Exh. MM-25(a)r2 Docket TP-190976 Witness: Capt. Michael Moore

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

DOCKET TP-190976

Complainant,

v.

PUGET SOUND PILOTS,

Respondent.

EXHIBIT TO TESTIMONY OF

Captain Michael Moore

ON BEHALF OF

PACIFIC MERCHANT SHIPPING ASSOCIATION

Analysis of BPC Incident Reports 2005-2018

May 27, 2020

Revised August 6, 2020

Analysis and Spreadsheet Summary of BPC Annual Report Incident Data [Exh. ROYER 8], With Vessel Data [Exh. ROYER 19]

Exh. JR-5r

Exh. JR-19

BPC Incident Analyses (2005-2018)

TOTAL ANNUAL INCIDENTS		AVERAGE INCIDENTS PER YEAR	
2005-2018	67	2005-2018	6.5
2015-2018	21	2015-2018	5.25

INCIDENTS BY VESSEL AGE									
Avg Vessel Age (2005-2018)	10.2								
Avg Vessel Age (2015-2018)	10.1								
	TOTAL (200	5-2018) %	TOTAL (2015	•	Rate of Incident by Age (2005-2014)	Rate of Inci (2015-2018	dent by Age)	Rate of Ch 2015-18 v.	•
<u>AGE</u>	63		21		,	,	,		
0-5 years	16	25.4%	4	19.0%	1	1.2	1	-0.2	
6-10 years	27	42.9%	9	42.9%	1	1.8	2.25	0.45	
11-15 years	12	19.0%	7	33.3%		0.5	1.75	1.25	
16-20 years	1	1.6%	0	0.0%		0.1	C	-0.1	
21-25 years	2	3.2%	0	0.0%	1	0.2	C	-0.2	
26+ years	5	7.9%	1	4.8%		0.4	0.25	-0.15	

INCIDENTS BY LOCATION								
	TOTAL (2005-2018)		TOTAL (2015-2018)		Rate of Incident by Location Rate of Incident by Location Rate of Change			
	Incidents	%	Incidents %	á	(2005-2014)	(2015-2018)	2015-18 v. 2005-14	
Total Incidents	68		21					
Location w 1-3 Incidents ('05-'18)	48	70.6%	16	76.2%	3.2	4	0.8	
Location w 4+ Incidents ('05-'18)	20		5					
Blair Waterway	10	14.7%	3	14.3%	0.7	0.75	0.05	
Cherry Point	6	8.8%	1	4.8%	0.5	0.25	-0.25	
Duwamish	4	5.9%	1	4.8%	0.3	0.25	-0.05	

INCIDENTS BY VESSEL TYPE							
	TOTAL (200	5-2018)	TOTAL (201	5-2018)	Rate of Incident by Type	Rate of Incident by Type	Rate of Change
	Incidents	%	Incidents 9	%	(2005-2014)	(2015-2018)	2015-18 v. 2005-14
Vessel TYPE	63		21				
Anchor Handling Tug Supply	1	1.6%	1	4.8%	0	0.25	0.25
Bulk Carrier	15	23.8%	4	19.0%	1.1	. 1	-0.1
Container	21	33.3%	5	23.8%	1.6	1.25	-0.35
Cruise	1	1.6%	1	4.8%	0	0.25	0.25
General Cargo	3	4.8%	0	0.0%	0.3	0	-0.3
LPG Tanker	2	3.2%	1	4.8%	0.1	. 0.25	0.15
Open Hatch Cargo	2	3.2%	2	9.5%	0	0.5	0.5
Product Tanker	2	3.2%	0	0.0%	0.2	2. 0	-0.2
Ro-Ro Cargo	3	4.8%	2	9.5%	0.1	. 0.5	0.4
Ro-Ro/Container Carrier	1	1.6%	0	0.0%	0.1	. 0	-0.1
Tanker	9	14.3%	2	9.5%	0.7	0.5	-0.2
Tug	1	1.6%	1	4.8%	0	0.25	0.25
Vehicle Carrier	2	3.2%	2	9.5%	0	0.5	0.5

INCIDENTS BY TONNAGE							
Avg Vessel Tonnage (2005-2018)	50,773						
Avg Vessel Tonnage (2015-2018)	49,629						
	TOTAL (200	05-2018)	TOTAL (2015-	-2018)	Rate of Incident by Tonnage R	ate of Incident by Tonnage	Rate of Change
	Incidents	%	Incidents %		(2005-2014)	2015-2018)	2015-18 v. 2005-14
<u>Tonnage</u>	63	3	20				
0-20,000 GRT	12	19.0%	6	28.6%	0.6	1.5	0.9
20,000 - 40,000 GRT	17	7 27.0%	4	19.0%	1.3	1	-0.3
40,000 - 60,000 GRT	8	3 12.7%	3	14.3%	0.5	0.75	0.25
60,000 - 80,000 GRT	12	2 19.0%	3	14.3%	0.9	0.75	-0.15
80,000 - 100,000 GRT	10	15.9%	2	9.5%	0.8	0.5	-0.3
100,000+ GRT	4	4 6.3%	2	9.5%	0.2	0.5	0.3

INCIDENTS BY LOA							
Avg Vessel LOA (2005-2018)	231.96						
Avg Vessel LOA(2015-2018)	212.53						
	TOTAL (2005-Incidents	-	TOTAL (201	-	Rate of Incident by LOA (2005-2014)	Rate of Incident by LOA (2015-2018)	Rate of Change 2015-18 v. 2005-14
LOA	62		21				
0 - 150m	4	6.3%	3	14.3%	0	.1 0.	75 0.65
150m - 199m	18	28.6%	9	42.9%	0	.9 2.	25 1.35
200m - 249m	12	19.0%	1	4.8%	1	.1 0.	25 -0.85
250m - 299m	20	31.7%	5	23.8%	1	.5 1.	25 -0.25
300m+	8	12.7%	3	14.3%	0	.5 0.	75 0.25

	TOTAL (20)	05-2018) %	TOTAL (2015 Incidents %	-2018)* Rate of Incident by Pilot (2005-2014)	Rate of Inc (2015-201	cident by Pilot 8)	Rate of Change 2015-18 v. 2005-1
Total Incidents	68	• -	21	(2003 2014)	(2013 201	0,	2013 10 1. 2003 1
Pilots w 1-2 Incidents ('05-'18)*	49	9 72.1%	18	85.7%	3.1	4.5	1.4
Pilots w 3+ Incidents ('05-'18)*	19	9 27.9%	3	14.3%	1.6	0.75	-0.85