February 24 - 26, 2014



# Program QA vs. Provider QA What's the Difference?

Douglas McCleery, PE, CEM; MaGrann Associates

Patrick Fitzgerald, NYSERDA





#### Introduction

- MaGrann's Business Model
- Historical Program Roles
  - Administrator and Rater
  - Administrator
  - Participating Rater
  - Administrator
  - Technical Consultant



#### QA/QC – What's the difference?

- QA and QC are closely related but fundamentally different
  - Quality Assurance is the process of managing for quality
  - Quality Control is used to verify the quality of the output



# QA/QC – What's the difference?





#### Program / RESNET

- Programs rely on RESNET to set minimum standard for Rater Participation
  - Infrastructure
  - Rule-making
  - Training
  - Providership
  - o QA

But.....



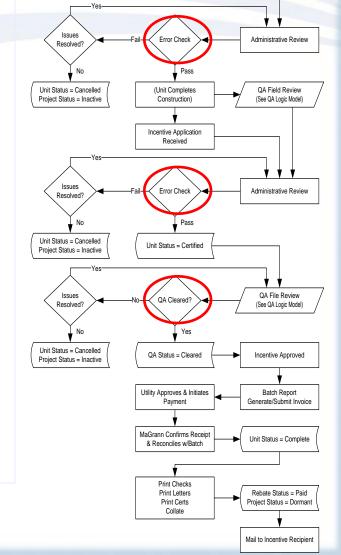
#### **Program Responsibilities**

- Fiduciary responsibility to produce savings AND account for funding
  - Program Funders
  - Utility Boards
  - Rate Payers
  - Shareholders



#### **Program Responsibilities**

- This Responsibility can justify
  - Increased standards
  - Additional QA
  - Additional training and certification
  - Additional submittals
- Programs incorporate QC to ensure compliance for all homes



Site Registration Received

Unit Status = Pending



## Program QA vs. RESNET QA

- The Program QAs the rater, RESNET QAs the rating
- Program QA covers savings calcs and reporting issues not always within RESNET QA limits.
  - RESNET QA is focused on errors that influence the HERS index.
  - Program QA is also interested in errors that influence program savings and customer's program experience



# **Key Elements of Program QA**

- Example: Sampling
  - What can happen?
  - What can be done?
  - What are the implications?





# Key elements of Program QA

- QA Program goals
  - Set a level playing field and support fair players
  - Identify training opportunities
  - Monitor and achieve compliance with program requirements
  - Mentor raters
  - Identify raters/builders who need scrutiny
  - Ensure savings are captured and defensible



#### Report Cards

- QA scoring allows for consistent implementation
  - Standardize results
  - Increase objectivity
  - Document and "digitize" results
  - Can be used as a pass/fail (go/QA hold)
  - Program adjust action level over time



#### Report Card Example

- We use 1, 2, 3 points to identify minor, moderate and significant findings.
- If action level is set at 3 points
  - o 3 points = QA Hold (fail)
    - 3 minor findings
    - 1 minor + 1 moderate finding
    - 1 significant finding (deal breaker)



# Report Card Example

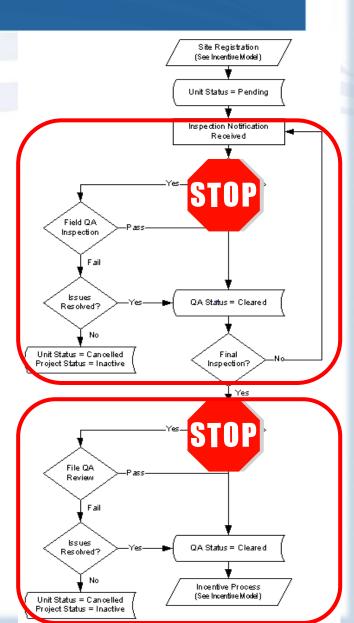
#### QA Event: Final Inspection and Testing v-3

	Rater:	Rater: Review Date:		Reviewer: T Smith	
	Builder:	Project:	Model:		Caara
	Address:	City:	State:	Zip:	Score
	Rating File Number				
	OA Inspector's TERC Completed: Sections 3 & 5?			Yes – No?	
	QA Inspector's Rater HVAC Checklist Completed: 2.1-2.7; 3.1-3.3; 7.1-7.4			Yes - No?	
_/	Inspection Item and Score weight:				<u>Score</u>
	TERC Completed [M]:			Yes – No?	
Α	TERC Full compliance with Sections 3 & 5 [P]:			Yes - No?	
	TERC: Maximum 6 items	Builder Verified for Sections 3 and 5 [P]:		Yes - No?	
-1	Rater HVAC: Sections 2.1	- 2.6; 3.1-3.3; 7.1-7.4 completed [M]:		Yes – No?	
-1	Orientation – Front Door F	aces [M]: North, South, East, West			
-1	Housing type [M]: SF, Duplex, TH: Inner – End, MF – Floor: 1, 2, 3, 4, 5, 6				
-	Foundation type [S]: SOG, Crawl, BSMT, Walkout BSMT, % above grade:				
	r oundation type [o]. ooo	, crawi, boint, walkout boint, // above gre			
	Foundation wall insulation	[S]: Type:, R			
	Blown Ceiling Ins. [S]: FO	G - CE; R: 19, 30, 38,; Grade: I, II, III			
-1	Program Compliance Item	s [P]:			
-1	Unvented or Nation	ural Draft heating appliances or DHW:		Yes - No?	
	E-Star Vent Mode	el:, Nom. Cap.:CFM,	Control:	Yes – No?	
1		ights: ≥ 3 fixtures:		Yes – No?	
		d Lights: ≥ 50% CFLs:		Yes – No?	<u> </u>
		-			
	Raw	Data Captured	Same	as Rate	r rinding
	Ilavv	Data Captured			
	<b>viaGrann</b>	Data Captured			
	ASSOCIATES				

#### Model 1: In the Production Stream

- Incentive Process include a hold for QA in real time.
  - Homes with active QA issues don't get certified
  - Homes not picked for QA proceed
  - NOT PERFECT need to manage expectations





# Lesson Learned





#### Model 2: Parallel to Production

- QA during/after certification and incentive
  - Less likely to interfere with schedules
  - Homes with active QA issues may get certified
  - OK if incentive not directly related to program compliance
  - QA findings primarily used to raise the level of expertise of raters/builders/homes



#### Independent and Different

- Not a duplicate of RESNET QA
  - Our Programs have agreements with rating companies not providers
    - Individuals/Companies
    - Rater/Providers
  - "Sweet Spot" that works for large and small rating companies, regardless of business model



#### **Increases Flexibility**

- Ability to work with Providers
  - Coordinate training
    - Providers involved in program training
    - Combined events
  - Interpretations/messaging to raters
    - Insulation Grading
  - Clarify distinction between RESNET and Program responsibilities



#### **Distinction Not Clear to All**

- ► We have had issues...
  - Providers who wanted to use Program field QA as a substitute for Provider QA
    - Conflict of interest, at least.
  - RESNET and ENERGY STAR guidelines are used, but application is different
  - Providers can be sensitive to review of "their" files and additional obligations



#### Parallel QA

- Programs not necessarily interested in setting standards
  - Defer to RESNET / EPA guidance and judgement on technical issues
    - QA's job is to seek interpretation and mediate as needed
  - Does not mean that Program QA always defers to Provider QA
  - Another reason to operate in parallel with RESNET and National Programs



# Thank you!!

#### Questions?

Contact me dougmccleery@magrann.com

