EEMIS: Enterprise Energy Management Information System

SBCCOG Board of Directors Meeting
9/25/2014

SOUTH BAY CITIES
COUNCIL OF GOVERNMENTS

SOUTH BAY
ENVIRONMENTAL SERVICES CENTER
South Bay Cities Council of Governments

Acknowledgments

Overview

Los Angeles County
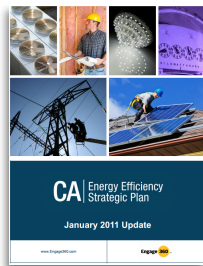*Enterprise*
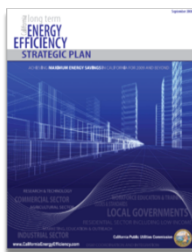*Energy*
Management
Information
System

1. Background

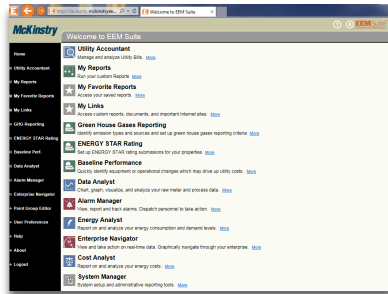2. What is EEMIS?

3. Accomplishments

4. Findings

5. Questions

1. Background

* California Public Utilities Commission's long-term **California Energy Efficiency Strategic Plan (CAEESP)**
  * Local governments lead by example
  * Establish utility bill manager to track municipal energy usage to **plan**, **budget**, and **manage**

2. What is EEMIS?

* Implemented for SBCCOG 15 member cities serviced by SCE
* Leveraged Los Angeles County/ McKinstry EEMIS web-accessible platform
  * Administering EEMIS since 2002 at LA County's facilities

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2. What is EEMIS?

* **Web-accessible utility bill manager that can:**
  * Automate month-end utility bill data
  * Supply timely and credible energy usage and budget information
  * Expedite energy project development
  * Provide ongoing measurement and verification of energy projects
  * Identify opportunities for improved operation and maintenance practices

2. What is EEMIS?

One year of paper bills →

One year of data in EEMIS

Multi-level Bill History

Accts & Mtrs: SCE 9-999-9999-25   Report date: 9/19/2014 10:08:20 AM
Region:: CA   Start period: 2013-1 (Jul-12/13)
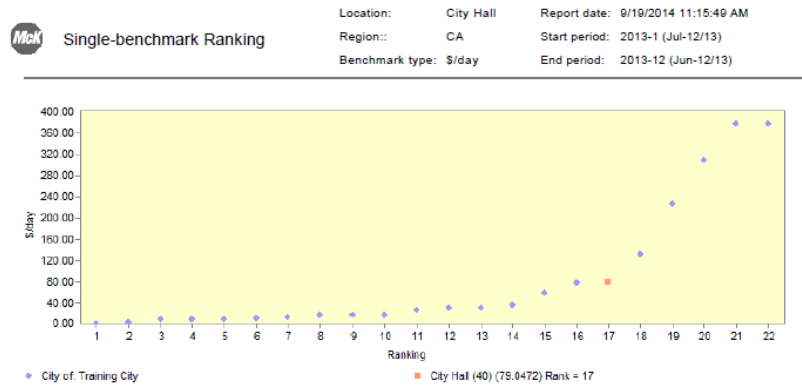Provider: All providers   End period: 2013-12 (Jun-12/13)

Account Number	Accts & Mtrs	Commodity	Unit	2013-1 (Jul-12/13)	2013-2 (Aug-12/13)	2013-3 (Sep-12/13)	2013-4 (Oct-12/13)	2013-5 (Nov-12/13)	2013-6 (Dec-12/13)	2013-7 (Jan-12/13)	2013-8 (Feb-12/13)	2013-9 (Mar-12/13)	2013-10 (Apr-12/13)	2013-11 (May-12/13)	2013-12 (Jun-12/13)	Totals
9-999-9999-25	SCE 9-999-9999-25	Electricity	$	3,978.35	3,273.41	2,874.94	2,050.96	1,815.63	1,550.07	1,483.98	1,350.28	1,673.92	1,207.01	2,091.96	3,704.77	27,055.28
9-999-9999-25	SCE 9-999-9999-25	Electricity	kWh	16,368.00	14,889.60	17,899.70	10,801.80	7,800.00	8,373.60	8,600.00	5,700.00	10,608.40	4,692.60	11,605.00	12,468.60	129,807.30

Note: Data is not prorated to fiscal periods

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2. What is EEMIS?

* Example of report to compare energy use and cost to prior fiscal year

Training City	9-999-9999-25	SCE 9-999-9999-25	Electricity	$	2012	3,351.36	3,360.57	2,730.20	1,889.38	1,293.85	1,242.46	1,228.00	1,138.65	1,314.63	1,401.75	1,877.06	2,737.46	23,565
					2013	3,901.22	3,416.95	2,746.40	2,381.88	1,917.60	1,658.69	1,548.07	1,334.21	1,548.08	2,037.70	2,528.25	3,833.17	28,852
					Variance	549.86	56.38	16.20	492.50	623.75	416.23	320.01	195.56	233.45	635.95	651.19	1,095.71	5,286
					CuSum	549.86	606.24	622.44	1,114.94	1,738.69	2,154.92	2,474.93	2,670.49	2,903.94	3,539.89	4,191.08	5,286.79	5,286
Training City	9-999-9999-25	SCE 9-999-9999-25	Electricity	kWh	2012	15,155.28	15,497.96	14,485.20	12,056.82	10,138.65	10,220.31	10,516.40	9,528.15	10,673.01	10,804.03	13,239.73	13,597.63	145,915
					2013	16,198.68	15,006.12	15,269.09	13,714.83	9,100.78	8,090.15	8,704.83	6,598.62	8,477.51	9,897.95	12,910.34	13,685.43	137,654
					Variance	1,043.40	-491.84	783.88	1,658.01	-1,037.87	-2,130.16	-1,813.57	-2,929.53	-2,195.50	-906.08	-329.38	87.80	-8,260
					CuSum	1,043.40	551.56	1,335.44	2,993.45	1,955.59	-174.57	-1,988.14	-4,917.68	-7,113.17	-8,019.25	-8,348.64	-8,260.84	-8,260
Training City	9-999-9999-26	SCE 9-999-9999-26	Electricity	$	2012	1,884.16	1,830.96	1,351.88	845.85	555.30	470.11	448.34	494.48	585.80	740.88	1,097.49	1,647.24	11,952
					2013	1,898.74	1,863.20	1,459.52	1,070.47	771.56	627.24	566.18	578.97	679.75	730.64	1,049.14	1,573.55	12,868
					Variance	14.58	32.24	107.64	224.62	216.26	157.13	117.84	84.49	93.95	-10.24	-48.35	-73.69	916
					CuSum	14.58	46.82	154.46	379.08	595.34	752.47	870.31	954.80	1,048.75	1,038.51	990.16	916.47	916
Training City	9-999-9999-26	SCE 9-999-9999-26	Electricity	kWh	2012	10,514.63	10,126.28	6,764.13	4,429.51	3,242.48	2,904.27	2,803.76	3,114.62	3,616.38	5,183.69	7,090.14	9,603.96	69,393
					2013	10,550.91	10,323.10	8,247.10	7,088.35	5,360.44	4,321.08	3,527.84	3,188.83	3,806.73	4,434.50	6,128.89	8,021.21	74,998
					Variance	36.28	196.83	1,482.96	2,658.84	2,117.96	1,416.81	724.07	74.21	190.35	-749.19	-961.25	-1,582.75	5,605
					CuSum	36.28	233.10	1,716.07	4,374.90	6,492.86	7,909.67	8,633.74	8,707.95	8,898.30	8,149.11	7,187.86	5,605.10	5,605

2. What is EEMIS?

* Example of benchmarking report among city's facilities

Single-benchmark Ranking

Location:	City Hall	Report date:	9/19/2014 11:15:49 AM
Region::	CA	Start period:	2013-1 (Jul-12/13)
Benchmark type:	$/day	End period:	2013-12 (Jun-12/13)

◆ City of: Training City   ■ City Hall (40) (79.0472) Rank = 17

3. Accomplishments

* **With SBCCOG as Implementer:**
  * Enrolled approximately 2,400 electric accounts into EEMIS with collaborative teamwork from SBCCOG, SBCCOG member cities, Los Angeles County, and SCE
  * Installed real-time energy monitoring at city hall for two cities with over 200 kW demand
  * Identified high Energy Use Intensity (EUI) buildings to prepare facility benchmark reports

3. Accomplishments

* *Continued,*
  * Provided energy data to help cities establish an energy re-investment fund
  * Expedited Energy Action Plan preparation
  * Contributed to cities of Lawndale and Manhattan Beach achieving Platinum under SCE's Energy Leader Partnership program through development of facility benchmarking reports

4. Findings

Example 1:

Finding	Description	FY 2013/2014 Cost
#1 – Community Center	Energy use and cost increase from prior fiscal year	$27,700
#2 – Zero energy use	City paid for no energy use electric accounts – 21 accounts	$5,700
#3 – Low energy use	City paid for low energy use (<50 kWh) electric accounts – 20 accounts	$6,100
#4 – Tariff evaluation	Possible tariff change for traffic control and streetlights on TOU-GS-1 tariff	----
#5 – Third-party agency	City paying for electric account serving third-party agency	$2,100
	Total:	$41,600

4. Findings

Example 2:

Finding	Description	FY 2013/2014 Cost
#1 – Main Library	Energy use and cost increase from prior fiscal year	$16,800
#2 – Zero energy use	City paid for no energy use electric accounts – 15 accounts	$5,000
#3 – Low energy use	City paid for low energy use (<50 kWh) electric accounts – 31 accounts	$9,200
#4 – Tariff evaluation	Possible tariff change for traffic control on TOU-GS-1 tariff	----
#5 – Private Business	City paying for electric bill with meter located on building occupied by small business	$600

Questions?

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