



2023-24 Holiday Curtailment Energy Savings Report

Summary

This year the UC Berkeley Campus curtailed buildings over the winter holiday for 12 days, from December 22nd through January 2nd. The Energy Office worked with the EMS group, Stationary Engineers, HVAC and Electric Shops to curtail 60 buildings. In total, curtailment saved 721,485 kWh and 496,665 pounds of steam. Compared to the baseline, electric use was 12% lower and steam use was 2% lower (when normalized for weather). Although the campus experiences the lowest electric rates of the year over winter break, curtailment saved the campus approximately \$167,000 and 149 metric tons of carbon dioxide emissions. Below are the detailed costs and energy savings associated with curtailment this year.

	Electric (kWh)	Steam (lbs)*
Pre-Curtailment Usage	5,933,825	27,062,255
Curtailment Usage	5,212,340	26,565,590
Savings	721,485	496,665
% Savings	12%	2%

*Weather normalized

Cost (Labor)	\$15,000
Savings	\$167,000
ROI	1113%

Curtailment 2023-24 saved 149 metric tons of CO₂ - the emissions of:

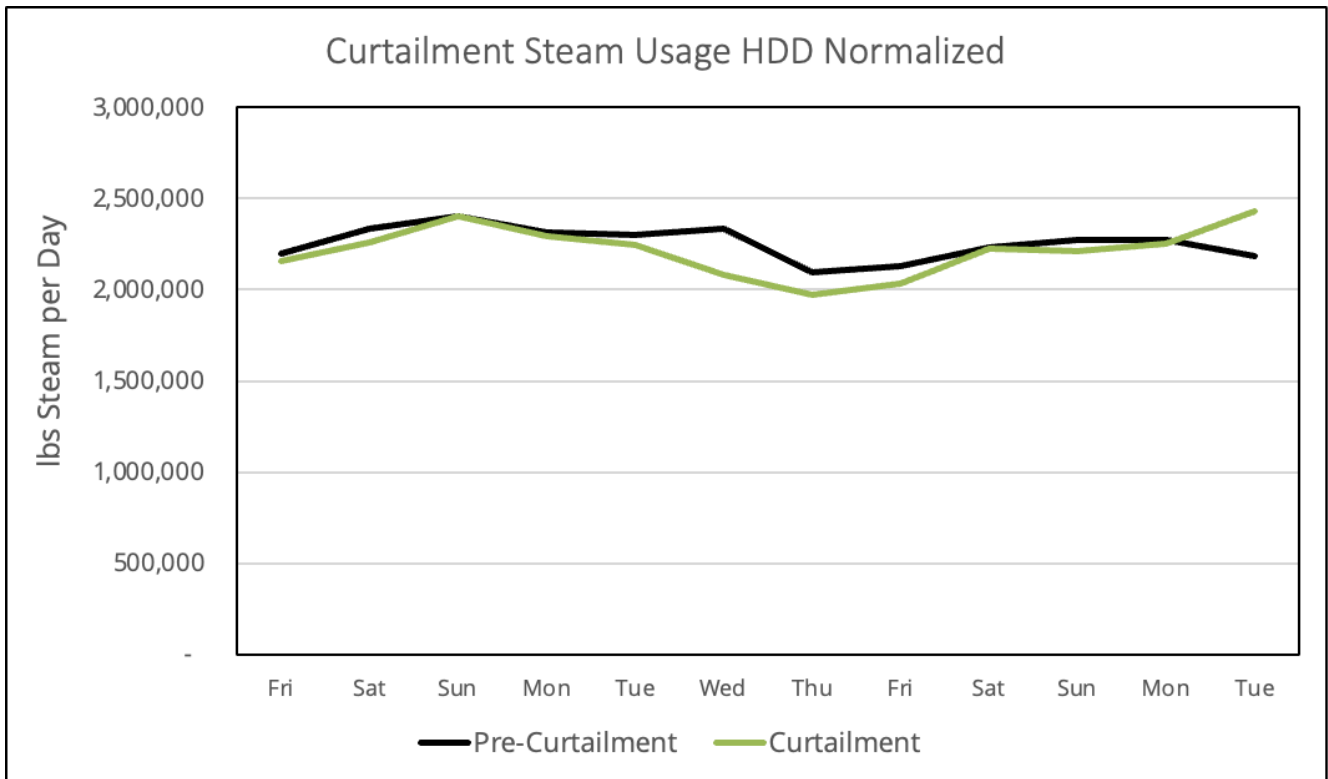
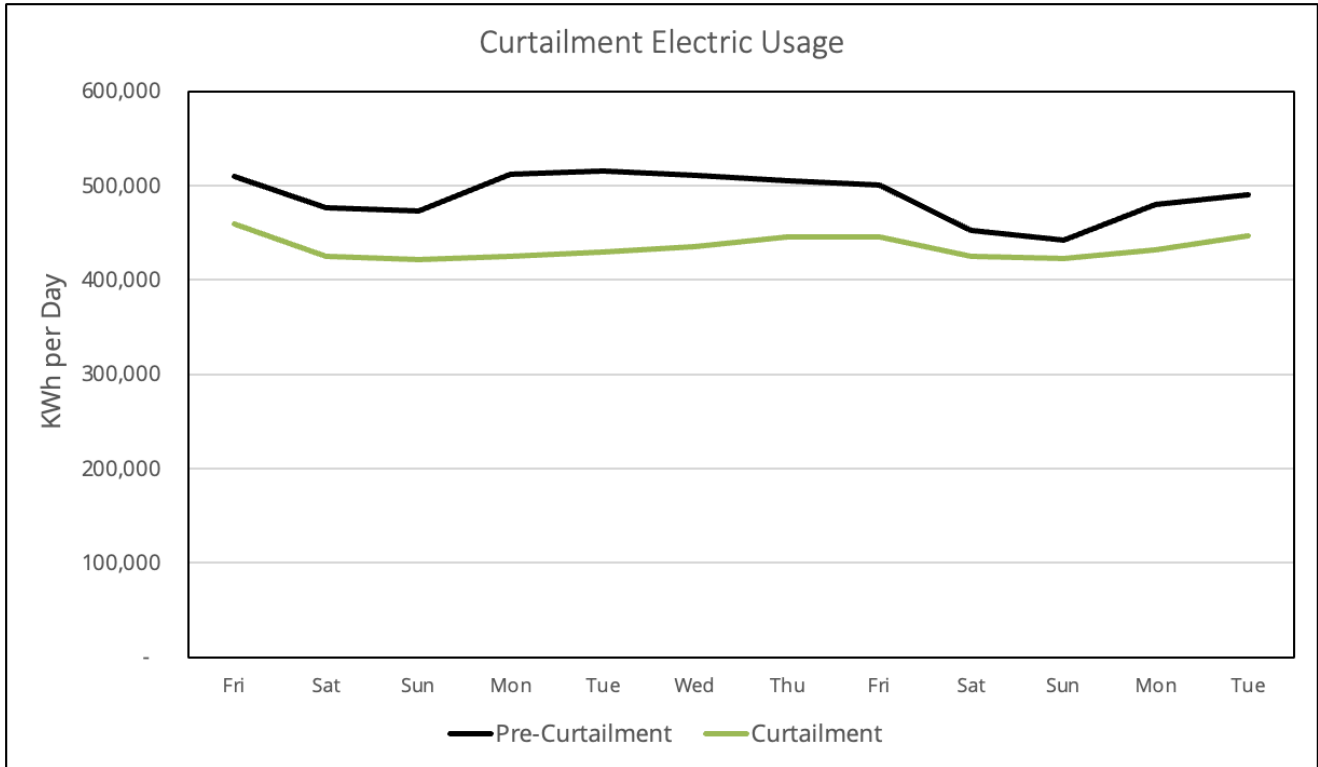
18 average US homes' annual energy use...



...or 1 Railcar of Coal



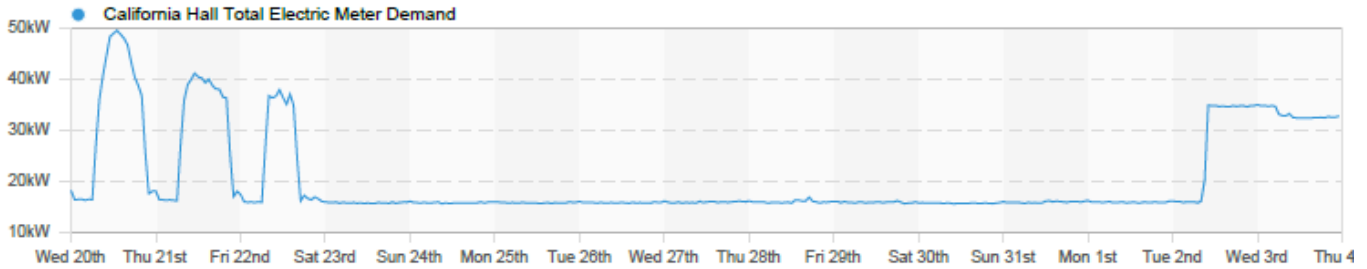
Total Campus Electric and Steam Usage



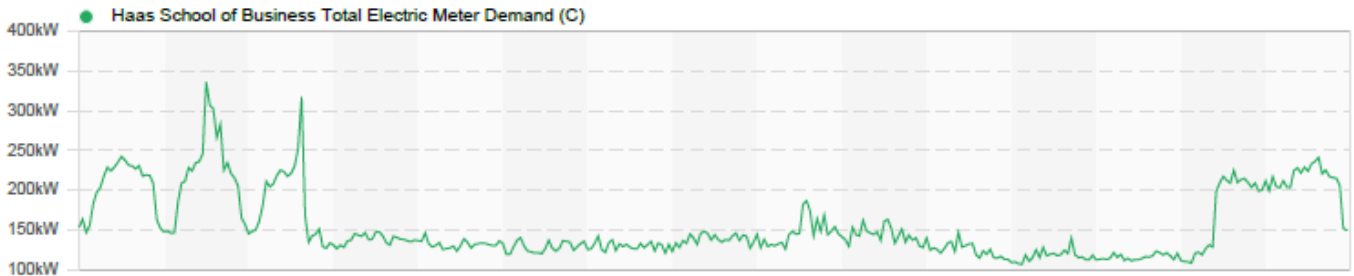
Electric Demand Reduction – Campus Buildings

The graphs below illustrate the significant drop in energy demand (kW) during the 2023-24 winter curtailment program at four campus buildings.

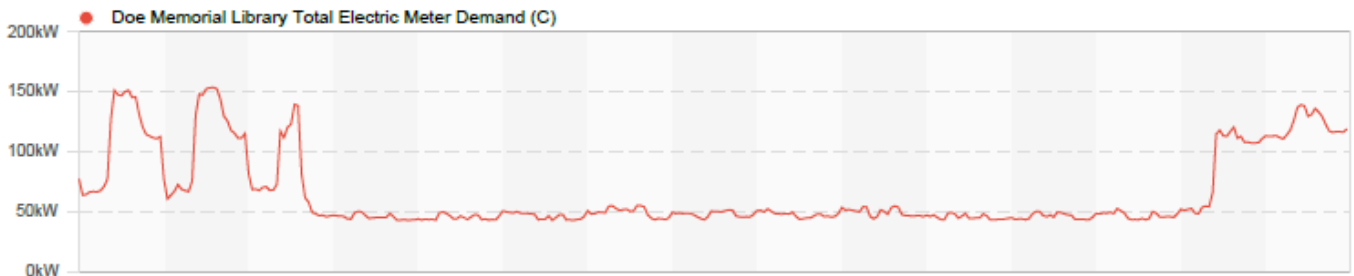
California Hall



Haas



DOE Memorial Library



Social Science Building

