

EXH. BTC-9
DOCKETS NOS. UE-240004/UG-240005
2024 PSE GENERAL RATE CASE
WITNESS: BRADLEY CEBULKO

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

DOCKET NOS. UE-240004 and UG-240005
(Consolidated)

**EXHIBIT BTC-9 (NONCONFIDENTIAL)
TO THE RESPONSE TESTIMONY OF**

BRADLEY CEBULKO

**ON BEHALF OF
JOINT ENVIRONMENTAL ADVOCATES**

August 6, 2024

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

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

JEA DATA REQUEST NO. 015:

Re: Manetti Testimony

Please refer to JM-1CT 45 – 46 on Clean Hydrogen Technologies.

- a. Please identify which hydrogen production techniques, or “colors,”¹ PSE classifies as “clean hydrogen.”
- b. Please provide the Company’s forecasted levelized cost (in \$/kilogram) for each type of clean hydrogen identified in subpart (a) in each of the following years: 2025, 2030, 2035, 2040, and 2045.
- c. Please identify the Company’s forecasted capital expenditure cost of a dedicated hydrogen pipeline on a per mile basis if construction of a dedicated hydrogen pipeline began construction in each of the following years: 2025, 2030, 2035, 2040, 2045.
- d. Please identify the amount of hydrogen PSE expects that it will need to accommodate the Company’s hydrogen goals, including fuel for a hydrogen-fueled peaker and hydrogen-blending in the gas system, on an annual basis.
- e. Please identify the amount of hydrogen storage the Company will need to access to meet the Company’s hydrogen goals, including fuel for a hydrogen-fueled peaker and hydrogen-blending in the gas system, on an annual basis.
- f. Please identify the capital costs for constructing the hydrogen storage in subpart (e).

Response:

Puget Sound Energy (“PSE”) objects to JEA Data Request No. 015 as overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. PSE also objects to this request to the extent this request seeks a document that does not exist and is therefore not in the possession, custody, or control of PSE. In addition, PSE objects to this request as misstating the Prefiled Direct Testimony of John Mannetti, Exh. JM-1CT. PSE has not set any “hydrogen goals.” Notwithstanding these objections, and subject thereto, PSE responds as follows:

¹ <https://spectra.mhi.com/the-colors-of-hydrogen-expanding-ways-of-decarbonization>

- a. PSE recognizes that there are several methods of producing hydrogen and does not offer an opinion about their relative carbon intensity. PSE classifies “clean hydrogen” as hydrogen that complies with the Clean Energy Transformation Act (“CETA”), Chapter 19.405 RCW.
- b. Please see below the forecasted levelized cost (\$/kg) for green hydrogen that was included as part of PSE’s 2023 Natural Gas Integrated Resource Plan (“IRP”).

Using Max. Production Tax Credit “PTC” (assumes PTC extended to 2050)	2025	2030	2035	2040	2045	2050
Green Hydrogen Net Cost with Max. PTC from Inflation Reduction Act (\$/kg)	\$2.30	\$2.00	\$1.60	\$1.05	\$0.55	\$0.00

- c. PSE has not forecasted the capital expenditure cost of a dedicated hydrogen pipeline nor is such a project planned or proposed in this case.
- d. PSE is still exploring the use of hydrogen and has not yet quantified the amount of hydrogen it may need in the future.
- e. PSE is still exploring the use of hydrogen and has not yet quantified the amount of hydrogen storage it may need in the future. PSE, in conjunction with a coordinated regional hydrogen economy, would benefit from the development of geologic storage, in addition to a build out of hydrogen transmission pipeline capacity. The specific amount of storage required will depend on the relative economic value of other forms of decarbonization, and what is best for customers and ratepayers.
- f. PSE is still exploring the use of hydrogen and has not yet quantified the amount of hydrogen storage it may need in the future. Therefore, PSE has not calculated the capital costs of constructing any hydrogen storage.