

e-on companies

ENERGY STAR® New Homes Program

**"Aligning the Stars for Success
in a New Market"**

EPA Utility Sponsor Meeting

Scottsdale AZ

March 22-24, 2010

Ben Adams

MaGrann Associates



- Background
- Progress to date
- Elements of success
- Observations (or “how the stars aligned”)

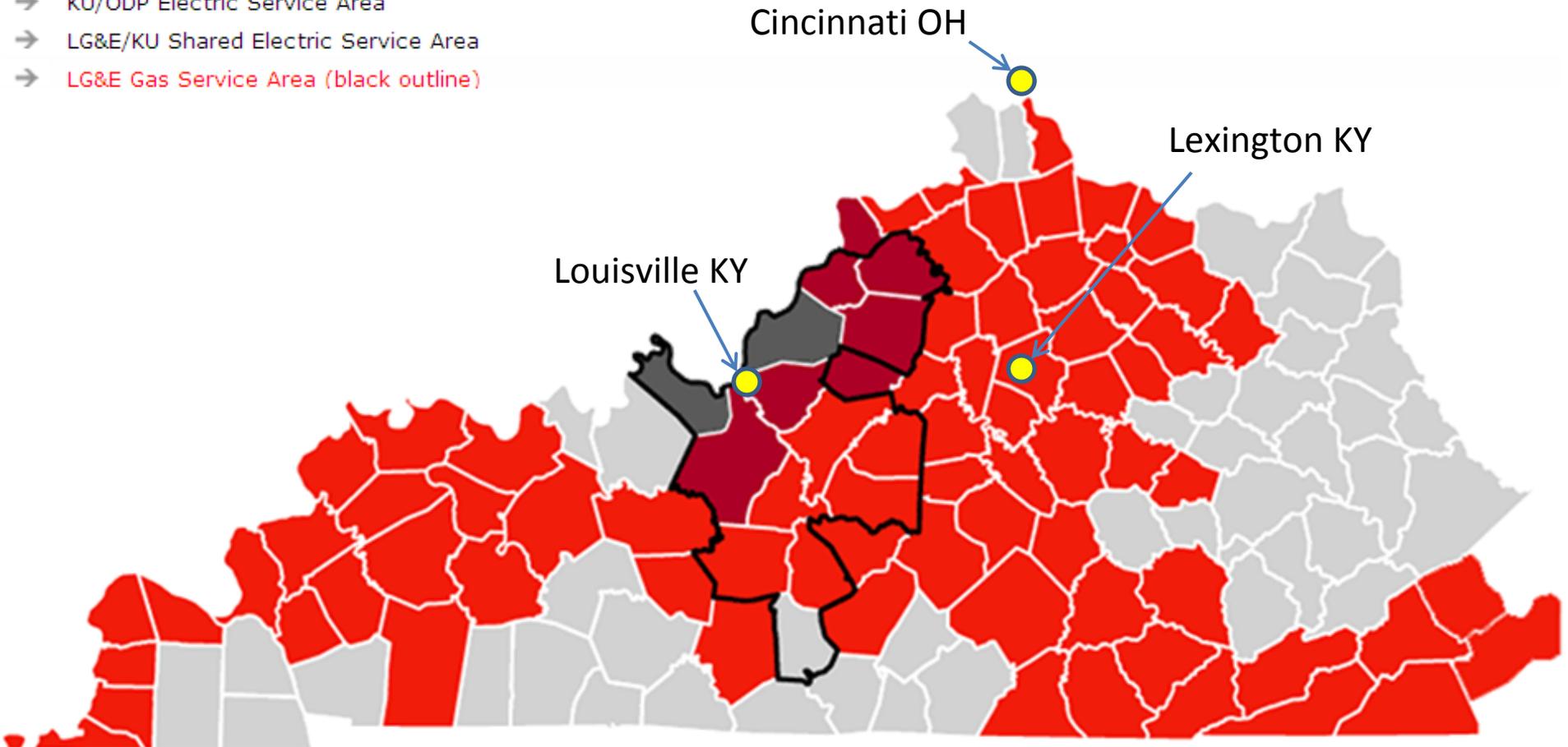
Louisville Gas & Electric

- 389,000 electric customers
- 314,000 natural gas customers
- Approximately 700 square miles

Kentucky Utilities

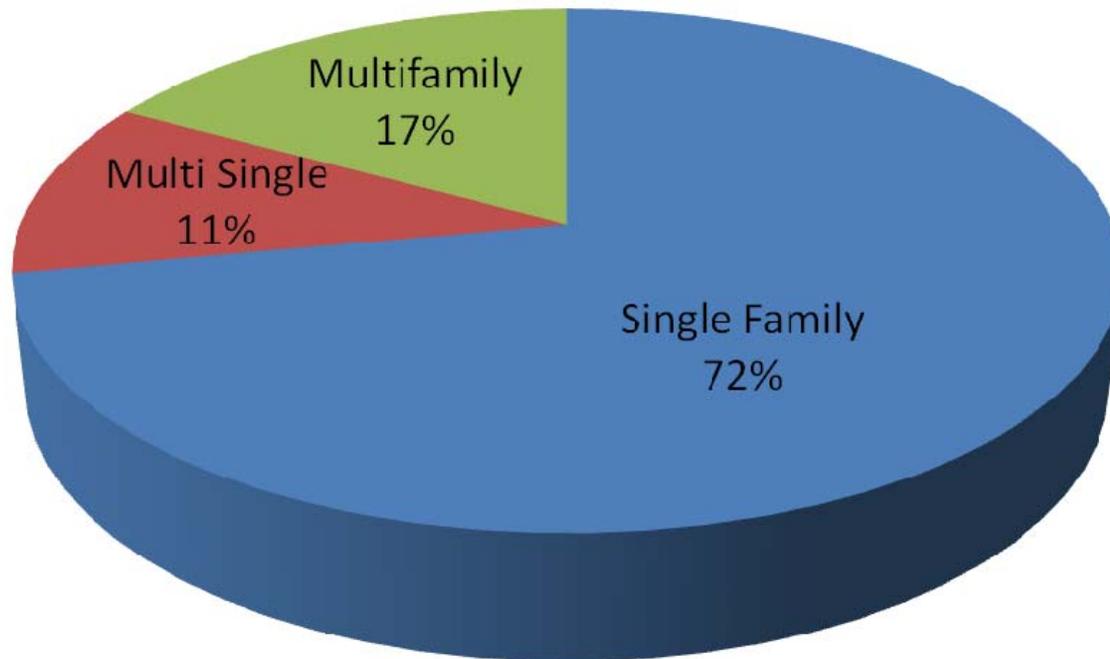
- 508,000 electric customers in Kentucky
- 6,600 noncontiguous square miles

- LG&E Electric Service Area
- KU/ODP Electric Service Area
- LG&E/KU Shared Electric Service Area
- LG&E Gas Service Area (black outline)



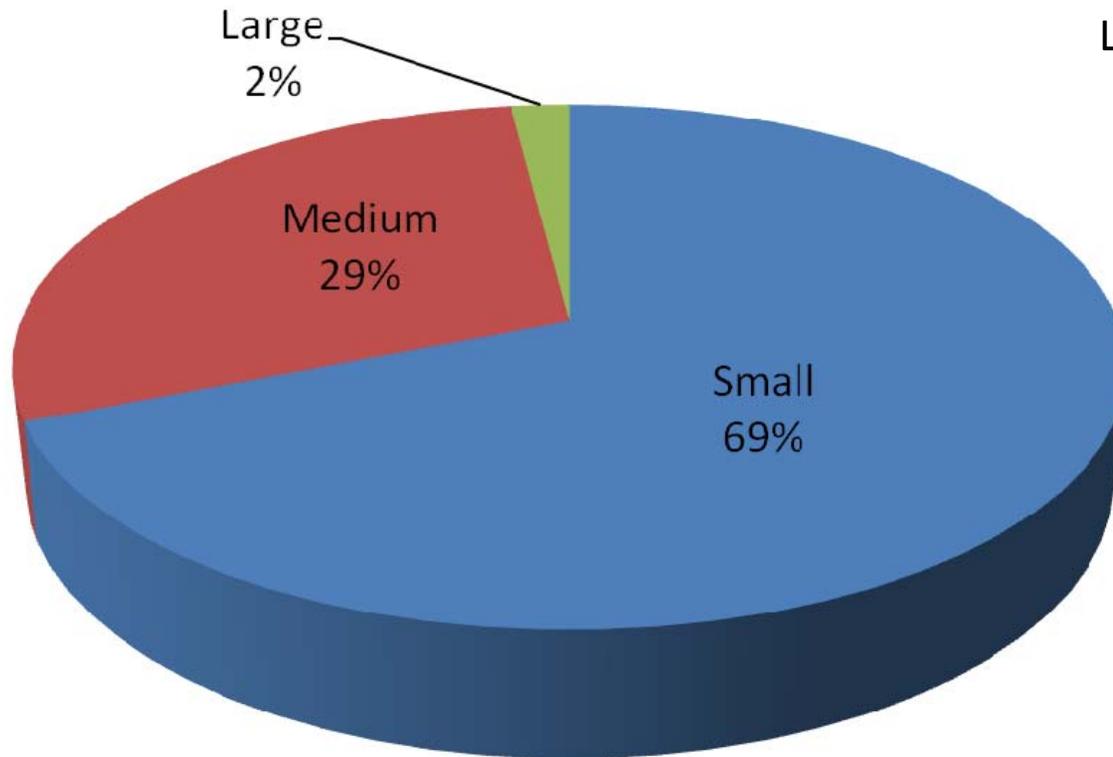
- 170 Builders
 - Nominal participation in territory prior to program launch
- 24 Raters
 - Only 2 active in territory prior to program launch
- 1150 Homes committed
 - Approx. 22% market share
(2009 commitments against permits)
- 600 Homes completed
 - Average HERS Index: 78
 - 24% at HERS 75 or lower (25%+ better than code)

- Home participation by building type:

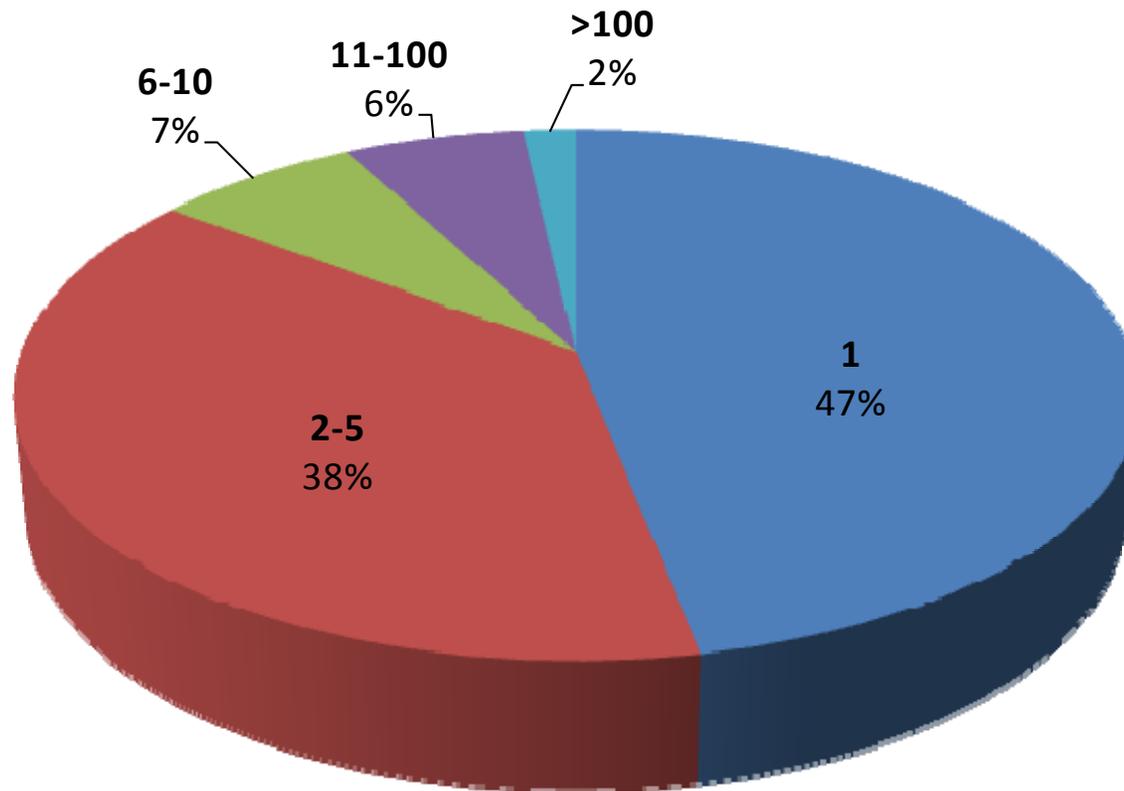


- Home participation by unit size:

Small \leq 2500 sq.ft.
Medium \leq 6500 sq.ft.
Large \geq 6501 sq.ft.



- Builder participation by number of units:



Elements of Success

- Infrastructure engagement
- Strategically targeted incentives
- Rater based delivery
- Training & education
- Quality Assurance
- Marketing support

- Builder associations (HBAs)
 - Green Build Kentucky
- Local rating/training provider
 - Energy Efficient Homes Midwest
- State of Kentucky
 - ENERGY STAR Homes tax credit
- Key builders
 - Volume
 - Performance

Strategically Targeted Incentives

For raters...

- Training & certification
 - Actual cost up to \$1200
- Equipment purchases (x2)
 - Actual cost up to \$500 each
- Payable upon completion of unit thresholds
 - 10/15/20 homes
- Offered first program year only
 - Based on rater response

Strategically Targeted Incentives

For builders...

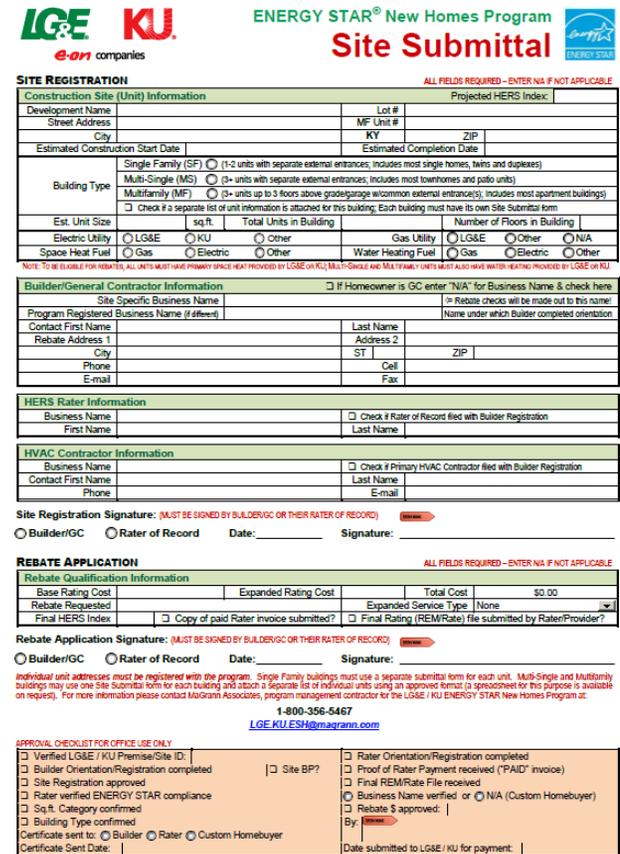
- Rebates are intended to offset actual energy rating/verification costs paid up to the maximum rebate per unit
- Qualifying “base” costs include Thermal Bypass (pre-drywall) inspections and final inspections with blower door/duct testing
- Qualifying “expanded” costs can include additional services such as IR thermography, Green Build KY or LEED inspections, EPA Advanced Lighting Package and/or AirPLUS verification

Initial Builder Incentive Structure

- Tiers reflect relative cost and energy savings

MAXIMUM REBATE BY BUILDING TYPE/SIZE (SQ.FT.)			
	≤ 2500	2501-6500	≥ 6501
Single Family	\$450	\$600	\$750
Multi-Single	\$325	\$450	
Multifamily*	\$225		

- Rater of Record acts as primary marketing and administration conduit
 - Builder “sales”
 - Participation “agent”
- Processes are simple and responsive
 - One electronic form for site registration and rebate submittal
 - Email submittal of final rating file
 - Proof of payment
- Units are individually tracked
 - Program provides active feedback and support to participants



ENERGY STAR® New Homes Program Site Submittal

SITE REGISTRATION ALL FIELDS REQUIRED - ENTER N/A IF NOT APPLICABLE

Construction Site (Unit) Information

Development Name		Lot #		Projected HERS Index:	
Street Address		MF Unit #			
City		KY		ZIP	
Estimated Construction Start Date		Estimated Completion Date			

Building Type

Single Family (SF) (1-2 units with separate external entrances, includes most single homes, town and duplexes)

Multi-Single (MS) (3+ units with separate external entrances, includes most townhomes and patio units)

Multi-Family (MF) (3+ units up to 3 floors above grade/garage w/ common external entrances); includes most apartment buildings

Check if a separate list of unit information is attached for this building. Each building must have its own Site Submittal form.

Est. Unit Size: sq. ft. Total Units in Building: Number of Floors in Building:

Electric Utility: LG&E KU Other Gas Utility: LG&E Other N/A

Space Heat Fuel: Gas Electric Other Water Heating Fuel: Gas Electric Other

NOTE: TO BE ELIGIBLE FOR REBATE, ALL UNITS MUST HAVE PRIMARY SPACE HEAT PROVIDED BY LG&E OR KU; MULTI-SINGLE AND MULTI-FAMILY UNITS MUST ALSO HAVE WATER HEATING PROVIDED BY LG&E OR KU.

Builder/General Contractor Information If Homeowner is GC enter 'N/A' for Business Name & check here

Site Specific Business Name: Rebate checks will be made out to this name.

Program Registered Business Name (# of units): Name under which Builder completed orientation

Contact First Name: Last Name:

Rebate Address 1: Address 2:

City: ST: ZIP:

Phone: Cell:

E-mail: Fax:

HERS Rater Information

Business Name: Check if Rater of Record filed with Builder Registration

First Name: Last Name:

HVAC Contractor Information

Business Name: Check if Primary HVAC Contractor filed with Builder Registration

Contact First Name: Last Name:

Phone: E-mail:

Site Registration Signature: (MUST BE SIGNED BY BUILDER/GC OR THEIR RATER OF RECORD)

Builder/GC Rater of Record Date: Signature:

REBATE APPLICATION ALL FIELDS REQUIRED - ENTER N/A IF NOT APPLICABLE

Rebate Qualification Information

Base Rating Cost	Expanded Rating Cost	Total Cost	\$0.00
Rebate Requested:	Expanded Service Type:	None	
Final HERS Index: <input type="text"/>	Copy of paid Rater invoice submitted? <input type="checkbox"/>	Final Rating (BEM/Rate) file submitted by Rater/Provider? <input type="checkbox"/>	

Rebate Application Signature: (MUST BE SIGNED BY BUILDER/GC OR THEIR RATER OF RECORD)

Builder/GC Rater of Record Date: Signature:

Individual unit addresses must be registered with the program. Single Family buildings must use a separate submittal form for each unit. Multi-Single and Multi-Family buildings may use one Site Submittal form for each building and attach a separate list of individual units using an approved format (a spreadsheet for this purpose is available on request). For more information please contact MaGrann Associates, program management contractor for the LG&E / KU ENERGY STAR New Homes Program at:

1-800-356-5467
LGE.KU.ESH@magrann.com

APPROVAL CHECKLIST FOR OFFICE USE ONLY

<input type="checkbox"/> Verified LG&E / KU Premise/Site ID	<input type="checkbox"/> Site BP?	<input type="checkbox"/> Rater Orientation/Registration completed
<input type="checkbox"/> Builder Orientation/Registration completed		<input type="checkbox"/> Proof of Rater Payment received ("PAID" invoice)
<input type="checkbox"/> Site Registration approved		<input type="checkbox"/> Final BEM/Rate File received
<input type="checkbox"/> Rater verified ENERGY STAR compliance		<input type="checkbox"/> Business Name verified or N/A (Custom Homebuyer)
<input type="checkbox"/> Sq. ft. Category confirmed		<input type="checkbox"/> Rebate \$ approved: <input type="text"/>
<input type="checkbox"/> Building Type confirmed		By: <input type="text"/>
Certificate sent to: <input type="radio"/> Builder <input type="radio"/> Rater <input type="radio"/> Custom Homebuyer		Date submitted to LG&E / KU for payment: <input type="text"/>
Certificate Sent Date: <input type="text"/>		

site submittal form 092409.docx

Builder registration

- Eligibility
 - Must complete Orientation by program or Rater of Record
- Contact /profile information
 - Type of construction
 - HERS rater
 - HVAC contractor
- Agreement
 - Rater QA/QC by Program
 - Legal language
 - Compliance requirements
 - Limitation of liability
 - Must re-register annually





Builder Registration 2010

ALL FIELDS REQUIRED - ENTER N/A IF NOT APPLICABLE

Builder/General Contractor Contact Information			
NOTE: FOR RESALE PURPOSES, SITE SPECIFIC COMPANY INFORMATION IS REQUIRED ON EACH SITE REGISTRATION FORM			
Business Name		<input type="checkbox"/> If Homeowner is GC enter "N/A" for Business Name & check here	
Contact First Name	Last Name		
Address 1		Address 2	
City	ST	ZIP	
Phone	Cell		
E-mail	Fax		

Builder Profile	Number Built per Year	Average Size (sq.ft.)	Building Type Definitions
Single Family (SF)			1-2 units with separate external entrances; includes most single homes, twins and duplexes
Multi-Single (MS)			3+ units with separate external entrances; includes most townhomes and patio units
Multifamily (MF)			3+ units up to 3 floors above grade/garage with common external entrances; includes most apartment buildings

HERS Rater Information			
Business Name		<input type="checkbox"/> Check if this Rater is your Rater of Record	
First Name	Last Name		
Phone	E-mail		

Primary HVAC Contractor Information			
Business Name		<input type="checkbox"/> Check if other HVAC contractors are also used	
Contact First Name	Last Name		
Phone	E-mail		

You must acknowledge and agree to the following terms and conditions ("I agree" Release) in order to participate in this program:

Neither E.ON U.S., Kentucky Utilities Company, Louisville Gas and Electric Company, or its or their contractors, employees, agents, officers, parent company, affiliates, or holdings (i.e., collectively "the Companies"), makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the Companies. The standards, views and/or opinions expressed herein do not necessarily state or reflect those of the Companies.

I and my representative, employee and/or agent thereof, agree to comply with all the ENERGY STAR Home Program (Program) building standards administered by the Companies. I shall save, defend, indemnify and hold the Companies and their assigns harmless from and against all claims, damages, liabilities, causes of action and costs of every kind, nature and description which may arise as a result of or in connection with any design, construction, general contractor and/or builder activities and the activities of subcontractors, agents and/or employees which are undertaken in connection with, under, pursuant to or with regard to the Program.

I further agree to participate in the Companies' Quality Assurance (QA) Program, whereby Program homes shall be subject to a three-to-five percent sampling. I understand that the Companies will retain confidentiality of said data results, and provide me with copy of same for all homes inspected. Home inspection shall only occur on properties not already occupied.

I further understand and agree that names and photo images of participating homes or Builder personnel may be used by E.ON U.S. and its representatives in the promotion of the program without compensation or additional consent.

Signature: (MUST BE SIGNED BY BUILDER/GC) _____ I have read and agree to the terms & conditions stated above

Date: _____ Builder/GC

Participating Builders must have completed LG&E / KU ENERGY STAR New Homes Program Orientation and registered with the program (using this form) prior to submitting Site Registrations. For more information on the program or how to register as a Builder, please contact MaGrann Associates, program management contractor for the LG&E / KU ENERGY STAR New Homes Program at:

1-800-356-5467
LGE.KU.ESH@magrann.com

FOR OFFICE USE ONLY	
Posting Date:	
Registration Notes:	

builder_registration_form_2010.doc

- Initial Orientations provide basics of program, technical and process requirements
- Quarterly Rater/Provider meetings address local or administrative challenges
 - Supplements initial certification training
- Bi-monthly Technical Training Series for
 - *Thermal Bypasses in New Home Construction*
 - *Duct Design & Installation - Best Practices*
 - *The Relationship Between Design, Energy*
 - *HVAC Manual J Sizing*
 - *Incorporating Energy Star Products, Appliances*
 - *Beyond Energy Star: Driving Performance toward Net Zero Energy*

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ENERGY STAR®
New Homes Program

Technical Training Series

Identifying and Addressing
Thermal Bypasses
in New Home Construction

Wednesday, Nov. 11, 2009
9 a.m. to 1 p.m. — Lunch provided

LG&E East Service Center — Assembly Room West
10300 Ballardsville Rd., Louisville, Ky. 40241

Please respond by November 6

For more info and to register:
E-mail lge.ku.esh@magrann.com
or call **Mike Flannery** at **609-744-7340**

Who Should Attend?

- Builders and General Contractors
- Architects and Design Professionals
- Insulation Contractors
- Framing Contractors
- HVAC Contractors
- Home Energy Raters

This valuable, half-day education seminar is open to all — at no cost to you!

Participation in the ENERGY STAR® Program is not required.

Learn how to improve energy efficiency and comfort performance by...

- aligning the thermal and air barrier for the entire structure,
- air sealing and insulating for maximum effectiveness,
- properly addressing walls adjoining exterior or unconditioned space,
- preventing heat loss/gain in classic problem areas (e.g., rooms over garages and cantilevers),
- understanding optimal strategies for slabs, crawlspaces and basements.

All attendees will receive a full-color copy of the EPA's 86-page **Thermal Bypass Checklist Guide**

- Supplements, not substitutes for RESNET required Provider QA
 - Mimics RESNET QA process/standard
- Rating file review
 - 100% submitted
 - First 3 then $\geq 5\%$
- Field review
 - Shadow
 - Full blind
 - Combined $\geq 5\%$
- Feedback to raters
 - Letter grade based on consistency with standard
 - Encouraged to allow us to share directly with Provider
 - Monthly summary to E.ON Program Manager

- Action strategies
 - Review of next 3 consecutive file submittals (for file review issues)
 - Prioritization of field reviews (for field review issues)
 - Increased percentage of reviews (file or field)
 - Request for RESNET QA results and/or data from rater's Provider
 - Request additional action from rater's Provider
 - Revise rater's program participation status
- Objectives
 - Provide a feedback loop
 - Identify training needs
 - Credible threat of discovery
 - Confidence in savings

- Program Outreach
 - HBAs and HBA initiatives (Green Build KY, etc.)
 - Architects (AIAs) & design professionals
 - Trade contractors & suppliers
 - Habitat and affordable sector
- Sales & POP support

**ENERGY STAR®
Qualified Home**

- Save Energy
- Save Money
- Start Now

eon-us.com/build

What makes a home ENERGY STAR?



- Save Energy
- Save Money
- Start Now



eon-us.com/build

What is ENERGY STAR?

ENERGY STAR is the government-backed symbol for energy efficiency. The mark identifies new homes, buildings, and more than 60 types of products that are energy-efficient and offer the features, quality, and performance that today's consumers expect.

A home that earns the ENERGY STAR is significantly more efficient than a standard home. By purchasing an ENERGY STAR qualified home, you can have all the features you desire in your new home, plus better performance and lower utility bills—all while helping prevent greenhouse gas emissions.

ENERGY STAR was introduced by the U.S. Environmental Protection Agency (EPA) in 1992 as a voluntary partnership to reduce greenhouse gas emissions through increased energy efficiency. Today, ENERGY STAR offers consumers and business energy-efficient solutions to save energy, save money, and help protect the environment for future generations.

More than 15,000 organizations, including over 6,500 of the nation's home builders, are ENERGY STAR partners committed to improving energy efficiency at home and at work. In 2006, Americans with the help of ENERGY STAR saved \$19 billion on their utility bills and reduced greenhouse gas emissions equivalent to those from 29 million vehicles.

"I would recommend ENERGY STAR to anyone looking to buy a new home. If I had known energy ENERGY STAR existed, I wouldn't have bought it."
David Vidal, Homeowner
Las Vegas, NV

"Our ENERGY STAR home met so many needs. We wanted lots of light, a bright house, and low cooling bills. We got exactly that—ENERGY STAR really does work!"
Sam and Charice Westbrook, Homeowners
Aurora, IL

"My biggest selling point for buying an ENERGY STAR home was resale value. I would highly recommend ENERGY STAR to anyone because it will definitely save them money in the long run."
Jenny Elliott, Homeowner/Investor
Las Vegas, NV

KU
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Improved insulation.

Properly installed insulation with higher R value levels helps keep heat in during the winter, and outside in the summer. It also helps to block outside noise, creating a quieter home for you.

For more energy-saving ideas, call 1-800-356-5447 or visit eon-us.com/build. How much can you save?

LGE
e-on companies

Right-sized cooling equipment.

Properly sized and installed high-efficiency cooling equipment maximizes energy efficiency and system performance. Remember, one size does not fit all, and bigger isn't always better. Ask your builder for more information.

For more energy-saving ideas, call 1-800-356-5447 or visit eon-us.com. How much can you save?

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U.S. Environmental Protection Agency
Build ENERGY STAR® Qualified Homes

Join the thousands of builders using new ENERGY STAR solutions to revolutionize home building.

KU
e-on companies

ENERGY STAR FOR HOMES SALES TOOLKIT

Create Customized Materials to Enhance ENERGY STAR Sales

Welcome to the ENERGY STAR Sales Toolkit. The Sales Toolkit contains a wide variety of Marketing and Sales Tools, a Customer Sales Outreach Tool for your sales staff, and benefits labels that highlight your home's ENERGY STAR features.

Important Things to Remember:

- The Toolkit is best viewed with a screen resolution of 1024x768.
- The Toolkit will only work properly if the "ENERGY STAR Sales Toolkit" folder has been copied to a local file location on the program's drive.
- Be sure your mouse is set to "Standard" (Globe icon) = 1MB/s or > . Security restrict your level to Medium or only touch the Toolkit. After the settings are changed, close the Settings and open the Toolkit again.
- You need acceptable Internet speed to your computer to use the Toolkit.
- Any of our tools need an Internet connection.

CLICK HERE TO START

Help

Sample of the available Marketing Materials from the ENERGY STAR Sales Toolkit.

Observations (or “how the stars aligned”)

1. Context (Basis for Program Outreach)

- HBAs looking to engage with “green”
 - Bought into ENERGY STAR as the foundation
- Builders looking for differentiation in a down market
 - And aware that energy affordability will be an increasing issue for buyers
- An active regional HERS Rating/Training Provider
 - Program provided both “motivation” and “destination” for new raters
- State support for energy efficiency and ENERGY STAR
 - Tax incentive supplements rating-based utility incentive
- Latent demand for technical education
 - Current and “future” participants

2. Implementation

- Rebate structure recognizes the certification process (rating) as the “new” incremental cost
 - Also supports the value of complementary programs/rater services
 - And including all eligible building types broadens market reach
- Focus on supporting effective Rater delivery
 - Simplified, responsive processes that still gather critical data
 - Admin support targeted to “Raters of Record”
 - Marketing support provides tools for raters and value for builders
 - QA/training feedback loop



Contact Information

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Discussion