

**Peoples Gas (PGL) and North Shore Gas (NSG)**  
**Summary of Deemed NTG Values for GPY1 through GPY7**  
**Updated to include Final NTG Values for GPY7**  
**March 1, 2017**  
**Updated with Faucet Aerator Correction – March 20, 2019**

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***Programs with updated NTGs for GPY7 are highlighted.***

**Net to Gross Methodology References:**

- Illinois TRM version 5.0<sup>1</sup> NTG methodologies
- Illinois TRM version 6.0<sup>2</sup> NTG methodologies

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<sup>1</sup> Illinois Statewide Technical Reference Manual for Energy Efficiency (TRM) Version 5.0 (effective 6/1/2016). Available: <http://www.ilsag.info/technical-reference-manual.html>. See *Volume 4: Cross-Cutting Measures and Attachment*.

<sup>2</sup> Illinois Statewide Technical Reference Manual for Energy Efficiency (TRM) Version 6.0, February 8, 2017, *Volume 4: Cross-Cutting Measures and Attachments*. Available: <http://www.ilsag.info/technical-reference-manual.html>.

	<b>Residential Program Home Energy Jumpstart</b>
GPY1	<p><b>Peoples Gas NTG: 0.86</b>  <b>Free ridership</b> Not estimated separately from NTG  <b>Spillover</b> Not estimated separately from NTG  <b>Water Efficient Showerheads NTG 0.93</b>  <b>Water Efficient Kitchen Aerators NTG 0.94</b>  <b>Water Efficient Bath Aerators NTG 0.94</b>  <b>Pipe Wrap NTG 0.67</b>  <b>Method and Source:</b> Program launched in Peoples Gas in the fourth quarter of GPY1 and experienced limited participation for the year. GPY1 NTG was based on evaluation review and recommended acceptance of program administrator ex ante NTG assumptions by measure, weighted by program-level measure savings to a single NTG ratio for the program.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: no program</b></p>
GPY2	<p><b>Peoples Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>North Shore Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>Method and Source:</b> Evaluation research consisting of GPY2 participating customer self-reports. In GPY2, the Peoples Gas program distributed measures to 4,004 participants, and the North Shore Gas program distributed measures to 348 participants. A total of 80 participants were sampled from the combined population (71 from Peoples Gas, 9 from North Shore Gas).</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 0.93</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.89</b></p>
GPY3	<p><b>Peoples Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>North Shore Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY2 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 0.99</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.98</b></p>
GPY4	<p><b>Peoples Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>North Shore Gas: NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>Method and Source:</b> Deemed by SAG consensus. Values from GPY2 evaluation research.</p>
GPY5	<p><b>Peoples Gas and North Shore Gas:</b>  <b>Deemed NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>Method and Source:</b> Values from GPY2 evaluation research.</p>
GPY6	<p><b>Peoples Gas and North Shore Gas:</b>  <b>Deemed NTG 0.96; Free ridership 0.08; Participant Spillover: 0.04</b>  <b>Method and Source:</b> Values from GPY2 evaluation research.</p>
GPY7	<p><b>All Measures Except Faucet Aerators:</b>  <b>NTG: 0.96 ; Free Ridership: 0.08 ; Participant Spillover: 0.04</b>  <b>Faucet Aerators:</b></p>

	<p><b>Residential Program Home Energy Jumpstart</b></p>
	<p>NTG: 1.04 ; Free Ridership: 0.00 ; Participant Spillover: 0.04</p> <p><b>Method:</b> For measures except faucet aerators: No new research; retained GPY6 final values; FR &amp; PSO (IL EM&amp;V GPY2); NPSO (no value).</p> <p>For faucet aerators: TRM version 6.0 specifies that the free ridership for faucet aerators be set at zero when estimating gross savings using the TRM specified baseline average water flow rate.</p>

	<b><i>Residential Program Home Energy Rebate</i></b>
GPY1	<p><b>Peoples Gas: NTG 0.72; Free ridership 0.28; Participant Spillover 0.00</b>  <b>North Shore Gas: NTG 0.67; Free ridership 0.33; Participant Spillover 0.00</b>  <b>Method and Source:</b> Evaluation research consisting of GPY1 participating customer self-reports and participating trade ally interviews. For Peoples Gas: 68 NTG interviews completed from a population of 1,363 participants. For North Shore Gas: 71 NTG interviews completed from a population of 991 participants. No quantifiable participant spillover was found from customer self-reports. Significant qualitative evidence of spillover was found from 30 trade ally interviews, but was not quantified.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY2	<p><b>Peoples Gas: NTG 0.82; Deemed Free ridership 0.28; Non-Participant Spillover: 0.10</b>  <b>North Shore Gas: NTG 0.80; Deemed Free ridership 0.33; Non-Participant Spillover: 0.13</b>  <b>Method and Source:</b> Spillover results for GPY2 based on evaluation research to estimate spillover from non-participating trade allies. For the spillover calculation, 59 interviews were conducted sampled from two groups of non-participating trade allies: 1) Trade allies that dropped out of the program (so-called “drop out” trade allies): those who had participated in GPY1, but did not participate in GPY2; and 2) True non-participating trade allies - those who reported that they were aware of the program, but had never participated. Free-ridership for GPY2 was deemed from GPY1 evaluation research based on SAG consensus. Evaluation did not research free-ridership in GPY2.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.01</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.02</b></p>
GPY3	<p><b>Peoples Gas: NTG 0.82; Deemed Free ridership 0.28; Non-Participant Spillover: 0.10</b>  <b>North Shore Gas: NTG 0.80; Deemed Free ridership 0.33; Non-Participant Spillover: 0.13</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 and GPY2 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY4	<p><b>Peoples Gas: NTG 0.82; Deemed Free ridership 0.28; Non-Participant Spillover: 0.10</b>  <b>North Shore Gas: NTG 0.80; Deemed Free ridership 0.33; Non-Participant Spillover: 0.13</b>  <b>Method and Source:</b> Deemed by SAG consensus. Values from GPY1 and GPY2 evaluation research.</p>
GPY5	<p><b>Peoples Gas and North Shore Gas:</b>  <b>NTG 0.81; Free ridership 0.30; Participant Spillover 0.00; Non-Participant Spillover: 0.11</b>  <b>Method and Source:</b> A single value was developed for both PGL and NSG programs based on weighting GPY4 values 60% PGL to 40% NSG. Weighting based on GPY5 planning values.</p>
GPY6	<p><b>Peoples Gas and North Shore Gas:</b>  <b>NTG 0.81; Free ridership 0.30; Participant Spillover 0.00; Non-Participant Spillover: 0.11</b>  <b>Method and Source:</b> A single value was developed for both PGL and NSG programs based on weighting GPY4 values 60% PGL to 40% NSG, no changes for GPY6.</p>

GPY7	<p><b>For all program measures except Duct Sealing, Air Sealing, and Insulation</b></p> <p><b>NTG: 0.64</b></p> <p><b>Free ridership: 0.49</b></p> <p><b>Method:</b> Value is from GPY5 evaluation on-line survey completed with 119 GPY5 HER Program participants. The FR result is based on applying the TRM v6.0 NTG methodologies. Overall program FR value uses GPY5 HER Program verified gross savings to weight measure category free ridership: AFUE 95+ (FR=0.48, weight=75%); programmable thermostats (FR=0.64, weight=11%); other measures in survey (FR is not based on enough responses to report statistically significant results at the measure level, weight = 14%). Program measures that were not researched were assigned the overall FR average. This NTG value is not recommended for air sealing, insulation, or duct sealing.</p> <p>Navigant described our concerns with the TRM v5.0 NTG algorithm and offered an alternative approach in an August 23, 2016 memo. Our alternative was not adopted for TRM v6.0, but the approach that did make it into TRM v6.0 addresses what we believed were weaknesses of TRM v5.0 and produces results similar to our August 23 recommended alternative. Navigant recommends the algorithm in TRM v6.0 over the algorithm in TRM v5.0 to estimate free ridership for residential prescriptive rebate programs. A Navigant memo dated December 30, 2016 provides further discussion.</p> <p><b>Participant Spillover: 0.02</b></p> <p><b>Method:</b> The PSO value is from GPY5 evaluation telephone survey research conducted with 100 GPY4 Nicor Gas HEER Program participants. The PSO result is based on applying the TRM v5.0 methodologies to identify spillover candidates, and estimating spillover savings using the Illinois TRM and Nicor Gas program data from GPY4. The TRM version 6.0 participant spillover methodology advises using a lower, more inclusive spillover threshold score of 5.0 rather than 7.0. Navigant re-examined our survey responses applying a threshold of 5.0, but no additional gas spillover was found. A Navigant memo dated December 16, 2016 provides further discussion. Navigant recommends the PSO value from the Nicor Gas study for PGL &amp; NSG. The last participant spillover study for the PGL &amp; NSG HER Program was conducted in GPY1, where evidence of PSO was found, but it was not quantified.</p> <p><b>Non-Participant Spillover: 0.11</b></p> <p><b>Method:</b> Non-participant spillover value for GPY7 is based on GPY2 evaluation research conducted for Peoples Gas and North Shore Gas to estimate spillover from non-participating trade allies. For statewide consistency, the methodology and survey instrument were derived from evaluation research completed for Ameren Illinois by Cadmus. For the spillover calculation, 59 interviews were conducted sampled from two groups of non-participating trade allies: 1) Trade allies that dropped out of the PGL or NSG program (so-called “drop out” trade allies): those who had participated in GPY1, but did not participate in GPY2; and 2) True non-participating trade allies - those who reported that they were aware of the PGL and NSG program, but had never participated. The value of 0.11 is a weighted average of 0.10 for Peoples Gas and 0.13 for NSG.</p>
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	<b><i>Residential Program Home Energy Rebate</i></b>
	<p><b>For Duct Sealing, Air Sealing, and Insulation</b></p> <p><b>NTG:</b> 0.90  <b>Free ridership:</b> 0.10  <b>Spillover:</b> 0.00</p> <p><b>Method:</b> The free ridership value was taken from the "Home Energy Savings Program GPY2/EPY5 Evaluation Report" prepared for Nicor Gas and ComEd (Navigant, 3/25/2014). Results for Nicor Gas for the weatherization component were: FR=0.10. No recommendation was made for spillover.</p> <p>The GPY5 HER FR research did not have a representative mix of duct sealing, air sealing and insulation measures, which contribute significant portions of the PGL &amp; NSG program savings. Navigant concludes the GPY5 overall HER Program NTG (0.64) is not reasonable for duct sealing, air sealing, and insulation. Duct sealing, air sealing, and insulation FR and PSO research is planned for the first half of 2017. Navigant may recommend updated free ridership and spillover values using data from the PGL &amp; NSG Home Energy Rebate Program survey planned for the first half of 2017 if results are final prior to May 30, 2017.</p>

	<b>Advanced (Smart) Thermostats defined in the Illinois TRM</b>
GPY6	<p><b>NTG</b> Not Applicable</p> <p><b>Method:</b> Research for TRM Version 5.0 savings value was conducted as a large sample regression analysis of energy use data with a control group. Natural gas savings shown in TRM Version 5.0 Section 5.3.16 are net savings; no additional NTG adjustment is applied.</p>
GPY7	<p><b>NTG:</b> Not Applicable</p> <p><b>Method:</b> No new research. The natural gas heating savings shown in Illinois TRM Version 6.0 Section 5.3.16 is based on regression analysis on energy use data and thus is a net savings number; no additional NTG adjustment is applied.</p>

	<b>Home Energy Jumpstart/Savings for Low and Moderate Income</b>
GPY6	<p><b>Overall NTG</b> 1.00</p> <p><b>Method:</b> SAG consensus.</p>
GPY7	<p><b>NTG:</b> 1.00</p> <p><b>Method:</b> No new research. Retained GPY6 final value.</p>

	<b>Multi-Family Program</b>
GPY1	<p><b>Direct Install Program NTG: 0.90</b>  <b>Free ridership 0.10</b>  <b>Spillover 0.00</b>  <b>Method and Source:</b> Evaluation research consisting of participating GPY1 customer self-reports (tenants and property decision-makers). NTG based on CATI telephone survey with participating decision-makers (21 property managers for Peoples Gas and North Shore Gas interviewed from a GPY1 population of 343). Program was delivered an assessment and direct installation offering.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY2	<p><b>Peoples Gas: Deemed NTG 0.90; Free ridership 0.10; Participant Spillover: 0.00</b>  <b>North Shore Gas: Deemed NTG 0.90; Free ridership 0.10; Participant Spillover: 0.00</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.98</b></p>
GPY3	<p><b>Peoples Gas: Deemed NTG 0.90; Free ridership 0.10; Participant Spillover: 0.00</b>  <b>North Shore Gas: Deemed NTG 0.90; Free ridership 0.10; Participant Spillover: 0.00</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY4	<p><b>Peoples Gas and North Shore Gas:</b></p> <p><b>In-Unit Direct Installation: NTG 0.90; Free ridership 0.10; Spillover: 0.00</b>  <b>Method and Source:</b> No new research. Value from GPY1 evaluation research.</p> <p><b>Prescriptive Rebates: NTG 0.84 (PGL); 0.90 (NSG)</b>  <b>Method and Source:</b> Based on a weighting of the C&amp;I Prescriptive GPY4 NTG value (0.58) and Multifamily DI NTG (0.90) to reflect decision-makers, measure types, and decision scenario indicated by rate classification.</p> <p><b>TAPI Incentives: NTG 0.99</b>  <b>Method and Source:</b> Based on GPY1 evaluation research of the joint utility Small Business Energy Savings Program.</p> <p><b>Custom Incentives: NTG 0.68</b>  <b>Method and Source:</b> Based on the C&amp;I Custom Rebate Program GPY4 NTG value.</p> <p><b>Gas Optimization: NTG 1.02</b>  <b>Method and Source:</b> Based on GPY1 evaluation research of the joint utility Retro-Commissioning Program.</p>



	<b>Multi-Family Program</b>
GPY5	<p><b>In-Unit Direct Installation: NTG 0.92; Free ridership 0.10; Spillover: 0.02</b>  <b>Method and Source:</b> Free-ridership value from GPY4. Spillover value from Nicor Gas CATI telephone survey with participating GPY3 decision-makers (74 property managers).</p> <p><b>Prescriptive Rebates: NTG 0.87 (PGL); 0.92 (NSG)</b>  <b>Method and Source:</b> Based on a weighting of the C&amp;I Prescriptive GPY5 NTG value (0.63) and Multifamily DI NTG (0.92) to reflect decision-makers, measure types, and decision scenario indicated by rate classification.</p> <p><b>TAPI Incentives: NTG 0.99</b>  <b>Method and Source:</b> No new research. Value from GPY4.</p> <p><b>Custom Incentives: NTG 0.78</b>  <b>Method and Source:</b> Based on the C&amp;I Custom Rebate Program GPY5 NTG value.</p> <p><b>Gas Optimization: NTG 1.02</b>  <b>Method and Source:</b> No new research. Value from GPY4.</p>
GPY6	<p><b>In-Unit Direct Installation: NTG 0.92; Free ridership 0.10; Spillover: 0.02</b>  <b>Method and Source:</b> Free-ridership value from GPY4. Spillover value from Nicor Gas CATI telephone survey with participating GPY3 decision-makers (74 property managers). Comparable research will be conducted with GPY5 PGL and NSG property owners/managers to update these values.</p> <p><b>Prescriptive Rebates and Partner Trade Ally Projects: NTG 0.92 (PGL); 0.92 (NSG)</b>  <b>Method and Source:</b> These types of projects have not been directly researched in Multi-Family, so proxy values from other programs have been used and weighted in previous years. When GPY4 NTG research updates in C&amp;I Prescriptive and with Small Business trade allies are applied to the Multi-Family NTG values, the Multi-Family values fall in a range of 0.90 to 0.93. Differences in that range are not significant. We recommend a single value of 0.92 until research is completed with GPY5 PGL and NSG property owners/managers to establish values for these projects and decision makers.</p> <p><b>Custom Incentives: NTG 0.78</b>  <b>Method and Source:</b> Based on GPY2 custom project research that included multi-family decision-makers. The GPY4 C&amp;I Custom Program NTG research did not include multi-family decision makers.</p> <p><b>Gas Optimization: NTG 1.02</b>  <b>Method and Source:</b> No new research. Value from GPY4.</p>
GPY7	<p><b>In-Unit Direct Installation (except faucet aerators): NTG 0.85; Free ridership 0.18; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p> <p><b>In-Unit Direct Installation Faucet Aerators: NTG 1.03; Free ridership 0.00; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p> <p><b>Prescriptive Rebates: NTG 0.76; Free ridership 0.27; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p>

	<p><b>Multi-Family Program</b></p>
	<p><b>Partner Trade Ally Projects: NTG 0.88; Free ridership 0.15; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p> <p><b>Custom Incentives: NTG 0.72; Free ridership 0.31; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p> <p><b>Comprehensive Project Roll-up Average: NTG 0.84; Free ridership 0.19; Participant Spillover: 0.03; Non-Participant Spillover 0.00.</b></p> <p><b>Method:</b> Free-ridership and Participant Spillover values from GPY5 evaluation research conducted by CATI telephone survey with GPY5 decision-makers (59 property managers or owners). Interviews with 11 trade allies did not find evidence of PSO or NPSO. The GPY5 research applied the TRM v6.0 NTG algorithms.</p> <p>Due to the small population of MF custom projects, the GPY5 Multifamily research completed three Multi-Family Custom interviews, with a FR = 0.31, but did not achieve a 90/10 result. The GPY4 C&amp;I Custom Rebate Program FR estimate was 0.31, and 0.31 is judged to be the best available value. The GPY4 research used TRM v5.0 NTG algorithms, and GPY5 research used TRM v6.0 NTG algorithms.</p> <p>TRM version 6.0 specifies that the free ridership for faucet aerators be set at zero when estimating gross savings using the TRM specified baseline average water flow rate.</p> <p>The comprehensive roll-up NTG value covers Prescriptive, PTA, and Custom MF participants. The roll-up value may be used instead of the path-level NTGs.</p> <p><b>Gas Optimization: NTG 1.02</b></p> <p><b>Method and Source:</b> No new research. Retained value from GPY6.</p>

	<b>Behavioral Energy Savings – Home Energy Reports</b>
GPY1	NA <b>Launched in GPY3</b>
GPY2	NA <b>Launched in GPY3</b>
GPY3	NTG: 1.00 <b>Free ridership</b> N/A <b>Spillover</b> N/A <b>Method:</b> GPY3 billing analysis will yield a net savings value that includes FR and participant SO impacts.
GPY4	NTG: 1.00 <b>Free ridership</b> N/A <b>Spillover</b> N/A <b>Method:</b> GPY4 billing analysis will yield a net savings value that includes FR and participant SO impacts.
GPY5	NTG: 1.00 <b>Free ridership</b> N/A <b>Spillover</b> N/A <b>Method:</b> GPY5 billing analysis will yield a net savings value that includes FR and participant SO impacts.
GPY6	NTG: Not applicable <b>Free ridership</b> N/A <b>Spillover</b> N/A <b>Method:</b> GPY6 billing analysis will yield a net savings value that includes FR and participant SO impacts.
GPY7	NTG: Not applicable when the natural gas savings calculated by evaluation is based on regression analysis on energy use data and thus is a net savings number; no additional NTG adjustment is applied.

	<b>Targeted Outreach and Education – Elementary Energy Education</b>
GPY1	No Program
GPY2	No Program
GPY3	No Program
GPY4	<p><b>Program NTG:</b> 0.79  <b>Free ridership</b> 0.21  <b>Spillover</b> 0.00  <b>Method and Source:</b> PGL and NSG have joined the Elementary Energy Education (EEE) Program offered by Nicor Gas and ComEd. The EEE Program NTG and free-ridership values were the recommended values for Nicor Gas for GPY4. Nicor Gas GPY4 values were based on evaluation research conducted on the EEE Program for Nicor Gas for GPY1.</p>
GPY5	<p><b>NTG</b> 1.05  <b>Free ridership</b> 0.14  <b>Spillover</b> 0.19  <b>Method:</b> No new Illinois research. Free-ridership was estimated as the average of values from three Elementary Energy Education impact evaluation reports (weighted 2/3 showerheads, 1/3 aerators): NIPSCO (FR=12%; final report June 2013), Nicor Gas Rider 29 (FR=3%; final report September 2011), and GPY1 Nicor Gas (FR=27%; final report (July 2013). Rider 29 did not estimate spillover; the spillover is the average of results from NIPSCO (SO=21.5%) and GPY1 Nicor Gas (SO=17%).</p>
GPY6	<p><b>Program NTG: 1.00</b>  <b>Water Efficient Showerheads NTG 1.00</b>  <b>Water Efficient Kitchen Aerators NTG 1.00</b>  <b>Water Efficient Bath Aerators NTG 1.00</b>  <b>Method:</b> Based on SAG consensus.</p>
GPY7	<p><b>Program NTG: 1.00</b>  <b>Method:</b> No new research. Retained GPY6 final value. Program value applies to all natural gas saving measures offered through the program, including Water Efficient Showerheads; Water Efficient Kitchen Aerators; Water Efficient Bath Aerators; Water Heater Setback, and Shower Timers.</p>

	<b>Business Programs Energy Jumpstart Direct Installation</b>
GPY4	<p><b>NTG 0.81; Free ridership 0.19</b></p> <p><b>Method and Source:</b> Value drawn from free-ridership results from small business owners interviewed in the GPY1 Small Business Energy Savings Program. Free-ridership reflects separate evaluation analysis of direct install responses.</p>
GPY5	<p><b>NTG 0.82; Free ridership 0.18</b></p> <p><b>Method and Source:</b> Value drawn from free-ridership results from small business owners interviewed in the GPY1 Small Business Energy Savings Program. Free-ridership reflects results of small business owner responses as reported directly in the Small Business GPY1 evaluation report.</p>
GPY6	<p><b>NTG: 0.79</b></p> <p><b>Free ridership: 0.23</b></p> <p><b>Participant Spillover: 0.00</b></p> <p><b>Non-Participant Spillover: 0.02</b></p> <p><b>Method and Source:</b> Free ridership and participant spillover based on GPY4 evaluation research of C&amp;I Prescriptive Program participating trade allies and customers. Non-participant spillover of 2% from 5 non-participating trade ally interviews conducted in GPY2 as part of evaluation research of the C&amp;I Prescriptive Program.</p>
GPY7	<p><b>NTG: 0.79</b></p> <p><b>Method:</b> No new research. Retained GPY6 final value.</p>

	<b>Business Programs Prescriptive Rebate</b>
GPY1	<p><b>NTG 0.43; Free ridership 0.57; Participant Spillover 0.00</b></p> <p><b>Method and Source:</b> Evaluation research consisting of participating customer self-reports: 37 NTG interviews completed covering 40 projects from a population of 137 projects. No quantifiable participant spillover was found from customer self-reports. Customer participant self-reported free-ridership was 57 percent.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b></p> <p><b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY2	<p><b>NTG 0.63; Free ridership 0.41; Participant Spillover 0.02; Non-Participant Spillover 0.02</b></p> <p><b>Method and Source:</b> Evaluation research consisting of GPY2 participating customer self-reports, GPY2 participating trade ally self-reports, and non-participating trade ally self-reports. Free-ridership of 41% and participant spillover of 0.1% from 58 participating customer NTG interviews completed covering 127 projects from a population of 793 projects. Participant spillover of 2% from 9 participating trade ally interviews. Non-participant spillover of 2% from 5 non-participating trade ally interviews.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b></p> <p><b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY3	<p><b>NTG 0.63; Free ridership 0.41; Participant Spillover: 0.02; Non-Participant Spillover: 0.02</b></p> <p><b>Method and Source:</b> Deemed by SAG consensus from GPY2 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b></p> <p><b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY4	<p><b>NTG 0.58; Free ridership 0.45; Participant Spillover: 0.01; Non-Participant Spillover: 0.02</b></p> <p><b>Method and Source:</b> Based on GPY2 evaluation research, with minor adjustments based on consideration of planned measure mix.</p>
GPY5	<p><b>NTG 0.63; Free ridership 0.41; Participant Spillover: 0.02; Non-Participant Spillover: 0.02</b></p> <p><b>Method and Source:</b> Based on GPY2 evaluation research of the C&amp;I Prescriptive Program, but with no adjustments for a forecasted measure mix.</p>
GPY6	<p><b>NTG: 0.79</b></p> <p><b>Free ridership: 0.23</b></p> <p><b>Participant Spillover: 0.00</b></p> <p><b>Non-Participant Spillover: 0.02</b></p> <p><b>Method and Source:</b> Evaluation research consisting of GPY4 participating customer self-reports, and GPY4 participating trade ally self-reports. Free-ridership of 23% and participant spillover of 0% from 21 participating customer NTG interviews completed from a population of 49 (a relative precision of ± 13% at a 90% confidence level). Participant spillover of 0% from 8 participating trade ally interviews. Non-participant spillover of 2% from 5 non-participating trade ally interviews conducted in GPY2 as part of evaluation research.</p>
GPY7	<p><b>NTG: 0.79</b></p> <p><b>Method:</b> No new research. Retained GPY6 final value.</p>

<b>Business Programs Custom Rebate</b>	
GPY1	<p><b>NTG 0.68</b>  <b>Free ridership 0.32</b>  <b>Participant Spillover 0.00</b>  <b>Method and Source:</b> Evaluation research consisting of participating customer self-reports: 15 NTG interviews completed covering 15 projects from a population of 32 projects. No quantifiable participant spillover was found from customer self-reports.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.02</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.02</b></p>
GPY2	<p><b>NTG 0.78; Free ridership 0.24; Participant Spillover 0.02; Non-Participant Spillover 0.00</b>  <b>Method and Source:</b> Evaluation research consisting of GPY2 participating customer self-reports, GPY2 participating trade ally self-reports, and non-participating trade ally self-reports. Free-ridership of 41% and participant spillover of 0.1% from 40 participating customer NTG interviews completed covering 44 projects from a population of 100 projects. Participant spillover of 2% from 5 participating trade ally interviews. Non-participant spillover of 0% from 5 non-participating trade ally interviews.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 0.81</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.81</b></p>
GPY3	<p><b>NTG 0.78; Free ridership 0.24; Participant Spillover 0.02; Non-Participant Spillover 0.00</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY2 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 0.96</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.96</b></p>
GPY4	<p><b>NTG 0.68</b>  <b>Method and Source:</b> Based on GPY2 evaluation research, but with adjustment based on review of other Illinois Custom programs.</p>
GPY5	<p><b>NTG 0.78; Free ridership 0.24; Participant Spillover 0.02; Non-Participant Spillover 0.00</b>  <b>Method and Source:</b> Based on GPY2 evaluation research of the C&amp;I Custom Program, but with no further adjustments based on review of other Illinois Custom Program NTG values for GPY5/EPY8.</p>
GPY6	<p><b>NTG 0.69; Free ridership 0.31; Participant Spillover: 0.00; Non-Participant Spillover: 0.00</b>  <b>Method and Source:</b> Evaluation research consisting of GPY4 participating customer self-reports, and GPY4 participating trade ally self-reports. Free-ridership of 31% and participant spillover of 0% from 13 participating customer NTG interviews completed from a population of 29 (a relative precision of ± 19% at a 90% confidence level). Participant spillover of 0 from 6 participating trade ally interviews. Non-participant spillover of 0% from 5 non-participating trade ally interviews conducted in GPY2 as part of evaluation research.</p>
GPY7	<p><b>NTG: 0.69</b>  <b>Method:</b> No new research. Retained GPY6 final value.</p>

	<b>Business Programs Gas Optimization</b>
GPY3	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> Evaluation recommendation accepted by SAG based on GPY1 evaluation research of the joint C&amp;I Retro-Commissioning Program.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY4	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> Deemed by SAG consensus. Values based on GPY1 evaluation research.</p>
GPY5	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> No new research. Values based on GPY1 evaluation research.</p>
GPY6	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> No new research. Values based on GPY1 evaluation research.</p>
GPY7	<p><b>NTG: 1.02</b>  <b>Method:</b> No new research. Retained GPY6 final value.</p>



	<b>C&amp;I Retro-Commissioning</b>
GPY1	<p><b>NTG 1.02</b>  <b>Free ridership 0.09</b>  <b>Participant Spillover 0.11</b>  <b>Method and Source:</b> Evaluation research consisting of GPY1 participating customer and Retro-Commissioning Service Provider self-reports. Interviews conducted with 9 of 15 participants from Peoples Gas and North Shore Gas and eight of nine Service Providers. Participant and Service Provider spillover researched.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.06</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.20</b></p>
GPY2	<p><b>Peoples Gas: Deemed NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>North Shore Gas: Deemed NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.04</b>  <b>North Shore Gas: Verified Gross Realization Rate: no savings installed</b></p>
GPY3	<p><b>Peoples Gas: Deemed NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>North Shore Gas: Deemed NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.00</b></p>
GPY4	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> Deemed by SAG consensus. Values based on GPY1 evaluation research.</p>
GPY5	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> No new research. Values based on GPY1 evaluation research.</p>
GPY6	<p><b>NTG 1.02; Free ridership 0.09; Participant Spillover: 0.11</b>  <b>Method and Source:</b> No new research. Values based on GPY1 evaluation research.</p>
GPY7	<p><b>NTG: 1.02</b>  <b>Method:</b> No new research. Retained GPY6 final value.</p>

	<b><i>Business New Construction</i></b>
GPY4	<p><b>NTG</b> 0.52</p> <p><b>Method and Source:</b> PGL and NSG have joined the Business New Construction (BNC) Program offered by Nicor Gas and ComEd. The BNC Program NTG value was the recommended value for Nicor Gas for GPY4.</p>
GPY5	<p><b>NTG</b> 0.92; <b>Free ridership</b> 0.08, <b>Spillover</b> 0.00</p> <p><b>Method and Source:</b> Value drawn from gas-weighted free-ridership and spillover results from participant interviews conducted for the Nicor Gas and ComEd GPY3/EPY6 Business New Construction Program.</p>
GPY6	<p><b>NTG</b> 0.67</p> <p><b>Method and Source:</b> FR, PSO, and NPSO research conducted for Nicor Gas and ComEd for GPY4/EPY7 resulted in a NTG of 0.57 for gas. SAG consensus for GPY6 is a three-year average of 0.52, 0.92, and 0.57. Also applies to small business new construction.</p>
GPY7	<p><b>NTG:</b> 0.77</p> <p><b>Method:</b> Research conducted for ComEd and gas utility program partners for GPY5/EPY8 resulted in a NTG ratio of 0.83 for natural gas measures. SAG consensus for GPY6 and GPY7 was to use a three-year average of the most recent NTG research values. For GPY7, the three most recent research values are: 0.92, 0.57, and 0.83, producing an average of 0.77. The NTG value also applies to small business new construction. The research applied TRM v5.0 NTG algorithms.</p>

	<b>Small Business Energy Savings</b>
GPY1	<p><b>NTG 0.99</b>  <b>Free ridership 0.02</b>  <b>Participant Spillover 0.01</b>  <b>Method and Source:</b> Evaluation research consisting of GPY1 participating customer self-report combined with trade ally input. Customer self-reports: 30 participant NTG interviews completed covering 31 projects from a population of 396 projects. Basic method of participant free ridership analysis was applied. One percent participant spillover was found from customer self-reports. Customer participant self-reported free-ridership was 18 percent for Peoples Gas and North Shore Gas. Trade ally interviews: Three trade allies interviewed representing 98% of ex ante program therm savings. Individual trade ally responses to free-ridership questions were weighted by their respective fuel-specific program savings contributions and combined for a fuel-specific overall free-ridership rate. This approach resulted in an evaluation estimate of 2 percent free-ridership for gas measures.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 0.99</b>  <b>North Shore Gas: Verified Gross Realization Rate: 0.99</b></p>
GPY2	<p><b>Peoples Gas: Deemed NTG 0.99; Free ridership 0.02; Participant Spillover: 0.01</b>  <b>North Shore Gas: Deemed NTG 0.99; Free ridership 0.02; Participant Spillover: 0.01</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.02</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.02</b></p>
GPY3	<p><b>Peoples Gas: Deemed NTG 0.99; Free ridership 0.02; Participant Spillover: 0.01</b>  <b>North Shore Gas: Deemed NTG 0.99; Free ridership 0.02; Participant Spillover: 0.01</b>  <b>Method and Source:</b> Deemed by SAG consensus from GPY1 evaluation research.</p> <p><b>Peoples Gas: Verified Gross Realization Rate: 1.00</b>  <b>North Shore Gas: Verified Gross Realization Rate: 1.02</b></p>
GPY4	<p><b>NTG 0.99; Free ridership 0.02; Participant Spillover: 0.01</b>  <b>Method and Source:</b> Based on evaluation recommendation. Did not reach consensus.</p>
GPY5	<p><b>NTG 0.93 (for Direct Install and Retrofit Incentives)</b>  <b>Free ridership 0.09</b>  <b>Spillover 0.02</b>  <b>Method:</b> The GPY5 NTG value uses an equal-weight average of the free-ridership estimate from participant survey research performed on ComEd participants during EPY7 with the free-ridership estimate derived from PG/NSG trade ally interviews in GPY1. For participant spillover, the EPY7 ComEd result was 2%, the Nicor Gas GPY1 result was 2%, and PG/NSG GPY1 result was 1%. A value of 2% for participant spillover was set for all three utilities. This results in a NTGR of 0.93. For ComEd PY7 NTG research, Navigant conducted a CATI survey of 70 program projects drawn at random from a sample frame of 4,441 projects with ex-ante savings of 5,000 kWh or greater, representing 82 percent of PY7 projects and 98 percent of PY7 expected savings. Sample size chosen to attain +/- 10 percent precision at 90 percent confidence.</p>

	<b><i>Small Business Energy Savings</i></b>
GPY6	<p><b>NTG 0.93 for Direct Install, Retrofit (custom and prescriptive projects)</b>  <b>Free ridership 0.09; average of participant (0.16) and trade ally (0.03)</b>  <b>Participant Spillover 0.02</b>  <b>Non-Participant Spillover 0.00</b></p> <p><b>Method:</b> The GPY6 NTG value uses an equal-weight average of the 16 percent free-ridership estimate from participant survey research performed on ComEd participants during EPY7 (described in GPY5 above) with the three percent free-ridership estimate derived from PGL and NSG trade ally interviews in GPY4. The PGL and NSG GPY4 trade ally free ridership is based on 12 trade ally interviews from a population of 55. The GPY4 trade ally interviews found no spillover. For participant spillover, the EPY7 ComEd result was 2%, the Nicor Gas GPY1 result was 2%, and PG/NSG GPY1 result was 1%. A value of 2% for participant spillover was set for all three utilities.</p>
GPY7	<p><b>NTG 0.92 for Direct Install and Retrofit (custom and prescriptive projects)</b>  <b>Free ridership 0.09; equal weighted average of participant (0.15) and trade ally (0.03) results</b>  <b>Participant Spillover 0.01</b>  <b>Non-Participant Spillover 0.00</b></p> <p><b>Method:</b> The GPY7 NTG value uses an equal-weight average of the 15 percent free ridership estimate from participant telephone survey research conducted on 44 PGL &amp; NSG participants from GPY5, and a three percent free-ridership estimate for 12 PGL &amp; NSG trade allies from interviews conducted in GPY4. The participant free ridership estimate was based on “Option 1” of the TRM v5.0 NTG protocol which is now the protocol in TRM v6.0. The PGL and NSG GPY4 trade ally free ridership is based on a representative stratified sample of 12 trade ally interviews from a population of 55. The GPY4 trade ally interviews found no spillover. For participant spillover, both GPY5 and GPY1 results for PGL &amp; NSG were 1 percent.</p>