**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. Agreed. For purposes of this Nicor proposal, we understand the proposal only addresses information provided to customers for their benefit, and does not apply to any criteria related to the eligibility of a project for promotion by the utility. We note that utilities and stakeholders have already agreed on a project-level, all-measure bundled approach for bill impacts for IQ electrification eligibility purposes to comply with stipulation requirements that IQ electrification projects provide total bill savings.
2. In complying with this requirement, electric utilities shall provide transparent and accurate information that allows customers to assess electrification choices. Agreed.
3. Electric utilities shall provide estimates of bill and cost impacts specific to the electrified end use and specific to the electrification measure installed. Partial agreement. See below.
	1. 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.

We agree it will be useful for customers with heat pump projects to understand separately the expected heating and cooling costs. This will provide them useful information to help in making decisions about how much they may want to use the cooling capability, and to properly budget for it if they choose to use it. However, because a heat pump is a single device and a customer cannot separate the multiple end use functionality, it is important to first provide the entire bill impact of the heat pump, and then also provide the detail by end use.

We disagree that auxiliary savings should be excluded. One cannot eliminate these auxiliary impacts, and they are simply part of the overall impact of the measure. For example, the customer will have no choice but to have the auxiliary impacts resulting from installation of an HPWH, and it would be misleading to the customer to imply their cost impacts would somehow not actually be effected by them.

* 1. 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. Generally agree. However, we propose customers be provided with information on both the entire project bill impacts, and then a breakdown that shows each measure’s standalone bill impact without interactions (since a customer can choose to adopt any single measure or any combination of measures). The itemized listing can note that because of interactions between measures they sum to a larger total bill impact than the actual full project considered as a whole. And as articulated in our response to the proposal around energy consumption reduction, we support the TRM allowing program administrator discretion as to any ordering of measures when interactions are included.

1. 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. Disagree. Electrification measures are now eligible measures in the 8-103(b) efficiency programs per CEJA. It is inappropriate to apply this standard only to those measures when the requirement does not apply to other efficiency measures. We have never had a requirement to present potential alternative measure options to customers. Further, this is a completely unworkable policy. There are potentially unlimited different possible solutions to improving energy using systems and equipment in buildings, and it would be unreasonable, cost prohibitive, disruptive, and confusing to customers for them all to be analyzed.
2. 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. We agree that bill savings are the product of the energy savings and prices. In general, we agree with the sub-bullets below. In short, we agree that we should strive for accurate calculations of “all-in” cost impacts, including any appropriate riders, fixed charges, taxes, etc. whenever practicable. However, we have concerns about the documentation of these calculations in the TRM because rates and prices can change, and they will not necessarily align with TRM update schedules. In addition, it is unworkable for the TRM to keep up with changes from things like QIP and all the various possible ARES rates. Further, the electric utilities, in partnership with stakeholders, have already begun development of comprehensive calculators to estimate bill impacts and utilities are best positioned to maintain these calculators and ensure they are using appropriate current values. Also, we believe this would add some significant and unnecessary burden to the TRM administrator. Finally, in some cases, electrification measures may be promoted through midstream or other delivery channels which, by necessity, will require reliance on somewhat more simplified calculations and default averages (e.g., one cannot know what electric rate block a customer might have on the margin, or what ARES rate they are paying).
	1. In calculating energy consumption (or savings), electric utilities shall:
		1. Rely on algorithms specified in the IL-TRM.
		2. At the utility’s option, rely on custom calculations of consumption and savings.
		3. Account for seasonal and other time-differentiated differences in energy usage, consistent with time-differentiated differences in applicable energy prices.
	2. In calculating energy prices, electric utilities shall incorporate the following factors applicable to each customer:
		1. Appropriate rates and riders for the delivery of electricity or natural gas.
		2. Appropriate rates and riders for the purchase of wholesale electricity or natural gas for customers purchasing wholesale energy from utilities.
		3. 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.
		4. Appropriate fixed charges, demand charges, energy charges, and other charges.
		5. Appropriate seasonal and other time-differentiated price differences.
		6. Appropriate interconnection fees or other charges for new or expanded service.
		7. Appropriate exit fees or other charges for discontinued service.
		8. Appropriate taxes, surcharges, discounts, or other additional charges not captured in Sections 5.b.i. through 5.b.vii.
		9. Marginal prices that will be charged for the changes in energy use created by the electrification measure.
		10. Appropriate adjustments to capture as known changes in electric and gas rates , as well as monthly and seasonal variations in energy prices.
		11. 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).
3. 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:
	1. When appropriate, IL-TRM algorithms shall specify savings by end use for measures affecting multiple end uses. Agree. This is already standard practice for most TRM measures.
	2. When appropriate, IL-TRM algorithms shall provide approaches for calculating time-differentiated energy consumption and savings. Maybe. However, we believe this may be better done with the utility bill impact calculator that may be better able to deal with utility-specific time periods based on their specific tariffs, especially since the various time periods will vary by utility.
	3. 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. Disagree. See Section 4 above.
	4. 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. See above. We believe this is better and more efficiently maintained by the individual electric utilities. The TRM only undergoes updates annually. Given the volatility of some fuel prices, the ability to maintain up-to-date bill impact calculators will be better handled by the program administrators.
	5. 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. Disagree. TRM can specify the approach and data sources as appropriate for delivered fuels. We note that the avoided costs represent retail costs for delivered fuels already. However, we recognize that it may be appropriate to further disaggregate that by customer type and typical volumes purchased. Also, given fuel price volatility, relying on current avoided costs may be problematic rather than an objective data source (e.g., EIA) that tracks and updates values more frequently. The Stakeholders and electric utilities have already agreed on some appropriate sources and update periods for delivered fuels for purposes of bill impact calculations.
	6. 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. While we are not necessarily opposed to some evaluation review, we disagree that it should be mandated on a time schedule. Evaluators already review samples of custom savings calculations annually. Given the establishment of agreed upon rate values and methods for converting energy savings to bill impacts, we do not see the need for evaluators to also review the final cost estimates. Further, this implies a review of a census of projects rather than a sample, which we would oppose. Finally, while the evaluators will review the energy savings claims for electrification projects, we believe it is unnecessary for them to also review the bill impact calculations using those energy savings.
4. 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. Agree, with emphasis on the term “practicable.” As mentioned above, midstream and potentially other delivery methods may require use of default averages that may not represent specific customers. Further, we expect to continue to rely on things like DOE testing standards and code requirements as we do with efficiency measures that often do not reflect a particular customers circumstance.