



To: Nicor Gas, Elizabeth Horne, David Brightwell, ICC Staff
CC: Celina Aguilar, Laura Agapay-Read, Jeff Erickson, Guidehouse
From: Ensar Biscevic, Guidehouse
Date: August 26, 2025
Re: Recommended NTG Value for Nicor Gas Residential New Construction Program

1. Executive Summary

This memo documents our rationale to recommend 0.65 for the Net to Gross (NTG) ratio for the Nicor Gas Residential New Construction Program.

Guidehouse conducted secondary research on NTG values for the Residential New Construction program (RNC). The research involved identifying potentially similar programs in comparable jurisdictions with recently researched NTG values. Based on our research, Guidehouse recommends using the free ridership and spillover values from DTE's New Home Construction program, 0.35 and 0.0, respectively. This is based on several criteria which Guidehouse used to rate the applicability of NTG values of comparable programs to Nicor Gas program. The methodology and the criteria used are described below.

2. Program Background

The Nicor Gas RNC program aims to achieve energy savings by enhancing the energy efficiency of new single-family detached homes and town homes. The program offers financial incentives to participating home builders and their verifier companies to either exceed state and local building code requirements for duct and air sealing and for installing specific high-efficiency equipment, or for installing prescriptive high-efficiency equipment only. Measures are combined into tiered prescriptive packages with a different incentive amount for the new home builder at each tier.

3. Research Methodology and Results

Guidehouse investigated NTG values for other residential new construction programs. We sought programs with features like the Nicor Gas program, specifically targeting features that can affect the NTG of program measures:

- Customer sector: Residential
- Measure technology: HVAC, Water, and Weatherization
- Climate/region: Cold Climate
- Installation: Homebuilder
- Project Time frame: 2 years
- Market Maturity: High Maturity

Recommended NTG Value for Nicor Gas Residential New Construction Program (RNC)

- Extent of Design Assistance: Low
- Incentive Calculation: Tiered Prescriptive Measure Packages

Our primary research included a literature review of utility evaluation reports and NTG memos. We determined that if the program included a training component it may affect total spillover. We also prioritized programs with NTG ratios that were based on recent primary research.

The Guidehouse secondary research reviewed six potentially analogous values, shown in Table 1 below.

Recommended NTG Value for Nicor Gas Residential New Construction Program (RNC)

Table 1. Net-to-Gross Values of Residential New Construction (RNC) Programs CY2024

ID	State	Utility	Region	Sector	Program Type	End Uses	Program Name	Incentive Calculation	Delivery Channel	Components	NTG	FR	PSO	Year of Research	NTG Research at Measure or Pgm Level?
Assessment															
1	MI	DTE	MW	RES	Gas & Electric	HVAC, Water, & Weatherization	New Home Construction	Measure level	New home builders and	New Construction	0.65	0.35	-	2022	Program
<i>Primary field verification, gas specific measures, tiered incentives, and low design support like Nicor Gas's program.</i>															
2	PA	PECO	NE	RES	Gas & Electric	HVAC, Water, & Weatherization	Residential New Construction	Tiered Whole Home Efficiency	New home builders and	New Construction &	0.55	0.45	-	2022	Program
Incentive was calculated using a per kWh Saving as opposed that allowed for a large variety of measures to be implemented unlike Nicor Gas's tiered incentive structure.															
3	WI	WI FOE	MW	RES	Gas & Electric	HVAC & Insulation	Residential New Construction	Tiered Whole Home Efficiency	New home builders and	New Construction, &	0.13	NA	NA	2019-2023	Program
Primary research based on billing history through 2023 of programs implemented in CY2019. Program design, training programs in particular, lead to large spillover causing NTG to be low without non-program factors (0.13) and very high with non-program factors (1.16).															
4	PA	PPL	NE	Res	Gas & Electric	HVAC & Insulation	Energy Efficient Homes	Tiered Whole Home Efficiency	New home builders and	New Construction &	0.53	0.48	0.01	2022	Program
Primary research, however included retrofits in addition to new construction.															
5	IL	ComEd	MW	Res	Electric	HVAC & Insulation	Electric Homes New Construction	New Home Size	New home builders and	New Construction	0.8	NA	NA	2024	Program
Electric only measures, Research inconclusive leading to default value being used.															
6	IN	NIPSCO	MW	Res	Gas & Electric	HVAC & Insulation	Residential New Construction	New Home Size and Measure level	New home builders and	New Construction	0.21	0.79	0	2022	Program
Incentive is based on house size plus measure level incentives. Additionally interviews suggested incentives were far too low and team engagement was minimal leading to high free ridership.															

NA = Not Available. RES = Residential, COM = Commercial

FR = Free Ridership, PSO = Participant Spillover

Source: Guidehouse Evaluation Team

¹ [DTE Program Year 2022 Evaluation Report](#)

4. Final NTG Results and Recommendations

Based on our secondary research, we recommend using the free ridership value of 0.35 and spillover value of 0.0 of the DTE Energy New Home Construction (NHC) program. In our research of similar programs, NHC stood out as a close comparison to RNC due to its similar incentive calculation and program components. Unlike other potential comparison programs, NHC used tiered fixed incentive rebates that increase with energy efficiency savings. Though implemented at a measure level, these tiered rebates are similar in magnitude and contain measures consistent with the Nicor Gas prescriptive measure packages. Additionally, NHC was specifically geared towards residential new construction including single and multifamily new construction, which is consistent with Nicor Gas program's target audience. The structure of the two programs is such that system design was left to the new home builders so both programs had relatively low project design support. It should be noted that NHC is a joint electric and gas program, but, given that most measures implemented by DTE targeted gas savings, NHC remains a good comparison to Nicor Gas RNC Program.

Other potential comparison programs fell at different stages of our analysis. Most of them did not follow the same incentive structure as RNC which could contribute to differences in NTG value. Others contained components like training that would have boosted SO or included other programs in the NTG calculation which would obscure the RNC-specific value. The New Home Construction program therefor provided the best comparison to the RNC.

This recommendation results in a NTG of 0.65 for all measures of Nicor Gas' RNC program except advanced thermostats, and a NTG of 0.83 for advanced thermostats².

² Because the heating savings factor for residential advanced thermostats is based on a consumption data analysis using matching to non-participants, Guidehouse recommends $NTG = 1 - FR/2 + NPSO$ for residential advanced thermostats. For more detail, see Table 5-3 in Volume 4 of the TRM.