revenue			$11,520					$7,680									$19,200
Federal Revenue							$2,000				$2,000						$4,000
State Revenue			$1,834			$1,834						$1,834			$1,834		$7,336
Revenue Total			**$13,354**			**$1,834**	**$2,000**	**$7,680**			**$2,000**	**$1,834**			**$1,834**		**$30,536**
Expenses																	
Permitting	($253)	($577)	($1,023)	($705)	($525)	($525)	($584)	($471)	($419)	($448)	($295)	($309)	($295)	($295)	($613)	($232)	($7,569)
Early Mitigation	$0	$0	($113)	($131)	($119)	($119)	($136)	($131)	($119)	($235)	($231)	($242)	($231)	($231)	($220)	($242)	($2,500)
Environmental Planning	($488)	($512)	($442)	($513)	($474)	($474)	($218)	($71)	($65)	($71)	($61)	($62)	($216)	($42)	($343)	($279)	($4,332)
Operations Modeling	($621)	($680)	($232)	($78)	($71)	($71)	($81)	($72)	($43)	($48)	($46)	($48)	($11)	($46)	$0	$0	($2,146)
Engineering	($1,134)	($768)	($398)	($461)	($108)	($185)	($355)	($292)	($221)	($190)	($161)	($186)	($155)	($155)	($147)	($25)	($4,941)
Geotechnical	($52)	($54)	($61)	($374)	($346)	($461)	($513)	($134)	($124)	($172)	($42)	($44)	($42)	($42)	($40)	($42)	($2,544)
Real Estate	($23)	($24)	($20)	($24)	($21)	($21)	($25)	($24)	($21)	($24)	($23)	($24)	($23)	($23)	($21)	($24)	($362)
Communications	($48)	($50)	($43)	($50)	($46)	($46)	($52)	($50)	($46)	($50)	($48)	($50)	($48)	($48)	($46)	($50)	($771)
Project Controls	($126)	($132)	($114)	($132)	($120)	($120)	($138)	($132)	($120)	($132)	($126)	($132)	($126)	($126)	($120)	($132)	($2,033)
Funding	($29)	($30)	($26)	($30)	($64)	($66)	($76)	($73)	($66)	($71)	($29)	($30)	($29)	($29)	($28)	($30)	($706)
Growth	($25)	($26)	($23)	($26)	$0	$0	($38)	($36)	($33)	($36)	($35)	($154)	($146)	($146)	($139)	($148)	($1,010)
Management	($101)	($106)	($91)	($106)	($96)	($96)	($110)	($106)	($96)	($106)	($101)	($106)	($101)	($101)	($96)	($106)	($1,623)
Support	($32)	($34)	($29)	($34)	($31)	($31)	($35)	($34)	($31)	($34)	($32)	($34)	($32)	($32)	($31)	($34)	($516)
Expenses Total	**($2,931)**	**($2,994)**	**($2,616)**	**($2,663)**	**($2,020)**	**($2,214)**	**($2,362)**	**($1,624)**	**($1,404)**	**($1,616)**	**($1,230)**	**($1,422)**	**($1,454)**	**($1,314)**	**($1,844)**	**($1,345)**	**($31,052)**

Sites Reservoir Project
Second Amendment to Phase 2 Participation Agreement

DESERT WATER

Phase 2 Second Amendment

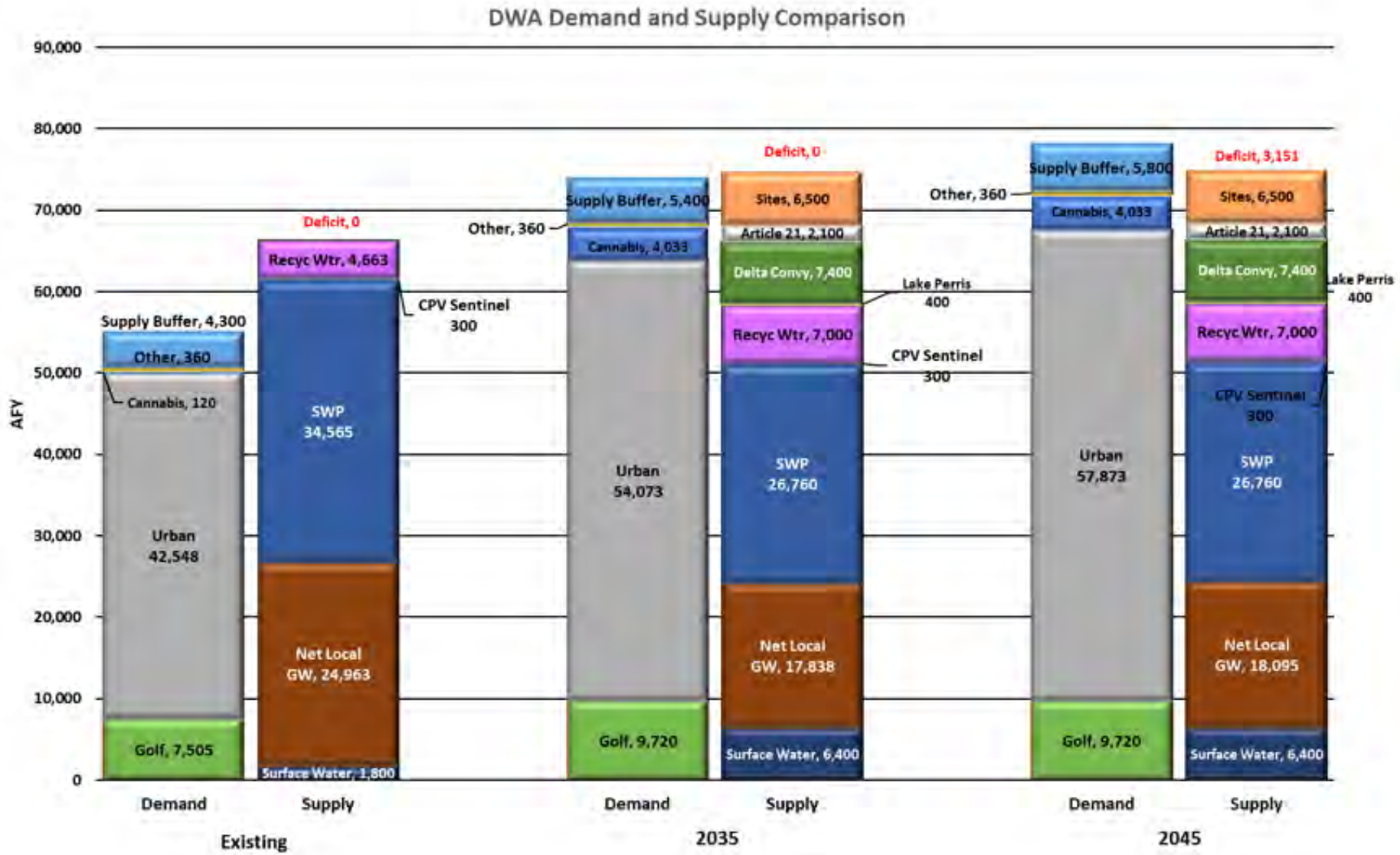
- **Goal**
  - ✓ *to provide information for go/no-go decision by Jan 1, 2022*
  - ✓ *deadline driven by Prop 1 criteria of min 75% local cost share*
- **Cost - $100/AF of participation**
  - ✓ *DWA's share = $650,000 (based on 6,500 AF)*

Workplan Activities

Environmental	Engineering
➢ *finalize & circulate draft EIR/EIS* ➢ *work w/USFW & State on various permits* ➢ *start water rights application*	➢ *finalize Federal Feasibility Report* ➢ *conduct geotechnical-related work* ➢ *refine project cost estimate*

Sites Reservoir Project Benefits

- **New Off-Stream Storage**
  - ✓ *increases State's water supply resiliency*
- **Climate Change Adaptation**
  - ✓ *enhances flood flow capture*
  - ✓ *reduces flood damage*
  - ✓ *stores surplus flows for use during dry periods*
- **Provides Environmental Flow Needs** (Shasta exchange, SWP exchange)
- **Provides Recreational Opportunities**


DWA Demand and Supply Comparison
AFY
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Supply Buffer, 4,300
Other, 360
Cannabis, 120
Urban 42,548
Golf, 7,505
Deficit, 0
Recyc Wtr, 4,663
SWP 34,565
Net Local GW, 24,963
Surface Water, 1,800
CPV Sentinel 300
Other, 360
Supply Buffer, 5,400
Cannabis, 4,033
Urban 54,073
Golf, 9,720
Deficit, 0
Sites, 6,500
Article 21, 2,100
Delta Convy, 7,400
Lake Perris 400
Recyc Wtr, 7,000
CPV Sentinel 300
SWP 26,760
Net Local GW, 17,838
Surface Water, 6,400
Other, 360
Supply Buffer, 5,800
Cannabis, 4,033
Urban 57,873
Golf, 9,720
Deficit, 3,151
Sites, 6,500
Article 21, 2,100
Delta Convy, 7,400
Lake Perris 400
Recyc Wtr, 7,000
CPV Sentinel 300
SWP 26,760
Net Local GW, 18,095
Surface Water, 6,400
Demand
Supply
Existing
Demand
Supply
2035
Demand
Supply
2045

Participants

Sacramento Valley

Authority Board	Vol (AF)
Colusa County	10,000
Colusa County Water District	11,000
Glenn County	-
Glenn-Colusa Irrigation District	5,000
Placer County WA & City of Roseville	-
Reclamation District 108	4,000
Sacramento Co WA & City of Sacramento	-
Tehama-Colusa Canal Authority	-
Western Canal Water District	-
Westside Water District	2,000

Associate Members (non-voting)	Vol (AF)
Maxwell Irrigation District	-
TC-4	-
Cortina Water District	450
Davis Water District	2,000
Dunnigan Water District	2,717
LaGrande Water District	1,000

Total Subscribed

188,917 AF
+
~40,000 AF (State)

~228,917 AF

Board
10 Agencies

Combined
30 Agencies

Sacramento Valley

Reservoir Committee	Vol (AF)
American Canyon, City of	4,000
Carter MWC	300

Beyond Sacramento Valley

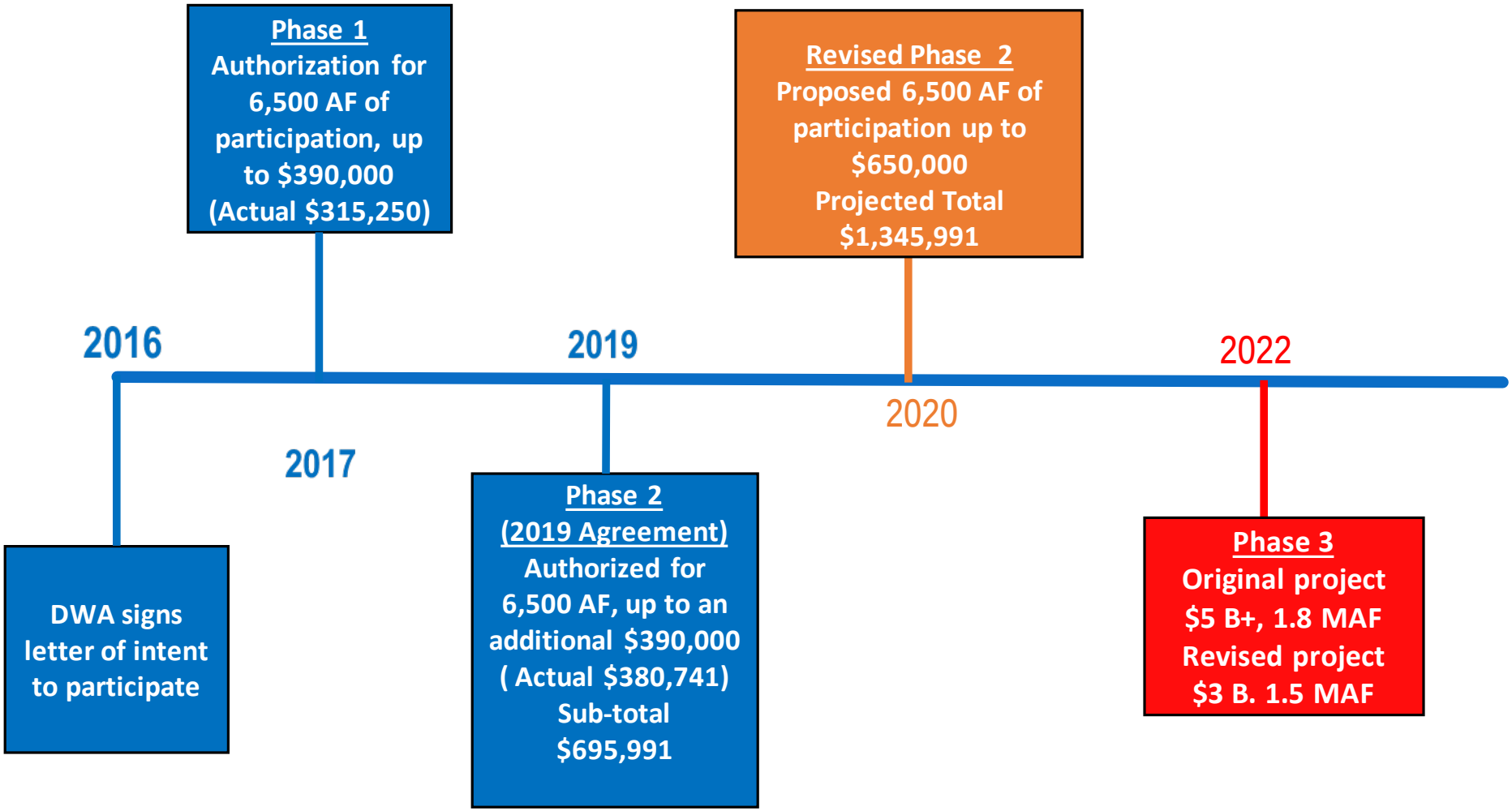
Reservoir Committee	Vol (AF)
Antelope Valley-East Kern WA	500
Coachella Valley Water District	10,000
Desert Water Agency	6,500
Metropolitan Water District	50,000
Pacific Resources MWC	10,000
San Bernardino Valley Muni WD	21,400
San Gorgonio Pass Water Agency	14,000
Santa Clara Valley Water District	16,000
Santa Clarita Valley Water Agency	5,000
Wheeler Ridge-Maricopa WSD	3,050
Zone 7 Water Agency	10,000

Other (non-voting)	
US Bureau of Reclamation (Cost-share)	TBD
California Department of Water Resources	

Participation Percentages

Participants	Participant Subscription (Acre-Feet)	Participant Percentage (%)	Regional Percentage (%)
Sacramento Valley Authority Board	32,000	14	19
Sacramento Vallley Associate Members (non-voting)	6,167	3	
Sacramento Valley Reservoir Committee	4,300	2	
Beyond Sacramento Valley	146,450	64	64
Sub-Total	**188,917**		**83**
State	40,000	17	17
Other	TBD		
Sub-Total	**40,000**		**17**
Total	**228,917**	**100**	**100**

DWA Participation



Accomplishments (up to 2019)

- **Received Largest Award From WSIP (Prop 1)**
  - ✓ *$816 million*

- **Awarded Federal loans**
  - ✓ *$449 million from USDA Rural Development Program*
  - ✓ *$6 million from WIIN Act*

- **Named as a Priority Project in State 2019 Water Resilience Draft Portfolio**

Phase 2 Progress

Organizational

- **Assessment Conducted**
  - ✓ *New executive director appointed in 2020 (Jerry Brown, former GM of Contra Costa Water District where he oversaw development of the first Los Vaqueros Reservoir expansion in 2012.*
- **Certainty Needed For Investments**
  - ✓ *Policies generated (reservoir storage, credit reimbursement)*

Technical

- **Conducted Value Planning For Project Alternatives**
  - ✓ *Ensures project is fully subscribed*
  - ✓ *Facilitates permitting process*
- **Analyzed Water Supply Delivery**

Financial

- **Reduced Phase 2 Costs**
- **Reduced Overall Project Costs**
- **Generated Draft Unit Water Costs**

Project Evolution

- **Original project - 1.8 MAF reservoir, $5.2 billion**
  - ✓ *anticipated 250 TAF of non-State, non-Federal participant demand (Current non-state and federal participation 189 TAF)*

- **Phase 2 deliverables ($323 M) designed to meet**
  - ✓ *Water Storage Investment Program (WSIP, Prop 1)*
    - final EIR, final approvals, certifications, agreements
  - ✓ *Water Infrastructure Improvements for the Nation (WIIN) Act*
    - final EIS, federal feasibility, in construction before Dec 16, 2021

Project Revisions

- **Re-evaluation of project size and costs conducted in 2019 - 2020**
- **Reservoir size revised to 1.5 MAF based on Value Planning effort**
- **Phase 2 scope changes**
  - ✓ *limit WIIN Act activities (confined to efforts to advance federal feasibility process). Focus on WIFIA funding.*
  - ✓ *target draft EIR for public comment as part of Prop 1 efforts (not final)*
- **Phase 2 cost impacts**
  - ✓ *revised cost of $39 M (>$280 M reduction)*
  - ✓ *reductions in engineering, geotechnical & real estate/acquisition work*
- **DWA's Phase 2 costs reduced from $10.3M to $1.4M**

Value Planning Exercise

- **"Right-sized" project ensures**
  - ✓ *full subscription (Federal monetary contribution questionable)*
  - ✓ *facilitates permitting process*

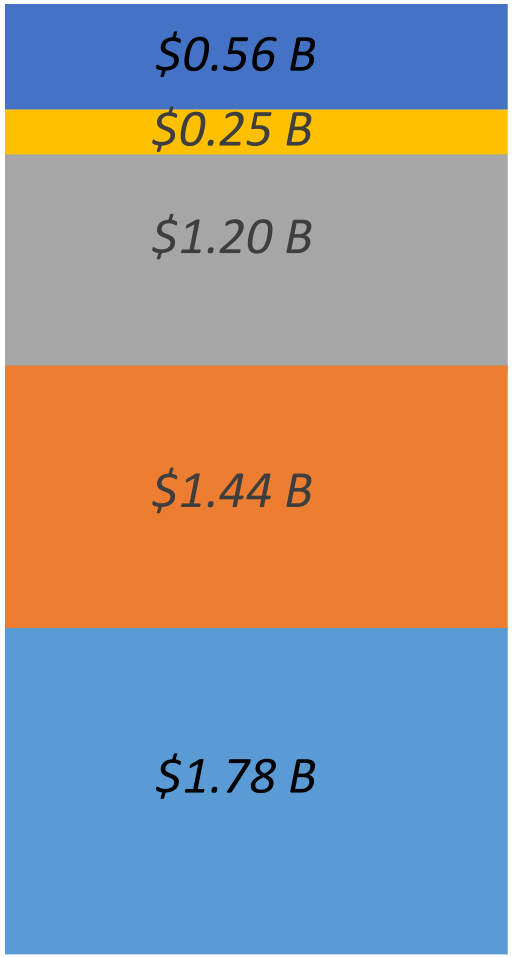
- **Parameters evaluated (7 alternatives)**
  - ✓ *storage volume (1.0, 1.3, 1.5 MAF)*
  - ✓ *release capacity (750; 1,000; 1,500 cfs)*
  - ✓ *bridges, roads, power generation also considered*

- **Results (2019 $)**
  - ✓ *annual deliveries: 191 to 253 TAF*
  - ✓ *project costs: $2.7 to $3.6 Billion (no contingency)*
  - ✓ *unit water cost: $644 - $862/ AF (no WIFIA)*
    $592 - $799/ AF (w/WIFIA)

Project Cost Changes

(Prior to Value Planning)

Total $5.24 B



Environmental mitigation

Transmission/switchyard

Canals/conduits

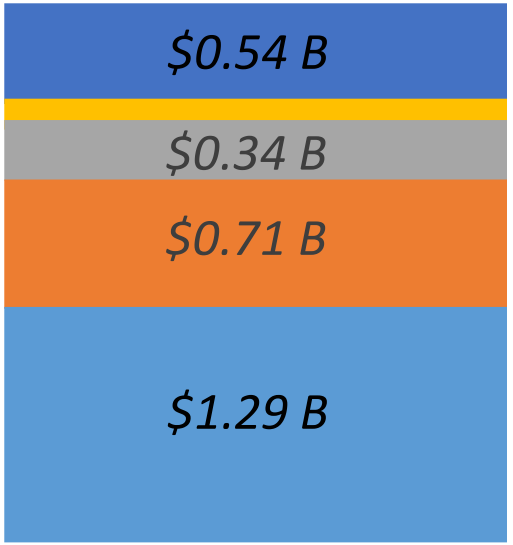
Pumping/generation plants

Reservoir/dams

(After Value Planning)

Total $3.04 B
(no contingency)

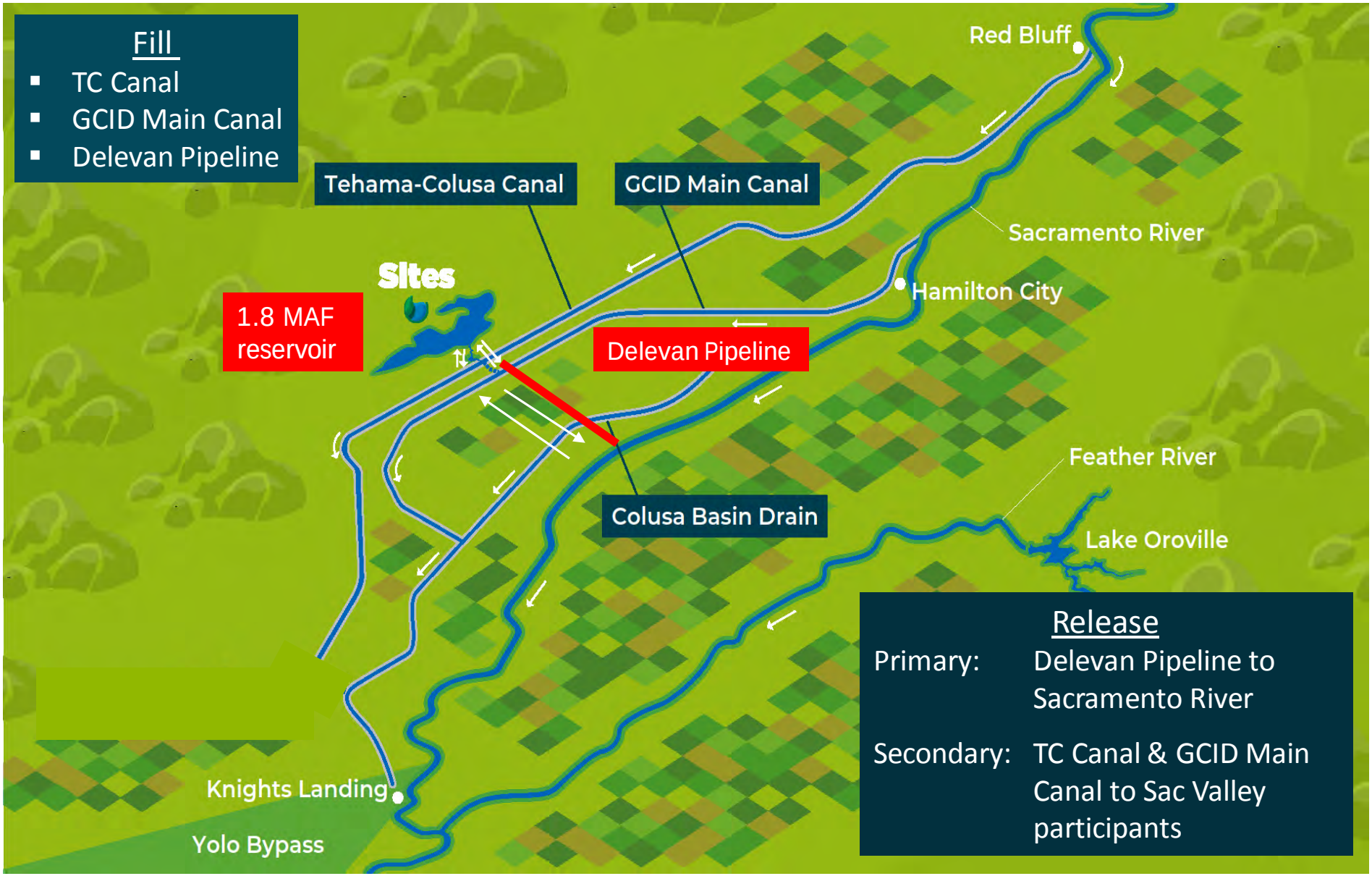
$0.17 B



Project Cost Changes

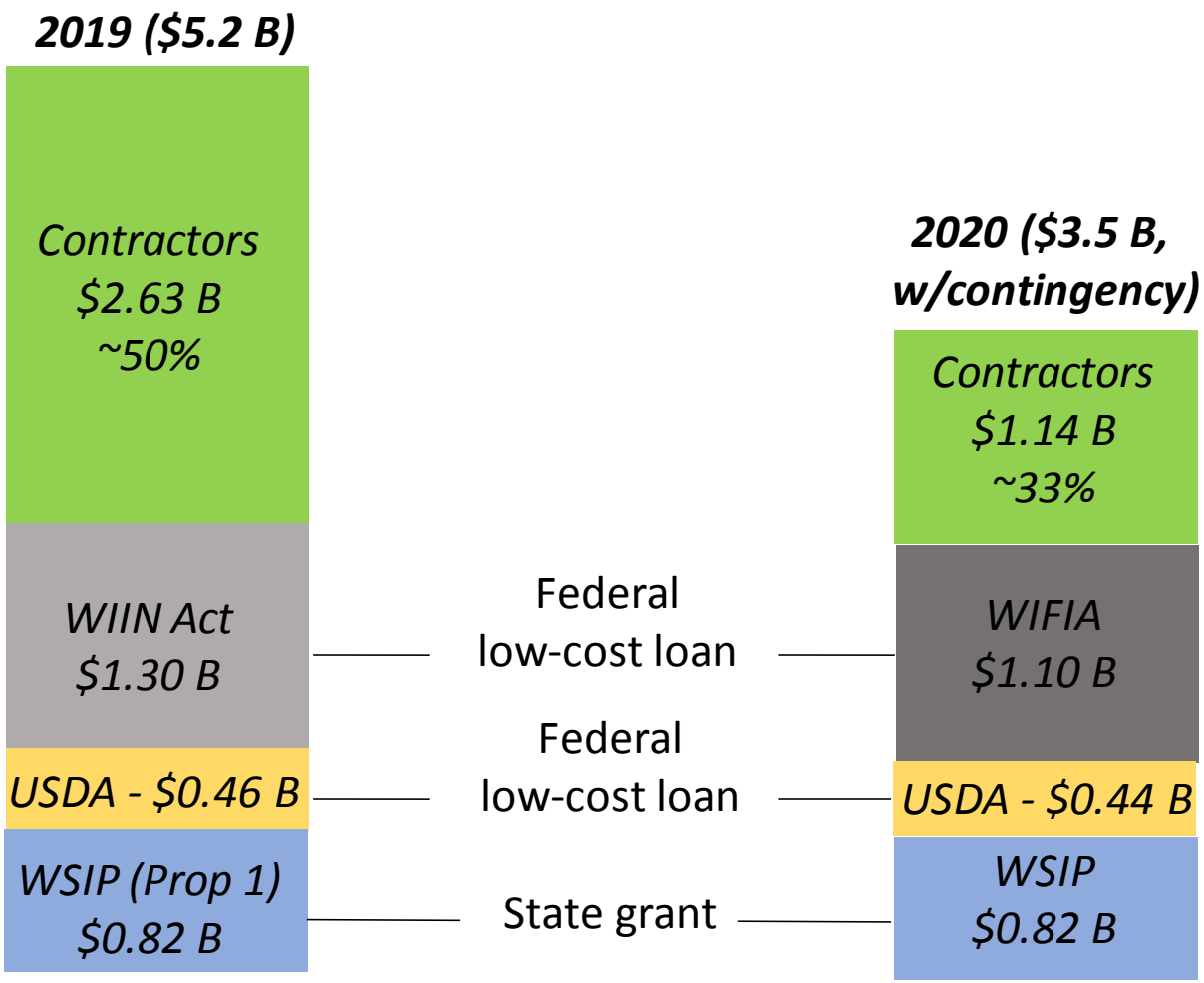
Cost Savings

- **Reservoirs / Dams (-$0.49 B)**
  - ✓ *reduced from 1.8 to 1.5 MAF*
  - ✓ *forebay/afterbay*
- **Pump / Gen Plants (-$0.73 B)**
  - ✓ *eliminate P/G plant (Delevan pipeline, Sac River)*
- **Canals/conduits (-$0.86 B)**
  - ✓ *eliminate Delevan pipeline*


Fill
TC Canal
GCID Main Canal
Delevan Pipeline
Red Bluff
Tehama-Colusa Canal
GCID Main Canal
Sacramento River
Sites
1.8 MAF reservoir
Hamilton City
Delevan Pipeline
Feather River
Colusa Basin Drain
Lake Oroville
Knights Landing
Yolo Bypass
Release
Primary: Delevan Pipeline to Sacramento River
Secondary: TC Canal & GCID Main Canal to Sac Valley participants

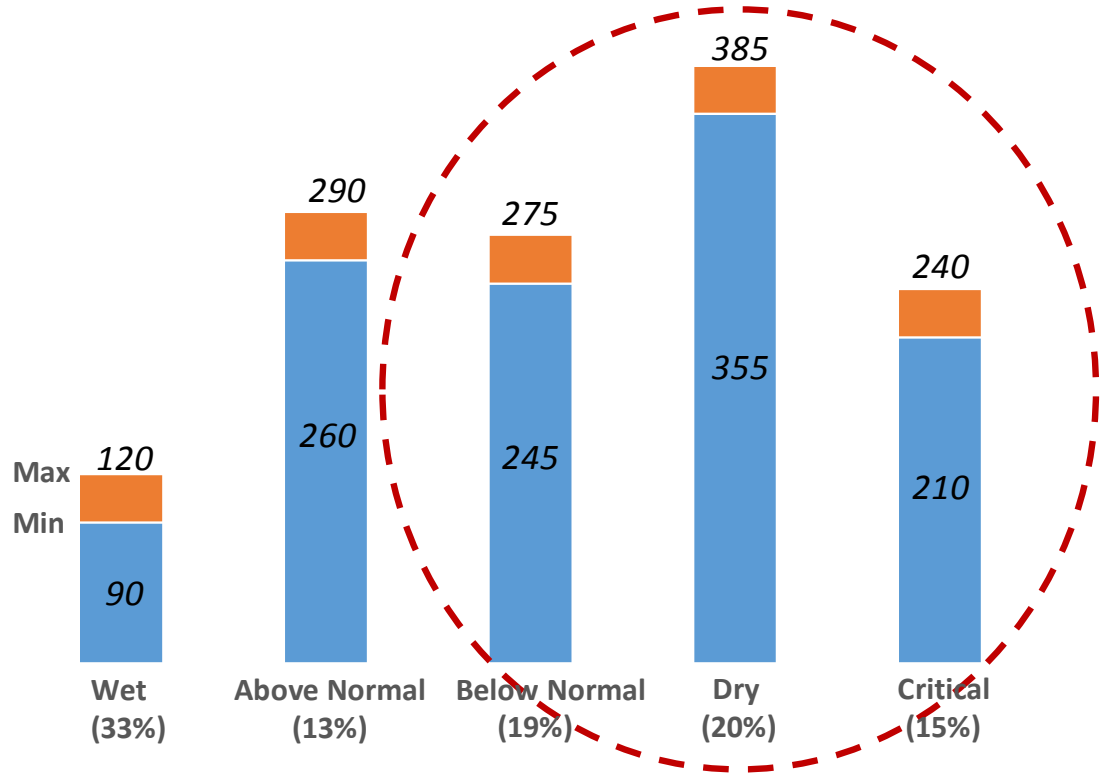

Fill
TC Canal
GCID Main Canal
Red Bluff
Tehama-Colusa Canal
GCID Main Canal
Sacramento River
Sites
1.5 MAF reservoir
Hamilton City
Feather River
Colusa Basin Drain
Lake Oroville
Dunnigan Pipeline
Knights Landing
Yolo Bypass
Release
TC Canal
GCID Main Canal
Dunnigan Pipeline
CBD to Sac River

Project Changes (1.8 to 1.5 MAF Reservoir)

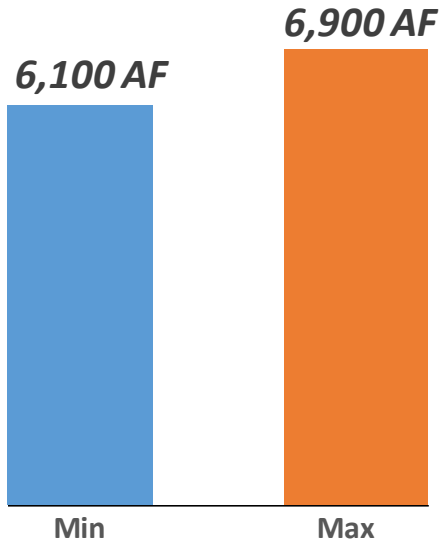


Water Delivery Analysis

Est. water delivery by water year type
(total delivery of 213 - 243 TAF)

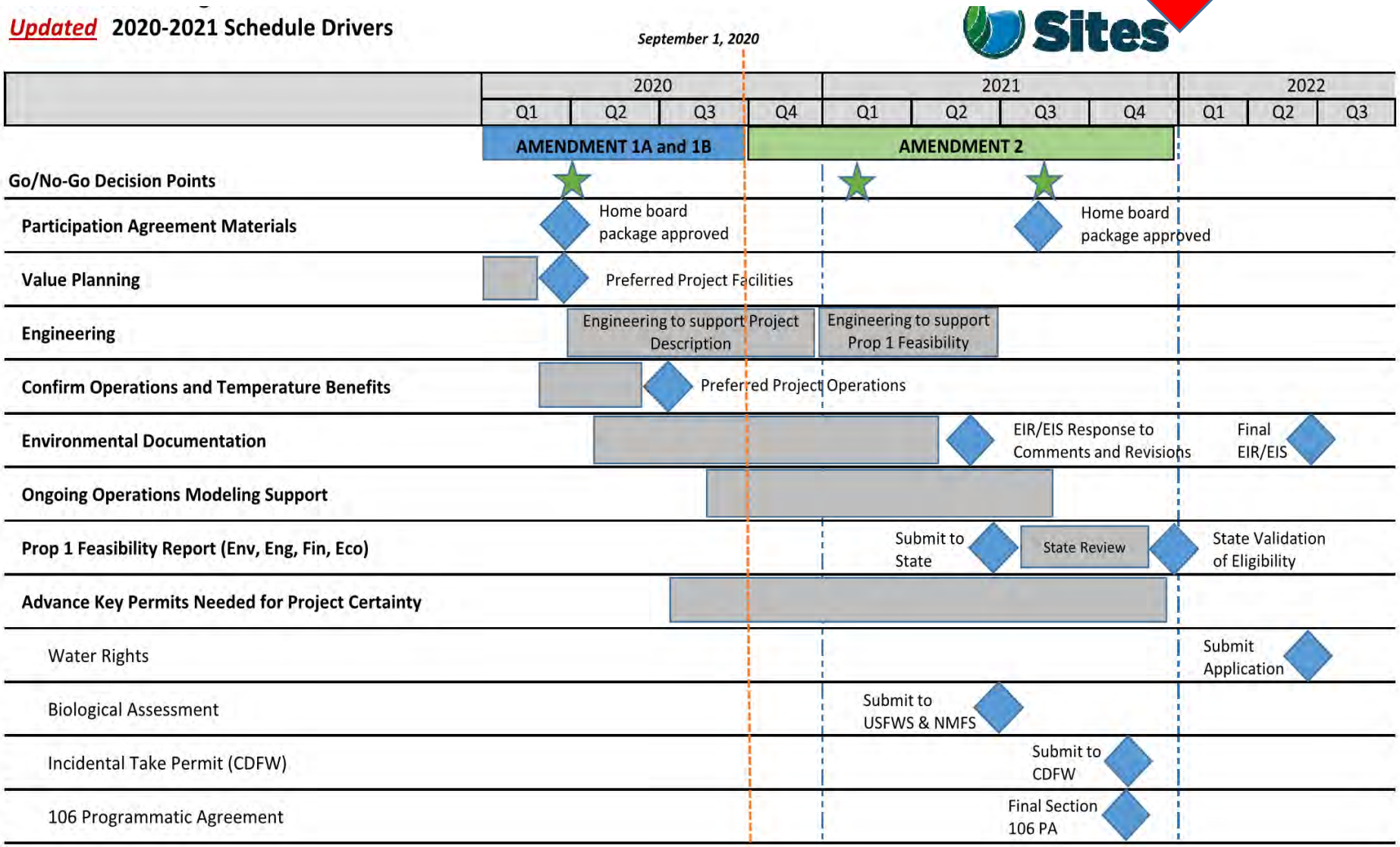


Est avg delivery to DWA
(does not account for losses)



Latest Schedule

Go/No-Go Decision



SWP Statement of Charges

- **SWP Sites Reservoir Participant Workgroup has been formed**
  - ✓ *Meetings with DWR and non-participants SWC's*
    - ✓ *General support to look for a solution*
- **Investigating options with DWR**
  - ✓ *Contract amendment approach*
  - ✓ *Non-Contract amendment approach*
- **Deadline January 1, 2022**

Requested Actions

- **Authorize General Manager to execute the Second Amendment to the Sites Reservoir Phase 2 Participation Agreement**

- **Approve expenditure not-to-exceed $650,000 for Phase 2 tasks between Sept. 2020 and Dec. 2021**
  - ✓ *expenditures included in FY 20/21 budget*

QUESTIONS

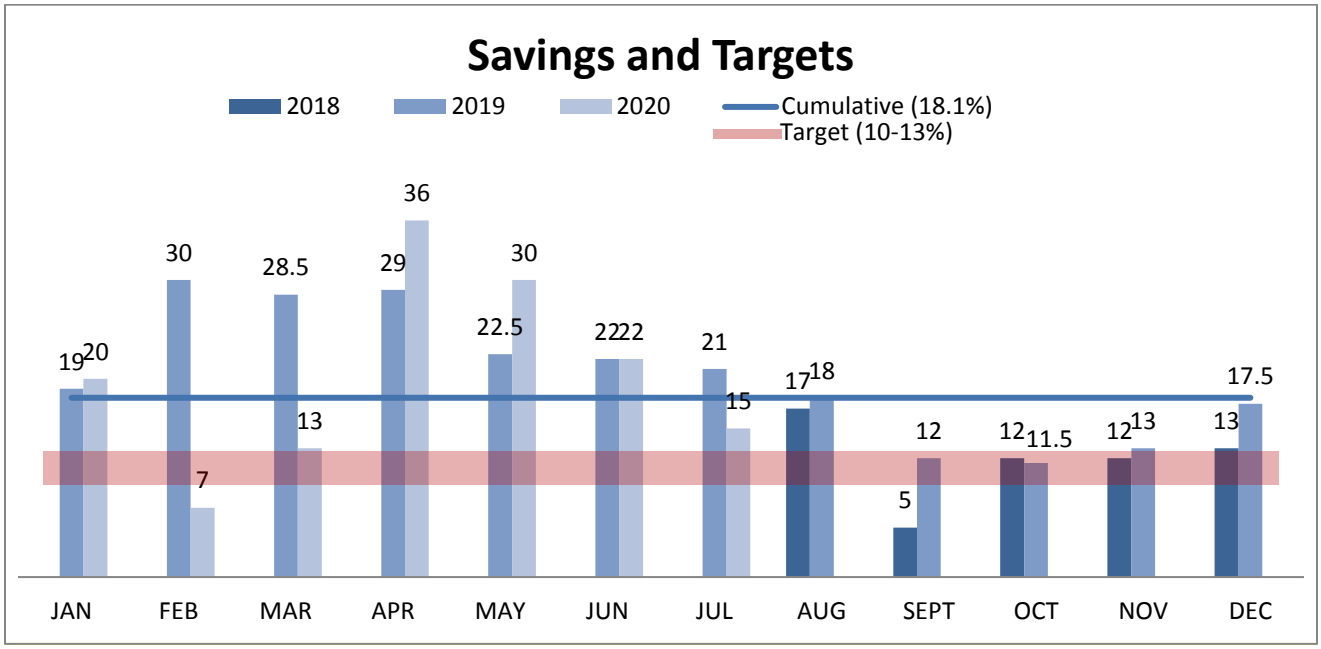
DESERT WATER

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

AUGUST 18, 2020

RE: JULY 2020 WATER USE REDUCTION FIGURES

Desert Water Agency and its customers achieved a 15% reduction in potable water production during July 2020 compared to the same month in 2013 – the baseline year used by the State Water Resources Control Board (State Water Board) to measure statewide conservation achievements. DWA continues to report its production to the state on a monthly basis, despite mandatory conservation ending in 2017.



DWA is asking its customers to save 10-13% compared to 2013 to help achieve long-term sustainability.

The cumulative savings over the last twelve-month period is 18.1%. The cumulative savings beginning in June of 2016 when we put our 10-13% target in place is 17.8%.

On the following page is additional information for this month.

Reporting information	**Consumption** (Currently used)	**Production** (SWRCB required)
July 2020 conservation percentage	15.21%	17.01%
July 2020 water production	3284.90 AF	3693.92 AF
July 2013 water production	3874.08 AF	4450.85 AF
The percentage of the Total Monthly Potable Water Production going to residential use only for the reporting month	71.13%	63.25%
Population (inclusive of seasonal residents)	89,232	
Estimated R-GPCD	275.23	
How many public complaints of water waste or violation of conservation rules were received during the reporting month?	19	
How many contacts (written/ verbal) were made with customers for actual/ alleged water waste or for a violation of conservation rules?	8	
How many formal warning actions (e.g.: written notifications, warning letters, door hangers) were issued for water waste or for a violation of conservation rules?	2	
How many penalties were issued for water waste or for a violation of conservation rules?	0	
Comments: The Agency's service area is highly seasonal making population analysis a complex task. The State Water Board analyzes data on a per capita basis. Population figures included are those accepted by the Department of Water Resources. We have historically reported water consumption (billing data) to the SWRCB. Starting later this year, we will be required to report production (water extracted from wells and streams), which includes water losses (leaks, theft, metering inaccuracy, etc.). We are working to review all of the 2013 baseline data for production before the reporting requirements begin.		

8-B

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

AUGUST 18, 2020

RE: PALM SPRINGS INTERNATIONAL AIRPORT DEMONSTRATION GARDEN

Developing a demonstration garden at the Palm Springs International Airport has been a goal of the Desert Water Agency Board of Directors, Conservation and Public Affairs Committee and staff for a number of years.

In June, the Department of Water Resources (DWR) announced its final awards for Proposition 1 Round 1 Integrated Regional Water Management (IRWM) grant awards. Desert Water Agency will receive $350,000 in grant funding - $60,000 for the Airport Demonstration Garden and $290,000 for grass removal rebates.

In addition to $60,000 in grant funding that DWA secured, the Agency will make its grass removal rebate funding available ($3 per square foot for municipal projects) for eligible areas of the garden. The demonstration garden is roughly 10,000 square feet of grass and will be located between the fountain and the arrivals area.

The City of Palm Springs has used one of its on call landscape designers, David Evans and Associates to develop the design concept. Conservation and Public Affairs Committee Member Cioffi and staff have worked with City of Palm Springs staff, the Sustainability Commission and the design consultant.

A reference map for location and the preliminary design are attached. The design includes native pollinators, herbs and various succulents. The design presently also includes artificial turf and a climate appropriate grass like kurapia. It also includes some walkways and benches. City of Palm Springs Sustainability Manager, Patrick Tallarico will provide an overview of project status and next steps.

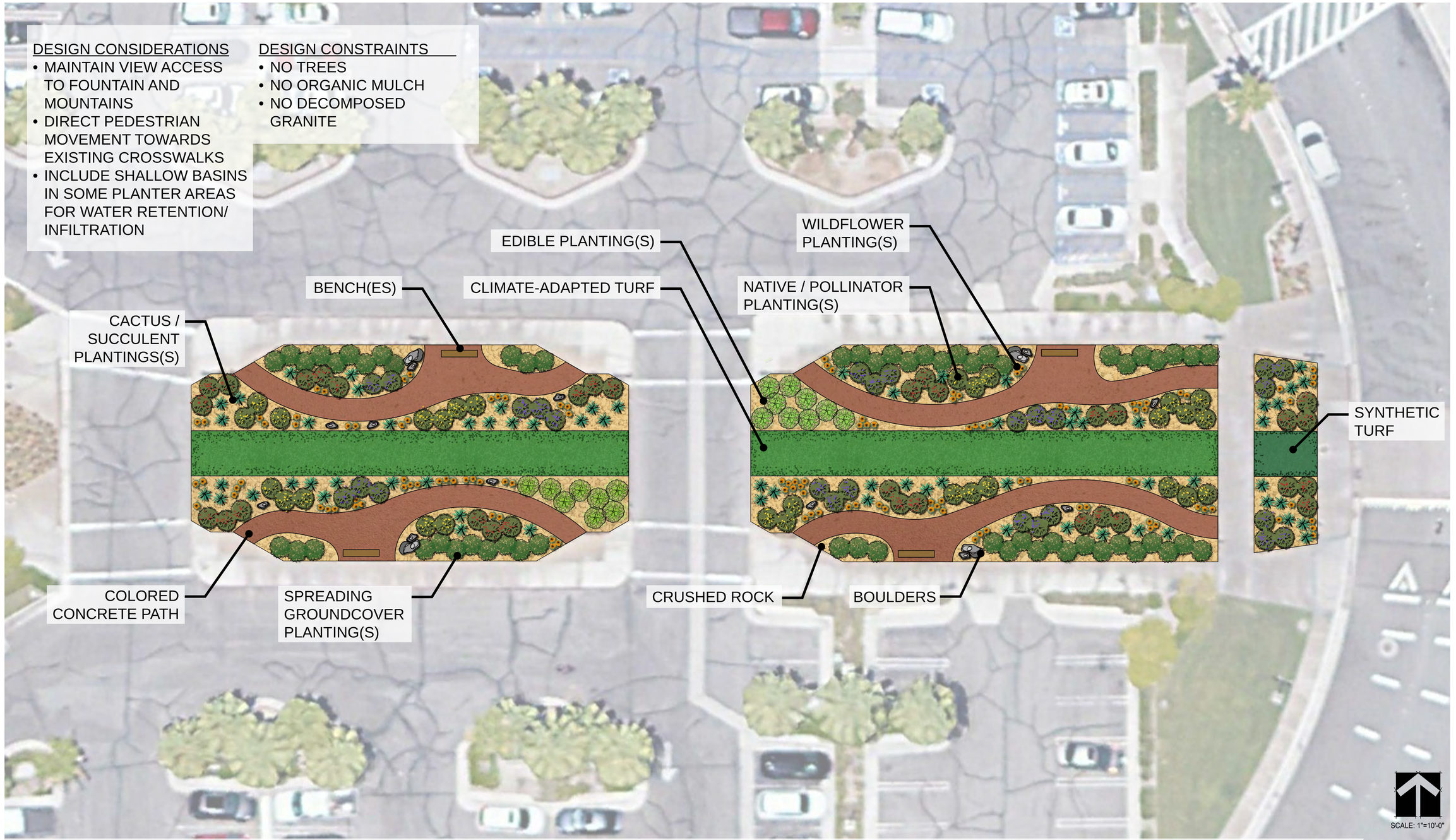
Location reference map

DESIGN CONSIDERATIONS

- MAINTAIN VIEW ACCESS TO FOUNTAIN AND MOUNTAINS
- DIRECT PEDESTRIAN MOVEMENT TOWARDS EXISTING CROSSWALKS
- INCLUDE SHALLOW BASINS IN SOME PLANTER AREAS FOR WATER RETENTION/ INFILTRATION

DESIGN CONSTRAINTS

- NO TREES
- NO ORGANIC MULCH
- NO DECOMPOSED GRANITE



SCALE: 1"=10'-0"

0 2.5 5 10

Climate-Adapted Turf Area: 2,003 SQFT

Pathway Area: 2,148 SQFT

Demonstration Planting Area: 5,306 SQFT

Quantity of Plants Demonstrated: 213 PLANTS

PALM SPRINGS AIRPORT TURF CONVERSION

DEMONSTRATION GARDEN - DESIGN CONCEPTS EXHIBIT

OPTION 1

Version 5 - August 10, 2020

DAVID EVANS AND ASSOCIATES INC.
4141 E. Inland Empire Blvd., Suite 250
Ontario California 91764
Phone: 909.481.5750

8-C

STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS

AUGUST 18, 2020

RE: COVID-19 FINANCIAL IMPACT UPDATE

On March 17, 2020, the Board took multiple actions in response to the COVID-19 pandemic. These actions included the suspension of Late Fees and water disconnections for non-payment, and absorption of Paymentus remote payment convenience fees for sixty days and granted General Manager Krause the ability to take action regarding on premise staffing levels in order to achieve appropriate social distancing. On May 5, 2020, the Board voted unanimously to extend the financial relief measures for customers for an additional sixty days. Additionally, on July 7, 2020, the Board again voted unanimously to extend the financial relief for customers for an additional sixty-two days, through September 15, 2020.

The following figures are representative of the financial impact the Agency has experienced to date as a result of the above mentioned actions and COVID-19 impacts to Water Sale revenue.

Water Sales

As a result of COVID-19, the Agency has experienced decreased water sales. July consumption have returned approximately to historical 3-year average levels for the month, as also experienced in June. Included in the 2020/2021 budget, the Agency included forecasted COVID-19 impacts through December 2020. July, actual water sales revenue exceeds the pre-COVID-19 adjusted budget by $105,500. Overall, the Agency has experienced approximately $352,000 in decreased water revenues attributed to COVID-19 for the period of March through July 2020.

	July 2020
Adopted 2020/2021 Budget	$ 3,528,600.00
COVID-19 Adjustment	$ 142,900.00
Pre-COVID-19 Budget	$ 3,671,500.00
Actual Revenue	$ 3,777,000.00
Over/(Under)	**$ 105,500.00**

Late Fees

For the measurement period of March 17th to August 10th, the Agency has not assessed 7,622 late fees. This equates to $190,600 in lost revenues.

Reconnection Fees

The Agency has not discontinued water service for non-payment, which has resulted in decreased revenues of approximately $132,000 from March 17th to August 10th.

Paymentus Fees

For the measurement period of March 17th to August 10th, the Agency has absorbed $9,000 in Paymentus fees (2,229 payments), allowing customers to make remote payments at no charge. The Agency has not experienced an increase payment volume on the Paymentus platform despite it being free of charge as originally anticipated.

Telecommuting Expenses

In order to support social distancing efforts, the Agency has shifted to a remote working environment where possible. Agency laptops and telecommunication access to the Agency have been provided to staff, costing the agency $23,700 to date. The upgrade to the Agency's phone system and telecommuting software upgrades are nearing completion and will allow for increased remote access capabilities. These enhanced capabilities will cost approximately $28,000 and will be beneficial to the Agency beyond the immediate COVID-19 need.

Safety Supplies & Disinfection

To date, the Agency has purchased $5,100 in safety supplies directly related to COVID-19. Items purchased include, masks/respirators, thermometers and disinfecting supplies. The Agency has also increased its nightly cleaning services contract to include daily disinfection of the Operations Center, totaling $32,900 to date.

To date, the Agency has experienced lost revenues of $674,600 and increased expenses of $101,400 as a result of the COVID-19 pandemic, totaling a net impact of $776,000. This evaluation does not include decreased variable costs related to providing water. We are currently working on calculating these reduced expenses and will report them with future updates. The Agency will continue to monitor the ongoing revenue losses and expenses related to COVID-19 and will provide ongoing updates to the Board.