



Memorandum

To: Vincent Gutierrez, Kelly Gunn, Violeta Ryman, Rick Tonielli, Mark Milby, ComEd

From: Ann Thompson, Patricia Plympton, Guidehouse

CC: Jennifer Morris, ICC; Jeff Erickson, Laura Agapay-Read, Guidehouse; Mike Frischmann, EcoMetric

Date: September 30, 2021

Re: ComEd CY2021 Electric Homes New Construction Pilot: Results of Secondary Research on NTG Ratios and NTG Recommendation for use in CY2021

Executive Summary

The evaluation team conducted secondary research on net-to-gross (NTG) values for the ComEd CY2021 Electric Homes New Construction (EHNC) Pilot, which involved identifying potentially similar programs and pilots in comparable regions with recently researched NTG values. Based on not finding NTG values for similar programs or pilots, the evaluation team recommends using the default NTG value of 0.80 for this pilot. This memo describes the methodology and the criteria used to come to this conclusion.

Pilot Background

The ComEd EHNC Pilot offers builders a financial incentive for constructing high quality, electric homes in ComEd's service territory. The pilot encompasses single-family homes, townhomes, duplexes, and quadplexes that achieve best-practice energy efficiency. The pilot's requirements for efficiency pertain to the home's envelope, all-electric HVAC, heat pump water heating, lighting, and appliances. These homes are potential candidates for supplemental clean energy strategies, such as solar power, EV charging, smart homes, and induction cooking. In addition to incentivizing builders, the pilot aims to benefit homeowners by reducing their energy bills while providing superior comfort.

Research Methodology and Results

The evaluation team investigated NTG values for all-electric, new construction programs and pilots. The team sought programs and pilots with features similar to ComEd's offering, specifically targeting features that can affect a program's NTG:

- Customer Sector: Residential
- Measure Category: All-electric New Construction

- Delivery Channel: Incentive to Builders

The research included a secondary literature review of annual utility reports and state technical resource manuals. The team also included residential new construction programs that offered an incentive to builders to construct fully electric homes. The secondary research included eight programs and pilots, shown in Table 1. Midwest programs are in bold.

Table 1. Net-to-Gross Values of Electric Homes New Construction Programs

ID	State	Utility	Region	Sector	Program or Pilot Name	Delivery Channel	NTG	Assessment
1	MI	Consumers Energy	MW	Residential	All Electric New Home Construction¹	Incentive to Builders	-	No published NTG ratio.
2	IN	Indiana Michigan Power	MW	Residential	New Home Construction²	Incentive to Builders	-	No published NTG ratio.
3	CA	Sacramento Municipal Utility District	W	Residential	All Electric Smart Home Builders Incentive ³	Incentive to Builders	0.55	Default residential NTG value for California.
4	CA	Roseville Electric Utility	W	Residential	Building Electrification Pilot ⁴	Incentive to Builders	0.55	Default residential NTG value for California.
5	OR	Central Electric Cooperative	W	Residential	New Home Performance Path ⁵	Incentive to Owners or Builders	-	No published NTG ratio.
6	ID	Idaho Power	W	Residential	Residential New Construction Pilot ⁶	Incentive to Builders	-	No published NTG ratio.
7	TN	Sequachee Valley Electric Cooperative	SE	Residential	New Homes Program ⁷	Incentive to Builders	-	No published NTG ratio.
8	VT	Washington Electric Cooperative	NE	Residential	Residential New Construction ⁸	Incentive to Owners	-	No published NTG ratio.

Source: Evaluation team analysis

¹ [All Electric New Home Construction](#)

² [New Home Construction](#)

³ [All Electric Smart Home Builders Incentive](#)

⁴ [Building Electrification Pilot](#)

⁵ [New Home Performance Path](#)

⁶ [Residential New Construction Pilot](#)

⁷ [New Homes Program](#)

⁸ [Residential New Construction](#)

Two of the reviewed offerings are in the Midwest, and did not have published NTG ratios. Two California utility offerings, Sacramento Municipal Utility District and Roseville Electric Utility, had

a program or pilot with published NTG ratios, but these are default values not based on program- or pilot-specific primary research and therefore are not applicable. In general, most of the programs and pilots did not have published NTG values specific to all-electric new construction.

Final NTG Results and Recommendations

Because our research found no recently researched NTG ratios for a similar program or pilot in a comparable market and region, the IL default NTG value of 0.80 applies for the CY2021 Electric Homes New Construction pilot. The team will annually examine the possibility of NTG research.

In addition, ComEd has expressed the desire to offer the EHNC as a market transformation program beginning in CY2022. The evaluation team will use the methodology in TRM Attachment C when estimating net savings for a market transformation offering.