

Comments on SB13-272

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I am the co-founder and current Vice President of a small geothermal and exploratory drilling company, Alpine Geothermal Drilling, located in the Denver Metro Area and serving the entire State of Colorado. Additionally, I am the current President of the Colorado Geo Energy and Heat Pump Association. And Furthermore I am a resident of Denver, CO and a current and long time customer of Xcel Energy and paying into the DSM Gas program. Although I could sit here and explain all the many benefits of geothermal heat pumps and why they absolutely should be provided as options to the rate payers, I believe my colleagues will be making those points well understood to this committee. I would then like to take this time to explain my concerns with the current DSM Gas program pertaining to the Total Resource Cost Calculation (TRC) and why I believe moving to a Utility Resource Cost (URC) is more appropriate and fair to those of us paying into this fund.

Unlike many customers' that are currently paying into the DSM fund, I actually, through my intense involvement with this bill, have gained a reasonable understanding of how this program currently operates. GSHPs have in the past failed to meet the qualifications necessary to pass the TRC calculation under DSM Gas guidelines because of the high upfront costs to the consumer. However, when we discuss GSHP as an inclusion into the DSM program, we are discussing something that is much more complex than insulation. We are discussing a building's whole mechanical system, and the cost of that system is going to depend on the how the owner of that system chooses to condition that building. In other words they could choose the "Cadillac" or the "Ford Escort" of systems, both being effective and reliable but costs are different. However, the actual benefit to the rate base is nearly the same regardless of which system the owner decides to install, assuming the buildings are similar and in the same geographic region.

So the point is, it seems more appropriate and fair to make decisions based on what qualifies in the DSM program dependent on what the benefits are to the rate payers and their collective contribution through the rebate, than on the benefit to the rate payer

dependent on the total cost the individual consumer pays for the system based on their individual choices. SB 272 addresses this by directing the utilities to use a URC calculation in replace of the current TRC calculation. This then will allow the rate payers to have more available energy efficiency options available to them, and possibly some additional rebates to help them with the upfront costs associated with geothermal heat pump installations.

Lastly I would like to note that the infrastructural component of the geothermal system, i.e. the geothermal heat exchanger will last for well over 100 years and provide renewable energy to that property for multiple generations of buildings. It is an incredible complement to both our current renewable electric capacity and our conventional electric generation capacity, and is a more appropriate technology to help address the peak demand issues that face our generation portfolio.