HF 4242 / SF 4202 - Modify building codes – new model residential energy codes

Dear Chair McEwen and Labor Committee members,

Below we list concerns with the language and ask for a sentence to be modified with our proposed language.

Concern 1 & 2: IECC adoption requirement without Minnesota cold climate protections & specifying 'site energy use'

Strike 3.14 - 3.15: <u>Requirements must be adopted such that electricity only and mixed-fuel buildings attain the</u> same site energy use intensity.

On line 3.14 – 3.15 insert: <u>Requirements shall not be adopted that effectively preclude electric or mixed-fuel use</u> in residential buildings or for residential heating.

Legislation should ensure Minnesotan's have access to efficient, affordable, and reliable heating, especially during the coldest temperatures.

IECC is adopted on a national level and could ignore Minnesota's unique climate needs by banning critically important heating systems that Minnesotans depend on to heat their homes.

• The IECC 2024 process included an amendment to require full electrification of residential new construction which would have prevented natural gas furnaces. (See IECC 2024 Amendment: Residential Decarbonization [R202] – REPI-017-21)

Specifying 'site energy use' favors electricity by ignoring the efficiency losses before the energy reaches the site (i.e., the home). The 'site-to-source' energy accounting method (total system energy) is federally recognized by the DOE, EPA, and used in Energy Star's Portfolio Manager.

- MN Air Source Heat Pump Collaborative recommends using an ASHP until 15-25F and then switching to a secondary, or back-up heat source. This is because a HP's efficiency and capacity decrease with decreasing temperature such that the ASHP alone is no longer able to meet the full heating load of the home, requiring a back-up heating system.
- The back-up heating options are: an inefficient electric resistance system with a site energy efficiency of 100% but a source energy efficiency of ~33%, or a gas furnace with a site energy efficiency of 90+% and a source energy efficiency of ~85%. Only source energy calculations account for the large energy losses of the electric power plants and line losses.
- Report from Minnesota based CEE and Great Plains Institute concluded the most cost effective and resilient system for Minnesota's is hybrid heating. (See G21 report)

Ensuring hybrid heating provides residents with:

- Lower utility bill cost
 - Heating with natural gas consistently provides the least cost option for home heating.
 - Hybrid gas/electric heating provides flexibility for homeowners to protect against costs fluctuations over-time.
- Great resiliency and comfort
 - Redundancy in fuel ensures home heating is available in the coldest weather and help manage potential power outages.
 - Gas systems are more reliable at maintaining healthy and comfortable temperature in cold weather.

Sincerely, Jamie Fitzke Director of Government Affairs, CenterPoint Energy