Exh. JCR-1Tr
Docket TP-190976
Witness: John C. Ramirez

BEFORE THE WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND PILOTS, Respondent.	**DOCKET TP-190976**

TESTIMONY OF

John C. Ramirez, ASA

ON BEHALF OF

PACIFIC MERCHANT SHIPPING ASSOCIATION

Subject: Ratesetting Methodology and Analysis

MAY 27, 2020

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LIST OF EXHIBITS

I. PROFESSIONAL QUALIFICATIONS

1. Q. Please state your name, business address, and occupation.

A. My name is John C. Ramirez. My business address is 111 SW Fifth Avenue, Suite 2150, Portland, Oregon 79204. I am a managing director of Willamette Management Associates.

2. Q. What is the nature of your company's business?

A. Willamette Management Associates is a business consulting firm that specializes in the fields of business and property valuation, forensic analysis, and transaction financial advisory services.

3. Q. What is your professional experience?

A. I have 15 years of experience in performing valuation analyses, damages analyses, and transfer pricing analyses. I perform these valuation, damages, and transfer price analyses for purposes of forensic analysis and dispute resolution; income tax and property tax planning and compliance; estate and gift tax planning and compliance; bankruptcy and reorganizations; shareholder oppression and dissenting shareholder appraisal rights disputes; fair value accounting; transaction pricing and structuring; transaction fairness opinions; commercial damages measurements; regulatory compliance; reasonableness of compensation disputes; and management information and corporate planning.

In particular, I perform cost of capital analyses, reasonableness of compensation analyses, and functional analyses as standard procedures in almost every valuation, damages, and transfer price analysis that I perform. Both reasonableness of employee/shareholder compensation (i.e., fair rate of return) analysis and functional analysis (i.e., the analysis of functions performed, assets employed, and risks assumed)

are generally accepted procedures in the forensic analyses I perform for purposes of family law, bankruptcy, shareholder rights, income tax, gift and estate tax, property tax, antitrust, breach of contract disputes, and tort disputes.

My experience and professional qualifications are set forth in my curriculum vitae, which is attached to this testimony.

4. Q. What is your educational background?

A. I have a bachelor of science degree in business administration, finance, from Portland State University School of Business Administration. I graduated magna cum laude, with departmental honors. I am also an accredited senior appraiser ("ASA") of the American Society of Appraisers, accredited in business valuation.

5. Q. Who are your clients typically?

A. One part of my practice is focused on assisting corporate taxpayers, taxing authorities, and their professional advisers on issues related to unit principle property valuation, the identification and valuation of taxpayer tangible and intangible property, cost of capital and/or capitalization rate studies, and property obsolescence studies. My typical clients include public utilities and transportation, communications, and other similar utility-type companies. These clients operate business interests such as railroads, airlines, interstate and intrastate pipelines, water distribution systems, wastewater distribution systems, gas distribution systems, electric generation and distribution systems, cable television systems, and telecommunications systems.

Another part of my practice involves developing (and reviewing) valuation, damages, and transfer price analyses involving taxation, transaction, financing, bankruptcy, shareholder rights, breach of contract, torts, and other disputes in virtually every industry.

6. Q. What is your understanding of these tariff proceedings?

A. I understand that the Washington Utilities and Transportation Commission (the "Commission") is responsible for establishing in tariffs the rates for marine pilotage services provided under chapter 88.16 of the Revised Code of Washington ("RCW").

I understand that the Pacific Merchant Shipping Association ("PMSA") is an independent, not-for-profit association that represents owners and operators of marine terminals and U.S. and foreign vessels operating throughout the world.

I understand that PMSA is involved in a marine pilotage service rate-making appeal matter before the Commission (the "matter").

I understand that one of the issues in the matter involves the marine pilotage services rates charged by the Puget Sound Pilots ("PSP") in its tariff.

7. Q. What is your experience in the types of issues involved in these tariff proceedings?

A. A fundamental task in the utility and transportation ratemaking process is establishing the revenue requirement. The revenue requirement is the amount of revenue that a utility or transportation company needs to collect in order to recover its cost of service and to earn a fair and reasonable rate of return on its investment.[1] The basic (or general) revenue requirement formula is typically expressed as follows:

Revenue requirement = operating expenses (including capital recovery i.e., depreciation expense) + return on rate base (i.e., return on invested capital).

[1] A "fair and reasonable" rate of return is generally defined as a rate that is sufficient to recover operating expenses and invested capital, attract new investment capital, and provide a return comparable to other investments with similar risk.

Nearly all of my client engagements require me to estimate a reasonable, market-derived cost of capital—or the required rate of return on investment. In any industry, two components of all of my valuation, damages, and transfer price analyses are (a) the assessment of the reasonableness of employee/owner compensation and (b) the calculation of a fair rate of return on the services provided or investment made.

8. Q. Have you testified as an expert before?

A. No.

9. Q. Has any court or other decision-making body ever refused to let you testify as an expert?

A. No.

II. RATEMAKING BACKGROUND AND RATESETTING METHODOLOGY

10. Q. Please describe the areas of analysis that you would typically review and rely on in ratemaking and ratesetting cases.

A. There are numerous rate-setting regimes, depending on whether the subject industry is regulated, rate regulated, or rate base regulated. However, in many regulated industries, rates are derived by applying traditional (i.e., generally accepted) rate of return, rate base regulation methodologies—where rates are typically a function of (a) the allowed (or permitted) operating expenses and (b) an allowed (or permitted) return on investment. The allowed return on investment is typically a function of (a) the value of the investment (often measured as "rate base"[2]) and (b) a fair and reasonable rate of

[2] Rate base is a utility's investment in facilities and related capital costs, including interest on debt and a return on equity.

return on that investment. Typically, I am asked to opine on several areas of analysis related to regulated industries generally and to the ratemaking process specifically. These areas include: the analysis of an allowed (or fair) return on investment and an allowed (or fair) return on the equity component of the investment; the valuation of the subject investment; the valuation of the regulated entity's property; and the cost of capital and/or capitalization rate appropriate to the regulated entity. For the tariff proceedings at hand, the focus of my analysis was on the fair return on investment and the corresponding cost of capital calculations.

11. Q. Please describe the methodologies used to conduct the analysis and review of a proposed tariff in ratemaking and ratesetting cases.

A. There are numerous state-specific public utility commission ("PUC") ratesetting methods that may be applied to set revenue requirements and tariffs of companies that operate in regulated industries. These numerous rate-setting methods can generally be categorized as (1) traditional rate of return ("ROR") methods (such as return on rate base or return on investment); (2) operating ratio methods; and (3) other unspecified methods.

Tariffs that are derived from traditional ROR methods are designed to cover a utility's operating expenses plus an allowed (or permitted) rate of return. A utility's rate of return (or its cost of capital) is typically calculated as the weighted average cost of debt, preferred stock equity, and common stock equity that the utility has issued to finance its investments.

In general, PUCs attempt to set the allowed (or permitted) return on equity at a level that is adequate to enable the utility to attract investors so as to finance the replacement and expansion of its operations. This allows the utility to fulfill its public utility service obligation. In practice, the subject utility's return on equity is estimated by

analyzing the market returns on investments of other companies with similar levels of risk.[3]

Some of the generally-accepted and commonly-used methods for estimating the return on investment (or the cost of equity capital) include: the build-up method; the modified capital asset pricing model ("MCAPM") method; the discounted cash flow (or dividend yield plus capital gains yield) method; the risk premium method; the comparable sales method; and the comparable earning method.[4]

12. Q. Please describe which of these areas of analysis and methodologies are most applicable and/or supportable with regard to the ratemaking process in these tariff proceedings and why.

A. In my opinion, the traditional rate of return methodologies (such as return on rate base and return on investment/equity) are most appropriate to these tariff proceedings. This is because (a) all of the traditional rate of return methodology inputs required to derive the revenue requirement are readily available, or can be estimated from publicly available data and (b) the operating ratio methodologies are more applicable for capital-intensive companies—which the PSP is not[5]—and/or for when there are a large number of companies operating in the subject regulated industry that all provide the same services—which is not the case in the PSP industry.

The PSP is a voluntary association of sole proprietors and incorporated individuals. Each of the PSP member owners buys into (and is bought out of) the PSP

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[3] *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944).

[4] See, for example: Arlo Woolery, *Valuation of Railroad and Utility Property* (Cambridge, Massachusetts: The Land Reform Training Institute in association with the Lincoln Institute of Land Policy, 1990), 97-107; and James Cawley and Norman Kennard, *A Guide to Utility Ratemaking* (Pennsylvania Public Utility Commission, 2018), 130-137.

[5] According to the PSP special purpose financial statements, as of December 31, 2018, the PSP reported total assets of approximately $5 million.

through a buy-sell agreement formula (the "PSP buy-sell agreement formula").[6] The PSP membership buy-in payment is an equity ownership investment in the PSP. In addition, the PSP member owners provide a portion of the PSP's labor (i.e., pilotage services). Thus, the PSP member owners would expect (1) a fair return on their labor (pilotage services) and (2) a fair return on their equity capital (i.e., the buy-in payment). Using the PSP operating data and other publicly available data, traditional rate of return methodologies can be applied to derive a revenue requirement that is sufficient to provide fair and reasonable rates for these two return components.

III. ANALYSIS FOR THESE TARIFF PROCEDINGS

13. Q. Please describe the areas of analysis you have engaged in for these tariff proceedings.

A. I was retained by the PMSA to perform a forensic analysis of the current PSP tariffs.

The objective of my analysis is to analyze whether the current PSP tariffs are sufficient to recover the PSP operating costs and to provide the PSP member owners with a fair and reasonable rate of return on their investment in the PSP.

The purpose of my analysis is to assist the Commission in the matter.

14. Q. Did you receive any substantive assistance from others? If so, who assisted you and what were their contributions?

A. No. The research, analysis, judgments, conclusions, and opinions expressed in this testimony are entirely my own. I was assisted by several associates in my office who worked under my direct supervision to perform various data gathering

[6] The PSP buy-sell agreement formula is described the PSP bylaws.

tasks and financial modeling analyses regarding my testimony.

15. Q. Please describe the areas of your analysis.

A. I applied traditional rate of return analyses (i.e., cost of service plus reasonable rate of return analyses) to analyze the current PSP revenue requirement and tariffs.

As part of my analysis, I analyzed the water transportation industry; labor wage data for pilotage services; the PSP operating/financial performance and rates of return on investment; rates of return on investment for the water transportation industry; and rates of return on alternative investments with risks that are similar to an ownership investment in the PSP.

My forensic analysis is not a valuation analysis. However, to the extent that my forensic analysis encompasses valuation elements, my analysis and conclusions are developed in compliance with the *Uniform Standards of Professional Appraisal Practice*.

The results of my analysis are discussed herein and are presented in the exhibits attached to my testimony.

16. Q. Describe the results of the application of data to the areas of your analysis.

A. First, as presented in my Exhibits 1 through 3, I relied on the PSP special purpose financial statements to analyze the PSP operating and financial performance for the five years ending December 31, 2014 to December 31, 2018.

According to the PSP special purpose financial statements, the PSP member owners provide pilotage services on inland waters within the Puget Sound Pilotage District of Washington State. The PSP member owners provide pilotage services under licenses issued by the U.S. Coast Guard and the state of Washington. The PSP revenue is

generated from pilotage tariffs set by the Washington State Board of Pilotage Commissioners and the level of maritime traffic in the Puget Sound Pilotage District. Operating expenses that are incurred from providing pilotage services are paid by the PSP. The revenue remaining after the payment of incurred operating expenses is distributed to the PSP member owners as distributable net income.

Based on my analysis (as presented in Exhibit 2), in 2018, the PSP generated about $34 million in revenue. From year end 2014 through 2018, revenue remained fairly consistent and increased at a compound annual growth rate of approximately 1%.

In 2018, the PSP incurred operating expenses of approximately $14 million, which consisted of $10 million in Seattle office expenses; $2 million in boat expenses; $1 million in Port Angeles Station expenses, and $1 million in transportation fees paid directly to pilots. The two largest expenses reported in the Seattle office operating expense category were (a) payments to retired pilots of approximately $5 million and (b) pilot medical insurance of $2 million.[7]

In 2018, the PSP generated distributable net income (i.e., earnings that are distributable to the PSP member owners) of approximately $20 million. From year end 2014 through 2018, distributable net income remained fairly consistent (both as a percentage of revenue and in amount) and generally increased at a compound annual growth rate of approximately 1.4%.

From year end 2014 through 2018, the distributable net income profit margin averaged approximately 60%. Based on my analysis, the PSP experienced very consistent operating performance.

Second, I analyzed the distributable net income of the PSP. The PSP's historical 60% distributable net income profit margin consists of two earnings return components

[7] A detailed listing of the 2018 PSP operating expenses is provided in the Board of Pilotage Commissioners 2018 Annual Report, page 31.

for the PSP member owners: (a) a return on pilotage labor and (b) a return on invested capital.

I requested, but did not receive, labor cost data for the PSP. In order to estimate a fair return on the PSP pilotage labor, I analyzed occupational annual labor wage data for captains and pilots who operate in the Seattle area. I sourced this occupational labor wage data from (a) the Bureau of Labor Statistics ("BLS") and (b) the Economic Research Institute ("ERI"). This occupation is categorized by the BLS as "Captains, Mates, and Pilots of Water Vessels." The service provided by this occupation, as defined by the BLS, is to command or supervise operations of ships and water vessels, such as tugboats and ferryboats. Employment in this occupation requires a license issued by the U.S. Coast Guard. This occupation excludes "Motorboat Operators." The industries served by this occupation include, among others, (a) inland water transportation and (b) support activities for water transportation.

As presented in Exhibit 5, according to the BLS data, in 2018, the annual labor wage of captains and pilots who operate in the Seattle area ranged from a low of $44,000 (the 10th percentile) to a high of $162,000 (the 90th percentile), with an average of $93,000. According to the ERI data, the 90th percentile (i.e., the highest paid) annual labor wage of captains and pilots with at least 18 years of experience who operate in the Seattle area earned approximately $150,000 in 2018. I relied on the BLS 90th percentile annual labor wage (i.e., the BLS highest reported annual labor wage of $162,000) for captains and pilots who operate in the Seattle area as a fair return on the PSP pilotage labor.

As presented in Exhibit 4, I normalized the PSP operating expenses to include a pilotage labor expense. I calculated the labor expense as (a) the BLS highest reported annual labor wage of $162,000 for captains and pilots who operate in the Seattle area multiplied by (b) the number of active PSP member pilots. After applying this estimated

labor expense, in 2018, the PSP distributable net income decreased from approximately $20 million to approximately $12 million and the PSP distributable net income profit margin decreased from approximately 60% to approximately 36%.

Next, I analyzed whether this level of normalized distributable net income (normalized to include a fair return on pilotage labor) provided a fair return to the PSP member owners for their ownership investment in the PSP. To do this, I first calculated the value of the PSP equity. The PSP buy-sell agreement (as described in the PSP bylaws) allows pilots to buy into (and out of) the PSP. I relied on the PSP buy-sell agreement formula to calculate the value of the PSP equity and the value of invested capital (i.e., equity plus interest-bearing debt) of the PSP. Those calculations are presented in Exhibit 7.

Exhibit 8 presents my estimation of the PSP rate of return on equity and rate of return on invested capital. Based on my analysis, as described above, for 2018, I estimated the PSP rate of return on equity of 62% and the PSP rate of return on invested capital of 61%. Again, these PSP rates of return are calculated after providing for a fair return on labor (as described above).

Next, to determine whether these PSP rates of return on investment were fair and reasonable,[8] I compared them to transportation industry rates of return on investment, publicly traded transportation company rates of return on investment, and transportation company sales rates of return on investment. The results of this comparative analysis are presented in Schedule B.

First, as presented in Exhibit 9, I applied two generally accepted cost of capital estimation methods to estimate the PSP required cost of equity (i.e., a fair and reasonable

[8] I define a "fair and reasonable" rate of return as a rate that is sufficient to recover operating expenses and invested capital, attract new investment capital, and provide a return comparable to other investments with similar risk.

return on equity capital). I applied the MCAPM method and the build-up method. As mentioned above, these methods are commonly used by PUCs to estimate the required (or fair) rate of return on equity for public utility and transportation companies. As presented in Schedule B and Exhibit 9, applying generally accepted cost of capital estimation methods, I estimated that the PSP required (or fair) rate of return on equity ranged from 13% to 15%.

Next, I compared the PSP rates of return (i.e., return on equity and return on total invested capital) to publicly traded transportation company rates of return. This comparative analysis is presented in Exhibits 12 through 15i. The data for this comparative analysis were sourced from S&P Capital IQ, a database that provides financial data on public and private companies, investment firms, and capital transactions. The search criteria included all U.S. publicly traded companies that provide specialized freight and logistics services. I did not identify any publicly traded companies that only provided pilotage services. However, I did identify eight publicly traded companies that operate in the transportation industry (Standard Industrial Classification SIC code 4xxx) and that provide specialized logistics and freight transportation-related services. I refer to these eight publicly traded transportation companies as "guideline publicly traded companies" or GPTCs. I relied on these selected publicly traded companies to provide relevant guideline (i.e., benchmark) risk and return comparison data. Descriptions of the selected GPTCs are provided in Exhibits 15a through 15h.

Exhibit 12 presents a comparative analysis of the operating performance of the PSP and the GPTCs. The PSP was smaller than most of the GPTCs, but it was in the range of the GPTCs based on revenue; market value of equity; market value of invested capital; activity ratios; and leverage. The PSP was higher than the range of the GPTCs in profitability based on EBIT return on revenue; net income return on equity; and EBITDA

return on market value of invested capital ("MVIC").[9] For example, the net income return on equity for the GPTCs ranged from 4% to 19%. The PSP net income return on equity was 62%. Again, the PSP net income measure was calculated after including a fair labor expense for pilotage services.

Next, I compared the PSP rates of return to rates of return from transportation company sale transactions. This comparative analysis is presented in Exhibit 16a and 16b. The data for this comparative analysis were sourced from DealStats, a database that provides financial data of private and public sale transactions. The search criteria included all transactions in the transportation industry (SIC code 4xxx) from 2013–2018, with a transaction price (i.e., MVIC) greater than $150,000. This search resulted in 294 sale transactions. Exhibit 16a presents a breakdown of (1) the number of sale transactions in each of the transportation SIC code subindustries and (2) the indicated return on investment (i.e., earning/MVIC) by percentile. For example, the median earnings/MVIC return for all the 294 transportation transactions was 34%. The median earnings/MVIC return for the sale transactions included in SIC code 44xx—the SIC code that the PSP operates in—was 16%. The PSP return on invested capital was 61%.

A summary and conclusion of the results of my comparative rate of return analysis are presented in Schedule B. As presented in Schedule B, the fair and reasonable rates of return on investment in the transportation industry ranged from 13% to 35%. The PSP rates of return on investment ranged from 61% to 62%. Based on my analysis, and in my opinion, the PSP rates of return exceeded fair and reasonable rates of return.

IV. OBSERVATIONS AND OPINIONS OF PSP PETITION AND PROPOSED METHODOLOGY

[9] Market Value of Invested Capital = long term debt + short-term interest-bearing debt + market value of preferred equity + market value of common equity.

17. Q. Did you review the PSP Petition proposed ratesetting methodology?

A. Yes.

18. Q. Are you familiar with the Lurito-Gallagher methodologies (WTB-1T-3) and/or "derived operating or modified operating ratio figure based on an advocated total revenue requirement" (WTB-1T-13) and/or "the development of a revenue requirement" (SK-1T-2,3)?

A. Yes, these are operating ratio methodologies that are used to set revenue requirements and tariffs for regulated, capital-intensive transportation companies (like solid waste companies and passenger carriers). In the application of operating ratio methodologies, revenue and asset investment are analyzed in order to derive fair and reasonable capital turnover ratios and operating margins. Operating ratio methodologies are typically applied when analyzing a large number of regulated companies that all provide the same services (like trucking companies and/or trash haulers).

19. Q. Is it clear to you why the PSP experts have concluded that these methodologies are inapplicable to this Petition process or what authorities they are relying on for the formulation of their new proposed analytical framework?

A. No.

20. Q. Do you agree with the PSP experts that a new analysis based on a "concept of establishing a target or distributive net income share" (WTB-1T-5) or that "two additional components are necessary: (a) Distributive Net Income (DNI) for pilots, and (b) level of workload per pilot" (SK-1T-3)

must be substituted for the usage of typical methodologies or areas of analysis?

A. No. I do not agree that the two additional components of (a) distributive net income for pilots and (b) level of workload per pilot are required for determining if the PSP tariffs are fair and reasonable. Traditional rate of return regulation methods can be used to determine if the PSP tariffs are fair and reasonable. If the PSP tariff generates a fair and reasonable return, then the PSP can determine how it allocates that return to its member pilots and how many pilot assignments are needed to handle the workload.

21. Q. Were you able to review testimony in the PSP submission that analyzed the consumer and market impacts that would occur as a result of the cost increases which would result from the proposed increases in the PSP tariff?

A. No. The PSP did not include a market impact study in its submission.

22. Q. Does this conclude your testimony?

A. Yes.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Executed on this 27th day of May 2020, at Portland, Oregon.

John C. Ramirez, ASA
Willamette Management Associates