

**EXH. EAB-9  
DOCKETS UE-220066/UG-220067  
2022 PSE GENERAL RATE CASE  
WITNESS: ED BURGESS**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**Docket UE-220066  
Docket UG-220067**

**EIGHTH EXHIBIT (NONCONFIDENTIAL) TO  
THE PREFILED RESPONSE TESTIMONY OF**

**ED BURGESS**

**ON BEHALF OF NW ENERGY COALITION, FRONT AND CENTERED, AND  
SIERRA CLUB**

**JULY 28, 2022**

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

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

**NWEC DATA REQUEST NO. 068:**

**Re: Gas System Costs**

Regarding the hybrid heating pilot referenced in Exhibit JJJ-1T, what is the expected annual therm usage for the average residential customer after converting to a hybrid heat pump? Please provide all associated analyses and workpapers.

**Response:**

The Energy and Environmental Economics (“E3”) analysis<sup>1</sup> used an assumption of approximately 579 therms per year for a standard (non-hybrid) heating residential customer with a gas furnace used for all of the space heating load. The assumption used for the hybrid heating alternative residential customer was approximately 188 therms per year. The difference between the two is approximately 391 therms per year. Ongoing meter data analysis on existing hybrid heating systems in our service territory will validate or refine this estimate.

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<sup>1</sup> E3 Studies were provided in the Fourth and Fifth Exhibits to the Prefiled Direct Testimony of Joshua J. Jacobs, Exhs. JJJ-5 and JJJ-6.