

# NAVIGANT

ENERGY

## Nicor Gas Peoples Gas and North Shore Gas Spillover Research

*Illinois Stakeholder Advisory Group TAC Meeting*

*July 15, 2014*



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# First Triennial Gas Evaluation Spillover Research

## » **The Net-to-Gross Ratio**

- *NTGR adjusts gross savings for free-ridership and spillover*

## » **Spillover Research Conducted in GPY1-GPY3**

- *Participant spillover (PSO)*

- *Non-participant spillover (NPSO) and market effects (ME)*

- *In some GPY1 evaluations, primary research was conducted on Spillover, but SO was not quantified (PR/NQ)*

  - *Not Quantified because research was qualitative only or SO was not observed*

## » **Planning NTG Values and Deemed NTGRs**

- *Planning values and deemed NTGRs used in GPY1-GPY3*

- *No NTG research planned for GPY3*

# First-Triennial Spillover Research for PGL and NSG

(Blue=Evaluation Primary Research, Red=Planning or Deemed Value)

Program	Utility	GPY1	GPY2	GPY3	Basis for Quantified Value
Home Energy Rebate	PGL	PR/NQ	0.10	0.10	NPSO Measured
Home Energy Rebate	NSG	PR/NQ	0.13	0.13	NPSO Measured
Home Energy Jumpstart	PGL & NSG	0	0.04	0.04	PSO Measured
Multifamily MCEEP	PGL & NSG	0	0	0	PSO Measured
C&I Prescriptive	PGL & NSG	PR/NQ	0.04	0.04	PSO and NPSO Measured
C&I Custom	PGL & NSG	PR/NQ	0.02	0.02	PSO and NPSO Measured
Retro-Commissioning	PGL & NSG	0.11	0.11	0.11	PSO and NPSO Measured
Small Business	PGL & NSG	0.01	0.01	0.01	PSO & NPSO/ME Measured

# First-Triennial Spillover Research for Nicor Gas

## Year of Research – Residential and Multi-family Programs

Residential program evaluations have covered the majority of program components, with the exception of the RNC program net impacts.

Residential and MF Programs	Free-Ridership and Spillover Research (Gas Program Year)				
	Free-ridership	Participant SO	Partial Participant SO	Participating Trade Ally SO	Non-Participating TA SO
Home EE Rebate	1	1	NA	1	2
Home Energy Savings	1,2	1,2	2	1,2	
MCEEP	1	1	1	NA	NA
Res NC	NTG Deemed				
EEE	1	1	NA	NA	NA
Behavior	Lit review 1,2			NA	NA

# First-Triennial Spillover Research for Nicor Gas

## Year of Research – Non-Residential and Other Programs

Business program components have similarly been well covered

Non-Residential and Other Programs	Free-Ridership and Spillover Research (Gas Program Year)			
	Free-ridership	Participant SO	Participating Trade Ally SO	Non-Participating TA SO
Business EE Rebate	1,2	2	1,2	1,2
Custom	1,2	2	2	2
RCx	1	1	1	
Small Business	1	1	1	
Bus New Construction	1	1		
Econ Redevelopment	Program combined with Business New Construction			
Emerging Technology	NA			

# Spillover Considerations for the Gas Second-Triennial

- » **ICC Orders 13-0549 (NG) and 13-0550 (PGL & NSG) for Energy Efficiency Plans (GPY4-GPY6) – Key considerations on Spillover**
  - *“The Commission finds that excluding spillover from the NTG calculations might unfairly reduce a program administrator’s calculated savings, but because it can be costly to determine spillover, the Commission will not require that it always be included.”*
  - *“Thus, the Commission directs evaluators to consider spillover while being mindful of the costs to measure spillover and the likely impacts of such measurements.”*
  - *“Staff’s proposal to consider a portfolio-wide spillover survey is worthwhile and the Companies should take it to their evaluators and the SAG for further development and implementation as soon as practical”*

# Spillover Considerations for the Gas Second-Triennial

- » **ICC Orders 13-0549 (NG) and 13-0550 (PGL & NSG) for Energy Efficiency Plans (GPY4-GPY6) – Key Considerations on Timing**
  - *(From 13-0550) “the Commission directs the Companies, their evaluator, and SAG to comply with the following [Modified Illinois] NTG framework for deeming NTG ratio values”*
    - *“...Prior to March 1st of each year, the independent evaluator will present their proposed NTG values for each program to the SAG,...”*
    - *“All NTG values shall only be applied prospectively beginning June 1 of each year”*
  - *(From 13-0549) “In order to ensure the SAG has adequate time to review the evaluators’ NTG recommendations before March 1 under the NTG Framework, the Commission directs the Company to require its evaluators to make best efforts to provide the evaluators’ initial recommendations for deeming NTG ratios for the energy efficiency programs by the end of the first week in January of each year.”*

- » **Gas Program Year Timing for NTG Research**
  - GPY3 NTG values are deemed
  - No gas program NTG research is being conducted in GPY3
  - GPY4 NTG values are deemed
  - GPY5 NTG values must be accepted by March 1, 2015 (seven months from now) for use on June 1, 2015.
  - GPY6 NTG values must be accepted by March 1, 2016 (19 months from now) for use on June 1, 2016.
- » We are planning to conduct much of the Second Triennial NTG research in GPY4.



# Second-Triennial Spillover Research for Programs

- » Spillover research will be conducted for programs that have a program theory to support spillover and that have been in place in the market and are sufficiently large to support the cost of spillover research.
- » Joint program NTG research generally includes gas and electric program portions
- » Participant spillover research generally conducted at the time of free-ridership research – same survey or same program year.
- » Schedule and priorities may necessitate more “real-time” data collection and year-round evaluation research rather than the year-end annual research that typified the first triennial.

## » **Participant Spillover – Participant Survey**

- The evaluation team has quantified participant spillover through past participant surveys and will continue to do so for the Second Triennial Plan.

## » **Non-participant Spillover – Trade-Ally Survey**

- The evaluation will calculate non-participant spillover from trade ally interviews.
- Proportion of their sales of program-qualified, energy efficient equipment goes to customers that do not receive an incentive for their purchase, and how much influence the program had on these sales.
- The ratio of savings that occur from program-qualified, non-incentivized, but program influenced, sales to sales of incentivized products will be calculated.

# Second-Triennial Spillover Research (possible approaches)

## » **Near-Participant (or Partial Participant) Spillover.**

### **Two approaches:**

#### » **Assessment Participant Survey**

- The savings would be based on the measures recommended in the assessments and would be extrapolated to the population of customers going through the assessments who have not completed projects.

#### » **Dropout Survey**

- Interview customers who initiated projects but ended-up cancelling.
- Explore if the customers did end up completing their projects outside of the program and what level of influence their interaction with the program had on their decision to complete the project.
- The savings would be based on the savings documented in the program records and would be extrapolated to the population using the completion rate ratio discovered through the survey.
- Dropout surveys can be conducted with Trade Allies that participate then drop out of the program

# Comprehensive Non-Participant Spillover Survey

- » **(From 13-0549)** *“Staff proposed that rather than trying to evaluate spillover on a program-by-program basis, the Commission should require Nicor to direct its evaluator to conduct an evaluation of non-participant spillover across the entire sectors of the portfolio, if feasible. Staff maintained that, if a comprehensive non-participant spillover survey were conducted, there would be no need to conduct program-specific assessments for non-participant spillover or use deemed values from other jurisdictions and comprehensive sector-wide portfolio-level evaluation may more accurately reflect how spillover occurs.”*
- » We recommend that the evaluators conduct research to determine if and how portfolio-level spillover research has been conducted successfully nationwide

# Comprehensive Non-Participant Spillover Survey

- » **Non-participant spillover – general population research**
  - Expect very large sample sizes to quantify spillover
  - Accurately quantifying attribution can be very challenging
  - Non-participant research efforts have yielded results of limited value
    - Non-participants often do not recall the details of their purchases so it is difficult to assess whether it would be program eligible
    - Similarly, participants called without reference to a specific program purchase have difficulty discussing their purchases and particularly those that did not go through the program in any detail, and making a conclusion regarding spillover is difficult
    - In contrast, participating trade allies know well what is program eligible equipment, have a market-wide perspective
  - Because of the cost and uncertain outlook for success, the evaluation team recommends that the need for non-participant general population research be assessed as part of GPY4/EPY7 evaluation planning.

# Key CONTACTS



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