

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**Dockets UE-170033 and UG-170034
Puget Sound Energy
2017 General Rate Case**

PUBLIC COUNSEL DATA REQUEST NO. 457

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Re: Rebuttal Testimony of Mr. Greg Zeller (Exh. GJZ-3T) and Proposed SQI Changes.

Please refer to Mr. Zeller's Rebuttal Testimony (Exh. GJZ-3T) at 8:16-18, which states: "In order to meet the change proposed by Public Counsel, PSE estimates it would need to add an additional 32 full time employees, which would add an estimated cost of \$2.4 million to the call center operating costs."

- a. With regard to Mr. Zeller's identification of the costs that PSE would incur to comply with Ms. Alexander's SQI proposed changes, please provide the associated workpapers.
- b. With regard to Mr. Zeller's identification of the costs that PSE would incur to comply with Ms. Alexander's SQI proposed changes, please provide the following:
 - i. The assumptions associated with staffing of the call center, whether employees are full time or part time, and the hours/days/months in which such staffing would be assumed to be necessary.
 - ii. The quarterly performance level for the percentage of calls answered within 30 seconds and the call abandonment rate (calculated based on the current methodology) that will result from the identified increased costs and staffing levels.
 - iii. Additional training cost estimates.
 - iv. Additional equipment, space, and other facility-based requirements, if any, associated with the estimated costs.
 - v. Any additional costs not indicated in subparts i.-iv. that are included in Mr. Zeller's cost estimate for Public Counsel's SQI Proposal.

- c. Please refer to the Direct Testimony of Ms. Barbara Alexander (Exh. BRA-1T) at 21:13-14, which states: “These new standards could be phased in over a 2-3 period with gradual incremental improvement until my recommended standards take full effect.”

In developing the aforementioned cost estimates, did Mr. Zeller consider or follow Ms. Alexander’s recommendations for new SQL performance to be phased in over 2-3 years? Please explain why or why not. Please show how that phase-in recommendation is reflected in the cost estimates.

Response:

The preliminary estimation of 32 additional staff needed is based upon the Erlang Model,¹ which is one of the call center industry’s commonly-used queuing models that calculates the number of staff required to reach an agreed service level for capacity-planning purposes. The following screenshot shows the model input Puget Sound Energy (“PSE”) used in calculating the total number of agents that would be required to answer 80 percent of the calls within 30 seconds.

Calculate the number of agents required to reach an agreed service level:

Incoming calls	<input type="text" value="10500"/>	calls
in a period of	<input type="text" value="720"/>	minutes
Average Handling Time	<input type="text" value="430"/>	seconds
Required service level <i>Probability of target answer time</i>	<input type="text" value="80.0%"/>	
Target answer time	<input type="text" value="30"/>	seconds
Shrinkage	<input type="text" value="30%"/>	
Number of Agents required	160	

Average Handling Time = Average Call Duration + Average time spent in After Call Work (ACW - also known as Wrap-Up time)

Traffic Intensity	99.5	Erlangs
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The model above describes the total traffic volume of a 720-minute call center operating period (i.e., 12 hours X 60 minutes) and predicts the number of agents required to

¹ Available at <https://www.callcentrehelper.com/online-call-centre-staffing-calculator-77780.htm>

support a call volume of 10,500 calls. The Erlang Model results indicated that 160 agents are required to support answering 80 percent of the calls within 30 seconds, which means that PSE needs 32 more agents than the current staffing level of about 128 agents. PSE projects the costs to meet the service level of answering 80 percent of the calls within 30 seconds to be \$2.4 million based upon the total labor costs associated with the additional 32 agents and two more full-time supporting employees at average annual costs of \$70,000 per employee.

A phased-in approach was not considered in the above analysis. In our opinion, a phased-in approach provides no additional benefit to customers and is considered to be more administratively burdensome to the Call Center training, supporting technology, quality control program, reporting, and business rule application.