Minutes

Energy Management Working Group – Kick off meeting
Hermosa Beach City Hall
5/6/2015
11am – 1pm

Attendees
Cities: Reata Kulcsar, Carson (RK); Grace Huizar, Lawndale (GH); Kristy Morris, Hermosa Beach (KM); Julie Hegvold, El Segundo (JH); Sean Roberts, Manhattan Beach (SR); Sean Larvenz, Rancho Palos Verdes (SL); Ron Dragoo, Rancho Palos Verdes (RD); Mondher Saied, Hermosa Beach (MS)
SBCCOG: Lena Luna (LL), Marilyn Lyon (ML), Amanda Maki (AM)
GSE Solutions, LLC: Greg Stevens (GS)
SCE: Scot Mann (SM), Damon Hannaman (DH)
SCG: Ashley Snyder (AS)

1. Welcome & Introductions

SBCCOG gave an update on the Energy Efficiency Climate Action Plan (EECAP) work. The final draft of the South Bay regional inventory report is currently being completed. Laura Zahn is the new consultant who will be working with the SBCCOG on the EECAP.

SBCCOG gave an update on the increase incentive rates for the SCE Energy Leader Partnership program, which will be effective for new applications submitted April 1st or after. Cities can receive more information from Damon Hannaman (SCE) if needed.

SCE gave an update about the streetlight acquisition process. The $10,000 fee will continue to be accepted until August 15th. Cities are able to talk to Damon Hannaman (SCE) if cities have further questions.

SBCCOG are continuing their Climate Action Plan work for the Transportation, Land Use, Energy Generation and Storage, Greening, and Solid Waste chapters. Draft strategies for the Energy Generation and Storage chapter will be discussed in a future meeting.

2. Energy Project Updates, Demand Response – Cities, SCE/SCG

Carson: continuing their city-wide energy audit and have made revisions on the first draft of the audit report

Gardena: retrofitting the city's safety streetlights using on-billing financing (OBF) and have an induction fixture project for city's exterior lighting

Hawthorne: upgrading the HVAC system at their Memorial Center with a new chiller, cooling tower, and advanced controls

Hermosa Beach: retrofitting exterior lighting throughout the city, including parks and city-owned streetlight, using on-bill financing; developing an RFP to do a solar feasibility study

SCE mentioned its free service to review proposals for solar projects that will take about two weeks and must happen before any contract is signed.

Inglewood: well pump project will include installing a VFD; streetlight project will be utilizing on-bill financing

Redondo Beach: library parking structure retrofit with LED

Torrance: city-wide exterior lighting project is currently finishing up

Overall, approximately 4 million kWh savings total in region.

SCE gave an update about the Direct Install program. New measures are being added to the program, and they are currently waiting for approval. Once approved, SBCCOG will go back to the cities to find opportunities where cities can take advantage of the program. All cities will be able to participate in receiving the new measures, and El Segundo will be able to receive all the measures since they did not participate in the last cycle.

SCG gave updates about a new pilot program for replacing smaller sized boilers. SCG is currently deciding what type of customers the pilot will focus on, which could potentially be school districts or cities. A new transmission lines project is underway and may affect Torrance. Hawthorne's city hall project that had therm savings is closing out, and the city will be looking for more savings in the new Memorial Center project.

SCG continues to offer free trainings, workshops, and seminars for city employees. A schedule can be accessed on the SCG website.

3. Guest Speaker – Sunbelt Controls/Acco

Jim Boyd from Sunbelt Controls gave a presentation on Automated Demand Response (ADR), Integration, Energy Initiatives & Building Management Systems (BMS), and Dashboarding.

Automated Demand Response:

OpenADR is a high level computer to computer communication protocol which was a product of the Smart Grid initiative. Utility suppliers are able to automatically and securely communicate with customer's building systems in order to reduce peak demand.

The reasons for a customer to implement OpenADR include: reduced costs, utility companies willing to incentivize customers to reduce peak demand, and Title 24 requiring controls and equipment to be OpenADR compatible.

The impacts of demand response to customers are controlled by the customers themselves. Demand response has various levels of comfort controls, and the customer can control the set-point relaxation, lighting, and other non-critical items.

Integration:

Considerations for integration of existing buildings include a mitigation plan from the existing system that plans solutions for proprietary and open systems, and integration to other building systems, such as lighting, power/energy monitoring, fire alarm, and access/security.

Considerations for integration when designing a new building include a life cycle philosophy that looks at the cost over the life of the building (training, simplicity, continuous commissioning, energy savings), and integration to other building systems as well.

Open systems have two primary protocols: BACnet and LON.

BACnet is a communications protocol for building automation and control networks and is an ASHRAE, ANSI, and ISO standard protocol. BACnet allows the building automation and control systems for applications to communicate. The BACnet protocol allows the computerized building automation devices to exchange information, regardless of the particular building service they perform. Communication between building automation devices is critical for maximizing building energy efficiency, indoor air quality, and other aspects of a green building (ASHRAE Standard 135).

LonMark/LonWorks is an open protocol developed by Echelon Corporation. LonMark was conceived as a general purpose real-time control technology, which enables "plug and play" interoperability and a single tool set.

Building Management System and Energy:

BMS does impacts energy initiatives. BMS should play a major role in energy strategy, and modern BMS is the easiest way to implement initiatives. BMS can affect scheduling, retro-commissioning, continuous commissioning, optimization, and demand ventilation.

Dashboarding:

Various examples were shown of different dashboards. One example showed a public education system that explains how a solar electric system works to the user. Another example was from the Santa Monica Community College, and it allowed students to see how much energy they were using in the dorms and its environmental impacts of increasing their energy use.

Conclusion:

Considerations when looking into building automation systems include: selection of the appropriate partner with a long term vision and flexibility to change course if necessary, simplicity of the system,

ownership of tools, accessibility to training, web-based versus client server, and ability to get the most out of the system over time.

4.   Other announcements

SCE offers incentives for system installations such as controls incentives and demand response potential, but as Title 24 requirements become implemented, the incentives may stop.

SCG also have incentives for those projects that also have gas savings.

SBCCOG program announcements included the turf removal rebate program and a sanitation district event of the tour of the Joint Water Pollution Control Plant.