



Outside one of the JC Penney parking structures showing half the floors converted and the other half still with the old, yellowish lighting.

Contract Details

Contract Type:

Energy Efficiency; Energy Savings
Performance Contract

Facility:

1 million sq. feet

Energy Savings:

\$100,379 annually
1,175,399 kWh annually

Energy Project Size:

\$587,000

Summary

Ameresco worked with the Anchorage Community Development Authority to reduce the energy use in local parking garages and enhance the lighting quality for patrons. The improved lighting has made the garages safer and conserves over a million kWh annually.

Customer Benefits

The Anchorage Community Development Authority (ACDA)-EasyPark partnered with Ameresco to increase lighting levels in all public parking areas to improve safety and produce significant energy savings. Pre-upgrade parking structure concerns included lack of adequate lighting output which caused customer safety concerns and ultimately resulted in a loss of business for ACDA. Illumination throughout the parking structures increased by an average of 284% in the main levels and an average of 413% in the stairwells, mezzanines, elevator lobbies, and other areas of the facility. These lighting upgrades required no up-front capital investment by the customer and the savings from the increase in energy efficiency are projected to have the project completely paid off in less than five years.

This project was made possible by a grant from the American Recovery and Reinvestment Act (ARRA). Ameresco has submitted numerous projects for ARRA funding and in the past has performed projects funded in part or whole by various Federal and other grants. Ameresco is a contract holder of the new GSA Schedule – Comprehensive Professional Energy Services (CPES) Blanket Purchase Agreement (BPA), which attests to Ameresco's expertise with Federally funded projects to quickly and effectively perform various energy services and provide documentation and verification of performance.

Accolades

"ACDA-EasyPark was pleased to work with Ameresco on the recently completed parking garage lighting retrofit. Ameresco did a fine job of improving the quality of light on our parking decks, stairwells, elevator lobbies, offices and common areas. In addition, we will save an average of 1,175,399 KWH per calendar year."

*- Rick Onstott
Director, ACDA*

Environmental Benefits

Through ACDA's partnership with Ameresco, ACDA-EasyPark will reduce Alaska's carbon footprint. The annual green benefits from this carbon reduction equal:

- ▶ the reduction of over 894 tons of CO₂
- ▶ the removal of 159 cars from the road
- ▶ the planting of 173 acres of trees
- ▶ the electricity consumed by 101 average-size homes

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Services Provided

Upon being awarded the lighting retrofit project, Ameresco met with ACDA-EasyPark to develop a plan tailored to the project requirements. Ameresco's project team collected past energy use data on-file and researched operating times for energy evaluation. During the final field audits, pre-photometric





About Anchorage Community Development Authority (ACDA) - EasyPark

The Anchorage Community Development Authority is governed by a nine-member board of directors appointed by the Mayor and approved by the Assembly. Two of the nine board members are executive employees of the Municipality. In addition, two Assembly members serve as ex-officio members of the board. The management of ACDA-EasyPark reports to the Board of Directors and the Executive Director reports to the Mayor. Within ACDA and reporting to the Executive Director, are the EasyPark and Development divisions.

Learn more at: easyparkalaska.com.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit ameresco.com and ameresco.com/alaska.



Before the project, lighting levels inside the parking structure were uneven and poor quality, left. After Ameresco completed the lighting retrofit, the illumination levels are even and the quality of light is brighter, right. Patrons find the garages to be safer now.

Services Provided (cont.)

readings were taken to compare against readings at project completion.

Ameresco worked closely with ACDA-EasyPark to develop, design and establish a timeline to suit the customer. ACDA-EasyPark’s objectives were to improve the quality and quantity of light in four facilities, with special emphasis on the parking decks. Improved lighting on the parking decks would draw more parking transactions and, thus, improve the overall occupancy rates in the parking garages. ACDA-EasyPark also wanted to reduce energy use,

increase lamp, fixture and ballast life, reduce electric bills, save on operations and maintenance expenses, and improve color rendering. Ameresco began activities on this project the day after contract execution and the team successfully completed the project within the 90 calendar day time-frame. The lighting retrofit included the installation of various highly efficient fixtures, including over 780 new 78-watt T8 fluorescent lamp lighting fixtures and over 120 new 108-watt T5 fluorescent lamp lighting fixtures, all with new electronic ballasts.

Before implementing the lighting retrofit, Ameresco measured the lighting levels, in footcandles (FC), throughout the structure. Once the retrofit was complete, Ameresco measured the FC levels once again. Results showed improvement of almost 284% in the main garage levels and over 413% in other areas such as stairwells and lobbies.

Location	FC Pre-Upgrade	FC Post-Upgrade	Percent Increase
5th Ave Parking Garage Level 3	60	100	66.67%
5th Ave Parking Garage Level 5	63	98	55.56%
5th Ave Parking Garage Stairwell Mid-landing	1	25	2400.00%
5th Ave Parking Garage Stairwell Floor Level-landing	7	29	314.29%
6th Ave Parking Garage Level 5	55	104	89.09%
6th Ave Parking Garage Stairwell Mid-landing	6	25	316.67%
6th Ave Parking Garage Stairwell Floor Level-landing	6	25	316.67%
6th Ave Parking Garage Lobby	33	65	96.97%
6th Ave Parking Garage Mezzanine	35	62	77.14%
6th Ave Parking Garage Mall Area	20	45	125.00%
6th Ave Parking Garage Elevator Lobby	12	44	266.67%
7th Ave Parking Garage Level 2	53	102	92.45%
7th Ave Parking Garage Mid-landing	1.5	6	300.00%
7th Ave Parking Garage Floor Level-landing	8	67	737.50%
7th Ave Parking Garage Elevator Lobby	25	81	224.00%
JC Penny's Level 3	15	93	520.00%
JC Penny's Level 4	15	95	533.33%
JC Penny's Level 5	13	95	630.77%
JC Penny's Elevator Lobby	25	37	48.00%
JC Penny's D Street Ticket Booth	10	25	150.00%
Average			368.04%

Average of main garage levels 283.98%
Average of other areas 413.30%