



# FREE MONEY!: Working with Utilities to Make Your Energy Efficiency Dreams Com True

May 28, 2015

# Today's Presenters

- Ken Black, Co-chairman, E Source
- Mike Ellinger, Whole Foods Market
- Juliann Rogers, Director of Energy, CKE Restaurants Holdings Inc.

# Overview and Agenda

- Welcome and Overview
- Setting the Stage: Utility Incentives Landscape (E Source)
- Success Story: Partnering for Grocery Store Efficiencies
- Success Story: Efficient Broilers in Quick-Serve Restaurants (CKE)
- Q&A/ Discussion

# Setting the Stage: Utility Incentives Landscape

**Ken Black, E Source**



**E Source**

# **Free Money: Working with Utilities to Make Your Energy Reduction Dreams Come True**

**Kenneth Black**

Co-Chairman, E Source

DOE Better Buildings Summit

May 28, 2015

# Who is E Source?

- Research and advisory firm with 30 years utility experience
- Over 85 staff with headquarters in Boulder, CO
- Membership-based
- Focus is on the *retail side* of electric & gas utility industry



E Source



# Our customers

- Electric/Gas utilities
- Government including DOE, EPA
- Non-Governmental Organizations
- Fortune 500 companies
- Consultancies
- Vendors of products/services sold to utility industry
- 75% of top 100 electric utilities in US
  - 2/3's of all electricity sold in US flows through our utility customers
- 91% of all Canadian electric utilities
- 58% of top 100 gas utilities



# E Source Provides

- Tools, research services, advice, and consulting
- Unbiased and actionable research
- Case studies and best practices
- Who is doing what?
- What works and what doesn't
- State of the industry
- Independent assessments and benchmarking
- We help filter the torrent of information in the marketplace





# What I Will Talk About Today

- Utility industry undergoing gut wrenching change
  - Flat and declining revenues
  - Renewables
  - Market changes
- DSM trends that will affect you
- Approaches you might consider



# DSM Trends

- Goals continue to rise in many states, but challenges in others (e.g. OH, IN, FL, AZ)
- In general, utility incentives have fallen
- Some states evaluating new innovative restructuring
- If approved, CAA 111(d) will likely drive more DSM
- The customer and “Customer Experience” increasingly front and center for utilities
- Growth in DSM spending and customer interest has helped spark “competition” in the energy efficiency market



# Strategic DSM Issues

- DSM programs still remain predominately lighting
  - 60-70% of DSM program savings are from lighting
  - Relatively few new technologies are included
- Lower avoided costs (e.g. natural gas) impacts
- Innovative on-bill financing and repayment products are slow to make inroads
- CHP has gained momentum, but remains a hard sell and can quickly overtake DSM budgets



# Strategic DSM Issues (cont'd)

- Increased focus by regulators and politicians
  - More scrutiny of programs, results, and assumptions
- Entry of 3rd parties into energy business that has been the traditional utility domain
- EE will continue upward pressure to raise rates
  - Focus on cost cutting and driving only the most cost-effective programs such as lighting



# Strategic DSM Issues (cont'd)

- Need to move beyond cream skimming to deeper retrofits and more comprehensive approaches
- Cost and lack of uniformity of program evaluation
- The bar continues to rise on Codes & Standards which directly impacts incentives



# Approaches You Might Consider

- Custom incentive programs can be effective
  - But, technologies have to work and lower energy demand
- Comprehensive whole building approach
- Combine EE and DR along with PV and storage
- Strategic Energy Management programs
- Intelligent Efficiency
- Consider new “financing” approaches in lieu of rebates



# For More Information



## **Kenneth Black**

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Have a question? Ask our experts: [www.esource.com/question](http://www.esource.com/question)



# **Success Story: Whole Foods Market & NSTAR Partnership**

**Mike Ellinger, Whole Foods Market**



## Presentation Outline

- Don't settle for “prescriptive” incentives, seek a custom, volume program
- Case Study with NSTAR in Boston Market - MOU
- Property holders that benefit from this model
- Barriers against rapid implementation
- Utility internal stresses that drive success

### Presenters:

Mike Ellinger-WFM Global Coordinator- Maintenance & Refrigeration

Mike Guldenstern-Director – e<sup>2</sup>s energy efficiency services, LLC

### WFM Global Program Leads:

Kathy Loftus - WFM Global Leader – Sustainable Facilities

Aaron Daly-WFM Global Coordinator- Energy

# Prescriptive vs. Custom Incentives



- Many property owners have exhausted prescriptive incentive opportunities
- Most Utilities offer a custom incentive program
  - Can be leveraged to allow deployment of current market efficiency technologies
- Often the existing custom path is a bit like...

# Prescriptive vs. Custom Incentives

A mountain of paperwork, analysis, and time

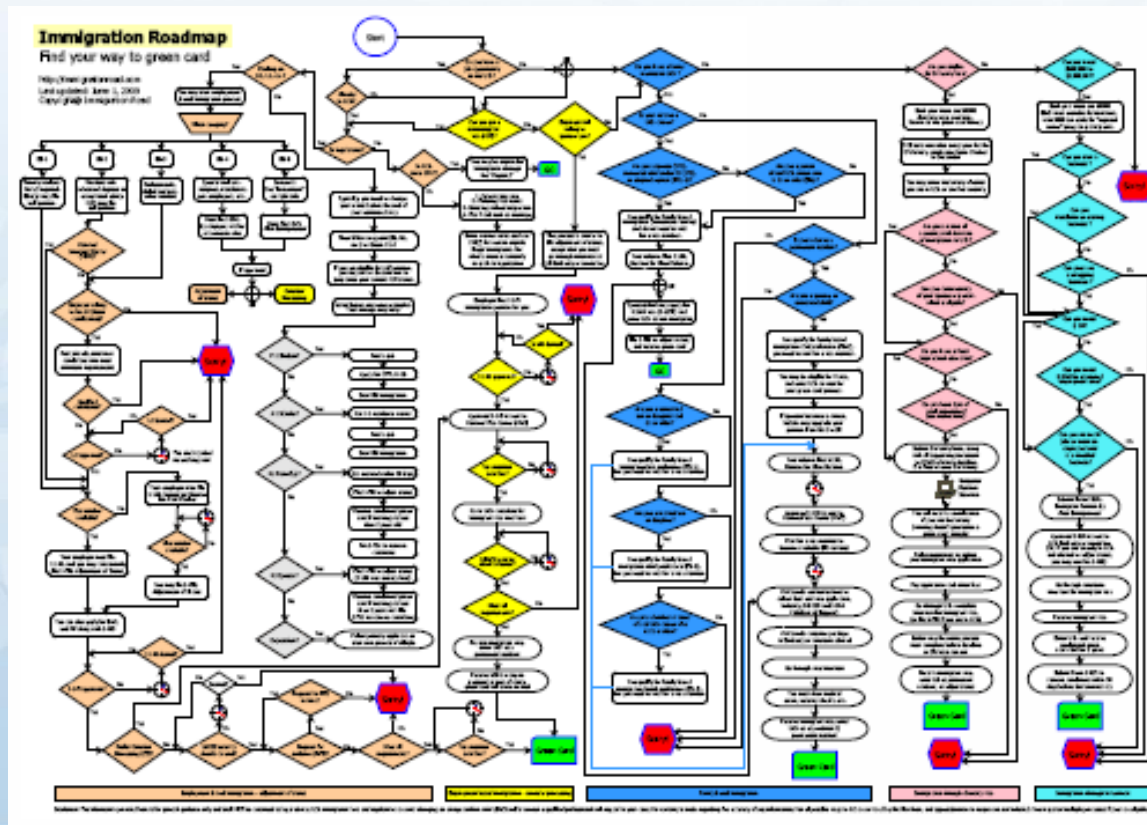


**Whole Foods Market – Energy Retrofit Implementation Model**

# Prescriptive vs. Custom Incentives

Or – “We’ll have our outsourced engineers talk with your engineers, and then we’ll talk about when we’ll talk next

Path to project review and approval ~ 2 years



# Case Study - NSTAR Boston MOU



- Memorandum of Understanding
- Supports the speed of Commercial business
- Cut out all red tape – “off the reservation”
- Collaborative spirit of energy conservation
- Propose projects/technologies with clear engineering backup for review by utility team
  - Often agreed rapidly with some back/forth
  - Occasional analysis / M&V required
- Approved project classes created easy repeat path

# Case Study - NSTAR Boston MOU



- Memorandum of Understanding
- Established a flat incentive for annual kWhr saved
- Custom incentives easy to predict
  - Detailed engineering calculations
  - 3<sup>rd</sup> party implementer – rapid deployment
- Nearly \$2m in incentives to date
- On average project incentive awards of 25-33%
- Project has removed 10,000,000 annual kWhrs/year
- Propelled WFM North Atlantic Region towards reduction goals

# Who Can Benefit?



Property owner/operators with:

- Volume quantity of buildings within single unique utility service territory
- Volume quantity of similar buildings/systems
- Helps replicate measures swiftly across buildings

# Barriers Against Rapid Implementation



- Utilities often don't / won't share information
- “Island” effect for project/savings penetration
- Fresh negotiation with new utility
- No accepted national archive for allowable references
- Individual State P.U.C.'s demand audit trail
  - Creates heavy, individual M&V and analysis burdens
- Some Utilities annually under funded for incentives and require mandatory sub-metering (ex: Texas)

## Bright spots:

- Energy Star label programs, and DLC for LED's
- DOE could help replicate the “gold standard” philosophy and function as a project repository



# Utility Stresses that Drive Success



- Many Utilities struggle to spend their collected “Societal Benefit Fund” (incentive funding pool)
- Many are under intense scrutiny to relieve current and future grid pressure
- Older plants closing, none coming online
- Utility directors incentivized for funding payout performance – they want to deploy the funding
- Utilities want to be in the “good news” business
- Let’s help them help themselves transform the market

# **Success Story: Efficient Broilers in Quick Serve Restaurants**

**Juliann Rogers, CKE Restaurants Holdings Inc.**

# Incentive Approval Timeline

- 2010 -- Designed new broiler
- 2011 -- Submitted Broiler to Testing Facility
- 08/01/11 -- Submitted Savings Report to Utilities
- 11/08/11 -- PG&E received conditional approval from CPUC and started accepting applications
- 02/22/12 -- CPUC selected SCG/CKE broiler project for review
- 03/08/12 -- SCG received conditional approval from CPUC, but wouldn't accept applications until final approval from CPUC
- 11/01/12 -- Met with Utilities and CPUC to Discuss Hurdles
- 12/10/12 -- CPUC requested 4 sites for M&V
- 03/05/13 -- CPUC requesting more information on the specific age of the existing broilers
- 03/11/13 -- SCG requested by CPUC to provide pre M&V on 8 sites
- 03/22/13 -- SCE Approved for Review
- 7/3/13 -- PG&E required to submit 16 sites for M&V
- 9/25/13 -- SCG started accepting applications for incentive giving approval to install new broilers
- 10/07/13 -- PG&E stopped accepting applications until CPUC approves the project
- 10/16/13 -- PG&E began accepting applications again, but will not pay incentive until CPUC has approved
- 3/25/14 Received Final Approval from CPUC for incentive





# Custom Rebate Process – CA

- **Application Requirements**
  - Required separate applications for each site with out a schedule (batched applications required all broilers to be installed to received rebate)
  - Letter of pre-authorization required
  - Site list and install schedule - the incentive would dictate the rollout schedule
- **Utilities Review Process**
  - M&V prior to submitting to CPUC
  - Some Utilities used the savings report in lieu of M&V
  - Timing of this review varied per utility
- **CPUC Review**
  - Reviews each utility submission as a separate project
  - Reviews each customer as a separate project
  - Randomly selects projects for review
    - One utility was selected for further review and 4 sites were requested for Pre – M&V
    - Conditional approval was granted pending CPUC review
    - Unconditional approval was granted pending CPUC review



# Custom Rebate Process – CA

- **CPUC selected the “project” for review**
  - requiring each utility provide pre and post M&V on a specific number of broilers.
  - The number of broilers needing M&V varied per utility, one needed as many as 14 sites
  - The broilers needed to be of varying ages. This meant that we needed to install broilers in fairly new sites.
  - Two utilities used the same consultant company to complete the M&V
- **Conditional approval was granted through out the review process**
  - One utility wouldn’t accept applications until final approval from CPUC
  - One utility began accepting applications but wouldn’t pay out until final approval from CPUC
  - One utility began accepting applications and began paying incentives



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# QSR Opportunities

- **Standardize the custom rebate application and approval process**
  - The process for submitting a custom project for the incentive is neither transparent or standardized across the different utilities.
  - Multiply that by all the utilities offering custom incentives for both gas and electric
- **With Customer's permission, allow the utilities to share customer information regarding specific projects i.e. engineering and M&V reports**
  - Standard Restaurant Prototypes
  - Similar Square Footage
  - Same equipment package
- **Solicit customers input when developing incentive program**
  - i.e. utility is developing a new LED incentive program which includes them selecting an approved manufacturer and authorized installers
- **Pre Audits**
  - Select a minimum random sample for pre-audits when the project scope is the same for each site





# QSR Opportunities cont...

- **Online application**
  - user friendly
  - Provide the ability to attach a spreadsheet with multiple sites to a single application
- **Flexibility on Installers**
  - Allow customers with in-house technicians to self-perform where applicable







# What's working

- **National Account Managers**
  - Support with completing applications and navigating through required paperwork
  - Communicating with Franchisees
- **Energy Star - Pre-approved rebates**
  - being adopted by many utilities across the country
- **Website consolidating rebates with application link**
  - [www.fishnick.com](http://www.fishnick.com)
  - [www.theflameison.org](http://www.theflameison.org)





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# Discussion