

# PG&E ADR Incentive Program Case Studies 2015



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# Commercial Offices

## PROJECT SUMMARY

1,055 kW total load shed potential approved  
\$369,250 incentives  
Peak Day Pricing, Aggregator Managed Portfolio  
Installation in progress  
DR Measure: Energy management system upgrade

## PROJECT DISTINCTIONS

Advanced HVAC technology  
27% reduction of facility load enabled  
Continuous trade ally relationship (Enerliance)  
Streamlining of review process over time  
Increase approved kW from initial proposal

## KEY CHALLENGES

Significant 24/7 demand (baseload) > 50%  
deducted from available baseline

More complex commissioning and testing of the  
advanced and sophisticated controls



## FACILITY PROFILE

Building <sup>1</sup>	Sq Ft	Incentive <sup>2</sup>	Load Shed <sup>3</sup>
1	446,000	31%	27%
2	775,000	27%	27%
3	332,093	34%	27%
4	430,000	18%	27%
5	90,348	36%	30%
6	70,090	26%	27%
Totals	2,144,021	27%	27%

<sup>1</sup>San Francisco, CA

<sup>2</sup>Incentive as a percent of total project cost

<sup>3</sup>Load shed as a percent of total facility demand (non-baseload)

ADR

Automated Demand  
Response Program

[www.pge-adr.com](http://www.pge-adr.com)



# Winery

## PROJECT SUMMARY

210 kW total load shed potential approved  
 \$25,647 incentives  
 Peak Day Pricing, Capacity Bidding Program  
 Project complete  
 DR measure: shutoff glycol refrigeration loop

## PROJECT DISTINCTIONS

Project Costs 100% Covered by ADR Incentives  
 Motivated customer  
 Experience participating in DR manually  
 Worked directly with device manufacturer (Gridlink)  
 ADR Team provided technical guidance

## KEY CHALLENGES

In-house staff installing ADR controls for first time  
 Installation schedule extended



## FACILITY PROFILE

	Building Description <sup>1</sup>	Sq Ft	Incentive <sup>2</sup>	Load Shed <sup>3</sup>
1	Main Showroom	39,200	100%	58%
2	Warehouse 1	173,214	100%	83%
3	Warehouse 2	104,481	100%	84%
4	Warehouse 3	62,089	100%	60%

<sup>1</sup>San Jose, CA

<sup>2</sup>Incentive as a percent of total project cost

<sup>3</sup>Load shed as a percent of total facility demand



# Retail

## PROJECT SUMMARY

4,287 kW total load shed potential approved  
Capacity Bidding Program  
Project complete  
DR measure: energy management system upgrade

## PROJECT DISTINCTIONS

Lighting is large portion of load shed strategy  
Developed with PG&E account representative  
Project Costs 100% Covered by ADR Incentives  
Direct access customer  
Self aggregated architecture

## KEY CHALLENGES

Many sites – 71 similar but unique  
Site conditions varied from audit



## FACILITY PROFILE

71 locations throughout PG&E territory  
3,814 kW Lighting load shed approved  
473 kW HVAC load shed approved  
EMS programming completed by Novar



# Large Office

## PROJECT SUMMARY

221 kW total load shed potential approved  
\$77,350 incentives  
Peak Day Pricing  
Project Complete  
DR measure: wireless pneumatic thermostats

## PROJECT DISTINCTIONS

ADR incentives reduced automation upgrade cost  
Advanced HVAC technology (Cypress)  
DR performance 120% of approved kW in 2014

## KEY CHALLENGES

Coordinate between thermostat and EMS vendor, customer management team

Efficient facility reduced DR potential and ADR incentives to support upgrade project



## FACILITY PROFILE

Office tower in San Francisco financial district  
570,900 square feet  
new wireless thermostats installed on 17 floors  
Incentives represent 22% of project costs  
Load shed represents 14% of baseline demand



# Getting Started

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Total funding available: \$4,667,105

- Building size and location
- Load Shed Strategy
- Data Authorization Form  
(provided by Energy Solutions)
- Enrollment form (provided by  
Energy Solutions)

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