

Successful Commercial Implementation Tactics Revealed

Moderator

Dan Tarrence, Implementation Topic Committee Chair



Implementation Topic Committee

Objective

Provide implementers of Commercial energy efficiency programs tested ideas that can be incorporated into your own programs back home to enhance results.



Implementation Topic Committee

Expectation

As an Implementer (& attendee), please....

- Review the presented tactic for applicability in your program(s);
- What additional information would you need to incorporate into your operation;
- Ask these questions to help make this session productive.



Implementation Topic Committee

Introduction of Panelists

- ***Anita Hagspiel, National Grid***
 - *Whole Building Benchmarking*
- ***Fred Dreher, Franklin Energy***
 - *Limited Time Promotions*
- ***Karen Maoz, KEMA Services Inc.***
 - *Utilizing Trade Allies*



Implementation Topic Committee

Source of Information

- Subset of Implementation Committee focusing on Commercial programs
- Set goal in 2006 of creating a reference guide of successful tactics
- Not too late to join the Implementation Committee



Implementation Topic Committee

Template: Demographic Information

Tactic Name & Type	* Types include: Incentive, Marketing, Markets, Technologies, Design, Delivery, Trade Ally, Approach
Program Name & Type	
Utility/Gov't Agency & State	
Contact person & title	
Email address & phone	



Implementation Topic Committee

Template: Tactic Information

Description	
When was it used?	
Challenges in implementing tactic	
Key concepts for success	
In what situation does it work best	
Cautions if others try to use this tactic	



Implementation Topic Committee

Template: Impacts Information

Participation	
Energy savings	
Market transformation	
Non-energy benefits	
Other	



Implementation Topic Committee

Format of Panel Discussion

- Panelists will provide about 15 minute presentation
- Panelists will take questions immediately following their presentation
- If we have time at the end, we will ask for successful tactics from the audience



Implementation Topic Committee

National Grid's
Whole Building Benchmarking Program for
Commercial and Municipal Customers

Anita C Hagspiel

Program Description

- ◆ **Aligns with National Grid's Energy Profiler on Line and EPA's Guidelines For Energy Management by Helping Customers –**
 - **Assess performance**
 - **Identify improvement opportunities (operating and capital)**
 - **Create an action plan**
 - **Monitor and track energy performance over time**
- ◆ **Enables customers to reduce energy and operating costs**
- ◆ **Leverages National Grid's existing Portfolio of Energy Efficiency Services**
- ◆ **Helps Customers meet important business goals**
 - ▢ **Improving quality and value of operating environment**
 - ▢ **Enhancing occupant comfort and productivity**
 - ▢ **Ensuring proper installation and operation of high efficiency equipment**

Benchmarking Building Criteria

Buildings selected using screening criteria:

- ◆ **Commercial customers of National Grid's New England Territories in Massachusetts and Rhode Island**
- ◆ **Owner responsible for operating expenses**
- ◆ **Owner agrees to sign Memorandum of Understanding**
- ◆ **Building meets ENERGY STAR eligibility requirements**

Building Characteristics

- ◆ **Large commercial buildings**
- ◆ **200-750 kW**
- ◆ **30,000 to 125,000 square feet**
- ◆ **Knowledgeable and available building staff**
- ◆ **>75% building occupancy**
- ◆ **History of efficiency investments**

Project Goals

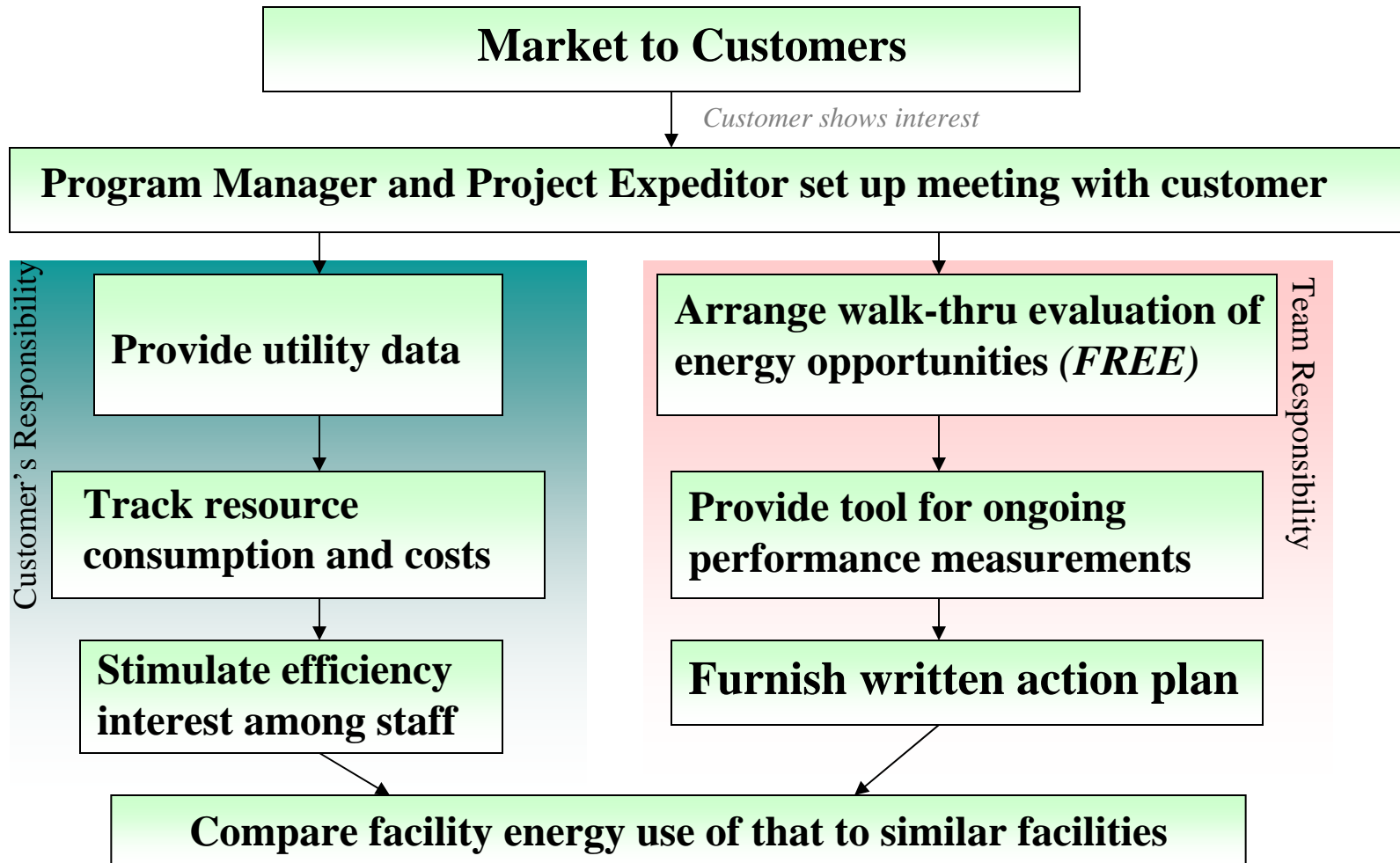
We will do the following for our customers:

- ◆ **Provide free, expert advice on ways to lower energy costs**
- ◆ **Identify and implement cost-effective and energy-efficient projects**
- ◆ **Promote use of Energy Profiler on Line (EPO) and EPA's Energy Performance Rating System for ongoing performance measurement**
- ◆ **Furnish written action plan with following up on recommendations**
- ◆ **Track resource consumption and costs**
- ◆ **Stimulate resource efficiency interest among staff**
- ◆ **Compare facility energy use to that of similar facilities**

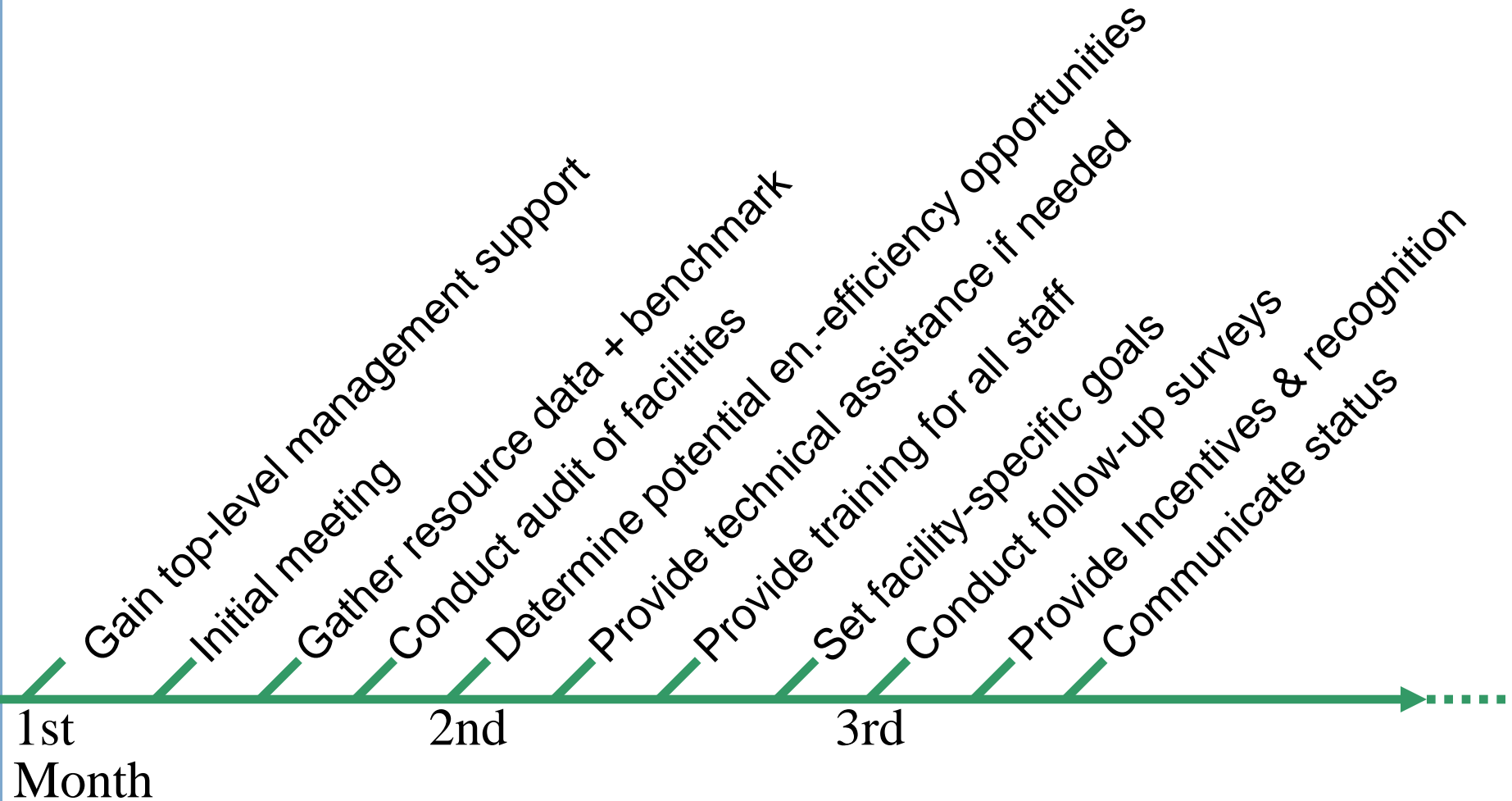
Program Implementation Plan

- ◆ **Peak customer interest with catchy direct mailer**
- ◆ **Gain Top-level management commitment and support**
- ◆ **Review program offerings, rate schedules and billing history**
- ◆ **Gather and organize resource accounting data**
- ◆ **Conduct audits of facilities**
- ◆ **Cultivate support of facility operations and maintenance staff**
- ◆ **Provide training for all staff**
- ◆ **Set facility-specific goals**
- ◆ **Encourage customers to track and monitor energy performance over time**
- ◆ **Conduct follow-up facility efficiency surveys**
- ◆ **Provide incentives and recognition**
- ◆ **Communicate program status**

Process Overview



General Project Timeline



Scope of Work

Phase/Tasks	Deliverable(s)
<p>Team obtains:</p> <ul style="list-style-type: none"> ◆ Electrical billing data for previous 12 months (Nat'l Grid) ◆ Twelve months of billing data for water, gas and oil (customers) <p>All data entered into Energy Star Benchmarking Tool. Site scored relative to like facilities</p>	<p>Data Gathering and Entry</p>
<p>Team meets with Customer to discuss key aspects of operation of facility.</p>	<p>Customer Interview</p>
<p>PEX/T/A Vendor tours facility and evaluates the efficiency of existing building systems. If opportunities are identified that will require further engineering and evaluation, PEX presents them to National Grid for potential Technical Assistance.</p>	<p>Audit Report</p>
<p>PEX/T/A Vendor provides detailed report, which presents the results of the benchmarking data and summarizes overall energy usage and costs. Report also describes facility and operations and identifies most viable energy savings projects.</p>	<p>Scope of Work and Cost Proposal</p>

Scope of Work, continued

Phase/Tasks	Deliverable(s)
<p>Energy efficiency measures are listed and described including:</p> <ul style="list-style-type: none">◆ cost estimates◆ savings estimates◆ potential incentives◆ simple payback	<p>List of Findings including all supporting calculations and data</p>
<p>Team does the following:</p> <ul style="list-style-type: none">◆ reviews program offerings, rate schedules and billing history◆ gathers/organizes resource accounting data◆ conducts audits◆ cultivates support of facility operations and maintenance staff◆ provides training for all staff,◆ sets facility-specific goals◆ conducts follow-up facility efficiency surveys◆ provides incentives and recognition◆ communicates program status	<p>Implementation Plan</p>

Recap of Program Deliverables

Deliverable	Description
Audit	<ul style="list-style-type: none">♦ Audit Report♦ Investigation Scope or Work and Cost Proposal♦ Memorandum of Understanding
Investigation	<ul style="list-style-type: none">♦ List of Findings♦ Capital Improvement Opportunities♦ Implementation Plan
Implementation	<ul style="list-style-type: none">♦ Implementation Verification Report♦ Documentation♦ Training Check List

Questions and Contacts

Program Team Contact Info:

- ◆ **National Grid:**

- ☰ **Anita Hagspiel – 1-508-421-7221**

Limited Time Promotions

AESP National Energy Services Conference

Fred Dreher – Franklin Energy (We Energies)
January 31, 2007



Background

- Energy Efficiency in Wisconsin
 - Focus on Energy – Long term market transformation centered program
 - Energy Incentives from We Energies – Short term resource acquisition centered program
 - Both programs have shared territory
- We Energies/Focus developed joint prescriptive measures to reduce confusion
- Differing incentive budgets \Rightarrow lowest \$\$ for 50% split

High Bay Fluorescent Promotion (cont.)

- HBF activity languished under the \$35/fixture rebate
- Cold HBF proposals sitting with customers
- Limited time promotion could help close these proposals
- Length of promotion – 120 days
- \$35/fixture \Rightarrow \$70/Fixtures

Positive Impacts

- 6.6 MW saved
- “Low” to “no” free-ridership
 - Just enough time for cold proposals to get implemented
 - Tough to get new proposals implemented in 120 day time frame
- Enough time for distributors to overstock

Positive Impacts (cont.)

- Excellent goodwill and customer service for We Energies
- Spillover marketing by manufacturers/distributors
- Increased program awareness among lighting contractors

Negative Impacts

- Constant pressure from customers and Trade Allies to expand deadline
- Getting all parties to understand procedures and terms/conditions
- Dry period after promotion

Other promotions

- RTU Bonus: \$75/Ton (up from \$25)
- GREM/PTAC Bonus: \$100/Room + \$75/Unit (up from \$50/Room, \$50/unit)
- Consultant/Engineer Bonus - \$100/kW installed for non-lighting projects.

Promotions for Your Programs

- What measures would you like to see stimulated?
- How does your lighting to non-lighting ratio look?
- Does your new program need a kick start for this year?

we energies®



Utilizing Trade Ally Services via Web-based Program Implementation

Karen Maoz – KEMA Services, Inc.

Two Programs – Small Commercial Market Segment

- Business Energy Services Team (BEST)
 - Focused on lighting retrofits
- Cool Biz
 - Focused on refrigeration retrofits
- Implemented in California
 - Currently in its third program cycle for BEST
 - First program cycle for Cool Biz
 - Served over 3,000 customers from 2002-05 under the BEST Program

Program Overview

- Turnkey program offering services to a market segment previously under-served by utility programs:
 - Marketing
 - Energy education
 - Site-specific energy analysis
 - Financial incentives
 - Equipment procurement
 - Installation services
- Serve small commercial customers in specific geographical areas and/or market segments

Features of Program

- Contractor-driven
 - Proper licenses and insurance
 - Offer program warranties
 - Sign contractor agreement
- Door-to-door marketing
- High incentives, yet cost-effective
- Standard Pricing
- Multi-step process including inspections
- Web-based software

Key Website System Features

- Proposal Generation
 - Proposal Approval
 - Program Form Generation
- Scenario Analysis
- Automatic Email Notification
- Project Status Tracking

System Enables Consistency/Communication Between Contractors and KSI

- Contractor enter data
 - Database is accessible to contractors and KSI
- System calculates savings and incentives
 - Standardized assumption tables on equipment specs and costs
- Database is the basis for
 - Contractor prints proposal/agreement for signature
 - Downloadable forms
 - KSI QA, reporting, and invoicing tasks

Samples of System Screens

Business Energy Services Team



HOME

- Project Index
- Enter New Proposal
- Download Blank Forms
- Current Proposal Contractor Data
- Log Out



Hello, Contractor

[BEST Website](#) for East Bay Energy Watch has been launched! Contact the BEST Program Team if you experience any problems or would like to ask for assistance.

Please specify proposal ID to search

Proposal ID:

Business Energy Services Team



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- [Project Index](#)
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Hello, Contractor

Proposal Listings

- Project Initiated**
- Pending Customer Acceptance**
- Pending Work Order**
- In Progress**
- Completed**
- All Projects**

Proposal ID	Facility Name	Number of items in inventory	Number of items w/o recommendations
-------------	---------------	------------------------------	-------------------------------------

1


No data available

Color Legend: Contractor Initiated Proposals in blue font
 XENERGY Initiated Proposals in black font

ProposalInventoryC - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://websafe.kemainc.com/BEST2006/proposal_inventory_c.aspx?versionid=2

Business Energy Services Team 

Inventory Summary
Proposal ID: 2-1; Facility: Test Facility; Address: Facility Address 1

Select version:

Total kW reduced:	0.95	Total annual Dollars Saved:	\$709.01
Total annual kWh Saved:	5582.72	Total Project Cost:	\$1069.20
Total annual Therms Saved:	0.00	Total Rebates:	\$691.80
Total lighting inventory items:	2	Total Customer Payment:	\$377.40
Total lighting inventory items w/o Replacements Selected:	0	Payback (yr):	0.53
Total other measure items:	2		

Inventory

Comprehensive retrofit, where all lighting fixtures in the facility will be retrofitted

Partial retrofit, where some of the lighting fixtures in the facility will be retrofitted

NA

Lighting Inventory **Other Measure**

Item #	Item Location	Quantity	Existing Fixture Description	Replacement Fixture Description	New Lighting Control	Annual Dollar Savings	Total Cost	Maximum Rebate	Rejected Item
<u>1</u>	Kitchen	4	60W Inc lamp	15W CF-SCRW	0	71.32	44.00	12.60	<input type="checkbox"/>
<u>2</u>	Kitchen - Fluor	8	4-4' 34/40W hybrid	2-4' 32W-T8-HPEB1-R	0	228.23	595.20	499.20	<input type="checkbox"/>

Business Energy Services Team



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 - Edit Customer/Facility
 - Proposal Status
 - Inventory Summary
 - Edit Lighting Inventory
 - Lighting Recommendations
 - Other Recommendations
- Contractor Data
- Log Out

Lighting Inventory (items 1-15)

For 2, Test Facility Facility. Address Facility Address 1 Facility City 12345 CA

Inventory Item*	1	
Inventory Name:	Kitchen - CFL	
Fixture List Filter:	Incandescent	and <100W
Light Type:*	60W Inc lamp	% Burn Out (Enter only if >10):
Location:*	Kitchen	Outdoor:*
Number of fixtures:	4	Operating Hours Per Week:*
Existing Controls:*	Small Area Switched	Percentage of Use On Peak:*
Ladder Accessible:*	Yes	PCB Ballast:*
Remarks:		
Save		

*Fields marked by asterisk are required.

Inventory Item*	2	
Inventory Name:	Kitchen - Fluor	
Fixture List Filter:	4ft T12	and 4 lamp
Light Type:*	4-4' 34/40W hybrid	% Burn Out (Enter only if >10):
Location:*	Kitchen - Fluor	Outdoor:*

Business Energy Services Team



HOME

Enter New Proposal

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Current Proposal

• Download Proposal Forms

• Edit Customer/Facility

• Proposal Status

• Inventory Summary

- Edit Lighting Inventory

- **Lighting Recommendations**

- Other Recommendations

Contractor Data

Log Out



Lighting Recommendations

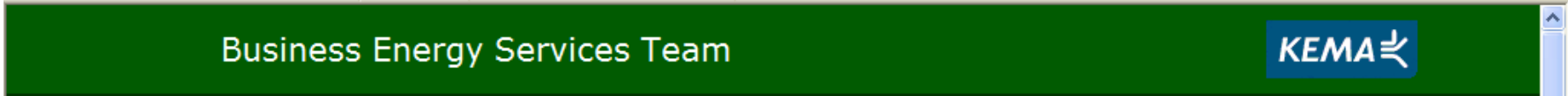
Proposal ID: 2-1, Test Facility Facility. Address Facility Address 1 Facility City 12345 CA

Lighting Inventory Recorded for this Facility: Kitchen - CFL

Inventory Number: **1**
 Location: Kitchen Fixture Quantity: 4
 Existing Fixture: 60W Inc lamp Existing Control: Small Area Switched
 Operating Hours Per Week: 60 Existing Total Connected Load: 0.24 kW
 Percent Used On-Peak: 100 Total Lumens: 3460
 Indoor: Yes Ladder Accessible: Yes
 Remarks:

Recommendations

Choose one	Description	Material Cost	Labor Cost	Other Cost	Total Cost	Max. Rebate	\$/yr Savings	Payback (yr)	% Original Lumen
<input type="radio"/>	No Replacement	0	0	0	0	0	0	0	0
<input checked="" type="radio"/>	15W CF-SCRW	\$24.00	\$20.00	\$0.00	\$44.00	\$12.60	\$71.32	0.44	104.05
<input type="radio"/>	15W CF-SCRW/R	\$48.00	\$20.00	\$0.00	\$68.00	\$12.60	\$71.32	0.78	130.06
<input type="radio"/>	15W CF-HW	\$76.00	\$68.00	\$0.00	\$144.00	\$117.00	\$71.32	0.38	104.05
<input type="radio"/>	13W CF-SCRW	\$24.00	\$20.00	\$0.00	\$44.00	\$13.16	\$74.49	0.41	104.05
<input type="radio"/>	13W CF-HW	\$76.00	\$68.00	\$0.00	\$144.00	\$122.20	\$74.49	0.29	104.05
<input type="radio"/>	13W CF-SCRW/R	\$48.00	\$20.00	\$0.00	\$68.00	\$13.16	\$74.49	0.74	130.06
<input type="radio"/>	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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Proposal status information

for Proposal ID 2-1, Test Facility Facility. Address Facility Address 1

Select version: v

Assigned to: Karen Lighting Company 510-891-0446 Auditor:

<input checked="" type="checkbox"/> Signed access agreement received by XENERGY Date: <input type="text" value="9/25/2006"/> Modified by Admin	Notes: <input type="text"/> <input type="button" value="Save"/>
<input checked="" type="checkbox"/> Proposal is generated Date: <input type="text" value="9/6/2006"/> Modified by karen <input type="checkbox"/> Contractor initiated proposal <input type="checkbox"/> Proposal generated is Non Standard <input checked="" type="checkbox"/> Proposal is approved by XENERGY Date: <input type="text" value="9/6/2006"/> Modified by karen	Notes: <input type="text"/> <input type="button" value="Save"/>
<input checked="" type="checkbox"/> Proposal Sent or Downloaded Date: <input type="text" value="9/25/2006"/> Modified by Admin <input checked="" type="checkbox"/> Proposal sent to customer Date: <input type="text" value="9/25/2006"/> Modified by Admin <input checked="" type="checkbox"/> Proposal is signed by the customer and received by XENERGY Accepted proposal's version: <input type="text" value="2-1"/>	Notes: <input type="text"/> <input type="button" value="Save"/>

Business Energy Services Team



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Download Forms



[Customer Participation Agreement](#)

[Download in Spanish](#)

Includes final proposal details (i.e., all measures proposed for installation and terms and conditions) with pre-filled data for customer to approve the project.



[Pre-Inspection Form](#)

Pre-filled form to be used during pre-inspection by XENERGY inspector.



[Project Completion Form](#)

[Download in Spanish](#)

Submitted by contractor after installation of measures per work order form.



[Post-Inspection Form](#)

Pre-filled form to be used during post-inspection by XENERGY inspector.



[Monthly Utility Project Completion Report](#)

Input the reporting period.

Month / Year



Download Acrobat Reader.

Sample of Downloadable Forms



East Bay Energy Watch
2006-2008 Business Energy Services Team
Participation Agreement

Page 1 of 5

Time stamp: 8/31/2006
 Facility Name: Test company
 Facility Address: 492 ninth street, Oakland, CA, 94607
 Proposal No: 5306-1 Work Order No: WO5306

Proposal/Agreement

Facility Information

Facility Contact TestF TestL
Telephone, Fax 510-891-0446, 510-891-0440
Email test@kema.com

Decision Maker

Contact Name TestF TestL
Telephone, Fax 510-891-0446, 510-891-0440
Email test@kema.com

Total kW Reduced 0.00
 Total Annual kWh Savings 0
 Total Annual Therm Savings 0.00
 Total Annual Dollar Savings \$0.00

Total Project Cost \$0.00
 Total Rebates \$0.00
Total Customer Payment \$0.00
 Payback (in years) 0.00

Program Information (fill in any missing data):

Electric Account Number: 1234567
 Own or Rent: Rent

Less than 10 Employees (Y/N): N
 Primary Language not English N

In order to participate in East Bay Energy Watch's Business Energy Services Team Program, Customers must read and initial the following:

_____ **Customer Disclosure (Initial):**

California consumers are not obligated to purchase any full fee service or other service not funded by this program. This program is funded by California utility ratepayers under the auspices of the California Public Utilities Commission.



Thank you for your attention!

Program Contact Information

Phone: 1-800-576-6405 or 1-800-726-6548 or 510-285-4111

Email: best@kema.com, coolbiz@kema.com

Website: www.californiabestprogram.com, www.cacoolbiz.com

Contact Information

510-891-0446, karen.maoz@us.kema.com