EXH. BTC-5 1 DOCKETS NOS. UE-240004/UG-240005 2024 PSE GENERAL RATE CASE 2 WITNESS: BRADLEY CEBULKO 3 4 **BEFORE THE** 5 WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION 6 WASHINGTON UTILITIES AND DOCKET NOS. UE-240004 and UG-240005 7 TRANSPORTATION COMMISSION, (Consolidated) 8 Complainant, 9 v. 10 **PUGET SOUND ENERGY,** 11 12 Respondent. 13 14 **EXHIBIT BTC-5 (NONCONFIDENTIAL) TO THE** RESPONSE TESTIMONY OF 15 16 **BRADLEY CEBULKO** 17 18 19 ON BEHALF OF JOINT ENVIRONMENTAL ADVOCATES 20 21 22 23 24 25 26 August 6, 2024 27 28

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Dockets UE-240004 & UG-240005 Puget Sound Energy 2024 General Rate Case

JEA DATA REQUEST NO. 059:

Re: Decarbonization

Please refer to PSE's 2023 updated Gas Decarbonization Study filed on December 22, 2023, in Docket UE-220066, slides 5 and 7.

- a) Please provide the underlying workpapers used to calculate the NPV of the "Electric Portfolio Costs" including an annual breakdown of capital and operating costs for each portfolio.
- b) Please also provide the assumptions for capital and operating costs of each of the incremental generation units added in each portfolio (e.g., CETA Qualifying Peaking Capacity, Wind, Nuclear, etc.)

Response:

(a) Please see Attachment A to Puget Sound Energy's ("PSE") Response to JEA Data Request No. 059 for workpapers used to calculate the NPV of Electric Portfolio Cost for the Air-Source Heat Pump.

Please see Attachment B to PSE's Response to JEA Data Request No. 059 for workpapers used to calculate the NPV of Electric Portfolio Cost for the Cold Climate Heat Pump.

Please see Attachment C to PSE's Response to JEA Data Request No. 059 for workpapers used to calculate the NPV of Electric Portfolio Cost for the Hybrid Heat Pump.

Please see Attachment D to PSE's Response to JEA Data Request No. 059 for workpapers used to calculate the NPV of Electric Portfolio Cost for the mix of Cold Climate Heat Pump and Hybrid Heat Pump.

The NPV can be found in the Evaluation Summary Tab C24.

The breakdown in costs by each new resource can be found in the tabs as follows:

FixCostBase includes fixed O&M costs

FixCostAux1 includes the revenue requirement related to capital investment

FixCostAux2 includes fixed transmission costs

VarCost Includes variable costs

VarCostAux1 includes production tax credits

VarCostAux2 includes variable transmission costs

(b) Please see Attachment E to PSE's Response to JEA Data Request No. 059 for the cost assumptions by resource type for capital and operating expenses.

ATTACHMENTS A - E to PSE's Response to JEA Data Request No. 059