BEFORE THE WASHINGTON 
UTILITIES AND TRANSPORTATION COMMISSION 

WASHINGTON UTILITIES AND 
TRANSPORTATION COMMISSION, 
Complainant, 

v. 

PUGET SOUND PILOTS, 
Respondent. 

Docket TP-

TESTIMONY OF 
CAPTAIN JEREMY NIELSEN 
ON BEHALF OF PUGET SOUND PILOTS 

JUNE 29, 2022
TABLE OF CONTENTS
I. IDENTIFICATION OF WITNESS ......................................................... 1
II. PURPOSE OF TESTIMONY ......................................................... 1
III. CONCLUSION ........................................................................... 10

EXHIBIT LIST

<table>
<thead>
<tr>
<th>Exhibit No.</th>
<th>Description</th>
<th>Page Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>JN-02</td>
<td>Curriculum Vitae</td>
<td>1</td>
</tr>
</tbody>
</table>
I. IDENTIFICATION OF WITNESS

Q: Please state your name, occupation and business address.
A: My name is Jeremy Nielsen. I am the president of the Columbia River Pilots. My business address is 13225 N. Columbia St., Portland, OR 97203.

Q: Please describe your educational background.
A: I have been licensed by the State of Oregon to pilot on the Columbia River and Willamette River Pilotage Ground (“CWRPG”) since 2014. I am a graduate of the United States Merchant Marine Academy and in my professional life have worked aboard deep draft, blue water cargo vessels and aboard tugs operating on the CWRPG. My resume is Exhibit JN-02.

II. PURPOSE OF TESTIMONY.

Q: What is the purpose of your testimony?
A: My testimony addresses the following topics:

1. The professional skill and experience required to become a state-licensed Columbia River Pilot;
2. The time necessary to perform pilotage services on our pilotage ground;
3. Pilotage supply and demand; and
4. Our pilot group’s compensation and benefits as approved by the Oregon Board of Maritime Pilots.
A. **Professional Skill and Experience Required.**

The CWRPG is the longest pilotage ground on the U.S. West Coast. From Astoria to the Portland Harbor is almost 85 nautical miles, with some 80 charted course changes. To Lewiston, Idaho, is another 312 nautical miles. The maintained navigation channel is predominately 600 feet wide, which must accommodate passing and overtaking vessels with beams sometimes exceeding 130 feet. Simultaneous inbound and outbound transits occur at night, in fog or other inclement weather. In addition to other commercial vessels, hazards include changing depths, shoals and sand bars, bank cushion and bank suction, current, and visibility issues. At times, particularly peak salmon and steelhead fishing seasons, the presence of unlicensed, untrained and unsophisticated recreational river users is a significant complication.

Each COLRIP pilot holds a valid license as Master endorsed by the United States Coast Guard and has either served at least 730 days as Master aboard a towing vessel on the CWRPG or else completed an intensive apprenticeship program designed to develop the familiarity with the grounds necessary to begin training as a pilot on the CWRPG.

Because of the size and complexity of the CWRPG, the requirements for an original license established by the Board of Maritime Pilots beyond the requirements of state statute are extensive. They include:

- A written training assessment of knowledge of currents, tides, soundings, bearings and distances of the shoals, rocks, bars, points of landings, lights and fog signals (the elements of ORS 776.035(2) and 776.325(1)(b));
- The U.S. Coast Guard physical examination for competence to perform the duties of a pilot;
- Actual experience as a pilot handling ships over the pilotage ground;
- A valid U.S. Coast Guard license as Master endorsed for Radar Observer;
• An unlimited federal pilot’s endorsement for the pilotage ground, which requires
drawing the entire river from memory, including every navigation aid and its
characteristics; and

• Service of at least two years as Master aboard vessels or completion of a program
of apprenticeship training approved by the Board.

(OAR 856-015-0010(1) – (4).) Training on the CWRPG – provided by COLRIP as the only
certified training organization for the CWRPG – takes 2.5 years to complete.

There are four licenses for piloting on the CWRPG. The first, a Grade “C” license,
requires that the trainee:

• Have served at least 730 active working days as a captain of towing vessels on the
Columbia River and its tributaries or have successfully completed a minimum 3-
year program of apprenticeship training;

• Complete at least six trips while on the bridge of a ship not less than 500 feet
length overall (LOA) into the upper Portland harbor;

• Complete at least 110 transits while on the bridge of a ship not less than 500 feet
LOA;

• Complete at least six trips turning from the Columbia River into the Willamette
River and vice versa;

• Complete at least 10 trips in either direction between Astoria and Longview or
Kalama;

• Complete at least 4 trips from dock to dock or anchor to dock on ships not less
than 500 feet LOA, with each requiring a 180-degree turn before docking;

• Train at least 25 additional days;

• Present recommendations from the training course monitor and at least 10
unlimited state pilots.

(OAR 856-015-0011.) Success results in a “C” license, entitling the trainee to pilot vessels up to
600 feet LOA on the CWRPG, while simultaneously training for a “B” license. Similarly, “B”
licensees train for their “A” licenses while piloting ships up to 700 feet LOA, and “A” licensees
train for their unlimited license while piloting ships up to 800 feet LOA. (OAR 856-015-0035.)
Each grade of license is valid for only one year absent extension for medical disability, and no license except the unlimited license may be renewed.

In 2010, the Columbia River navigation channel deepening project concluded, deepening the maintained navigation channel from 40 to 43 feet, delivering an additional three feet of depth for cargo vessels. The maintained channel has not gotten wider, however, so the challenge of piloting has only increased as vessel size has increased and the margins for error have decreased.

B. **Time Necessary to Perform the Service.**

COLRIP members generally work a schedule that is nominally 14 days on duty and 14 days off duty. In practice, however, this schedule often means 15 days on and 13 days off, for assignments on the last day on duty may carry beyond the 24th hour of the 14th day on duty. Duty days are 24-hours, and COLRIP pilots provide service to all CWRPG ports 24 hours a day, 365 days a year, safety permitting.

The CWRPG extends from the lowermost dock or wharf at the Port of Astoria to the heads of navigation (defined as the farthest point above the mouth of the river that can be navigated by vessels) on the Columbia and Willamette Rivers. The head of navigation on the Columbia River system is Lewiston, Idaho, and on the Willamette River is upriver from Oregon City, Oregon. Most ships piloted by COLRIP pilots travel inland as far as Vancouver, Washington, or Portland, Oregon. Most of the vessels piloted upriver from Vancouver by COLRIP pilots are destined for Hanford, Washington, with cargos of radioactive waste from the United States Navy, intended for disposal at the Hanford nuclear reservation.

The time on the bridge of a ship that is necessary for COLRIP members to provide pilotage service depends on a variety of factors, including specifications of the vessel, its
mechanical condition, the extent to which the ship is loaded, weather, the amount of traffic on
the river, the tidal stage, and river conditions. Pilotage requires devotion of much more time
than just time on the bridge of a vessel actually underway, but transit times are one quantifiable
measure of the time needed to perform the service. Typical transit times between Astoria to
dockside at the locations noted are:

<table>
<thead>
<tr>
<th>PORT</th>
<th>AVERAGE PILOT HOURS ON BRIDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longview</td>
<td>4.5</td>
</tr>
<tr>
<td>Kalama</td>
<td>5.5</td>
</tr>
<tr>
<td>Vancouver</td>
<td>7.0</td>
</tr>
<tr>
<td>Portland Terminals 5 &amp; 6</td>
<td>7.0</td>
</tr>
<tr>
<td>Portland Terminal 4</td>
<td>7.5</td>
</tr>
<tr>
<td>Portland Terminal 2</td>
<td>8.0</td>
</tr>
<tr>
<td>Portland Ship Repair Yard</td>
<td>8.0</td>
</tr>
</tbody>
</table>

These typical times do not take into account delays at the docks getting underway, delays enroute
due to mechanical problems or having to wait for other traffic to clear, or delays at berth due to
difficulties tying up. While underway, there are no breaks from the intense work. If eaten,
meals are usually taken while standing, during which piloting duties must continue.

COLRIP serves all vessels needing pilotage between Astoria and the Ports of Longview,
Kalama, Vancouver, and Portland, and elsewhere on the CWRPG as required. Because of the
distances and time demands, COLRIP has intricate internal dispatching rules to ensure that pilots
will be available when and where needed. COLRIP also must maintain infrastructure in both
Portland and Astoria and the means to transport pilots to any of dozens of docks and berths over
the 85 miles of the CWRPG most transited by vessels. COLRIP leases an office, which includes
its dispatching center. COLRIP also rents a small office and dispatching center in Astoria, where pilots board launches for transport to and from vessels. COLRIP also maintains modest sleeping quarters in Astoria, which allows pilots who have brought vessels downriver to sleep and ready themselves for dispatch to an inbound vessel. This means that pilots are away from their homes and families several nights each duty period.

To ensure that pilots are where they need to be, on time, COLRIP employs two dispatchers who provide service 24 hours per day, 365 days of the year. COLRIP also employs a business manager, a controller, and an office manager. All of these positions are managed by COLRIP’s officers, who include the President, Vice President, and Treasurer.

Pilots board vessels at every berth on the CWRPG, requiring ground transportation. COLRIP leases and maintains a small fleet of 16 automobiles for use as needed to reposition pilots between Astoria and Portland and for getting to and from docks and berths. Automobiles are tracked and assigned by the dispatchers.

COLRIP does not own or operate any boats, but its pilots frequently need to board or depart from vessels at the various anchorages along the river and, at times, to board or depart from vessels while they are underway. The frequency of underway transfers has increased since adoption in 2015 of fatigue management rules (discussed below) and has also increased the time and cost of providing pilotage service. Water transportation to and from ships is done by tug or by commercial launch boat.

COLRIP is also a pilot training organization, the only one approved for training pilots on the CWRPG. The training period is typically 2.5 years from beginning until receipt of an unlimited license. During the training period, trainees ride with every COLRIP pilot. Acting as
an instructor and mentor to trainees is a vital but under-appreciated aspect of the job, and one
that is demanding both in terms of time and attention.

C. Pilotage Supply and Demand.

As noted, it is COLRIP policy to provide prompt service 24 hours a day, 365 days per
year, safety permitting. If there are no rested pilots who can work under our fatigue rules, off-
duty pilots can be called in to work. In part because of the wide variety of cargoes transiting the
CWRPG, demand for pilotage is fairly constant. The CWRPG is busy. It is the largest wheat
export port in the United States. Corn, soybeans, and other bulk cargoes, such as soda ash and
potash, are also quite active. Other cargoes regularly transiting the CWRPG in vessels served by
COLRIP pilots include logs, wood products, steel products, windmill parts, chemical and
petroleum products, and automobiles.

Based on COLRIP’s quarterly reports to the Board, in the four years 2017-2020,
COLRIP pilots served an average of 1,406 vessels per year, performing an average of 4,319
assignments (excluding drug tests), with a workload factor of 105.9, just shy of the workload
factor set by the Board in 2010 of 106.

The 2015 adoption by the Oregon Board of Maritime Pilots of fatigue management rules
imposed certain work schedule limitations on COLRIP that have resulted in a slight increase in
pilot numbers and a correspondingly slight decrease in the average pilot workload. Pilots are
required to have 12.0 hours off duty following a duty period to permit an 8-hour sleep
opportunity. Bridge time should be limited to eight consecutive hours. Pilots should have no
more than three consecutive calendar nights of duty time that infringe in any amount on the
circadian low period (that is, hours between 0200 and 0559).
The fatigue management rules have had no material effect on the duration of transits but have limited the length of time that any one pilot may devote to an assignment. As a result, COLRIP has experienced an increase in annual underway transfers from few or none before 2015 to approximately 36 per year since 2015. The fatigue management rules have improved safety while a pilot is aboard the vessel being pilots, but the increased number of underway transfers from launch boat to vessel or vice versa has increased somewhat the danger of falls. The fatigue rules have also resulted in some dispatching and other administrative challenges.

**Q:** How often do the Columbia River Pilots utilize callbacks of off-duty pilots to perform pilotage assignments at times when there is no available rested on-duty pilot?

**A:** In recent years, our pilot group's staffing has matched up well with traffic demands, which results in a fairly low level of callbacks for the Columbia River Pilots. During the last five years, we have averaged from a low of 0.90% to a high of 2.26% in annual callbacks as a percentage of total assignments. The table below shows this data for the period of 2017 through 2021:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Callbacks</th>
<th>% Callbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4434</td>
<td>68</td>
<td>1.53%</td>
</tr>
<tr>
<td>4551</td>
<td>62</td>
<td>1.36%</td>
</tr>
<tr>
<td>4089</td>
<td>37</td>
<td>0.90%</td>
</tr>
<tr>
<td>4173</td>
<td>53</td>
<td>1.27%</td>
</tr>
<tr>
<td>4645</td>
<td>105</td>
<td>2.26%</td>
</tr>
</tbody>
</table>
D.  **Columbia River Pilots’ Compensation and Benefits.**

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

A: As of August 1, 2021, the Oregon Board Maritime Pilots approved $445,555 as the target net income for the Columbia River Pilots. In addition, the OBMP increased the annual cost-of-living adjustment that is effective on September 1 of each year by one half of 1% for a minimum of five years. The OBMP’s Final Order 12 is Exhibit DL-15. The OBMP also acknowledged our 2021 level of target net income in its recent March 18, 2022 Final Order for the Coos Bay/Yaquina Bay Pilots Association, which is Exhibit DL-13.

**Q:** With the extra one half of 1% added to the COLA, what was the change in your pilot groups' target net income as of September 1, 2021?

A: With the extra 0.50%, the annual COLA that was effective September 1, 2021 was 3.68%. This increased our target net income for the following year from $445,555 to $461,951.

**Q:** What is your projection regarding the amount of the COLA that will change your pilot group's target net income as of September 1, 2022?

A: We are able to track the monthly CPI figures that go into the 12 months that are averaged to generate the annual COLA. Based upon knowing those numbers for the last 11 months, we project that the COLA adjustment on September 1, 2022 will be 9.0%, which includes the additional 0.5%. This will result in an increase in our target net income to $503,527.
Q: Do you have an opinion about whether the annual COLA adjustment to the tariffs for Oregon pilotage grounds since 1993 have had an effect on the number of rate cases since then?

A: Yes. I believe that the annual COLA has minimized the need for expensive and time-consuming rate cases and led to periods of five to 10 years during which there is either no rate case or what amounts to a stipulated change in the rates agreed to by the shipping industry.

III. CONCLUSION.

Q: Does this conclude your testimony?

A: Yes.