



**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**Dockets UE-220066 & UG-220067  
Puget Sound Energy  
2022 General Rate Case**

**NWEC DATA REQUEST NO. 121:**

REQUESTED BY: Jaimini Parekh

**Re: Gas System Costs**

What is the size (in USD) of the cost premium that E3 assumes exists for cold climate heat pump vs. a non-cold climate heat pump? How does this compare to the cost premium for a hybrid heat system vs. a non-cold climate heat pump?

**Response:**

For a residential building, Energy and Environmental Economics, Inc. (“E3”) assumes there is an installed cost premium of approximately \$3,500 over a non-cold climate heat pump. That value is based on installation cost data from the Energy Trust of Oregon that was provided to E3 by NW Natural. The hybrid heat pump is assumed to carry a \$1,500 premium over a non-cold climate heat pump. That value is tied to the incremental cost of a furnace over an air-handler in a stand-alone air-source heat pump installation.