



Electrification Bill Impacts – Nicor Gas Policy Proposal

January 2023 Policy Manual Subcommittee Meeting

1. Section 8-103B(b-27) requires electric utilities to provide customers with estimates of the impact of electrification measures on customers' average monthly electric bill and total annual energy expenses.
2. In complying with this requirement, electric utilities shall provide transparent and accurate information that allows customers to assess electrification choices.
3. Electric utilities shall provide estimates of bill and cost impacts specific to the electrified end use and specific to the electrification measure installed.
 - a. Bill and cost impacts shall be calculated specific to the electrified end use, and not include auxiliary savings from other end uses affected by the measure. For example, for heat pump measures, electric utilities shall provide bill and cost impacts separately for the heating end use (i.e., the end use being electrified) as well as for the cooling end use. For another example, for heat pump water heater measures, utilities shall provide bill and cost impacts separately for the water heating end use, as well as for any impacts on space heating, cooling, or dehumidification.

Understandable, but it only makes sense in the context of what the purpose or desired end results are. Perhaps those goals and objectives are known and indicated elsewhere; and we are not referring to the purpose described at item 1. in this document but rather what the broader social policy and energy market transition aims are. If the amendments to the policy manual are aimed at customer safety, bill affordability and access, and decarbonization, while adhering to the purpose of the franchise and the interests of the franchisees, then the policy design (changes) must aim to balance all of these aims.

Separate bill impacts: this is good.

- b. For broader projects involving multiple measures, electric utilities shall provide bill and cost impacts separately for each measure and end use, although utilities may also provide additional information for other end uses and measures. For example, for a project involving a heat pump and additional weatherization measures, bill and cost impacts shall be calculated separately for heating savings (i.e., the electrified end use) coming solely from the heat pump measure (i.e., the electrification measure), and not be combined with additional savings from other measures installed in the broader project. However, when an electrification measure is installed in a broader project where savings from the measures interact, savings shall be allocated to the electrification measure using calculations and protocols defined in the IL-TRM.

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Should the requirement include rate, bill and installation cost impacts? Why should costs impacts be assessed separately by each measure? That approach or requirement could make this entire process unnecessarily expensive, burdensome and could cause delay - or altogether impracticable. What is the rationale for this approach? Who would benefit from this approach?

Does the approach proposed envision only behind-the-meter costs?

4. Electric utilities shall provide estimates of bill and cost impacts comparing the electrification measure not only to inefficient baseline options, but also to efficient, non-electrified equipment options available to customers. For example, for a heat pump measure replacing a gas furnace/electric air conditioner HVAC system, electric utilities shall provide bill and cost impacts comparing the installed electric heat pump to a baseline furnace/air conditioner system, as well as to an efficient furnace/air conditioner system.

Is there a plan for data sharing with gas utilities to help enable the analyses called for in this proposal?

5. In calculating bill and cost impacts, electric utilities shall calculate electric and non-electric energy costs (or savings) as the product of energy consumption (or savings) and energy prices.
 - a. In calculating energy consumption (or savings), electric utilities shall:
 - i. Rely on algorithms specified in the IL-TRM.
 - ii. At the utility's option, rely on custom calculations of consumption and savings.
 - iii. Account for seasonal and other time-differentiated differences in energy usage, consistent with time-differentiated differences in applicable energy prices.
 - b. In calculating energy prices, electric utilities shall incorporate the following factors applicable to each customer:
 - i. Appropriate rates and riders for the delivery of electricity or natural gas.
 - ii. Appropriate rates and riders for the purchase of wholesale electricity or natural gas for customers purchasing wholesale energy from utilities.
 - iii. Appropriate price structures for wholesale electricity, wholesale natural gas, or other fuels for customers purchasing wholesale electricity or natural gas, or customers purchasing other fuels, from unregulated suppliers.
 - iv. Appropriate fixed charges, demand charges, energy charges, and other charges.
 - v. Appropriate seasonal and other time-differentiated price differences.
 - vi. Appropriate interconnection fees or other charges for new or expanded service.
 - vii. Appropriate exit fees or other charges for discontinued service.
 - viii. Appropriate taxes, surcharges, discounts, or other additional charges not captured in Sections 5.b.i. through 5.b.vii.

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- ix. Marginal prices that will be charged for the changes in energy use created by the electrification measure.
 - x. Appropriate adjustments to capture as known changes in electric and gas rates , as well as monthly and seasonal variations in energy prices.
 - xi. Changes in utility rates or wholesale energy prices that may affect customers who electrify end uses (for example, the change to an electric heating rate).
6. The following procedures shall be implemented to ensure that electric utilities provide customers with bill and energy cost impact estimates that are transparent and accurate:
- a. When appropriate, IL-TRM algorithms shall specify savings by end use for measures affecting multiple end uses.
 - b. When appropriate, IL-TRM algorithms shall provide approaches for calculating time-differentiated energy consumption and savings.
 - c. The IL-TRM shall include sections specifying the efficient non-electric systems electric utilities will include in information to customers, consistent with the requirements of Section 4. The IL-TRM will provide the minimum requirements for efficient non-electric systems; electric utilities may choose to provide customers with information for additional efficient non-electric systems that go beyond these minimum requirements.
 - d. The IL-TRM shall include sections specifying the calculation of electricity and natural gas prices for an appropriate range of tariffs and/or customer classes for each utility. These sections shall report separately calculations for bundled service prices for customers purchasing wholesale energy from the utility, as well as for delivery prices for customers purchasing wholesale energy from unregulated suppliers.
 - e. The IL-TRM shall include sections specifying default values for prices of other fuels, with appropriate differentiation for customer types, and appropriate detail consistent with the requirements of Section 5.b.

+++Good Point Ted Weaver - There may need to be additional conversation about this. Electric prices change after TRM is finalized. The idea is that the TRM provides the algorithm for which rates to use in the calculation, and the utility plugs in values for any rates that change after the TRM is finalized. But there is a possibility for changes in rate structures that will need to be addressed.

Should also include building types, age, and location.

- f. At least once per year, electric utilities shall ensure that bill and cost impact calculations provided to customers, including any custom energy consumption (or savings) calculation approaches and assumptions, as specified in Section 5.a.2., are reviewed by the independent Evaluator to verify that they accurately reflect customer energy consumption and savings.

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Why not do this for both electric and gas utility EE programs? It would then provide a good basis for comparison over time.

7. Whenever practicable, utilities shall provide bill and cost impacts that represent equipment specifications, operating conditions, and energy prices specific to the individual customers installing the measures. At a minimum, electric utilities shall provide customer with estimates of bill and cost impacts that represent default equipment specification, operating conditions, and energy prices appropriate to the customer installing the measure. Utilities may comply with these requirements by providing customers with interactive electronic tools.

Any unsafe conditions identified that could advance unsafe conditions, and the cost to repair should also be considered. Additionally, utilities would be required to track and make available to the Commission homes or buildings identified as “untreatable” due to the state of disrepair. Those numbers should be reported in aggregate to the ICC.