

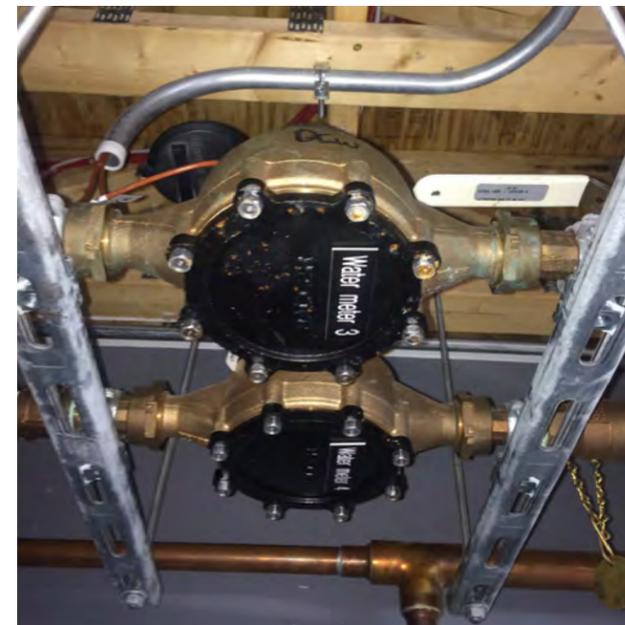
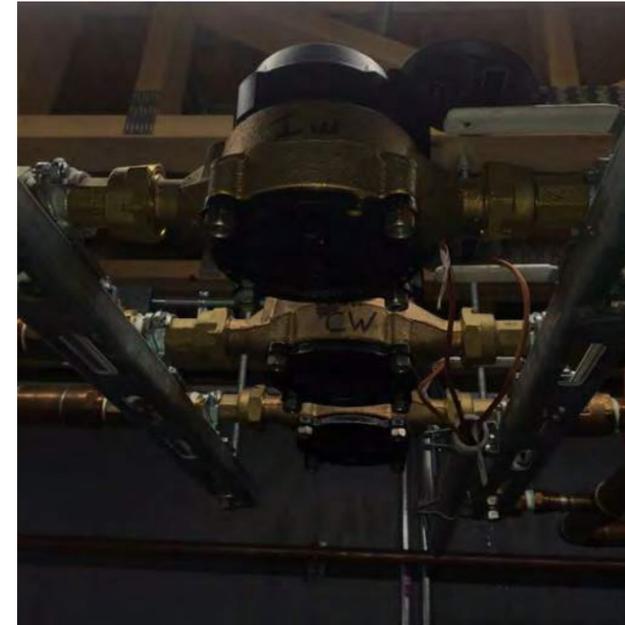
# KERN CENTER METERING

## (9) Water Meters

- (3) Incoming: Municipal and Cisterns
- (4) Use: Finished (total), Cold, Hot, Irrigation
- (2) Waste: Indoor and Outdoor Planters

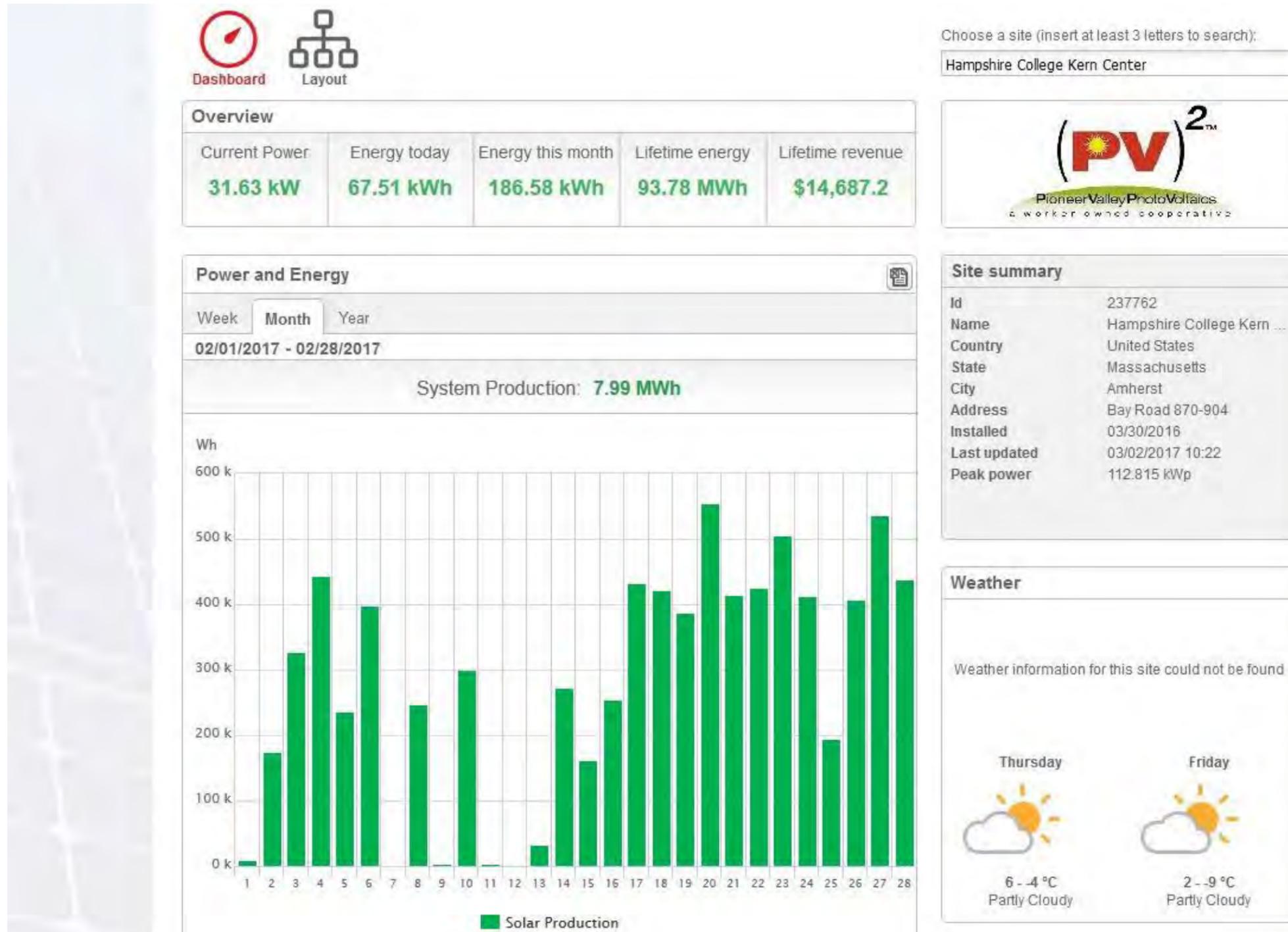
## (25) Electricity Meters

- (1) Main
- (13) Subpanels
  - (1) Solar PV
  - (2) Mechanical
    - \* (11) Mechanical Submeters: fans, pumps, water heaters, indoor heat pumps, outdoor heat pumps
  - (5) Lighting
  - (5) Plug Loads



# KERN CENTER METERING

What does a dashboard look like?



# KERN CENTER METERING

What does a dashboard look like?

The dashboard displays a physical layout of solar panels with a grid of data points for each panel. A callout box for Panel 8.16.16 (20234133-B7) shows it is a SunPower X21-345-COM panel, oriented vertically with a tilt of 0.0 and an azimuth of 180.0. The dashboard also includes navigation options like 'Show tree', 'Show playback', and 'Daily', along with a search bar for site selection.

(11) Inverters

(345) Panels

All awake and talking to me, except one.

# KERN CENTER METERING

What does a dashboard look like?

The dashboard displays the SolarEdge logo and navigation options: Home, Welcome Todd Holland, Dashboard, and Layout. A search bar prompts the user to 'Choose a site (insert at least 3 letters to search):' with 'Hampshire College Kern Center' entered. The main view shows a physical layout of solar panels with a data table below it. A 'Details for Panel 8.16.16' window is open, displaying system data.

**Details for Panel 8.16.16**

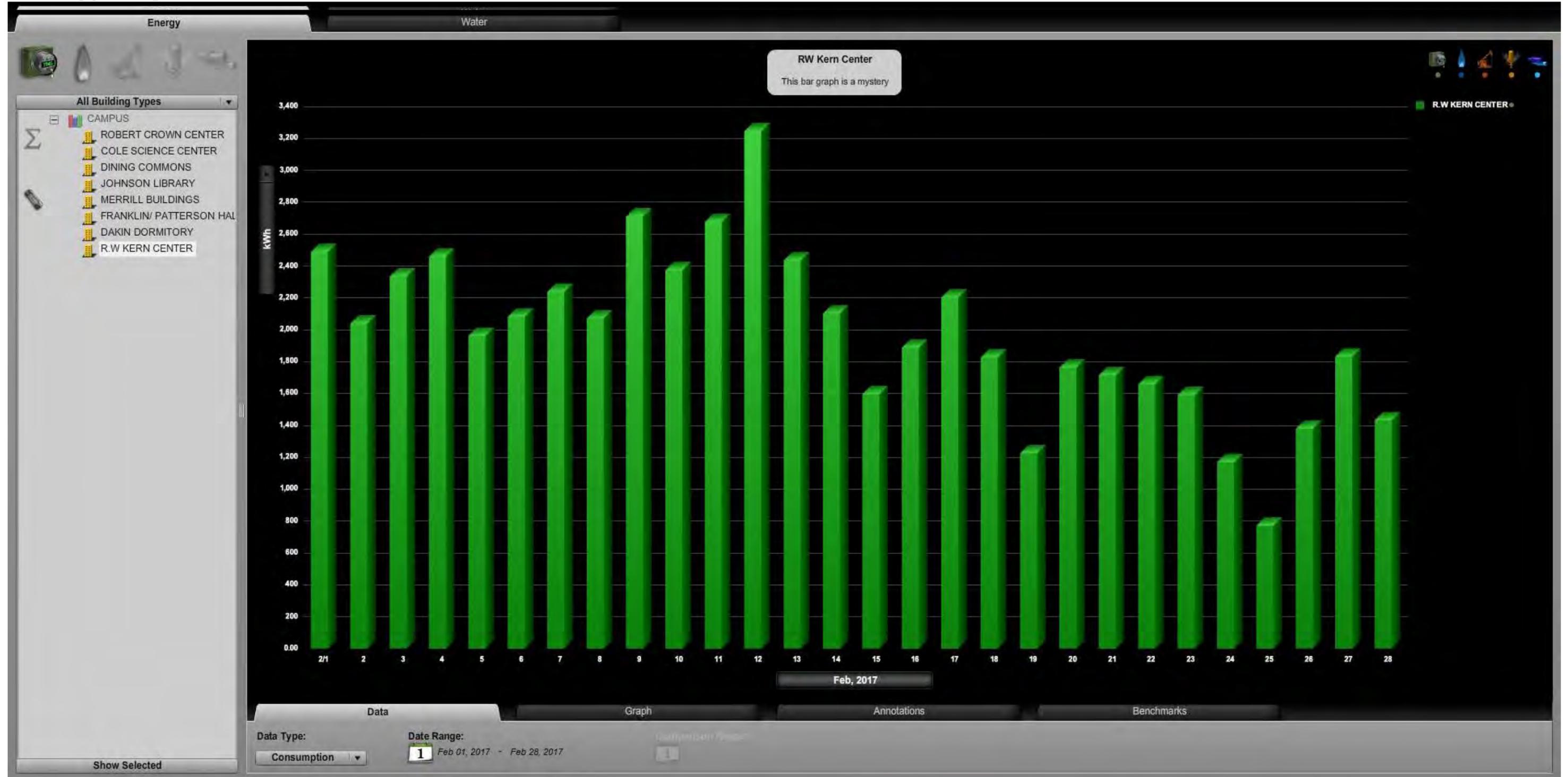
System data  
Last Measurement: 02/16/2017 10:23 [Refresh]

General

Parameter	Value
Model	X21-345-COM
Current [A]	1.98
Optimizer Voltage [V]	25.62
Power [W]	117.39
Voltage [V]	59.25

# KERN CENTER METERING

Energy Report is not a dashboard



# KERN CENTER METERING

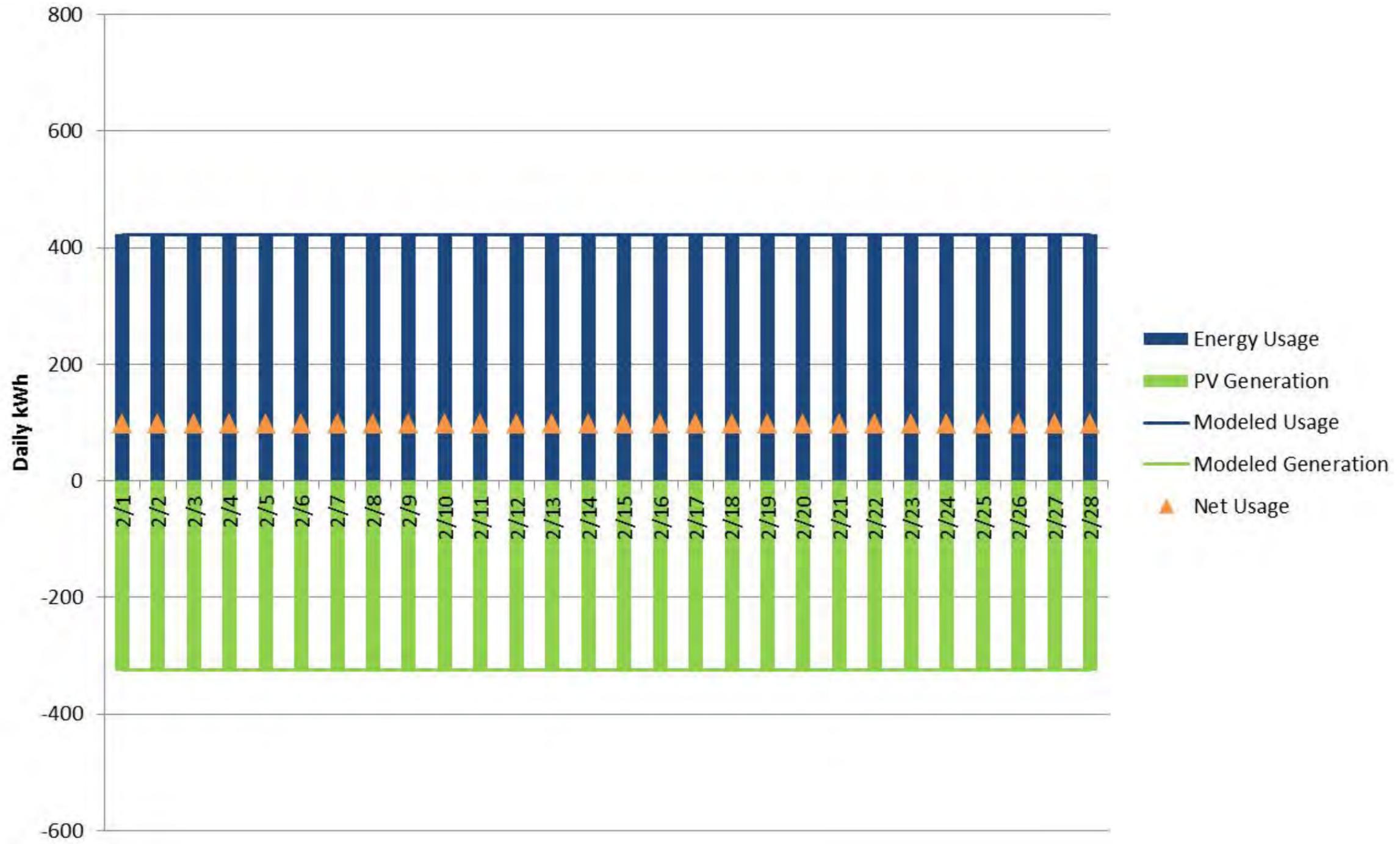
A Building Management System (BMS) is not a dashboard

The screenshot displays a BMS interface for the Kern Center. On the left is a tree view of building components, including various halls, dormitories, and the R.W. Kern Center with its sub-components like basement, ground floor, and electric meters. At the top center, there is a weather widget showing 37°F. In the middle, there is an image of a physical electric meter. On the right, a table titled 'CAMPUS ELECTRIC METERS' provides real-time data for various panels.

CAMPUS ELECTRIC METERS		Real Power		Daily kWh	
	Main Building	-16.37	kW	0	kWh
	Panel P22	0.70	kW	0	kWh
	Panel MA1	0.89	kW	0	kWh
	Panel P21	1.21	kW	0	kWh
	Panel Inverter	0.42	kW	0	kWh
	Panel LB1	0.34	kW	0	kWh
	Panel Elevator	0.15	kW	0	kWh
	Panel P12 Cafe	0.71	kW	0	kWh
	Panel L22	0.43	kW	0	kWh
	Panel L11	0.00	kW	0	kWh
	Panel Solar (PV)	29.50	kW	0	kWh
	Panel MB1	4.83	kW	0	kWh
	Panel PB1	1.00	kW	0	kWh
	Panel L21	0.84	kW	0	kWh
	Panel P11	0.17	kW	0	kWh
	Panel MB1 CIR 1-23 Outside HP's	3.77	kW	0	kWh
	Panel MB1 CIR 2, 46 WH 7.1 Cafe	0.00	kW	0	kWh
	Panel MB1 CIR 8,10,12 WH 7.3 Admissions	0.00	kW	0	kWh
	Panel MB1 CIR 14-36 & BC 1 & 2	0.03	kW	0	kWh
	Panel MB1 CIR 10,25,27,31,33 Compst_Grey	0.03	kW	0	kWh
	Panel MB1 CIR 10,29,35,37,41 UV Grey	0.04	kW	0	kWh
	Panel ERV 2,7,8 EACC, HP's	0.07	kW	0	kWh
	Panel ERV 3,4,5, HP	0.04	kW	0	kWh
	Panel ERV 6, HP	0.18	kW	0	kWh
	Panel WH 7-2, ADMIN 2nd FLR	0.00	kW	0	kWh
	Panel BC-3	0.05	kW	0	kWh
	Panel ERV 1-9 Fans 1-2, HP Jockey	0.04	kW	0	kWh

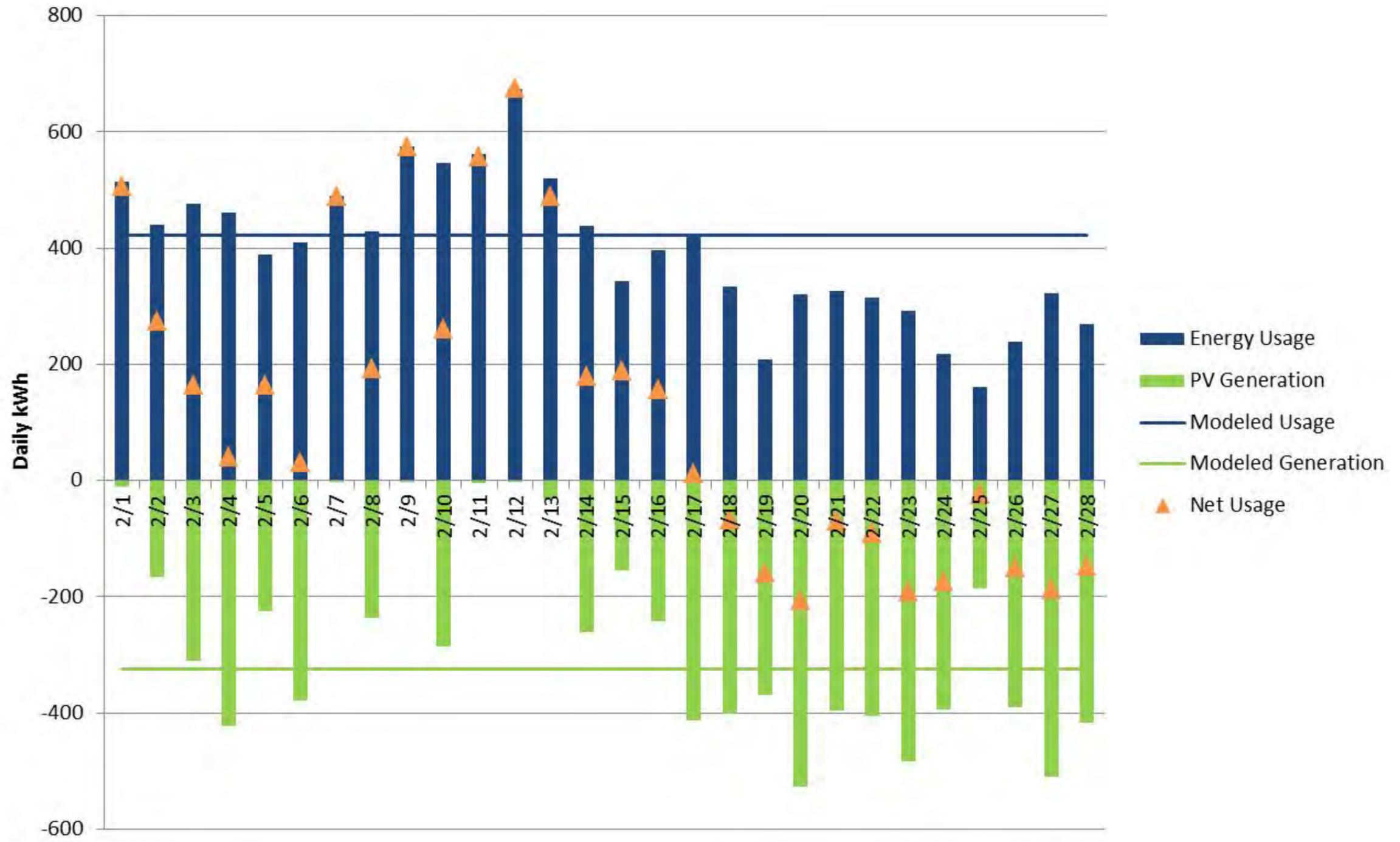
# KERN CENTER METERING

Modeled Use for February



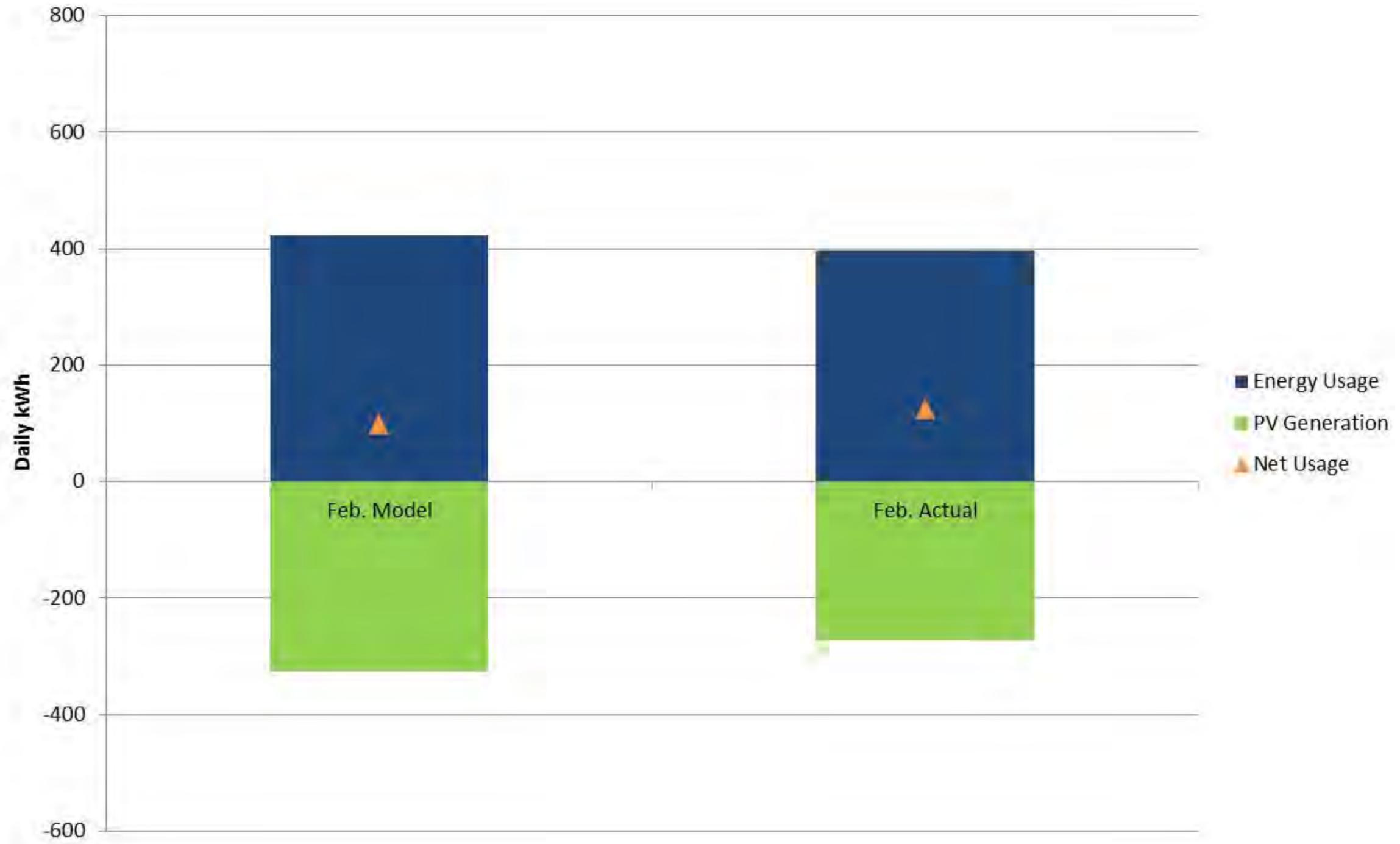
# KERN CENTER METERING

Actual Use for February



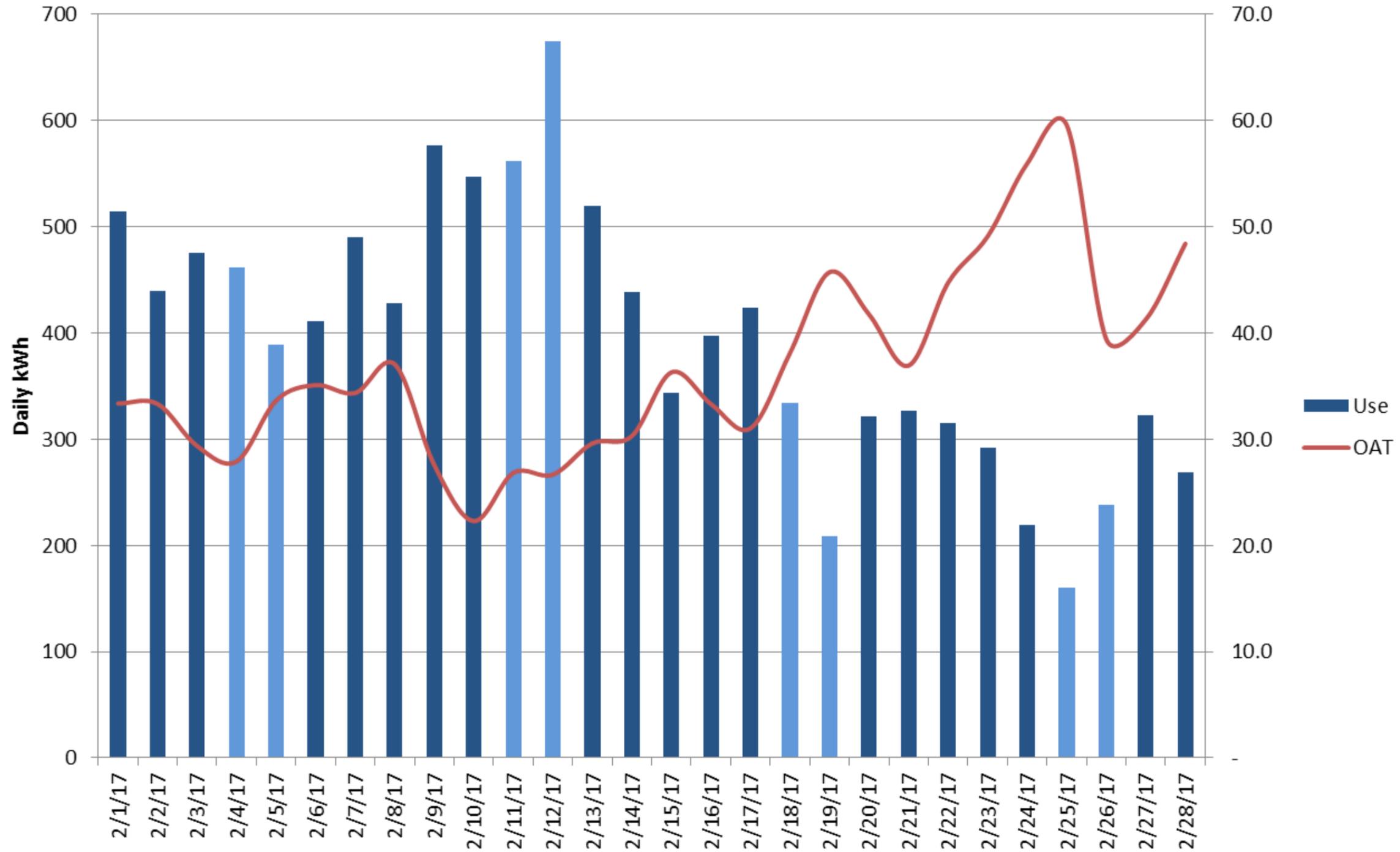
# KERN CENTER METERING

Model vs Actual



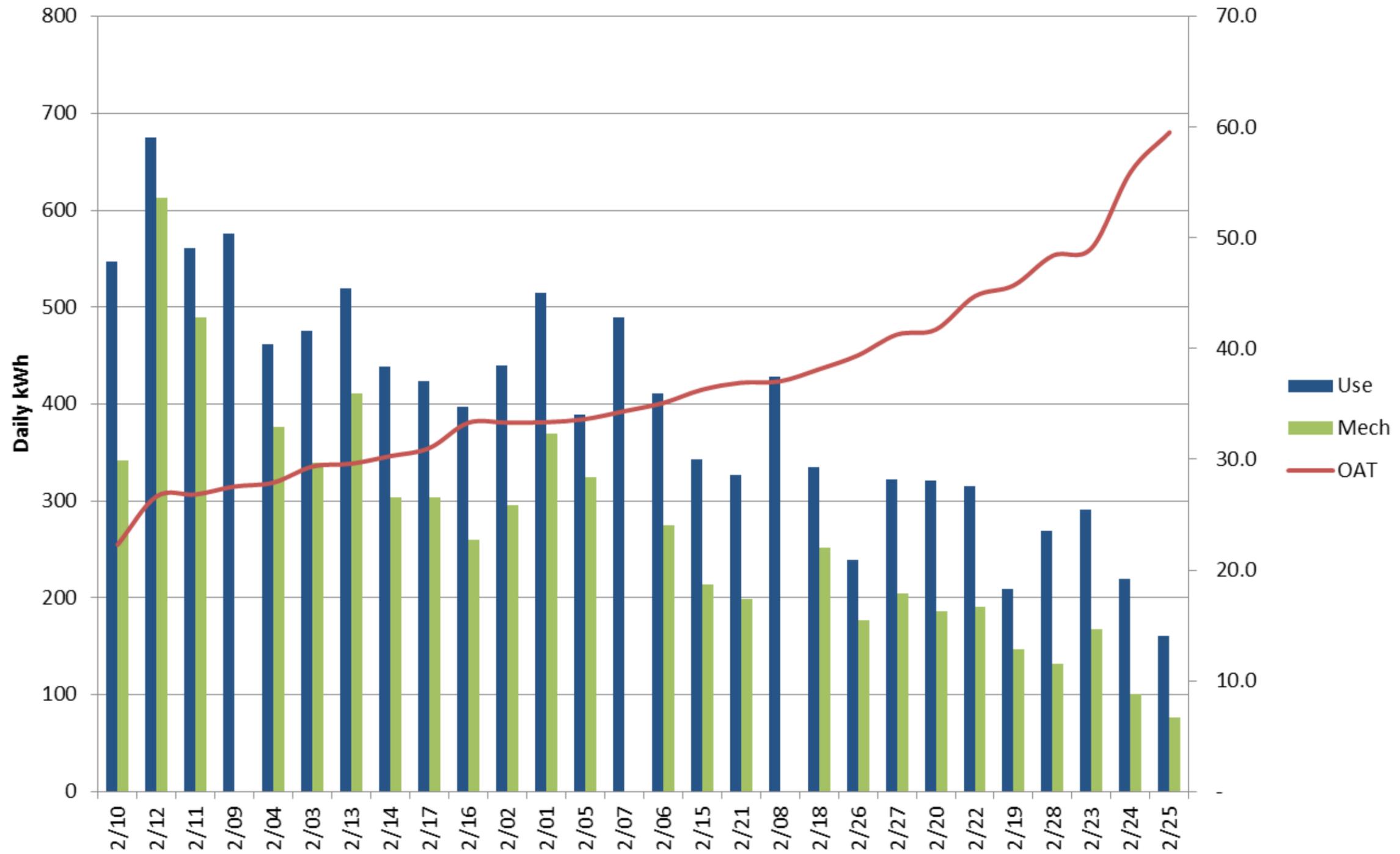
# KERN CENTER METERING

Electricity use vs Temperature



# KERN CENTER METERING

Electricity + Mechanical vs Temperature



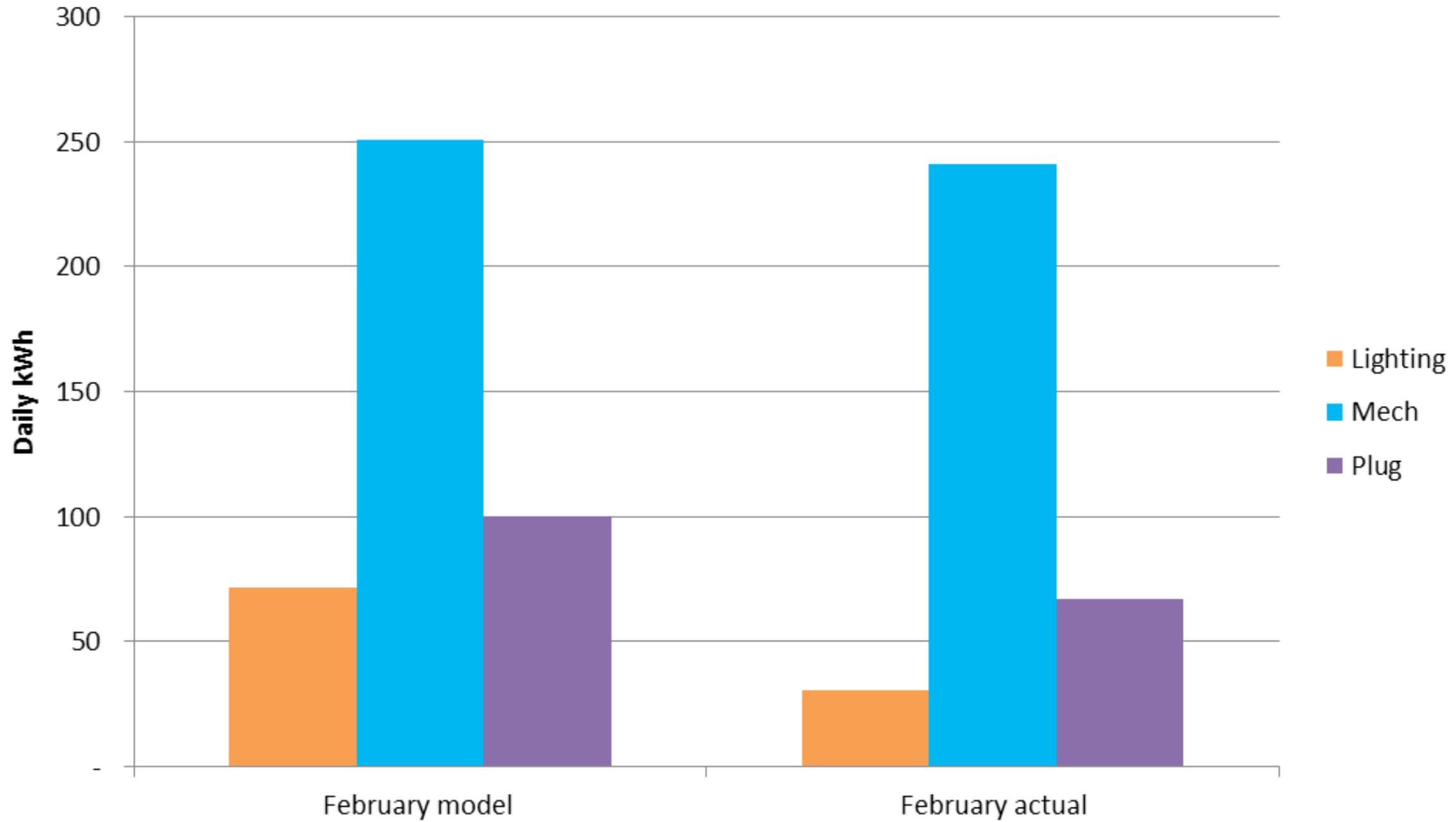
# KERN CENTER METERING

Electricity use vs Solar Gain



# KERN CENTER METERING

Energy use by Type of Use



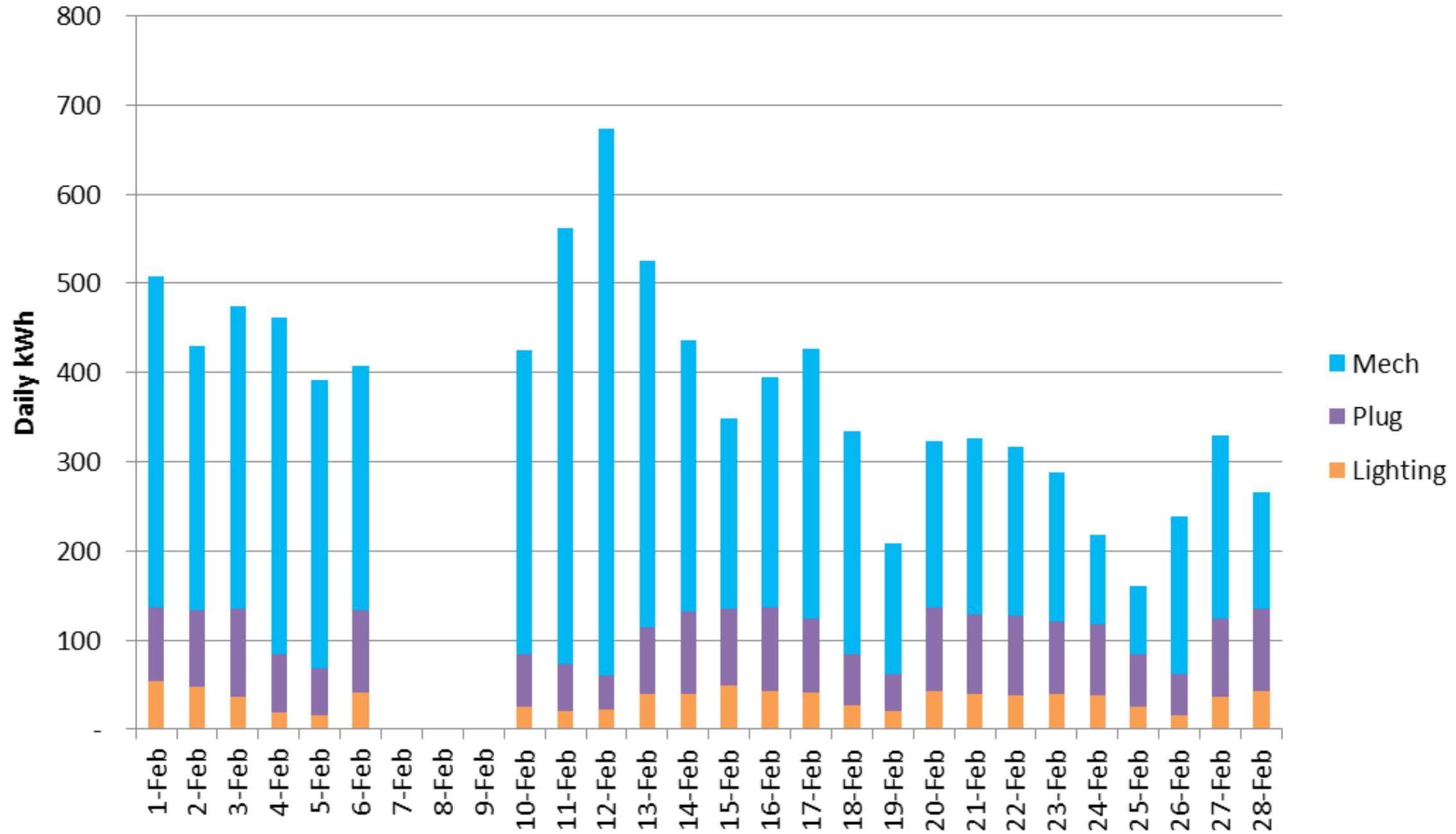
# KERN CENTER METERING

Actual Use for February



# KERN CENTER METERING

February use by Type of Use

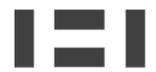




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# POST OCCUPANCY

How'd we do?



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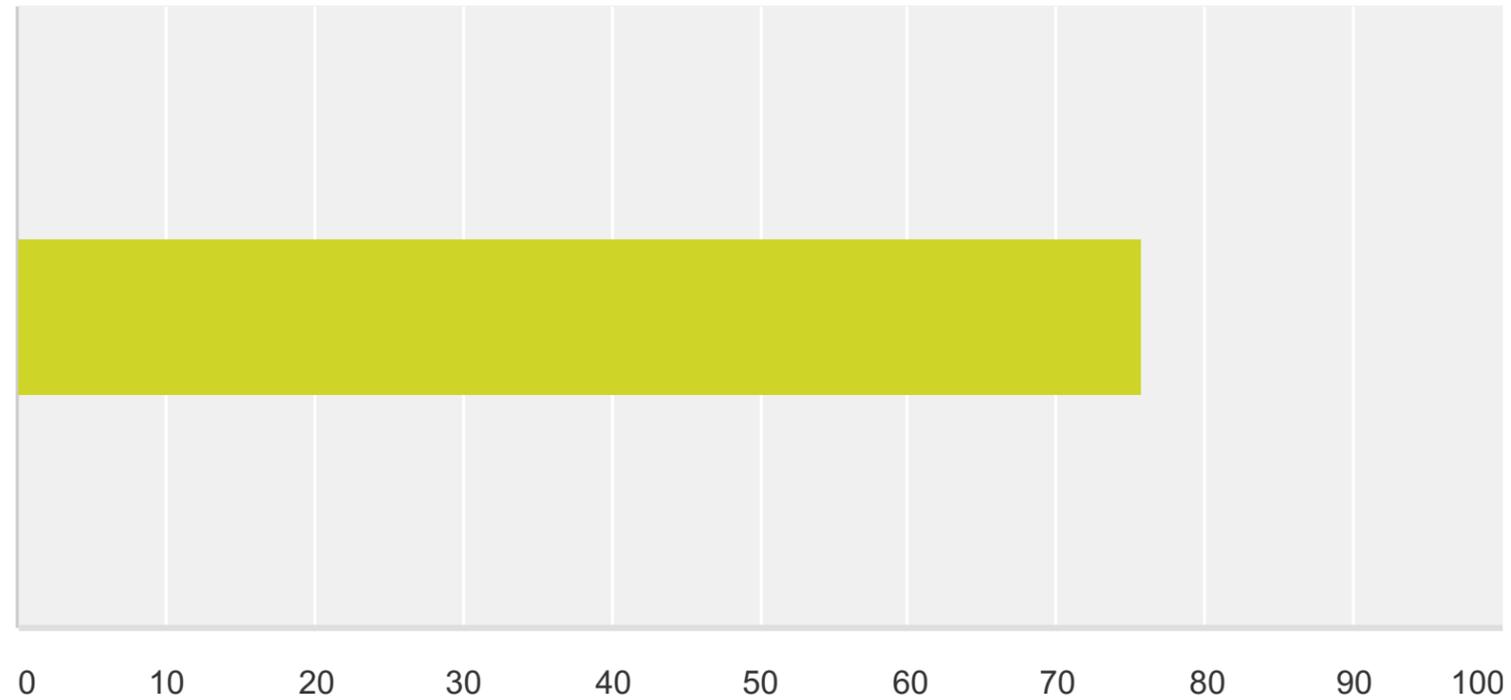
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# POST OCCUPANCY

How'd we do?

## Q4 The Kern Center is thermally comfortable (not too cold, not too hot).

Answered: 127 Skipped: 9



Answer Choices	Average Number	Total Number	Responses
	76	9,627	127

# POST OCCUPANCY

How'd we do?

More seating
Better acoustics. Very challenging for hearing-impaired. More cozy furniture. The space is pretty and bright, but has a cold feeling. Plants? More art?
If it were not cursed. This is not comical I am serious.
More comfy chairs
More comfortable seating
More, comfortable chairs in the lobby + gallery area - may be impossible, but it seems crowded often
A few smaller nooks for quieter, secluded working space. Although it is spacious, when it's busy it's hard to find a quiet table space to do work.
Better lighting
More variety of seating, more power outlets
Music!
More relaxing furniture
More temperature control
more plugs!!!
more study spaces, couches, leave classrooms open
Heal those dying plants around the windows! Yikes.
Less glare from the sun
Acoustically it could be more dampene, more sockets for plugging in
More hours for the cafe? You didn't have using the cafe as a choice..but I often come just to get coffee or pastries
More spaces out of the open
More private spaces or ways that open public spaces do not seem so large/echo-y/the opposite of private.
Sonic qualities need to be adjusted, no sense of privacy
It's pretty comfortable, sometimes there is a lack of seating
more seating
music
Maybe more comfy chairs.
An upstairs sitting/common area
more outlets
I am usuallyy comfortable! The Info Session room gets drafty sometimes.
No idea!
More seating, it can be hard to find a place to sit at lunch.
Art inside of it
more day-to-day activities of the type I usually attend. Maybe a fuller food menu at the cafe.
By not building it in the first place and instead using that money to support students instead of building something flashy for prospective students to see and come to the college

## Q9 What could make the Kern Center feel more comfortable?

Answered: 96 Skipped: 40

A more closed off area for the Kafé to increase comfort/warmth level
I think it's great as is
more seating - people love it but seating is often taken
Finally getting rid of that dairy-induced smell in the lobby!
More tables in the cafe.
More seating that is spaced more apart.
I don't know really - it's pretty great
More lounge areas, with sofas etc.
better temp. regulation and more comfy furniture
A few large tables in student area
couches
Background music
Add a few more tables and/or chairs to increase seating capacity.
Things added to make it more of a student space.
Sometimes it smells bad! And it's often too cold!
HVAC needs to be fixed. Lighting in offices and common areas needs to be improved at night (ie option to keep lights on even when not moving)
Better chairs, cushions, couches.
More furniture and maybe tables in the upstairs atrium
More comfortable chairs
Less smell, more open hours
If it felt less formal
More seating on the main floor
Water the plants
Cozier chairs
n/a
More comfortable chairs in the meeting rooms
More soft seating.
More seating
more control over our own heat
More lounge-like spaces!
Regulate the temperature better. Somehow soundproof the walls.
On cloudy days, there is a raw feeling in the building.
Having the kern cafe open more
Not as sterile looking

Not as sterile looking
More flexible seating
It is a bit cold sometimes (especially when the doors open all the time). More comfortable couches / armchairs!
it always is empty at night, and that can be a little spooky
More comfy chairs w/ tables instead of tables and metal chairs.
being less of a fishbowl
Lounge type space
lower food & drink prices
Maybe slightly warmer
Second floor classrooms sometimes cold.
I wish the Kern Center had an area that was cozier. Maybe some rugs and some comfy furniture. Like a lot of social spaces at Hampshire, it feels austere and minimalistic. Cozy would attract more people. Of course the upkeep and maintenance would be increased because with cozy comes the necessity of more cleaning. But to attract more people, particularly students, to Kern, I think it needs to be more inviting as a hang out spot.
The downside is the toilet smell that is pervasive, at times, throughout the second floor
more plants
spaces like the APL
perhaps a few more tables - feel more full and welcoming
More comfy seating.
Not sure
Better heat on cloudy days. Outside furniture come spring.
More seating options
couches
Maybe it's just the times I go, but more seating would be great.
N/A
Warmer! My office is very cold. And also better functioning motion detecting lights for when I'm at the office alone at night.
Enhance the quality of air
comfier chairs, longer cafe hours
regulation of the temperature and something to help with sound-working in the building it tends to be difficult in our own space, but even the spaces outside our office suite (lack of sound proofing in offices-even with the doors closed) where sound carries and makes it difficult to have private conversations or avoid distractions.
Warmth, having the motion sensors recognize short people (it's really hard to get lights to come on if you are under 5'5"), lights near the restroom hallways.
More comfy chairs
More soft seating in open areas
Music and pillows

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