Illinois Energy Efficiency Stakeholder Advisory Group
Policy Manual Subcommittee Version 3.0: Proposed Policy Template

Policy Proposal: Fuel Switching Definition
Submitted By: Peoples Gas & North Shore Gas

Question 1: Proposed Policy and Rationale

Peoples Gas and North Shore Gas (PGL and NSG) is proposing policy changes on the topics of fuel switching and customer benefits to fuel switching, as described further below:

1. Fuel Switching

PGL and NSG propose the following definition for fuel switching be included in Policy Manual 3.0:

> *A change in the primary fuel source means a change in the primary fuel source for space heating, water heating, cooling, drying, cooking, industrial processes, and other building and industrial end uses.*

2. Customer Benefit

In order to ensure that benefits to customers are properly prioritized in fuel switching policy framework, PGL and NSG recommend a three-part requirement for fuel switching measures to be included in Policy Manual 3.0. PGL and NSG propose that fuel switching measures must demonstratively:

a. reduce carbon emissions
b. reduce customer bills
c. have a TRC greater than 1.0

PGL and NSG propose that these requirements should be reviewed prior to a utility incentivizing a fuel switching measure and such total effect should be used to count the savings towards the utility's annual total savings requirement.

a. Reduce Carbon Emissions. PGL and NSG understand that one of the goals of CEJA is to reduce carbon emissions and reliance on fossil fuels. Amendments to the Electric Vehicle Act (20 ILS 627/45) (the "EV Act") requires electric utilities to explore beneficial electrification programs, as defined below.

> *"Beneficial electrification programs" means programs that lower carbon emissions, replace fossil fuel use, create cost savings, improve electric grid operations, reduce increases to peak demand, improve electric usage load shape, and align electric usage with times of renewable generation….*

Per the EV Act, the electric utilities serving more than 500,000 customers in the state shall file a Beneficial Electrification Plan with the Illinois Commerce Commission (Commission) for programs that start no later than January 1, 2023. The Commission will review the Plan to determine if they are cost-beneficial and in the public interest. One review criterion listed in the statute is to consider whether the Plan is reasonably expected to contribute to the reduction of carbon emissions and meeting air quality standards. This same concept of overall carbon reduction should be applied to fuel switching as energy efficiency measures as well.

b. Reduce Customer Bills*.* CEJA amended Section 8-103B(b-27) to require the utility to provide the customer with an estimate of the impact of the fuel switching measure on the customer's average monthly electric bill and total energy expenses. PGL and NSG proposes these estimates inform whether a utility should incentivize a fuel switching measure and the savings counted towards the utility's annual total savings requirement. The reduction in customer bills is particularly important for low-income customers, as these measures are not required to meet the total resource cost test.

c. TRC Greater Than 1.0*.* Illinois utilizes the Total Resource Cost (TRC) test to determine cost-effectiveness for Energy Efficiency and Demand Response Plans. PGL and NSG proposes that fuel switching measures should be evaluated for cost-effectiveness prior to implementation.

The Illinois Energy Efficiency Policy Manual Version 2.1, Section 4 on Program and Portfolio Planning states that Section 8-103B and 8-104 Portfolios shall be designed to accomplish a number of objectives (see response to Question 4 below). Two objectives regarding the TRC include:

- Deliver an overall cost-effective portfolio of energy efficiency and demand response measures using the TRC test.
- On a prospective basis, portfolios should have a TRC greater than 1.0. Program Administrators are encouraged to include business justification for individual programs and measures that have a TRC less than 1.0.

As noted above, CEJA amended the EV Act such that the electric utilities serving more than 500,000 customers in the State shall file a Beneficial Electrification Plan to be reviewed by the Commission to determine if it's cost-beneficial and in the public interest. The EVA Act states that a Plan is cost-beneficial if the total cost is less than the net present value (NPV) of increased electricity costs + NPV of reductions in other customer energy costs + net revenue from electric charging + the societal value of reduced carbon emissions. The EV Act sets a solid framework on cost-benefit that should be likewise considered for fuel switching policy in Policy Manual 3.0.

Question 2: Utility Impact

The proposed policy changes impact Illinois gas utilities and electric utilities.

Question 3: Background Research

Other jurisdictions with fuel switching statues have policies similar to the ones proposed by PGL and NSG. One such example is Minnesota's Energy Conservation and Optimization Act.

Minnesota Statute § 216B.2402 subd. 4 defines an efficient fuel-switching improvement as a project that:

(1) replaces a fuel used by a customer with electricity or natural gas delivered at retail by a utility;
(2) results in a net increase in the use of electricity or natural gas and a net decrease in source energy consumption on a fuel-neutral basis;
(3) otherwise meets the criteria established for consumer-owned utilities and for public utilities; and
(4) Requires the installation of equipment that utilizes electricity or natural gas, resulting in a reduction or elimination of the previous fuel used.

Minnesota Statute § 216B.241 subd. 11(d) states that a fuel-switching improvement is deemed efficient if the improvement meets the following criteria, relative to the fuel that is being displaced:

(1) results in a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis;
(2) results in a net reduction of statewide greenhouse gas emissions over the lifetime of the improvement;
(3) is cost-effective, considering the costs and benefits from the perspective of the utility, participants, and society; and
(4) is installed and operated in a manner that improves the utility's system load factor.

Optional Question 4: Commission Decision

The Illinois Energy Efficiency Policy Manual Version 2.0 was approved by the Commission in Docket No. 19-0983. In light of Public Act 102-0662 (effective September 15, 2021), which changes provisions of the law that affect energy efficiency, the Subcommittee developed Version 2.1 to update certain provisions of this Manual in a manner consistent with the approved Version 2.0.

Section 4: Program and Portfolio Planning states the following (underline added for emphasis):

Section 8-103B and 8-104 Portfolios shall be designed to accomplish the following objectives:

- *Delivery of an overall Cost-Effective Portfolio of Energy Efficiency and Demand Response Measures using the Total Resource Cost Test;*

- *Achievement of statutory objectives and Commission-approved savings goals;*
- *Delivery of Programs that represent a diverse cross-section of opportunities for Customers of all rate classes to participate in the Programs;*
- *On a prospective basis, Portfolios should have a TRC greater than 1.0. However, Program Administrators are encouraged to include business justification for individual Programs and Measures that have a TRC less than 1.0;*
- *Delivery of Programs targeted toward Low Income Customers, which do not have to be Cost-Effective; and*
- *Evaluation of Programs using consistent evaluation criteria*

Optional Question 5: Statutory Consistency

PGL and NSG proposed policy changes account for the Clean Energy Jobs Act (CEJA) amendments to statute 220 ILCS 5/8-103B.

Optional Question 6: Additional Information

The report below supports the PGL and NSG proposal to define fuel switching to encompass all measures that reduce energy consumption at the premises.

Manjarres, T. and A. Dusault. Optimizing Energy Efficiency in Residential Heating Applications – Where are the Options? What are the Impacts? ACEEE 2020 Summer Study. Panel 6. Utilities and the Future.

Optimizing Energy Efficiency in Residenti