BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,
Complainant,
v.
PUGET SOUND PILOTS,
Respondent.

TESTIMONY OF
CAPTAIN DAN JORDAN
ON BEHALF OF PUGET SOUND PILOTS

JUNE 29, 2022
TABLE OF CONTENTS

I. IDENTIFICATION OF WITNESS.........................................................1

II. PURPOSE OF TESTIMONY..............................................................1

A. The Public Interest in Safe, Efficient, Economical and Reliable Pilotage Service.........................................................2

B. Brief History of the Columbia River Bar Pilots, Their Challenging Pilotage Ground and the Skill Necessary to Provide Pilotage Service.............................................................................4

C. The Importance of Attracting Top Caliber Candidates as Bar Pilot Trainees................................................................9

D. Oregon’s “Safety First” Standard and Washington’s Best Achievable Protection” Standard Applicable to Their Pilotage Systems Are Equivalent.................................................................12

E. Relevant Statistics Regarding CRBP Vessel Traffic, Size And Draft........................................................................16

F. CRBP Income and Benefits Information.......................................17

G. CRBP Experience With Annual Cost-Of-Living Adjustments to Our Tariff.................................................................18

H. Recent CRBP Experience with an Unscrupulous Operator of a Bulk Carrier................................................................20

III. CONCLUSION....................................................................................21

<table>
<thead>
<tr>
<th>Exhibit No.</th>
<th>Description</th>
<th>Page Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>DJ-02</td>
<td>Chapter 6 from World’s Most Dangerous (2nd ed. 2021).</td>
<td>8</td>
</tr>
</tbody>
</table>

TESTIMONY OF DAN JORDAN

Exh. DJ-01T
Page i
I. IDENTIFICATION OF WITNESS

Q: Please state your name, occupation and business address.
A: My name is Dan Jordan. I am a state-licensed Columbia River Bar Pilot and the administrative pilot of the Columbia River Bar Pilots LLC ("CRBP"), which is the pilot group serving the Columbia River Bar pilotage ground. Our business address is 100 16th Street, Astoria, Oregon 97103.

Q: Please describe your educational background and work history.
A: I am a 1980 graduate of the California Maritime Academy with a concentration in nautical industrial technology. After graduation, I spent 24 years at sea aboard dry cargo vessels and hopper dredges. I also spent 20 years in the Naval Reserve. I have worked as a Columbia River Bar Pilot for over 17 years following issuance of my license by the Oregon Board of Maritime Pilots ("OBMP") in November 2004.

II. PURPOSE OF TESTIMONY

Q: Please describe the purpose of your testimony.
A: My testimony covers the following eight topics:

1. The public interest in maintaining safe, efficient and reliable pilotage service;
2. A brief history of the CRBP which describes the difficulty of our pilotage service and the skill necessary to provided;
3. My opinion that our pilotage system funded by the Oregon Board of Maritime Pilots meets the "safety first" standard for pilotage in Oregon and is equivalent to the "best achievable protection" standard in Washington;
4. The importance of attracting top caliber candidates as candidates to become Bar Pilot trainees;

5. Relevant statistics on our pilotage ground regarding vessel traffic, size, length and draft;

6. CRBP income and benefits data;

7. Our pilot group's experience with annual cost-of-living adjustments to the tariff and its major benefit of reducing the need for general rate cases; and

8. A recent experience on our pilotage ground involving an unscrupulous steamship operator.

A. The Public Interest in Safe, Efficient, Economical and Reliable Pilotage Service.

Q: How would you describe the primary purpose of state pilotage systems in the United States, including that of the Columbia River Bar Pilots?

A: The primary purpose of the state pilotage systems throughout the U.S. is to ensure the safe navigation of vessels throughout an extensive U.S. marine transportation system that includes over 300 ports, more than 1,000 harbor channels and 25,000 miles of inland, intercoastal and coastal waterways. In 1988 and 1989, the U.S. West Coast experienced two large oil spills that spawned a major effort to improve the safety of marine pilotage on the U.S./Canadian West Coast. The first incident involved the Barge Nestucca, which spilled over 230,000 gallons of oil off the coasts of Washington and British Columbia in December 1988. The second casualty was the catastrophic Exxon Valdez oil spill in Alaska’s Prince William Sound in March 1989. These environmental catastrophes led to the States/British Columbia Oil...

Oregon took action in response to the Nestucca/Exxon Valdez disasters as well as to significant criticism of its pilotage system in the 1990 report of the States/British Columbia Oil Spill Task Force. In 1991, the Oregon Legislature amended ORS 776.405 to require foreign flagged vessels to utilize state-licensed pilots on Oregon waters, making pilotage in Oregon compulsory rather than optional.

In late 1991 and early 1992, the Oregon Board of Maritime Pilots convened eight days of public hearings regarding a major upgrade in pilot qualifications, continuing professional development and mandatory drug and alcohol testing for pilots. This proceeding ultimately generated extensive revisions to OAR Chapter 856, including minimum physical requirements for pilots, upgraded minimum requirements for pilot training and qualifications, license restrictions ensuring that only more experienced pilots were authorized to pilot oil tankers and expanded grounds for disciplining pilots.

In 1999, a special task force created by the U.S. Department of Transportation predicted that growing levels of demand and more pressure on infrastructure would severely challenge the ability of the U.S. Marine Transportation System (MTS) to meet the challenges of this century. The MTS report to Congress, a portion of which is CRBP Exhibit P2 listed the key issues requiring attention and laid out a 20-year vision called “MTS 2020.” Included in that vision were multiple goals to achieve safety and environmental objectives and to establish information management and infrastructure supportive of MTS. Two of the most important goals in the MTS special report and other studies and reports issued over the last two decades are the increasing
importance of safety within the U.S. marine transportation system, and the role technology can play in achieving a system that is safe, efficient and environmentally sound.

As described below, the Columbia River Bar Pilots have repeatedly embraced new technology throughout their history, including the most complex, technologically advanced pilot transfer system in the U.S., and have been successful in recruiting the talented and experienced captains holding the highest license in the world to serve as pilots on an extremely challenging pilotage ground. If the CRBP is to continue to perform well in this very difficult environment, which has resulted in no major environmental casualties during the last 50 years, it is vital that the rate structure supporting our pilotage system be adequate to fund both the combination helicopter/fast boat system that has performed so well since the beginning of helicopter operations in August 1999 and pilot compensation and benefits at a level that is reasonably competitive with other pilot groups on the West Coast.

B. Brief History of the Columbia River Bar Pilots, Their Challenging Pilotage Ground and the Skill Necessary to Provide Pilotage Service.

Q: Please briefly describe the history of the Columbia River Bar Pilots, the challenges on your particular pilotage ground and the mariner skill set necessary to your work as a Columbia River Bar Pilot.

A: The Columbia River Bar Pilots LLC is the oldest pilotage organization in Oregon. The CRBP had its origins in 1846, some 13 years before Oregon became a state. From the very beginning, the purpose of an association of skilled master mariners at the Bar has been to provide safe and efficient navigation of all vessels across what is universally acknowledged as the most dangerous, heavily trafficked Bar in the United States.
Because the job of a Bar Pilot is often both difficult and dangerous, our organization throughout its history has emphasized the hiring of only experienced ship’s masters. Nearly a century ago, CRBP advocated that the ship’s master tradition be made a requirement to obtain a state pilot license from the Oregon Board of Maritime Pilots. The requirement that all applicants for licensure as a Columbia River Bar Pilot have a minimum of two years’ sea time serving as a ship’s master or captain while operating under the unlimited license (any ocean and any ton vessel) has been required by regulation since at least 1940.

The Columbia River Bar’s status as the most dangerous heavily trafficked commercial waterway in the world is documented in a book entitled *World’s Most Dangerous*, which was written by our legal counsel, Michael E. Haglund, and published in 2011 by the Columbia River Maritime Museum. Two quotes in particular explain the danger associated with crossing the Bar and summarize the waterway entrance analysis which proves that the Columbia River Bar is in fact the most dangerous entrance channel in the world.

When it comes to navigational challenge, the presence of a bar at the entrance to a major waterway dramatically increases the treachery of entering or departing that coastal inlet. The “bar effect” increases danger in two ways. First, a bar increases swell or wave height. And second, a bar may cause waves to break so violently that a vessel’s steerage is compromised, not in the open ocean where it may not matter, but in a narrow entry zone where steering clear of shoals is critical.

But while anecdotal evidence is compelling, it lacks the force of scientific data that facilitates comparison of waterways on an apples-to-apples basis. In today’s world, major waterways are all charted and there is comprehensive data showing ocean swell, period between swells, current, and significant wave height. Candidate waterway entrances were identified and provided to Professor Tuba Ozkan-Haller of Oregon State University’s College of Oceanic and Atmospheric Sciences. Utilizing her expertise in marine geology, geophysics, and coastal engineering, Professor Ozkan-Haller
assembled the relevant data and compared these major waterways in terms of probability of producing the most feared danger factor: high waves. This was accomplished with a mathematical equation that utilizes water depth at the entrance, speed of ebb current, period between swells and swell height in winter conditions.

Because the ebb tide colliding with the inbound ocean swell acts to steepen and increase wave height, the highest waves are encountered in ebb tidal conditions. The wave-amplifying force of these conditions over an entrance channel dredged to a given depth can be readily calculated. When the Columbia River Bar is compared to top candidates from around the world, it ranks first. When ocean swells reach a height of 19.6 feet offshore of the Columbia River Bar, the waves in the entrance channel will exceed heights of 31 feet. If the height of the offshore swell is 26 feet, which is not uncommon in winter, the wave heights will reach 42 feet.

<table>
<thead>
<tr>
<th>WATERWAY</th>
<th>WINTER WAVE HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia River Bar</td>
<td>42.0</td>
</tr>
<tr>
<td>Port Phillip, Australia</td>
<td>35.4</td>
</tr>
<tr>
<td>Gironde, France</td>
<td>33.6</td>
</tr>
<tr>
<td>San Francisco Bay</td>
<td>28.7</td>
</tr>
<tr>
<td>Durban, South Africa</td>
<td>28.0</td>
</tr>
</tbody>
</table>

Throughout our more than 150-year history, the Bar Pilots have repeatedly embraced new pilot transportation technologies that both improve pilot, ship and environmental safety and enhance commerce on the Columbia River. This history is reflected in changes over time from sail to steam to diesel-powered station-type pilot boats equipped first with rowboats and then with motorized daughter boats for boarding and disembarking pilots in heavy seas. When the station boat Peacock was delivered in 1967, she included then state-of-the-art technology with a
steel hulled German-built pilot boat with self-righting capability and a specially designed
daughter boat system. Throughout her history, the Peacock was the only self-righting pilot boat
in the world. She proved her unsinkability in the winter of 1971 when she was rolled over by a
huge breaker and completely submerged, but managed to pop back to the surface with her
engines running and only minor injuries to the pilots and crew aboard.

Over the three decades following the delivery of the Peacock in 1967, ships became
bigger and faster. The much larger ships in the world’s ocean-going fleet made the use of a
purely boat-based system (using daughter boats) for boarding and debarking increasingly unsafe
and inefficient in rough sea conditions. For nearly a decade, we studied how to upgrade our pilot
transfer system. Following a four-month experiment with helicopter operations in 1996-97, our
organization reached consensus on how best to modernize our pilot transfer system, culminating
in the extensive record developed in the 1998-99 rate proceeding that led to approval of the
combination helicopter/fast boat system. This system has now proven itself over more than two
decades. While common in other ports of the world, our dedicated helicopter operation remains
the only one of its kind in the U.S. and our jet-powered fast aluminum pilot boats have been
copied by other pilot groups throughout the world.

Throughout the history of helicopter operations on our pilotage ground, three potential
New Carissa-type incidents have been prevented. In the first incident in October, 1996, the M/V
Leotis arrived off our coast unannounced and anchored three miles off Seaside, where she began
to encounter worsening sea conditions and then called for a Bar Pilot. Under the conditions at
the time, it would have been virtually impossible to board an anchored vessel in the open sea via
pilot boat. The helicopter, which was on station during a four-month preliminary test, rushed
Captain James Stroup to the ship and he was successfully hoisted aboard the vessel. At the time

TESTIMONY OF DAN JORDAN

Exh. DJ-01T
Page 7
he boarded, the vessel was dragging anchor and drifting toward the beach. He was able to bring
the ship under control and then successfully transit the bar and sail the ship into Astoria without
incident.

The second incident involving the M/V Sea Hex occurred on January 1, 2001. Captain
Roger Nelson was aboard the helicopter headed for another assignment when he observed the
ship approximately two miles offshore headed toward Clatsop Spit. He quickly instructed the
helicopter to fly to the vessel, where he made radio contact and learned that the captain had
ordered the vessel to anchor to make some repairs. Captain Nelson repeatedly advised the ship
that she was attempting to anchor in an unsafe location, which turned out to be exactly the type
of problem that led to the loss of the New Carissa off Coos Bay in 1999 and he strongly advised
the vessel to go further offshore to make the necessary repairs. She then moved from her
location just two miles offshore to three miles offshore. Once again, Captain Nelson followed
the ship in the helicopter, hovered above her and told the captain to move even further offshore.
At this point, because of the vessel’s failure to follow his instructions, Captain Nelson reported
the matter to the U.S. Coast Guard and the ship subsequently moved away from the imminent
danger.

The third incident involved the M/V Tai Shan Hai in December 2002. A full account of
this incident is contained in Chapter 6 of World’s Most Dangerous. A copy of that chapter is
Exhibit DJ-02. It shows the danger of our job, the importance of the skill set that experienced
ship masters bring to their positions as Bar Pilots and the impressive capability of the
helicopter/fast boat transportation system.
C. The Importance of Attracting Top Caliber Candidates As Bar Pilot Trainees.

Q: Why is it important for the Columbia River Bar Pilots to attract only the most highly qualified candidates as pilot trainees on your pilotage ground?

A: The best way to illustrate our pilot group's need to attract trainee candidates who are among the best of the best in a relatively small national candidate pool is to describe some of the conditions that we encounter on the Columbia River Bar, especially during the winter.

One of the unique aspects of our job is that there are multiple wind, current and sea combinations which are experienced most commonly during winter where a Bar Pilot must instruct the bridge crew to engage in extreme maneuvers to accomplish the bar passage. Three examples are described below.

During many winter situations, the wind from the south and the current pushing to the north are so strong that the vessel, despite the intended course within the channel shown on the chart above, must actually head on a course that is rotated more than 45° to the south from the

TESTIMONY OF DAN JORDAN Exh. DJ-01T Page 9
intended course and be positioned in a way that it appears the vessel will pass on the wrong side
of the buoy marking the southerly edge of the channel. This radical maneuver must be made to
compensate for the effect of the wind and current. To the master entering the Columbia River
for the first time or encountering these conditions for the first time, this maneuver appears to
have the vessel headed for the shallows off Clatsop Spit but in fact the vessel stays on course in
the channel. However, unless this radical maneuver is used at the direction of an experienced
Bar Pilot, the vessel will run aground on the rocks of Peacock Spit or the jetty to the north.

In the second chart below, an inbound vessel is further along on its transit through the
Columbia River pilotage grounds and in the vicinity of Desdemona shoals. The wind and flood
currents are again setting the vessel to the north, pushing her toward the shoals. To avoid
running aground on the shoals and causing a major oil spill, the vessel must make the extreme
maneuver of appearing to head directly toward Clatsop Spit in order to stay in the channel and
avoid the shoals.
In a third example involving an outbound ship shown below, the vessel is attempting to stay in the channel with Peacock Spit to the north and Clatsop Spit to the southwest. Instead of pursuing a course with the bow headed parallel to the middle of the channel, the ship must be put on a heading that appears to head for the rocks on the South Jetty out of the channel to compensate for the extreme effects of wind and current.

The radical maneuvers described and depicted in the three above examples show that, unlike Houston or Baltimore or many other pilotage grounds throughout the world, an incoming vessel cannot be “talked into” the protected inland waters inside the Columbia River Bar with radio commands referencing navigational aids and gradual course changes. The maneuvers necessary to transit a difficult Columbia River Bar are simply too extreme to expect that a foreign master would ever execute the commands. It is critical that an experienced Bar Pilot be aboard to observe the conditions and deploy his or her experience on how best to maneuver the vessel to make a difficult crossing.
Considering the outstanding safety record of the Columbia River Bar Pilots, which is best demonstrated by lack of a major casualty in the last 50 years and the examples of near misses where casualties were avoided, it is clear that the skill set acquired through years of experience as an officer and ultimately a captain with an unlimited masters license used in highly varied conditions around the world is vitally important to the maintenance of a safe and efficient pilotage system at the entrance of the Columbia River. The Columbia River Bar Pilots draw their prospective trainees from a national pool of experienced merchant mariners who have graduated from one of this country’s maritime academies.

As an organization, the Columbia River Bar Pilots must be in a position to attract the most capable ship captains in the U.S. merchant marine. Because our pilotage ground is so difficult in heavy weather conditions, our organization must be able to offer a reasonably competitive package of compensation and benefits to prospective trainees. During most of the first decade of the 2000s, which was a period of considerable rate instability, the CRBP fell behind much of the West Coast in terms of pilotage compensation and benefits.


Q: With respect to the regulation of pilot groups in Oregon from both the safety and rate-setting standpoint, what state agency performs those functions?

A: In Oregon, we have four pilotage grounds including the Columbia River Bar, the Columbia and Willamette Rivers, Coos Bay and Yaquina Bay. These four pilotage grounds are served by the Columbia River Bar Pilots, the Columbia River Pilots and the Coos Bay/Yaquina Bay Pilots. Pursuant to ORS Chapter 776, Oregon pilot groups are regulated by the Oregon
Board of Maritime Pilots, a nine-member board appointed by the Governor and confirmed by the Oregon Senate.

Q: Does ORS Chapter 776 include a standard to guide the Oregon Board Maritime Pilots in setting "reasonable and just" pilotage rates?

A: Yes. In 1991, the Oregon Legislature amended ORS 776.115 to include the following sentence regarding the primary purpose of the Oregon Board Maritime Pilots: "The primary consideration of the board is public safety."

Q: Considering that the Columbia River is a boundary river between the states of Oregon and Washington, does the Oregon Board Maritime Pilots regulate pilotage on the Washington side of the Oregon/Washington boundary that generally runs along the midpoint of the river?

A: Yes. Although both Oregon and Washington licensed pilots during their history as U.S. territories, Oregon has been the exclusive regulator of pilotage on the Columbia River since becoming a state in 1852. However, based on my observations of meetings of the Oregon Board Maritime Pilots during my 17 years as a state-licensed pilot, Washington closely monitors pilotage regulation in Oregon through its Department of Ecology ("DOE"). DOE regularly has a representative in attendance at OBMP meetings and that representative often makes presentations of mutual interest to both states at those meetings.

Q: Have you had an opportunity to review the testimony of Puget Sound Pilots Executive Director Charles Costanzo regarding the "best achievable protection" standard
in Washington that pertains to oil spill in maritime casualty prevention including the
compulsory pilotage system?

A: Yes.

Q: Have you also had an opportunity to review the testimony of American Pilots
Association Executive Director and General Counsel Clay Diamond regarding this same
topic, the "best achievable protection" standard set out in Washington statutes?

A: Yes.

Q: What is your opinion regarding the comparability of the "safety first" mission of
the Oregon Board Maritime Pilots and the "best achievable protection" standard
applicable to the pilotage system in Washington?

A: In my opinion, the two standards are equivalent. The state agencies that regulate pilotage
in Oregon, the Oregon Board of Maritime Pilots, and in Washington, the Board of Pilotage
Commissioners and the Utilities and Transportation Commission, must regulate and fund their
compulsory pilotage systems in a manner that maximizes the accident-prevention capability of
the pilotage systems serving the waters of each state.

Q: Can you provide an example of where you believe the Oregon Board Maritime
Pilots has lived up to its "safety first" mission in a rate-setting context?

A: Absolutely. Following the New Carissa casualty in February 1999, which occurred
during the pendency of a major rate proceeding involving our pilotage ground, the Oregon Board
Maritime Pilots considered the testimony of 14 witnesses and over 1500 pages of written

TESTIMONY OF DAN JORDAN

Exh. DJ-01T
Page 14
testimony and exhibits over eight days of hearing. Based on that extensive record, the OBMP ultimately decided in March 1999 to approve the sizable rate increase necessary to fund the transition of the transportation system serving the Columbia River Bar pilotage ground from the station boat system I described above to the much more expensive combination helicopter/fast pilot boat system that has served our pilotage ground so well for what is now 23 years.

In addition, because of the need for Columbia River Bar Pilots to board incoming vessels further out to sea than the historic practice before 1999, the OBMP was instrumental in working with our pilot group to convince the Oregon legislature to amend ORS chapter 776 to significantly expand the western boundary of our pilotage ground out to sea by nearly 12 miles, to the boundary separating Oregon’s territorial sea from the zone in the Pacific Ocean under federal jurisdiction. Oregon’s territorial sea extends from shore a distance of 12 nautical miles. This legislation was necessary to establish a Columbia River Bar “precautionary zone” giving our pilot group the authority to require incoming ships to take on a pilot within that zone rather than much closer to the sea buoy at the entrance to the Columbia River as was the traditional practice. This legislative change significantly enhanced safety on our expanded pilotage ground.

Q: Are the pilotage costs incurred by oceangoing vessels transiting to or from ports or terminals on the Columbia River higher than those experienced by vessels calling at other West Coast port clusters including Puget Sound, San Francisco/Oakland and LA/Long Beach?

A: Except for that very small percentage of ships calling at the Port of Astoria, which is less than 2% of annual vessel traffic, ships incur pilotage fees for two pilotage grounds, the Columbia River Bar served by our pilot group, and the Columbia and Willamette River pilotage ground.
served by the Columbia River Pilots. Combined, the current pilotage rates for both grounds substantially exceed the pilotage fees that are charged currently in Puget Sound by the Puget Sound Pilots and also substantially above the proposed rates in this rate case.

Q: To provide some context, can you compare the revenue requirement for the Columbia River Bar pilotage ground and that of the tariff funding the Puget Sound Pilotage District?

A: Yes. Because of the highly dangerous conditions on our pilotage ground that require the use of a dedicated 24/7 fully crewed helicopter/fast pilot boat system, the Columbia River Bar Pilots have the most expensive transportation system in the United States as a percentage of the total revenue generated by our tariff, which is slightly more than 50% of the revenue requirement. In terms of total revenue requirement, the tariff funding our pilotage system currently collects approximately $18 million per year to cover all of our expenses and the income and benefit package approved by the OBMP for our 16 to 17 pilots. This figure is over half of the approximately $35 million revenue requirement in the current UTC-approved tariff funding the operations of the Puget Sound Pilots and their 53 state-licensed pilots.

D. Relevant Statistics Regarding CRBP Vessel Traffic, Size and Draft.

Q: Please provide the statistical information regarding vessel traffic, size and draft on your pilotage ground.

A: The CRBP maintains detailed records regarding vessel transits (inbound and outbound) across the Columbia River Bar and key statistics regarding vessel length, average gross tonnage and average draft. For the eight years from 2013 through 2021, those statistics are set out below:
The above statistics show our combined inbound and outbound transit figures to have fluctuated within a range from a low of 2,812 transits in 2019 to a high of 3,275 transits in 2014. In terms of vessel size, the trend is consistent with a more than 50-year trend. Vessels calling on Columbia River ports have been growing in size in terms of length, gross tonnage and average draft. The increasing size of ships is a contributor to somewhat lower traffic numbers because fewer larger ships can carry the same cargo tonnage as a larger number of smaller vessels. For professional maritime pilots, the steady march of the steamship industry toward longer, deeper and larger vessels increases the risk and responsibility associated with providing pilotage service.

<table>
<thead>
<tr>
<th>Year</th>
<th>Transits</th>
<th>Avg. Length Overall (feet)</th>
<th>Intern’l. Gross Tons</th>
<th>Avg. Draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3,102</td>
<td>609</td>
<td>26,544</td>
<td>25’5”</td>
</tr>
<tr>
<td>2014</td>
<td>3,275</td>
<td>619</td>
<td>27,852</td>
<td>25’9”</td>
</tr>
<tr>
<td>2015</td>
<td>2,878</td>
<td>605</td>
<td>28,472</td>
<td>25’9”</td>
</tr>
<tr>
<td>2016</td>
<td>3,088</td>
<td>618</td>
<td>29,776</td>
<td>25’11”</td>
</tr>
<tr>
<td>2017</td>
<td>2,962</td>
<td>617</td>
<td>30,390</td>
<td>26’7”</td>
</tr>
<tr>
<td>2018</td>
<td>3,166</td>
<td>616</td>
<td>30,650</td>
<td>26’9”</td>
</tr>
<tr>
<td>2019</td>
<td>2,812</td>
<td>613</td>
<td>29,877</td>
<td>26’5”</td>
</tr>
<tr>
<td>2020</td>
<td>2,858</td>
<td>622</td>
<td>30,234</td>
<td>27’1”</td>
</tr>
<tr>
<td>2021</td>
<td>3,149</td>
<td></td>
<td>29,339</td>
<td>28’9”</td>
</tr>
</tbody>
</table>

F. CRBP Income and Benefits Information.

Q: How often do the Columbia River Bar Pilots utilize callbacks of off-duty pilots to perform pilotage assignments at times when there is not an available rested on-duty pilot?
A: Our use of callbacks to cover peak traffic demands is fairly infrequent. As the table below demonstrates, our callbacks as a percentage of total assignments ranged from a low of 1.22% to a high of 4.26% during the nine year timeframe of 2013 through 2021.

<table>
<thead>
<tr>
<th>Year</th>
<th>Assignments</th>
<th>Callbacks</th>
<th>% Callbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3126</td>
<td>38</td>
<td>1.22%</td>
</tr>
<tr>
<td>2014</td>
<td>3284</td>
<td>97</td>
<td>2.95%</td>
</tr>
<tr>
<td>2015</td>
<td>2920</td>
<td>91</td>
<td>3.12%</td>
</tr>
<tr>
<td>2016</td>
<td>3134</td>
<td>90</td>
<td>2.87%</td>
</tr>
<tr>
<td>2017</td>
<td>2987</td>
<td>87</td>
<td>2.91%</td>
</tr>
<tr>
<td>2018</td>
<td>3176</td>
<td>61</td>
<td>1.92%</td>
</tr>
<tr>
<td>2019</td>
<td>2823</td>
<td>82</td>
<td>2.90%</td>
</tr>
<tr>
<td>2020</td>
<td>2858</td>
<td>69</td>
<td>2.41%</td>
</tr>
<tr>
<td>2021</td>
<td>3144</td>
<td>134</td>
<td>4.26%</td>
</tr>
</tbody>
</table>

G. CRBP Experience With Annual Cost-Of-Living Adjustments to Our Tariff.

Q: Please describe the most recent level of target net income approved by the Oregon Board Maritime Pilots for your pilot group.

A: As noted by the OBMP in its Final Order dated March 18, 2022 in connection with the Coos Bay/Yaquina Bay Pilots Association (Exhibit DL-14), the target net income level of the Columbia River Bar Pilots was considered to be $445,555 for a complement of 16 pilots as of June 2021. This is the same level of target net income approved by the OBMP for the Columbia River Pilots in a Final Order dated August 1, 2021.

Q: How much did the cost-of-living adjustment in 2021 for your group and the Columbia River Pilots add to the target net income figure of $445,555?

A: For 2021, the annual COLA that became effective on September 1, 2021 was 3.68%. That increased our target net income and that of the Columbia River Pilots to $461,951.
Q: Are you able to project the amount of the COLA that will increase target net income again as of September 1, 2022?

A: Yes. Based upon knowing the actual CPI monthly figures for 11 of the 12 months of 2021-2022, it appears that the COLA adjustment on September 1, 2022 will be 9.0%. That will increase our target net as well as that of the Columbia River Pilots to $503,527. By mid July, the Bureau of Labor will have issued the CPI for our particular index for June 2022, which will enable me to supplement my testimony to provide the actual CPI adjustment that will be made to all Oregon pilotage tariffs as of September 1, 2022.

Q: Is the tariff funding your pilotage ground adjusted annually based upon the Consumer Price Index?

A: Yes. Since 1993, all tariffs funding the pilotage systems in Oregon have had an annual cost-of-living (“COLA”) adjustment that is effective on September 1 of each year. At present, this COLA is based upon the Western Region all urban consumers Consumer Price Index (“CPI”). Specifically, this adjustment is made based upon the CPI for the year ending June 30 and made effective as of September 1 of each year.

Q: Has the Oregon Board Maritime Pilots enhanced that CPI for the period of five years beginning with September 1, 2021?

A: Yes. After approving a rate increase for our pilotage ground in a Final Order dated June 1, 2021 that was the result of a settlement with Columbia River ports and the shipping industry, the annual CPI adjustment to our rates and those of all other pilotage grounds in Oregon is increased annually by one half of 1%.
Q: What is your opinion regarding the impact of the annual cost-of-living adjustment benefiting Oregon pilot groups on the frequency of rate cases filed with the Oregon Board of Maritime Pilots?

A: In my opinion, the annual adjustment of our tariff based upon the CPI for our region has reduced the need for rate cases and, following the major transition of our transportation system to the helicopter/fast boat system that I have described, we've had over 10 years of relative rate peace. In fact, since 2011, we've had only two rate proceedings, both of which implemented either full or partial settlements with pilotage stakeholders.

H. Recent CRBP Experience with an Unscrupulous Operator of a Bulk Carrier.

Q: Within the last several months, did the Columbia River Bar Pilots have an experience with a loaded Panamax bulk carrier being uncooperative in a near miss grounding situation at the mouth of the Columbia River and then taking steps to evade a Coast Guard order to perform vital engine repairs in San Francisco?

A: Yes. On April 12, 2022, the M/V Alexia, a foreign flag Panamax bulk carrier fully laden with a cargo of grain suffered major engine failure issues on an outbound transit of the Columbia River Bar. The vessel had been loaded to 42 feet, which is near our maximum allowed draft of 43 feet and suffered engine failure on the bar. The engine failure occurred at a point where the vessel was just about to clear the south jetty. Captain Valentine immediately anchored the ship within ½ mile from the rocks at the end of the south jetty. Bar Pilot Jay Valentine repeatedly tried to bring the engine up to a speed sufficient to turn and make way into the incoming seas, which were breaking over the ship's deck, but every time he gave the order for half ahead, the engine would fail. Throughout this timeframe, the captain was uncooperative and did not
provide the information requested by the pilot. The heavy seas and wind conditions had the Bar Pilots on duty that day extremely concerned that the vessel could run aground on the jetty or Clatsop Spit and create a New Carissa-type casualty that could result in spillage of the one million or more gallons of fuel stored aboard a cargo vessel of this size.

To avoid a potential disaster, we had three towboats racing from Longview, Washington to the scene. Captain Valentine and a second Bar Pilot Bill Black were eventually able to anchor the ship further offshore and the changing tide ultimately turned the ship into the sea and she was able to make enough headway into the ocean to avoid a potential disaster. As this event unfolded, the U.S. Coast Guard was kept fully informed, which decided with our input that it was safer to order the vessel to continue seaward and then transit south to Los Angeles for repairs, rather than attempt a return voyage across the bar in a storm. Unfortunately, once underway southbound, the M/V Alexia not only refused to respond to repeated radio calls from the Coast Guard, but turned off her AIS (Automatic Identification System) and ignored the order to undergo repairs in Los Angeles Harbor. This close call with potential catastrophe is a good example of how state-licensed pilots are this country's first line of defense against unscrupulous practices by foreign flag shipowners and operators.

III. CONCLUSION

Q: Does this conclude your testimony?

A: Yes.