

➤ **Summary of 60-Day Notice: Addition of EER Minimum Requirement for Mini-Split Heat Pumps**

The following 60-Day Notice summarizes the Company's action to add a minimum Energy Efficiency Ratio ("EER") to the Ductless Mini-split Heat Pump ("MSHP") measure in the High Efficiency Air Conditioning ("HEAC") product.

Summary of Proposed Modification

A minimum EER requirement is beneficial in order for the Company to receive reasonable demand reduction savings (kW) from the Ductless MSHP measure.

The Company's original Deemed Savings calculations employed an empirical formula for estimating the EER based on the Seasonal Energy Efficiency Ratio ("SEER"). However, with inverter technologies such as the variable speed Ductless MSHP, SEER is often disproportionately high and EER is proportionally low. When the compressor is operating at full load, the inverter will increase the load on the system which results in a lower EER rating. When the inverter is used to control compressor speeds in part load conditions, the energy consumption drops significantly resulting in much higher SEER values.

Requiring a minimum EER of 11 will deliver larger savings to the product improving cost-effectiveness and drive change in the marketplace by encouraging customers to adopt higher efficiency measures.

Edits to the Deemed Savings Sheets

Mini-split Heat Pump tier descriptions in the Mini-Split Heat Pump table, rows 148-152, will add a minimum EER:

"Mini-Split Heat Pump (15-20 SEER, 11+ EER, 9-12 HSPF)"

"Mini-Split Heat Pump (21-26 SEER, 11+ EER, 9-12 HSPF)"

A copy of this notice is available on our website at:

http://www.xcelenergy.com/Company/Rates_&Regulations/Filings/Colorado_Demand-Side_Management