BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,

v.

PUGET SOUND PILOTS, Respondent.

Docket TP-

TESTIMONY OF
CAPTAIN IVAN CARLSON
ON BEHALF OF PUGET SOUND PILOTS

JUNE 29, 2022
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I. IDENTIFICATION OF WITNESS

Q: Please state your name, business and business address.
A: My name is Captain Ivan Carlson. I have served as president of the Puget Sound Pilots Association (“PSP”) since January 2020. My business address is 2003 Western Ave., Suite 200, Seattle, WA 98121.

Q: What are your duties as president of PSP?
A: The PSP President is the Chief Executive Officer of the Association and its primary spokesperson. The PSP president is a full-time position and the only position within our organization where the pilot is serving in an executive role on a full-time basis. I am responsible for organizing and leading monthly meetings of PSP's seven pilot Board of Directors. I am also responsible for appointing or reappointing the pilot members of our various committees, such as our Boat Committee, Efficiency Committee, Safety Committee, Rate Committee and Pension Committee. As the spokesperson for PSP, I represent PSP at all meetings involving our state or federal regulators, including the Board of Pilot Commissioners, UTC and US Coast Guard. I also regularly interact with other pilot groups throughout the U.S., which also includes attendance at regional, national and international pilot group meetings.

Q: Does the PSP president have administrative responsibilities related to the operation of the pilotage system within Puget Sound on a day-to-day basis?
A: Yes, whenever issues develop regarding dispatch of a pilot, the need to delay a vessel to increase efficiency or significant safety issues come up, the president has to be available on a 24/7 basis to deal with these issues.
Q: What sort of schedule do you work as PSP president?

A: Within our Association, the PSP President is a full-time administrative position. I am entitled to six weeks of vacation, but was only able to take three weeks in my first year as president due to the number of major challenges facing our pilot group.

Q: When you are working in your capacity as PSP president and not on vacation, do you work on the weekends?

A: Because our pilotage system is serving incoming and outgoing vessels on a 24/7 basis, I perform several hours of work virtually every weekend.

Q: Who takes care of your responsibilities when you are on vacation?

A: During those weeks, PSP vice president Eric Klapperich assumes my responsibilities. In the absence of the vice president, the secretary of the board (Captain Ken Grieser) assumes my responsibilities.

Q: Please describe your career as a mariner before becoming licensed as a Puget Sound pilot.

A: I began my maritime career in 1979 as a member of the Seafarers International Union, shipping off the assignment board on a variety of offshore deep draft vessels. For a period of nine years, I sailed worldwide on multiple ship types including tankers, passenger vessels, container ships, roll-on roll-off vessels, bulk carriers and once on a military pre-position ship. I started at the bottom as a dishwasher, or "pantryman," and eventually worked my way up to a deck officer's license as Third Mate, Unlimited for
Any Ocean. In 1987, I started work with the Washington State Ferries, ultimately earning my Masters license issued by the US Coast Guard. I began working as a Master or Captain on Washington ferries in 1995. During my career as a ferry Captain, I worked to obtain the federal pilotage endorsements for the entirety of Puget Sound, which involved 27 different tests that required drawing 27 nautical charts and writing up the route descriptions for each chart. I completed that work and obtained my Coast Guard federal pilotage endorsement for the entirety of Puget Sound around 2002. After taking and passing the Washington Board of Pilotage Commissioners’ pilot exam in 2005, I entered the training program a month later that same year. I received my state pilot’s license for the Puget Sound in July 2006 and have been piloting in the Puget Sound since then.

II. PURPOSE OF TESTIMONY.

Q: Please describe the topics that will be covered in your testimony.

A: My testimony will address multiple topics. First, I will discuss the importance of a fully funded top rank pilotage system in Puget Sound in order to comply with longstanding Washington State policy that its maritime transportation system in Puget Sound must meet a "best achievable protection" standard in terms of preventing oil spills. Second, I will describe the multiple steps taken by PSP to implement directives to our organization from the UTC in its November 25, 2020 Final Order. Third, I will present relevant pilotage system data bearing on specific issues in this rate case that our Association has assembled and with which I am very familiar. Finally, I will describe in detail the multiple automatic tariff adjusters proposed by PSP both to better match tariff...
revenues with actual pilotage system costs and to reduce the frequency of general rate cases.

III. THE IMPORTANCE OF A FULLY FUNDED TOP RANK PILOTAGE SYSTEM IN PUGET SOUND.

Q: Why is it important for the State of Washington to adequately fund the pilotage system in Puget Sound with a top flight pilot corps and state-of-the-art equipment and technology?

A: In simple, bottom-line terms, the reason is to prevent marine transportation casualties in Puget Sound, especially an oil spill that would devastate both the environment and our local economy.

Q: To your knowledge, does state law mandate compulsory pilotage utilizing only the best mariners supported by state-of-the-art technology?

A: Yes, there should be no question about the operating standard. In 2004, the Washington Legislature adopted a "zero spills" strategy, declared that "prevention is the best method to protect the unique and special marine environments in this state," and ordered the establishment of an oil spill prevention system designed to maintain the "best achievable protection" against oil spills. There is no question that a critical component of Washington’s marine transportation system oil spill prevention system is the compulsory pilotage system which PSP carries out in Puget Sound. In order to meet the “best achievable protection” standard, PSP must continuously and scrupulously work toward achieving a performance goal of zero casualties, which requires constant vigilance in terms of maintaining our safety culture and continuing to recruit only those highly experienced mariners whose shared experiences from diverse maritime experience and
personal backgrounds are central to maintaining the highest possible level of protection
against oil spills and other casualties in the performance of PSP pilotage assignments.

Q: When you are performing a pilotage assignment in Puget Sound, do you
consider yourself to be an employee or servant of the vessel?

A: Absolutely not. Every PSP pilot is carrying out his or her pilotage assignments as
an independent contractor who is a member of our unincorporated association of
professional pilots. We do not take instructions from or answer to the owner of the vessel
we are piloting or the operator of that ship. In fact, a regulation adopted by the Board of
Pilot Commissioners severely limits the authority of the vessel’s captain to intervene and
countermand the navigational order of the maritime pilot. WAC 363-116-405 reads:

The master may relieve a pilot only if the pilot is manifestly incompetent or
incapacitated or if the vessel is endangered or in extremis due to the pilot’s
error.

From time to time, a state-licensed pilot must resist commercial pressures from the ship
or her agent in the interest of safety during a pilotage assignment. I believe PSP pilots
view their customers as the citizens of Washington and the public resources we are
protecting: Puget Sound's waters, fish and wildlife, recreational opportunities as well as
the interests of commerce and navigation.

A recent example of the shipping industry trying to pressure PSP into moving a vessel
into a new berth at the Port of Seattle's Terminal 5 before our pilot group had the necessary
safety related information occurred in late April 2022. In this case, PSP still had not received
the technical data demonstrating that the newly constructed toe of the berth (a new concrete
below water structure) would accommodate vessels with drafts greater than 46 feet. PSP
refused to move a large MSC container vessel into that berth with a draft of 50 feet before receiving the necessary information that we needed to verify that the vessel could move into that berth drawing 50 feet and not allide with the new concrete toe. This led to a delay and the pressure from the industry that I am referring to is the subsequent issuance of a notice that the vessel interests intended to hold Puget Sound Pilots responsible for the liability associated with the cost of that delay. The email exchange between the Marine Operations Manager for MSC Mediterranean Shipping Company and me in early May 2022 is Exhibit IC-02.

Q: What standard do you believe should inform the UTC in determining the level of funding for the Puget Sound pilotage ground?

A: In my opinion, the UTC should approve a tariff generating the funds necessary to attract and retain a PSP pilot corps that is among the very best in the United States and to finance the infrastructure and equipment to carry out our work, which includes a pilot station in Port Angeles, two pilot boats, specialized dispatch and personal pilot unit technology and highly qualified support staff including pilot boat operators and crew and our dispatchers and office staff.

Q: What is your response to the argument that state-licensed maritime pilots in the U.S. are overpaid?

A: Based on my experience, those who make such statements are simply misinformed due to a lack of knowledge about the work of a maritime pilot, how long it takes to become a member of this profession and the prevailing levels of pilot
compensation and benefits throughout the United States, many of which were approved by the shipping industry in negotiated settlements.

Q: Please explain what you mean in terms of lack of knowledge.

A: Throughout the U.S., the average citizen takes no issue with the fact that professionals with advanced degrees like doctors and lawyers and especially the specialists in these two professions are highly paid. While the most highly paid doctors and lawyers will not reach the highest levels of pay until working in their professions for a number of years, it is worth noting that one can become a doctor or a lawyer within three to four years after graduating from college. The situation is quite different in the maritime transportation industry in terms of the time it takes to ascend to the highest position in the maritime transportation industry, that of professional pilot. In my case, it required 26 years of seagoing and then public ferry experience plus eight months of pilot trainee status before I was licensed as a Puget Sound pilot. I then spent another six years gaining piloting experience and progressing through the licensure levels necessary to become an unlimited pilot.

In fact, even the mariner who graduates from one of the seven US maritime academies, typically around age 22, must pursue a deck officer career that requires 10 to 15 or more years of experience, training and study to be in a position to apply for the opportunity to become a trainee on one of the pilotage grounds in the US. In my opinion, the fact that state regulators in many of the 24 states with pilotage statutes have approved tariffs designed to generate pilot net incomes in the range of $500,000 to over $600,000 should not be a surprise. Maritime pilots in the U.S. are a very small group of highly
qualified and highly specialized mariners. As noted in the testimony of American Pilots
Association Executive Director Clay Diamond, the total number of licensed maritime
pilots in the United States is approximately 1,236 individuals. That is less than the
number of players in the National Football League, which has over 1,700 players.

And speaking of football, state universities throughout the US including
Washington have made the policy decision that it is in the best interest of their largest
universities to adopt a "best achievable team" standard for their football teams, which is
demonstrated by the level of funding in these states for head coaches, assistant coaches,
facilities and equipment. In Washington, for example, the average salary paid to the two
head football coaches at the University of Washington and Washington State University
is $3.1 million. The average salary at both schools for their offensive coordinator
assistant football coaches is over $900,000. It goes without saying that assembling the
best college football team requires recruitment of the best players drawn from around the
country. I believe the same principle applies to a pilot group.

The key to achieving the "best achievable protection" against oil spills on the part
of a pilot group is retaining and continuing to attract a highly diverse mix of the best of
the best mariners not only from Puget Sound but from throughout the US. To do so
requires a level of funding of the Puget Sound pilotage system that enables the
Washington Board of Pilot Commissioners, which coordinates the pilot trainee program,
to attract highly qualified candidates to future serve as Puget Sound pilots. As noted in
the testimony of Captain Deb Dempsey and Chief Mate Alysia Johnson, the level of pay
and benefits that is competitive on a national level is especially important to successful
recruitment of highly qualified female mariners and candidates of color, who literally will
have their pick of pilot groups at that point in their careers where they qualify to apply for a pilotage position.

In sum on this point, where Washington's citizenry clearly supports the efforts of its public universities to field the best football and basketball teams achievable, which largely supports recreational interests, there should be no question that the public interest supports even more strongly a policy that seeks to achieve the best achievable protection against a catastrophic oil spill. Especially considering that over 95% of the vessels required to pay compulsory pilotage fees in Puget Sound are noncitizen foreign flag ships whose owners do not pay taxes in Washington or the US, there should be no question that a well-funded pilotage system should be a high priority for the State of Washington.

**Q:** Do you agree with the shipping industry argument accepted by the UTC in its Final Order that the relatively lengthy applicant list for trainee positions with PSP demonstrates that there is no reason for concern regarding the recruitment of highly qualified mariners to the Puget Sound pilotage ground?

**A:** No. I believe this conclusion reflects a very unsophisticated and misinformed view of the multiple factors affecting recruitment of potential maritime pilots. Back to a football analogy, the fact that there are literally hundreds of former college players who try out for a spot in the NFL every year is no indication of the relative skill levels within that large applicant pool. There is no question that the relatively high pay of the very small number of maritime pilots in the United States will attract candidates. However, as noted above, the key to the casualty-prevention capability of a major pilot group is the diversity of that group in terms of maritime background and experience. If one examines...
the credentials and experience of Chief Mate Alysia Johnson, which are laid out in detail
in her testimony, there is no question that she is a rising deck officer star in the U.S.
maritime industry who will almost certainly test at the top of the list in any of the pilotage
exams and simulator processes used to rank applicants in the 24 maritime states with
pilotage statutes in the U.S. How can the State of Washington afford not to be in a
position to attract top candidates like Chief Mate Johnson to a pilotage career in Puget
Sound? But at present, with an approved distributable net income ("DNI") of $410,075,
which is not being funded, PSP pilots rank last among the 14 pilot groups for which there
is publicly available net income data. As compensation expert David Lough clearly
states, there is no question that this sizable income gap will negatively impact the overall
quality of applicants to the Puget Sound pilotage ground, particularly with respect to the
national pool of seagoing mariners that eventually will include potential candidates like
Chief Mate Johnson.

Q: **What is PSP seeking in terms of distributable net income ("DNI") and benefits in this rate proceeding?**

A: As explained by compensation expert David Lough, in order for the Puget Sound
Pilots to compete for a fair share of the very best pilot trainee candidates in the national
pool for these top rank mariners, PSP must have a level of DNI within the range of
$540,000 to $545,000. PSP supports a DNI figure within that range, but we have picked
the median of $543,055 as the basis on which the revenue requirement in our requested
tariff is calculated. With respect to benefits, our evidence shows that maritime industry
workers traditionally receive medical insurance benefits that are fully paid by the
employer. That is also the practice in every state where the Board of Pilot Commissioners
has faced this issue. Until the UTC's Final Order of November 25, 2020, no other
regulator of state-licensed pilots had ever decided not to fund medical insurance benefits
in the tariff. As to pension benefits, PSP is legally obligated to pay both its retirees and
all currently working pilots the level of pension benefits promised when each pilot was
originally licensed. Our 1.5% per year pension accrual rate is in the middle rank of
pension plans for pilot groups throughout the United States. PSP actively supports
transitioning its pay-as-you-go pension plan to a fully funded defined benefit plan, but
strongly opposes any suggestion that the benefit levels should be reduced. Again, the
competitiveness of the Puget Sound Pilotage District to attract the best and the brightest
potential pilots will be impaired if the pension program for future licensees is negatively
impacted in this rate case.

IV. PSP EFFORTS TO IMPLEMENT DIRECTIVES IN
THE UTC’S 2020 ORDER.

A. Efficiency Measures.

Q: In its November 2020 Final Order, did the UTC direct the Puget Sound Pilots
to study its organizational efficiency?

A: Yes. The UTC expressed a broad concern that PSP "does not efficiently distribute
its workload" and recommended that we retain an outside consultant to study our
organizational efficiency.

Q: How did PSP respond to this direction?

A: Within one month following the issuance of the Final Order on November 25,
2020, I formed an Efficiency Committee composed of six pilots for the purpose of
examining our dispatch system, use of callbacks, level of on watch efficiency, use of meetings, etc. This committee was charged with examining our entire system for the purpose of evaluating where efficiencies could be gained consistent with the work/rest best practices essential to safe operations. As part of this process, we hired experts at Brigham and Women's Hospital’s Division of Sleep Medicine who are nationally recognized experts in sleep medicine and work scheduling that incorporates fatigue risk management regimes appropriate to the particular work force. This team of experts includes Doctors Charles A. Czeisler, Laura K. Barger and other specialists with the Harvard Medical School Division of Sleep Medicine who contracted with PSP through the Brigham and Women's Physicians Organization, Inc. (“BWPO”). To learn more about PSP's scheduling practices, BWPO conducted interviews with each of the three PSP dispatchers and focus group sessions involving three groups of PSP pilots that involved 68% of the pilot corps. BWPO also examined dispatch data over a 19-month time frame, order time change data over a seven-month period and transformed data regarding pilot schedules into usable databases for further analysis. With the assistance of the BWPO experts, the PSP Efficiencies Committee developed a list of nine different proposed efficiency measures that were then vetted with input from the entire pilot corps.

Q: Did PSP adopt any efficiency measures as a result of these efforts?

A: Yes. We entered into a one-year contract with BWPO on June 1, 2021 that is being extended for another year. During the first 10 months of that contract, PSP studied and experimented with a number of efficiency measures between August 1 and December 1, 2021. Based on those experimental measures and extensive study of other potential
operational changes designed to improve on-watch efficiency, PSP balloted and passed

six specific efficiency measures. These included:

1. Systematize PSP's approach to meetings involving on-watch pilots to allow on-watch pilots to accept a follow-on assignment after attending the meeting provided the meeting and subsequent pilotage assignment could be accomplished within 13 hours. To increase the efficiency of this measure, PSP began extensive use of virtual meetings and established hard stops for most meetings made known to dispatchers to enhance the effectiveness of this change.

2. Where it will optimize an on-watch assignment, an outbound pilotage assignment will be followed by an immediate repositioning prior to the required 10-hour rest, provided the combination of assignment and repo can be accomplished within 12 hours. The rationale for this rule change was based upon data showing significant dwell time at the Port Angeles pilot station after a pilot had achieved the required 10 hours of rest after completing an assignment when the pilot could instead repo direct to the Seattle side instead of engaging an off-duty callback pilot and receive his/her mandatory 10 hours rest and be ready to accept an outbound assignment where 60% of assignments originate.

3. Where a previously scheduled pilotage assignment is canceled, allow the pilot whose job canceled to be immediately dispatched to another job provided that assignment can be accomplished within the 13-hour work/rest best practice. This rule required a change to WAC 363-116-081. PSP successfully obtained an emergency rule change to this regulation from the Board of Pilot Commissioners in February 2022.

4. Authorize PSP pilots to perform both a transit assignment and a harbor shift provided the combined work can be accomplished within 13 hours. Implementation of this measure also required a change in regulation, which was approved on an emergency basis by the Board of Pilot Commissioners in February 2022.

5. For nighttime assignments between 1830 and 0759, reduce assignment preparation time from two hours to one hour. Under standard PSP practice, nighttime assignments are locked into the dispatch schedule as of 1730 each day, which is 5:30 PM. As a practical matter, pilots assigned to these nighttime jobs perform their assignment preparation before going to bed, thus justifying the reduction in preparation time.

6. Eliminate the coupling of repositioning or repo times from the Washington ferry schedule. Given the variety of transportation methods used by PSP pilots to repo from the pilot station in Port Angeles back to the Seattle area, this historic practice could be eliminated and improve efficiency.
During the last several months of 2021, a special PSP committee devoted enormous energy to the potential efficiencies to be gained from changing the Association's historic use of a single changeover day – the day when approximately half of the PSP pilot corps goes off-watch and the other half comes on-watch – to a rolling start phasing smaller increments of the pilot corps off-watch and on-watch. This massive effort ultimately led to a rolling start that increased the number of days that pilots are transitioning to or from their 15-day on-duty periods from two days per month to eight days per month with those rolling starts occurring on Tuesday and Thursday of each week. This major change in the PSP schedule was balloted in January, passed by a substantial margin and implemented as of March 29, 2022. Of all the efficiency measures that PSP has now adopted, this will undoubtedly become the single largest contributor to increased on-watch efficiency and will reduce the need for callbacks by as much as 40% in any given month.

Considering that these seven efficiency measures have only been fully in place for a number of months in 2022, we do not have sufficient data to provide quantitative analysis of their effectiveness. We will continue to maintain this data and work closely with BWPO in its analysis in order to be in a position by the time PSP witnesses provide their rebuttal testimony in this proceeding to supplement the record regarding the effectiveness of these efficiency measures.

**Q:** Did Dr. Czeisler and his colleagues at BWPO make any recommendations in their efficiency study that PSP has not been able to implement?
A: Yes. There are three. First, the physicians at BWPO recommended that PSP establish 72-hour shoulders where callbacks are prohibited at the beginning and end of each pilot's off-duty respite period of 13 days following 15 days on-duty the periods. We understand the fatigue risk reasoning behind this recommendation, but we are simply too understaffed to implement this recommendation without substantially increasing the number of ship delays.

Second, BWPO recommended establishing an annual cap on the total number of callbacks that any single pilot could work. Again, due to understaffing, this measure simply not practical at present. Further, provided PSP can ultimately be staffed up to keep callbacks below 5% of total assignments annually, which is consistent with other West Coast pilot groups, there may not be a need for an annual cap on callbacks.

The third recommendation was to increase the number of licensed PSP pilots. We are authorized by the BPC for 56 pilots, earlier this month saw the licensure of our 53rd pilot and expect to reach 56 FTE in early 2023. These figures take into account projected retirements. In my opinion, more than 56 pilots will be required to reduce off-duty callbacks below 5%.

However, any increase in our authorized number of licensees is a decision for the Washington Board of Pilotage Commissioners.

B. Callbacks Are Now Subject to Full Accrual Method Accounting, but Remain a Serious Problem for PSP.

Q: What action did PSP take to implement full accrual accounting regarding the PSP callbacks system?

A: After carefully evaluating the UTC order on the callback issue in the three months after the new tariff was approved on January 25, 2021, PSP implemented a full accrual
approach to the liabilities associated with callback jobs performed by off-duty PSP pilots effective May 1, 2021.

Q: How does this new system operate?
A: As of May 1, 2021, PSP began funding all new callback days at a rate of $1,198 per callback day work. This figure was based upon the average value of a pilot’s duty day in the prior calendar year of 2020. As callback days are earned by pilots, a liability is recorded as an accrual expense to the Association. As callback days are used, the liability is reduced.

Q: Did this shift to accrual-based accounting for callback days result in any changes to the PSP financial statement for 2021?
A: Yes. The change to the accrual method and the funding of callback days is reflected in our 2021 financial statement, which is Exhibit JN-02 and the subject of testimony by our long-time auditor, Jessica Norris. As of the May 1, 2021 transition date, all callback days that were previously outstanding were considered funded and treated the same way as they had been historically. On a going forward basis from May 1, 2021, pilots use callback days on a last-in first-out basis. As of December 31, 2021, there were 327 funded days and 2,429 unfunded days outstanding.

Q: Do you have concerns about the level of callbacks experienced by PSP in 2021 and continuing into 2022?
A: Very much so. I agree with the UTC characterization in its Final Order that the PSP callbacks system was "effectively a ‘banked overtime’" program that resulted in an unrecorded liability of approximately $7 million. In my opinion, the need for PSP to make excessive use of callbacks is a very problematic approach to staffing our pilot corps below peak demand levels while meeting demand through increased off-duty work. Exhibit IC-02 shows that approximately 15% of all PSP assignments since June 2021 have been callbacks performed by off-duty pilots. With the uptick in vessel traffic now being experienced in 2022, the percentage of callbacks to total assignments in January, February and March of this year was 17.19%, 18.20% and 13.17%, respectively. These highly elevated callback levels demonstrate that PSP continues to shoulder extraordinary levels of off-duty work.

It is important to note that a PSP pilot shortage that has been in place since 2015 has resulted in PSP being forced to operate under a system that requires among the highest amounts of off-watch work of any pilotage district in the country. Exhibit IC-03 compares PSP's level of off-watch work to both the Columbia River and Columbia River Bar Pilots. This data shows that, while the Columbia River Pilots and Columbia River Bar Pilots typically experience callback levels of 1% to 4% annually, PSP has ranged from a low of 11.08% in 2015 to a high of 19.67% in 2019. During the Covid-impacted traffic years of 2020 and 2021, callback assignments dipped to 12.59% and 12.84%, respectively, but we are now back up to 16.16% through March 31 of 2022.

Q: Why were you concerned about the level of PSP callbacks?
A: My concern as PSP president and that of our entire Association is entirely based on safety. During a pilot's on-duty period of 15 days, the level of work and the unpredictability of assignment timeframes, the majority of which occur during night hours, often leaves the pilot (and especially those over 50 years of age) very tired and very much in need of the respite associated with the 13 days of off-duty time. When a pilot shortage forces us to regularly call back pilots during their off-watch respite periods, there is a fatigue concern that unfortunately could lead to a serious casualty. In fact, in May 2019, Dr. Erin Flynn-Evans, head of NASA's Ames Research Center Fatigue Countermeasures Laboratory, told the Fatigue Management Subcommittee of the Board of Pilot Commissioners that PSP's volume of off-duty callback work was "alarming" from a fatigue perspective. Dr. Charles Czeisler and his colleague Dr. Laura Barger share this same opinion and have recommended that PSP establish shoulder periods at the beginning and end of each pilot's off-watch cycle where the pilot is prohibited from taking a callback job except in an emergency. Although that recommendation is included in the report that is Exhibit CSC-03 and discussed at length by Dr. Czeisler in his written testimony, PSP is in no position to consider implementing that measure in the midst of our continuing pilot shortage.

Q: How many active licensees are currently on PSP's roster of pilots, and how many do you expect to add to that number over the course of the next 13 months through June 2023?

A: During the hearing in our prior general rate case in October 2020, I was asked by a commissioner to project where our pilot numbers would be at the end of 2020 and then
at the end of 2021. I projected that we would be at 50 by the end of 2020, which in fact
did occur. I also projected that PSP would have 52 licensees by the end of 2021. That
latter projection was slightly off due to the dynamic character of the factors affecting how
many full-time equivalent licensees are working for PSP at any given time. Those factors
include the progress of trainees toward licensure, which sometimes is extended beyond
the standard 18 months and occasionally results in a trainee washing out, as well as when
a retirement will occur, which is a very personal decision that many pilots do not share
until shortly before deciding to retire.

If a pilot is injured and off the ground in an unfit-for-duty status, he or she is not
available to take assignments. At present, we have one pilot who is out on major medical
leave that will involve a number of months for this pilot.

At present, there are eight trainees in the pipeline working toward licensure as
Puget Sound pilots. Over the last year, the number of licensees has just kept pace with the
number of retirements. By the end of 2022, we expect to reach 54 licensees and the
number of trainees in the pipeline should increase the PSP pilot corps to 56 by sometime
in the first quarter of 2023, assuming our current projection regarding retirees and that of
the Board of Pilot Commissioners regarding the timing of new licensees turn out to be
accurate.

Q: Please provide more detail regarding the nature of the safety risk that

   concerns you.

A: Because pilots as a general rule are all former "can do" Captains tasked with
taking full charge of ensuring a successful voyage aboard their vessels day in and day
out, and because PSP pilots try to be supportive of the pilotage system by avoiding significant delays in a ship being assigned a pilot, I believe there is a significant level of risk that a PSP pilot who wants to assist the association in preventing a ship delay will take a callback job when a pilot is not sufficiently rested. In my mind, there is no question that increasing our pilot corps numbers to a level that reduces the level of callback assignments as a percentage of total assignments annually to below 5% is critically important to meeting the standard of a pilot group with "best achievable prevention" capability.

C. Planning for Transition to a Fully Funded Defined Benefit Retirement Plan.

Q: Please describe PSP's response to the UTC order that your pilot group develop a plan to transition from PSP's pay-as-you-go pension plan to a fully funded, defined-benefit retirement plan.

A: PSP was ordered to initiate discussions with pilotage system stakeholders for the purpose of developing a plan to transition to a fully funded, defined-benefit retirement plan and, as part of that process, to address whether active pilots should be required to contribute directly to PSP's retirement fund. To implement this directive, PSP first undertook an internal study of its options and engaged both a pension lawyer and an actuary with past experience with pilot group pension plan issues to educate our pilot group and to help inform us on how best to develop the stakeholder participation process. To lead this effort, I appointed a Pension Committee composed of five pilots including me.
Q: To your knowledge, has any other pilot group in the United States transitioned from a pay-as-you-go pension plan to a funded pension system?

A: Yes. The one instance where this has occurred previously was in Oregon where the Oregon Board of Maritime Pilots conducted two rate proceedings in the mid-1990s that ultimately led to a transition on the part of Oregon pilot groups from pay-as-you-go pension plans to defined contribution plans where the tariff includes sums distributed monthly to individual pilots above target net income levels in order to fund self-directed pension plans for each pilot. The actuary we engaged to advise PSP was Christopher Wood, who served as the primary actuary in the two pension-related rate proceedings in Oregon in the mid-1990s.

Q: What is PSP's position on transitioning its pay-as-you-go pension plan to a fully funded defined-benefit plan?

A: We favor that transition and support either one of the two options developed by our actuary Christopher Wood and our pension attorney Bruce McNeil. One option would continue to pay existing retirees as of a transition date their retirement benefits on a pay-as-you-go basis, but as of that transition date, the tariff would fund all past pension accruals for current PSP pilots and all future accruals for those pilots and future licensees as part of a fully funded Multiple Employer Pension Plan. The second option would continue to pay both existing retirees and the past pension accruals for current working pilots on a pay-as-you-go basis as of the transition date and then fully fund the future pension accruals for existing and future PSP pilots as part of a fully funded Multiple Employer Pension Plan.
Q: Why does PSP favor the transition to a fully funded defined-benefit plan?

A: Based on all of the study that went into preparing for and then conducting the pension-related stakeholder sessions ordered by the UTC, we have concluded that the benefits of the transition to both PSP retirees and all existing and future licensees are substantial and will also deliver significant long-term savings to the ratepayers. These benefits are described in detail by PSP’s experts in their respective fields, actuary Christopher Wood and pension attorney Bruce McNeil. However, from the perspective of PSP retirees and the existing pilot corps, we support the transition because it eliminates the risks associated with an unfunded plan and delivers substantial long-term benefits in the form of rate stability for the pension-related component of the tariff funding the pilotage system in Puget Sound.

Q: What were the results of the stakeholder participation process?

A: In a nutshell, some significant progress was made. PSP’s engagement with the Pacific Maritime Shipping Association ("PMSA") was fairly contentious and did not result in agreement on any issue. However, consensus was achieved between PSP and the other stakeholders participating in the pension-related sessions, Pacific Yacht Management ("PYM") and Northwest Marine Trade Association ("NMTA"), the largest recreational boating trade association in the U.S. PYM and NMTA agree with PSP on two fundamental points: (1) that existing PSP retirees have a legal right to the pension benefits promised in the PSP pension plan; and (2) all existing members of the PSP pilot corps also have a legal right to the pension benefits promised to each of our pilots at the
time of licensure. PYM and NMTA also agree with PSP that the most prudent option for the future of the Puget Sound pilotage system is for the UTC to order funding of the transition of the existing pay-as-you-go pension system to a fully funded defined-benefit plan utilizing one of the two options described above. A full account of the pension-related stakeholder process is contained in the testimony of PSP Executive Director Charles Costanzo.

Q: Does PSP have a recommendation regarding a proposed transition date for the pair of fully funded defined-benefit plans it proposes?

A: Yes. As explained in the testimony of PSP pension attorney Bruce McNeil, provided the UTC issues its final order in this rate proceeding by early 2023, the necessary work to obtain government approvals, to prepare the Multiple Employer Pension Plan and then to implement that plan with participation by all PSP pilots through an entity owned by each pilot could very realistically be accomplished in time for a transition date of January 1, 2024. In addition, as Mr. McNeil explains in his testimony, there are significant advantages to the funded defined-benefit pension plan operating on a calendar year basis rather than a fiscal year.

D. Prefiling Engagement with Stakeholders on Key Issues.

Q: Prior to filing its rate case, did PSP engage with stakeholders on issues other than the proposed transition to a funded pension plan described above?

A: Yes. We pursued discussions with Pacific Yacht Management and Northwest Marine Trade Association regarding several concerns regarding what they described as
negative impacts from the new rate design approved by the UTC in its November 2020 Final Order. This led to negotiations regarding adjustments to that rate design for foreign yachts to achieve overall rate equity in light of the unexpectedly large increase in pilotage rates for these vessels mandated by the 2020 Final Order.

Q: Did PSP, PYM and NWTA reach any agreements on these issues?
A: Yes. As set out in the testimony of Charles Costanzo, we have been able to reach an agreement on all of these issues. We are jointly proposing a revised framework for charges to foreign yachts.

V. COMPILATION OF RELEVANT PILOTAGE SYSTEM INFORMATION.
A. Puget Sound Pilots' Facilities.
Q: Please describe the facilities leased by PSP that are necessary to the performance of your pilot group's pilotage services.
A: We lease two facilities, our headquarters office near the waterfront in downtown Seattle and our pilot station in Port Angeles, which is close to the location where all inbound ships to Puget Sound are boarded by a pilot and all outbound ships are disembarked by a pilot. All of these pilot boardings and disembarkings are accomplished using one of our two pilot boats and the pilot ladder rigged by the crew of the incoming or outgoing vessel. Our two pilot boats, the pilot boat Puget Sound and the pilot boat Juan de Fuca are moored and maintained at our pilot station in Port Angeles.
Q: Please what goes on in PSP's Seattle office.
A: This office is where I report for work in my capacity as PSP President, a position that many pilot groups refer to as the Administrative Pilot. This office is also where our administrative and management staff work, a group that includes Executive Director Charlie Costanzo, Business Manager Magan Brooks and our accounts receivable and accounts payable staffers. This is the location where are dispatchers perform much of their daily work and where we hold some of our regular meetings.

Q: What is the scope of PSP's operations at the Port Angeles pilot station?
A: Because of the volume of traffic coming into Port Angeles as the entry point to our pilotage ground, our pilot station is located at Ediz Hook, just a few miles from where we board or disembark vessels entering or departing Puget Sound. This facility includes small quarters for pilots taking rest between or after pilotage assignments, communications equipment, a dock area for mooring the two pilot boats and a shop area for maintenance and repairs.

Q: Did PSP have a video prepared to give the UTC staff and the public the opportunity to take a virtual tour of the PSP facilities at Port Angeles?
A: Yes. That video is Exhibit IC-03 and includes a full tour of the pilot station as well as one of our pilot boats and the maintenance area for our boats. This video begins in the front room of the pilot station, progresses through the media room, pantry and kitchen to the dining area and sitting room, then down the hallway to our relatively small bunk rooms, the pilot check-in board, up a spiral staircase to a computer room and a few different views on
that second floor. The video then moves outside to where our pilot boats are moored. There is
a tour of one of the pilot boats including the bridge area and the engine room below, which is
remarkably clean for pilot boat that is over 20 years old. This video ends with scenes of the
shop area from both above and below and ends with the front of the pilot station.

Q: Did the videographer also take footage of several pilot boardings of different
vessels and one disembarkation on a beautiful day in April of this year?

A: Yes. The video shows the process of boarding via pilot ladder or disembarking via
pilot ladder, but in virtually perfect conditions. Captain Bendixen’s testimony presents a
fuller picture and describes the challenges that the pilot ladder presents to a pilot in rough
conditions. This video is Exhibit IC-04.

B. Vessel Traffic Data.

The table marked as Exhibit IC-05 contains the following vessel traffic
information for the six-year period of 2016 through 2021:

- Total gross tonnage per vessel class
- Average gross tonnage per assignment
- Total assignments per vessel class
- Total revenue per vessel class
- Average revenue per assignment
- Average cents per gross ton
C. **PSP Callback History and Comparison to Other Pilotage Grounds.**

Q: Please describe the level of off-duty callback jobs experienced by PSP over the last 17 years.

A: From an overview perspective, PSP callback levels were within what I consider to be a reasonable range of 5% or under for the eight years from 1995 through 2002. Then, in 2002-03, callback climbed to over 6% and jumped to an all-time high of 10.31% in 2005. In that year, Washington Board of Pilotage Commissioners declared an emergency shortage of pilots and expedited the date for the next pilot application exam. It took several years for the increased number of pilots to impact the level of callbacks, but by 2009, the annual percentage of callbacks had fallen back to 4.43% and stayed below 5% for two years. But beginning in 2015, there has been a steady rise in callbacks, hitting all-time highs of 18.89% in 2018 and then 19.67% in 2019. The percentage of callbacks moderated in the Covid-19 impacted years of 2020 and 2021 when traffic was reduced, but we are back up to 16.5% year to date.

Q: **How does PSP's level of off-duty callbacks compare to other pilotage grounds on the West Coast?**

A: Compared to other West Coast pilot groups, our callback levels are clearly excessive. As the data on Exhibit IC-05 shows, the Columbia River Bar Pilots’ callback levels in a nine-year timeframe were all below 5%, ranging from a low of 1.22% to a high of 4.26%. The callback rates for the Columbia River Pilots are even lower, ranging over the five years of 2017-2021 from a low of 0.90% to a high of 2.26%. For the San Francisco Bar Pilots, the
callback percentage is our extraordinarily low at below 1% annually as noted in the
testimony of Captain Anne McIntyre.

VI. PSP'S REQUESTED REVENUE REQUIREMENT AND PROPOSED
AUTOMATIC TARIFF ADJUSTERS.

Q: Please provide an overview of the tariff increase that PSP is requesting for 2023.
A: PSP seeks a 35.6% increase in the existing $35.4 million revenue requirement for
year 2 of our tariff, to $48 million.

Q: Can you describe the major changes to the tariff items that are set out
specifically on the tariff sheets filed in this rate case?
A: Yes, the tonnage charges for all vessels over 2000 GT were increased by 9%, all
harbor shift fees were doubled and pilot boat charges and service fee charges remain the
same. The harbor shift charge was doubled to bring it more into line with the level of work
required relative to the tonnage charge. The cancellation charge was increased by 50% to
create a disincentive to steamship company agents to make cancellations, which are highly
inefficient for PSP's pilot dispatch system. Tonnage charges for vessels under 2000 GT were
reduced. With respect to the current pay-as-you-go PSP pension, a separate tonnage pension
surcharge was established to fund those payments.

Q: Do the proposed tariff changes on the tariff sheets filed by PSP address the
separate request for an interim rate to provide funding for new licensees above the
currently funded 52 licensees?
A: No. As stated in PSP's Petition for Interim Rates, we are requesting that the current
tariff rates increase by 1.4% with each new licensee and decrease by that amount with each
retirement (provided the retirement does not reduce our active pilot total below the currently
funded 52 FTE) pending the decision in this general rate case.

Q: How was the 1.4% interim rate request derived?
A: To generate this percentage change in the tariff associated with either a new licensee
or a retirement, we used the UTC-approved current DNI of $410,075 plus all expenses of a
pilot, which totaled $499,004, and divided that figure into the current revenue requirement of
$35.4 million, which generates the 1.4%.

Q: Are you familiar with the PSP 2023 pro forma statement of operations that is the
basis for the $48 million revenue requirement been requested in PSP's requested new
tariff, which is Exhibit MB-04 to PSP Office Manager Magan Brooks' testimony?
A: Yes. I was directly involved in preparing that document.

Q: With respect to the 2023 pro forma, are there any contingencies that you wish to
make the UTC aware of?
A: Yes. With respect to our Executive Director Charlie Costanzo, we are in the midst of
consultations with a compensation expert who is providing advice regarding a framework for
a long-term contract with Mr. Costanzo. Charlie has been with PSP since October 1, 2021
and has demonstrated a high level of skill and we would like to make certain that PSP retains
his services over the long term. Once our evaluation work is completed and we negotiate that
contract with Charlie, we will supplement the record to make certain that the UTC is aware of the potential impact of that contract on the revenue requirement for 2023.

Q: Has the UTC confirmed that it has authority to consider automatic or periodic rate adjustment mechanisms?
A: Yes. In its June 29, 2021 report to the Washington legislature, the UTC stated explicitly that RCW 81.116.030(2)(c) authorizes the use of automatic tariff adjustment mechanisms.

Q: Why does PSP propose adoption of multiple automatic adjusters to the tariff funding the Puget Sound pilotage system?
A: The past three years have shown that several of the key factors that drive tariff funding for our pilotage ground can no longer be assumed to follow a multi-year trend, but instead are subject to considerable volatility. These include vessel traffic, the range of ship types making up that traffic in any given year, vessel tonnage trends and some of our cost categories, such as pilot boat fuel. To address that volatility and avoid the need for expensive and time-consuming general rate cases, PSP proposes seven different automatic adjustment mechanisms.

Q: Please describe each of the automatic adjusters to the Puget Sound pilotage tariffs that PSP seeks.
A: The automatic adjusters PSP proposes include:

1. A quarterly traffic/tonnage adjuster that automatically adjusts the tariff on a quarterly basis using a trailing 12-month data set to true up
revenue collections to the revenue requirement assumptions in the UTC's Final Order;

2. A quarterly adjuster that automatically increases or decreases the tariff based upon the cost of either a new licensee or a retirement;

3. An annual cost-of-living adjustment that automatically adjusts the tariff on September 1 of each year based upon the Consumer Price Index for All Urban Consumers in the Seattle-Tacoma-Bellevue area for the year ended June 30 issued by the U.S. Department of Labor on an annual basis;

4. An annual tonnage-based automatic adjuster designed to collect in a given calendar year the amount necessary to fund the cost in that year of the run out of pay-as-you-go pension benefits paid to PSP retirees (and to fund the pay-as-you-go pension credits earned by working pilots prior to a funded pension plan transition date if that option is selected by the UTC);

5. An annual tonnage-based automatic adjusters designed to collect in a given calendar year the amount necessary to fund the transition to a fully funded defined benefit pension plan for PSP pursuant to the option selected by the UTC in this rate proceeding;

6. An automatic quarterly adjuster that collects the actual cost of pilot station and pilot boat expenses including fuel and maintenance in the prior quarter in the subsequent quarter and carries forward any overcollection or undercollection in the calculation after the first quarter of implementation; and

7. An automatic adjuster for pilot station or pilot boat capital investments tied to the actual cost of financing those investments and the useful life of the asset involved.

VII. CONCLUSION.

Q: Does this conclude your testimony?

A: Yes.