

“Benchmarking 1000 Facilities ... No Problem”



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Product Manager
Aclara Software
(formerly Nexus Energy Software)
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Challenges

- Ratings Delivery
- Customer Motivation
- Program Participation



What's the Benchmark Rating?

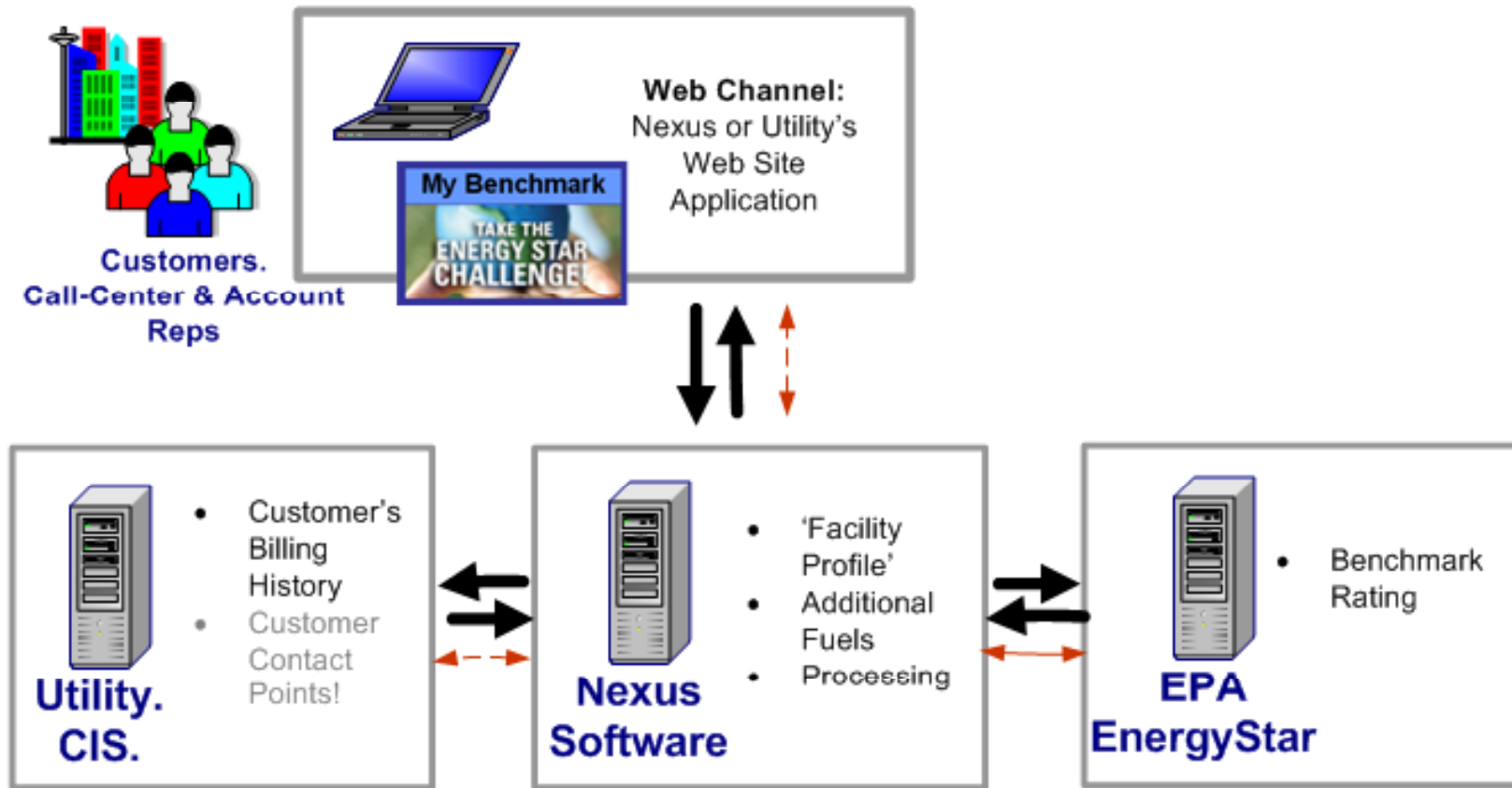
- An “Efficiency Score” for a Building
- Helps utility customers and energy managers assess building's energy use, relative to similar buildings nationwide.
- Rating system's 1–100 scale provides rapid indicator of building performance.

Objective of our deployment initiative:

- Provide ENERGY STAR Ratings
- With other energy analytics & KPI's
- To Promote customer participation in Utility & EPA programs



Delivery Process



Web Self-service Channel: *Dashboard*



Customer Service > Residential > Business > Farms & Other > Programs

John Doe (My accounts) [\(Update Profile\)](#) Service Details at: 123 Main Street, City, ST 12345

Account#: 123456678

Bill Center | Energy Center

Bill History | High Bill Help Center | Payments

Business Bill Center

Welcome! Below is your energy bill for your business. Review your energy usage and factors that caused changes from your last bill.

Account Summary
12345656 [View this bill](#)

Account Status as of 10/26/04
Last Payment - \$197.65
Received 9/12/2004 - Thank you!

Account Balance \$218.33
[Payment History](#) [Make payment](#)

Bill Summary ending 10/15/2004
Previous balance \$0
Total current charges \$218.23
Amount Due Oct 31, 2004 \$218.33

Get help controlling facility costs and **reduce future bills.**

Bill Highlights
123 Main Street

- The weather increased your bill \$13 - \$22.
- Your gas usage increased for this bill.
- A past due amount of \$4.35 is included in this bill.
- An estimated gas reading was used for this bill.

Analyze your bill
How did the weather affect your facility bill?

How does my usage compare?
123 Main Street

Usage Comparison

Month	Electric Use (kWh/day)	Gas Use (therms/day)
October 2004	17.2	1.2
October 2003	12.2	0.9

[View Bill History](#)
How did the weather affect your facility bill?

How does my business use energy?
123 Main Street

Monthly Energy Distribution

Control your business energy costs
Lighting is your facility's highest energy expense. Get specific recommendations that will lower your business bills in the Business Energy Center.

When does my business use energy?
123 Main Street

Average Energy by Day of Week

Choose meter: 123455 - GAS

More meter views
View charts for other meters at your business.

Load Shift Calculator
Identify numerous options to shift your facility's energy usage to lower cost periods.

Bill Summary & Payment

Bill Analysis

My Benchmark

TAKE THE ENERGY STAR CHALLENGE

Billing History

Multiple Accounts & Premises

Efficiency Analysis

AMI Presentation

Rate Analysis

Personalized Messaging: Promotions, Programs



Print & e-Mail Channels

Goals & Priorities

Annual Savings Goal
For Hotel Site #234
\$3,800
25% Better than the Benchmark "Average".

Best Places to Find Your Energy Savings

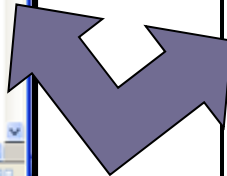
Rank	End-Use
1	Heating
2	Water Heating
3	Laundry
4	Cooling
5	Inside Lighting

If You Meet Your Energy Savings Goal ...

Your New Cost: \$11,500

Minimum of similar facilities: \$4,599 | Maximum of similar facilities: \$26,058

Your Est. Cost: \$15,332



To view this email as a web page, go [here](#).

UTILITY COMPANY Energy Saver

Quick Links

- Energy Efficiency Tools
- Energy Efficiency Programs & Rebates
- Green Power
- About Your Rates
- My PSE Account

Quick Tips

- Lower the thermostat.** Keep employees and customers comfortable by lowering the temperatures one degree at a time until they have a chance to get used to the cooler temperatures.
- Let sunlight in by opening curtains, blinds and shades over windows facing the to helps keep your offices warm and reduce heating needs.** At night or when the sky is overcast, keeping drapes and curtains closed will help keep the warmth indoors.
- Proper insulation in walls,**

Your Account Manager: Sally Jones
Telephone: 555.555.5555
Email: sally.jones@pse.com

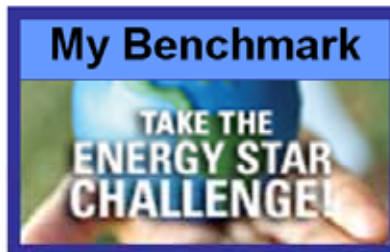
Your Top Ways to Save on Heating

We've put together the **Top Ways You Can Save** energy and money for your business.

- [Lower the thermostat setting](#) save between \$30-\$50 per year
- [Avoid Heating Unoccupied Areas](#) save between \$15-\$24 per year
- [Regularly Maintain Your Heating System](#) save between \$94-\$157 per year

Dishwashers and Ice Machines join the ENERGY STAR® family

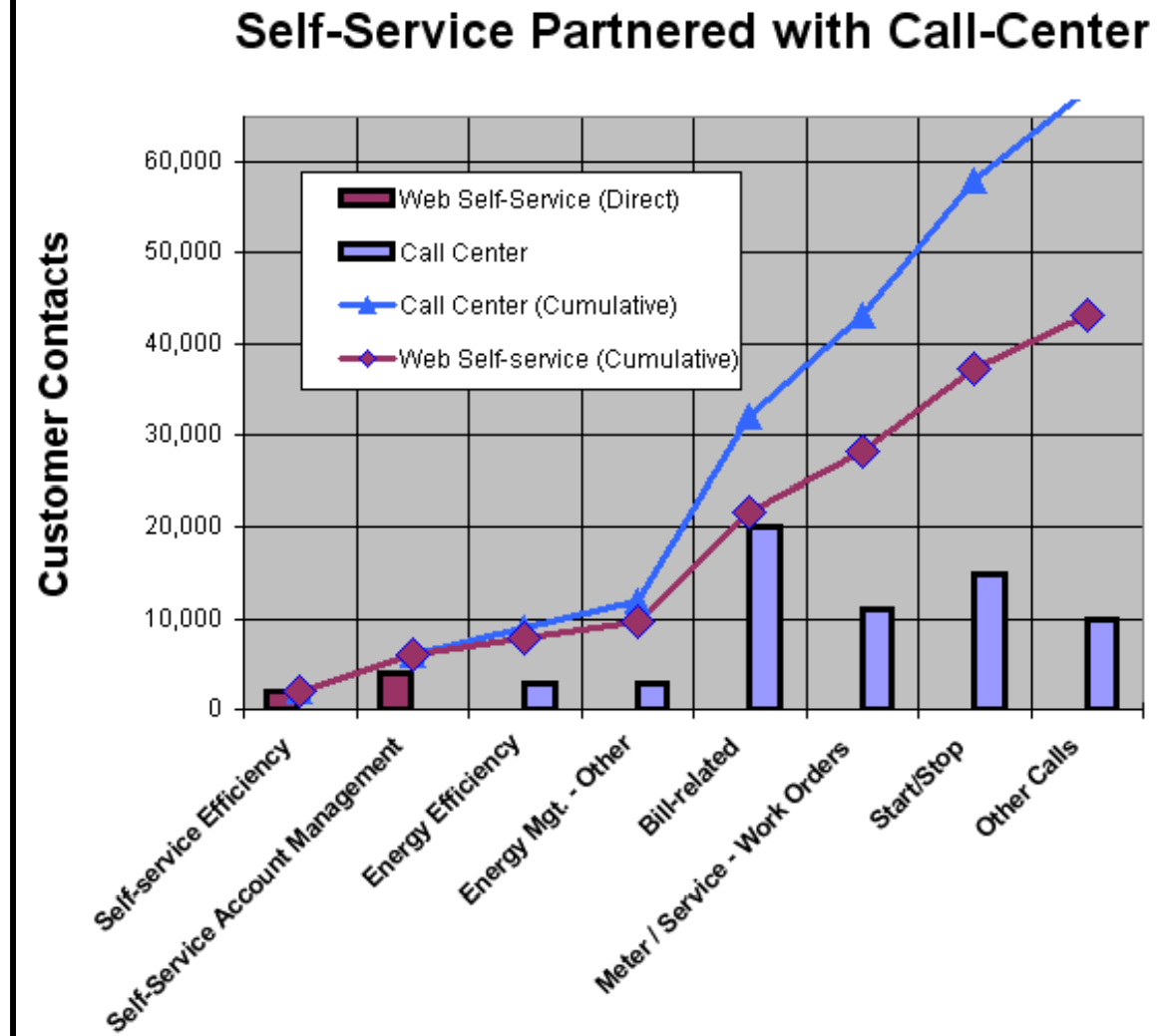
In July the EPA announced specifications for commercial Dishwashers and Ice Machines that would allow them to earn the ENERGY STAR label. The Dishwasher and Ice Machine join a growing list of commercial grade appliances to be given the environment friendly label. The expectation is that more efficient





Starting with Thousands of Contacts ...

- Multiple Channels
- Multiple Agents:
 - Web
 - Call-center
 - Account Rep.
- 50,000 + Contact Opportunities per Year
 - About 50% - “high energy costs”





Delivering Thousands of Ratings ...

- No Problem.
- Multi-pronged approach / engine:
 - Multi-channel.
 - Roles-based.
 - Service Oriented Architecture (SOA)

The ENERGY STAR Challenge

Build a Better World

The ENERGY STAR Challenge is a national call-to-action to improve the energy efficiency of America's commercial and industrial buildings by 10 percent or more.

We can all do our part — Take the ENERGY STAR Challenge and use the free Challenge Toolkit to help build a better world.



Next ... An Even Bigger Challenge:

- Make Each Benchmark Count!
 - Each Benchmark as a means for each *facility* to engage & succeed in the *challenge* to Build a Better World

- Customer Motivation.
- Ease of Program Participation.

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Customer Motivation

- “What’s Your ENERGY STAR Rating?”
- “What’s Your Academic Rating?”
- “What’s Your Credit Rating?”

- “How much is that poor rating costing me?”
- “What’s the value of a better rating to me?”

ENERGY STAR Labeled Buildings

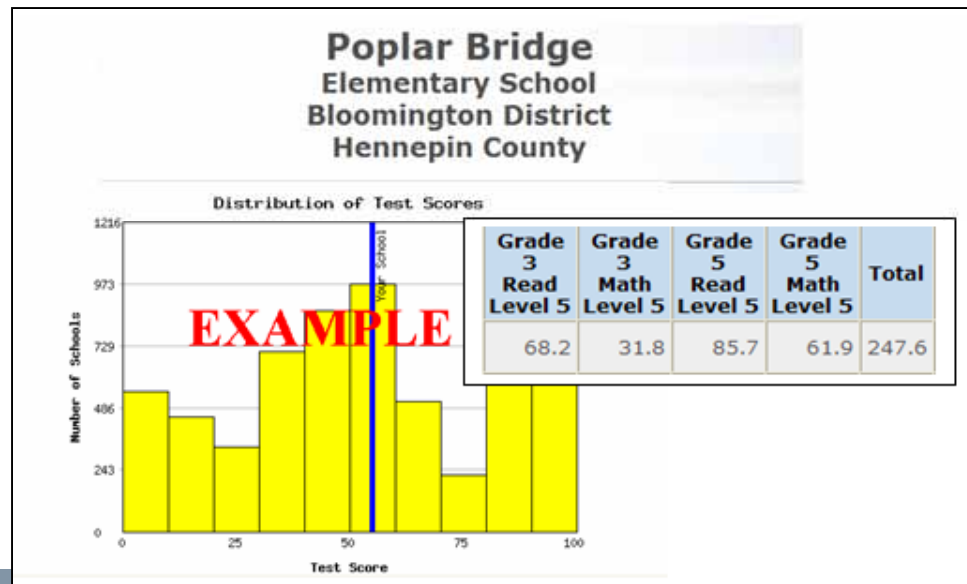
Building Owner:
Bloomington Public School

Year Labeled: 2003
Score (by years): 76

Space Type: K-12 School

Total Floorspace: 71815 sf
Year Constructed: 1962
Energy Intensity: 63.3 kBtu/sf/yr

Bloomington Poplar Bridge Elem.

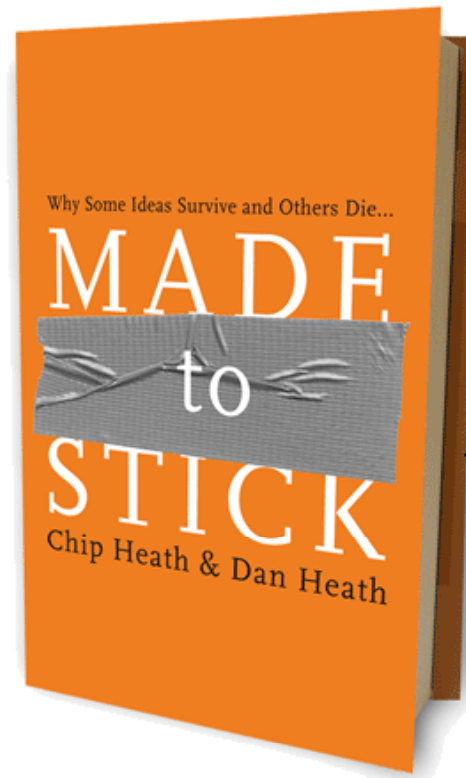




Customer Motivation: “Make it Stick”

- “What’s Your ENERGY STAR Rating?”
- “What’s Your Academic Rating?”
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S
Simple
Unexpected
Concrete
Credentialed
Emotional
Story



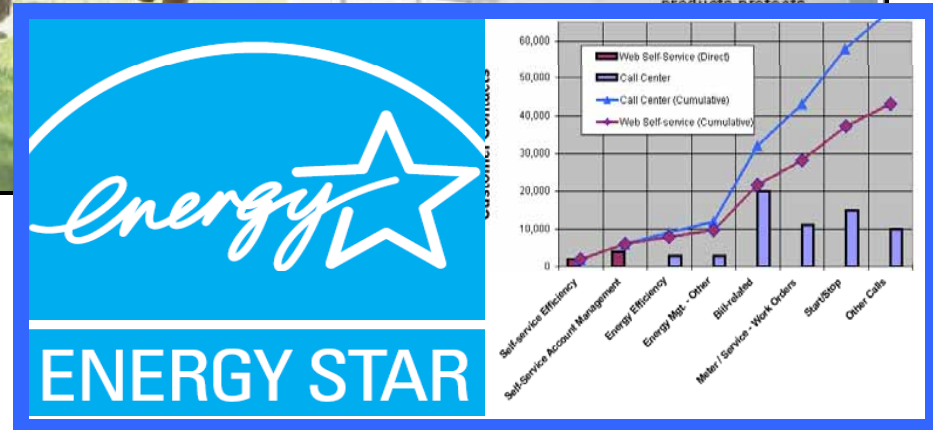
ENERGY STAR's Rating Helping Programs "Stick"

- Programs Deliver Energy Impact
- More "Hooks"
 - For increased program enrollment & participation



"SUCCESS":

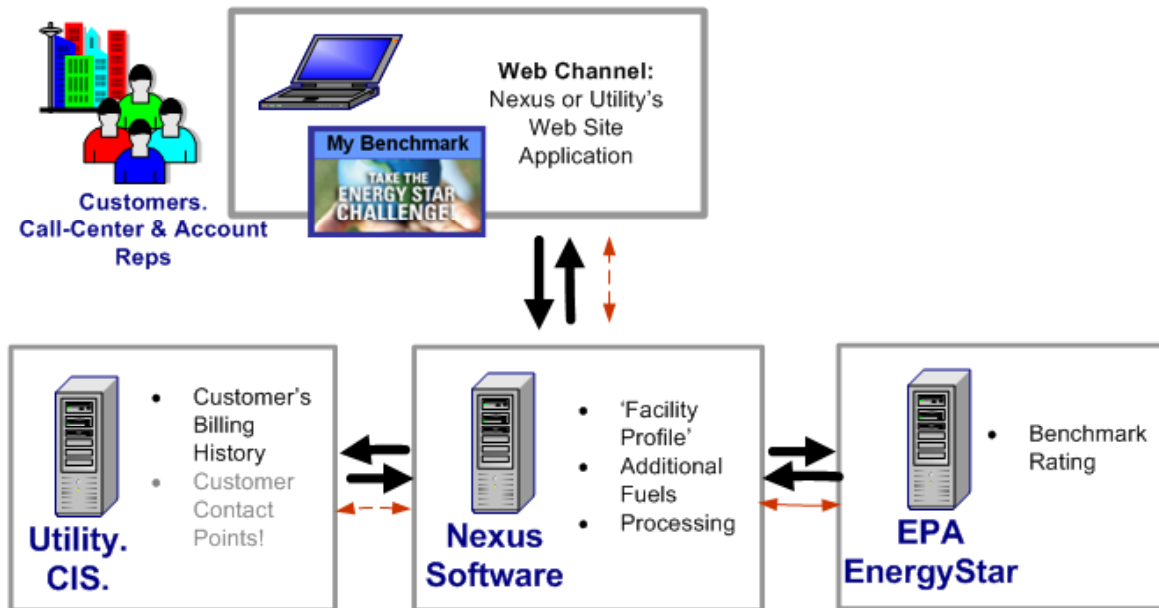
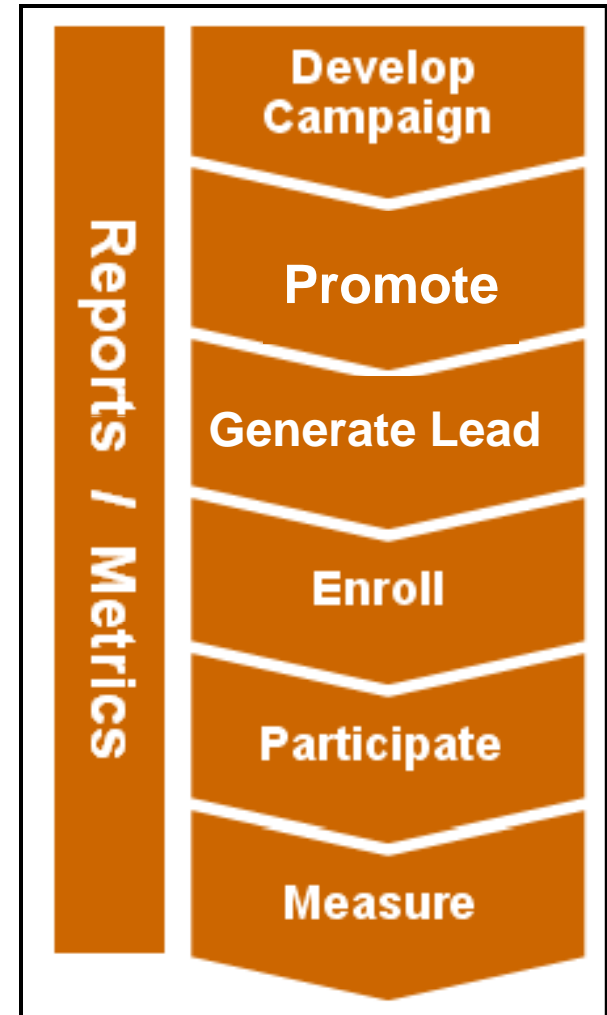
- Simple
- Credible / Credentialed
- Concrete
- Story: "Starts at Home & Continues at Work"





“Click” to Participate

- Leverage Integration Points & Services
- Secure Electronic Transactions
- End-to-End





Effective Delivery of ENERGY STAR Ratings

Challenges:

- Delivery
- Customer Motivation
- Program Participation

- Multi-pronged
- Personalized
- “Stick”
- “Click”

- **Multiple Channels. Multiple Roles**
 - Many pathways. Many agents.
- **“Make It Stick”**
 - “SUCCEsS”
 - Meaningful, motivational presentation
 - Personalized messaging & key performance indicators (KPI’s)
- **“Click & Go!”**
 - Transactional. End-to-End.
 - Easy to sign-up & participate in EPA & Utility programs
- **Many Software Enhancements Q2 2008**

Thank You



**Delivering Whole-Building Performance:
Benchmarking, Comprehensive Resources
and Portfolio Management**

**Xcel Energy (Minnesota)
Commercial Real Estate Efficiency (CREE)**

Mark Jewell
mjewell@realwinwin.com

AESP's 18th National Energy Services Conference & Expo
January 31, 2008

**Commercial Real Estate & Energy Efficiency
The Backstory**

- CRE can be a "hard-to-reach" sector
 - ✓ The building is the business...but plenty of other priorities
 - ✓ Understanding who pays, who benefits
 - ✓ Making decisions based on myths instead of math
 - ✓ Coping with decentralized decision-making

CRE, ENERGY STAR and CREE

- CRE-centric program design elements
 - ✓ Low-cost, low-effort paths to getting managers' attention
 - ✓ Facilitated communication up/down decision-making chain
 - ✓ Escalated engineering effort based on demonstrated potential
 - ✓ Interdisciplinary engineering and financial analyses
 - ✓ BOMA engagement to help w/program design & recruitment
- ENERGY STAR delivers an energy performance score
- CREE provides the roadmap to a higher score
 - ✓ Step-by-step guidance on retrofit and RCx measures

Key Energy Conservation
Opportunities Identified

Controls

- ✓ Night setback and "optimum start"
- ✓ Outside air (CO² sensors)
- ✓ Mixed air setpoint

Heating Equipment

- ✓ Cost per BTU of heat output
- ✓ Warm-up strategy
- ✓ Condensing Boilers

Cooling Equipment

- ✓ Water-cooled DX vs. air-cooled DX
- ✓ VFD Compressors
- ✓ Water-side economizer

Pumps

- ✓ VFDs (no reset)
- ✓ Right-Sizing vs. Throttling

Key Energy Conservation
Opportunities Identified (cont'd)

Fans

- ✓ VFDs (no reset)
- ✓ Fan-powered VAV (series or parallel)

Lighting

- ✓ T-8's, CFLs, LEDs, etc.
- ✓ Light levels

Garage Ventilation

- ✓ Carbon monoxide controls
- ✓ Makeup air

Commercial Real Estate Efficiency
Preliminary Findings Report

- ENERGY STAR Benchmarking
- Remote Engineering Assessment
 - ✓ E-mailed survey form; follow-up interview w/Building Engineer
- Preliminary Leasing Questionnaire
 - ✓ E-mailed survey form; follow-up interview w/Property Manager
- One-Day Engineering Walk-through

Commercial Real Estate Efficiency
Preliminary Findings Report (cont'd)

- Deliverable is the "Preliminary Findings Report"
 - ✓ Engineering overview and various rankings
 - ✓ Recommended retrofit and retrocommissioning measures
 - ✓ Energy Conservation Opportunity Summary Form
- Customer cost is \$3,500 after Xcel Energy (MN) rebate

Commercial Real Estate Efficiency
Investigation Report

- Investment-grade engineering analysis performed by Technical Services Provider (TSP)
- Financial analysis of landlord/tenant costs/savings allocation performed by RealWinWin (NOI Builder® study)
- Deliverable is the "Investigation Report"
 - ✓ Detailed analysis of potential measures (retrofits & RCx)
 - ✓ Financial analysis of landlord/tenant impacts

Commercial Real Estate Efficiency
Investigation Report (cont'd)

- Customer cost varies w/study's complexity & TSP selected
 - ✓ Xcel Energy will pre-approve a rebate up to 50% of the study cost, not to exceed \$20,000
 - ✓ NOI Builder® analysis is fully funded by Xcel Energy
- 30% bonuses available for implementation rebates

Commercial Real Estate Efficiency
Program Highlights

- ❖ Over 60 participating buildings
- ❖ Over 21 million square feet in the program
- ❖ More than 500 measures identified
- ❖ Over 20 gWh identified in potential savings

Questions?

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mjewell@realwinwin.com
