

Analysis supporting Proposed addition to Article 105.1.7 (Pool Measurement) - pool length shortage impact on final times (to be considered when reviewing the Rule proposal from the Oregon LMSC):

Course/ race length	# of lengths	Shortage/length (inches)	% short	Total Distance race is Short (inches)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Comments:
SCY					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length			Adjusted times are truncated to the hundredths (103.18.4)
50	2	0.125	0.01389%	0.25	30.00	0.00417	29.99	40.00	0.00556	39.99	50.00	0.00694	49.99	60.00	0.00833	59.99	
100	4	0.125	0.01389%	0.5	60.00	0.00833	59.99	80.00	0.01111	79.98	100.00	0.01389	99.98	120.00	0.01667	119.98	
200	8	0.125	0.01389%	1	120.00	0.01667	119.98	160.00	0.02222	159.97	200.00	0.02778	199.97	240.00	0.03333	239.96	
500	20	0.125	0.01389%	2.5	300.00	0.04167	299.95	400.00	0.05556	399.94	500.00	0.06944	499.93	600.00	0.08333	599.91	
1000	40	0.125	0.01389%	5	600.00	0.08333	599.91	800.00	0.11111	799.88	1,000.00	0.13889	999.86	1,200.00	0.16667	1,199.83	
1650	66	0.125	0.01389%	8.25	990.00	0.13750	989.86	1,320.00	0.18333	1319.81	1,650.00	0.22917	1,649.77	1,980.00	0.27500	1,979.72	Impact of 0.30 seconds or more is shown in blue
SCM					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length			
50	2	0.125	0.01270%	0.25	30.00	0.00381	29.99	40.00	0.00508	39.99	50.00	0.00635	49.99	60.00	0.00762	59.99	
100	4	0.125	0.01270%	0.5	60.00	0.00762	59.99	80.00	0.01016	79.98	100.00	0.01270	99.98	120.00	0.01524	119.98	
200	8	0.125	0.01270%	1	120.00	0.01524	119.98	160.00	0.02032	159.97	200.00	0.02540	199.97	240.00	0.03048	239.96	
400	16	0.125	0.01270%	2	240.00	0.03048	239.96	320.00	0.04064	319.95	400.00	0.05080	399.94	480.00	0.06096	479.93	
800	32	0.125	0.01270%	4	480.00	0.06096	479.93	640.00	0.08128	639.91	800.00	0.10160	799.89	960.00	0.12192	959.87	
1500	60	0.125	0.01270%	7.5	900.00	0.11430	899.88	1,200.00	0.15240	1199.84	1,500.00	0.19050	1,499.80	1,800.00	0.22860	1,799.77	
LCM					Pace: 30 sec/length			Pace: 40 sec/length			Pace: 50 sec/length			Pace: 60 sec/length			Times that differ by .30 seconds or more are shown in yellow
50	1	0.125	0.00635%	0.125	30.00	0.00190	29.99	40.00	0.00254	39.99	50.00	0.00317	49.99	60.00	0.00381	59.99	
100	2	0.125	0.00635%	0.25	60.00	0.00381	59.99	80.00	0.00508	79.99	100.00	0.00635	99.99	120.00	0.00762	119.99	
200	4	0.125	0.00635%	0.5	120.00	0.00762	119.99	160.00	0.01016	159.98	200.00	0.01270	199.98	240.00	0.01524	239.98	
400	8	0.125	0.00635%	1	240.00	0.01524	239.98	320.00	0.02032	319.97	400.00	0.02540	399.97	480.00	0.03048	479.96	
800	16	0.125	0.00635%	2	480.00	0.03048	479.96	640.00	0.04064	639.95	800.00	0.05080	799.94	960.00	0.06096	959.93	
1500	30	0.125	0.00635%	3.75	900.00	0.05715	899.94	1,200.00	0.07620	1199.92	1,500.00	0.09525	1,499.90	1,800.00	0.11430	1,799.88	

	# of lengths	Shortage (inches)	% short		Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	
SCY					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length			Adjusted times are truncated to the hundredths (103.18.4)
50	2	0.25	0.02778%	0.5	30.00	0.00833	29.99	40.00	0.01111	39.98	50.00	0.01389	49.98	60.00	0.01667	59.98	
100	4	0.25	0.02778%	1	60.00	0.01667	59.98	80.00	0.02222	79.97	100.00	0.02778	99.97	120.00	0.03333	119.96	
200	8	0.25	0.02778%	2	120.00	0.03333	119.96	160.00	0.04444	159.95	200.00	0.05556	199.94	240.00	0.06667	239.93	
500	20	0.25	0.02778%	5	300.00	0.08333	299.91	400.00	0.11111	399.88	500.00	0.13889	499.86	600.00	0.16667	599.83	
1000	40	0.25	0.02778%	10	600.00	0.16667	599.83	800.00	0.22222	799.77	1,000.00	0.27778	999.72	1,200.00	0.33333	1,199.66	
1650	66	0.25	0.02778%	16.5	990.00	0.27500	989.72	1,320.00	0.36667	1319.63	1,650.00	0.45833	1,649.54	1,980.00	0.55000	1,979.45	Impact of 0.30 seconds or more is shown in blue Highlighted adjusted times are those that differ from expected time by more than 0.30 seconds - the discrepancy that is considered a possible timing system malfunction when determining official times (103.17.3.C(1))
SCM					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length			
50	2	0.25	0.02540%	0.5	30.00	0.00762	29.99	40.00	0.01016	39.98	50.00	0.01270	49.98	60.00	0.01524	59.98	
100	4	0.25	0.02540%	1	60.00	0.01524	59.98	80.00	0.02032	79.97	100.00	0.02540	99.97	120.00	0.03048	119.96	
200	8	0.25	0.02540%	2	120.00	0.03048	119.96	160.00	0.04064	159.95	200.00	0.05080	199.94	240.00	0.06096	239.93	
400	16	0.25	0.02540%	4	240.00	0.06096	239.93	320.00	0.08128	319.91	400.00	0.10160	399.89	480.00	0.12192	479.87	
800	32	0.25	0.02540%	8	480.00	0.12192	479.87	640.00	0.16256	639.83	800.00	0.20320	799.79	960.00	0.24384	959.75	
1500	60	0.25	0.02540%	15	900.00	0.22860	899.77	1,200.00	0.30480	1199.69	1,500.00	0.38100	1,499.61	1,800.00	0.45720	1,799.54	
LCM					Pace: 30 sec/length			Pace: 40 sec/length			Pace: 50 sec/length			Pace: 60 sec/length			Times that differ by .30 seconds or more are shown in yellow Highlighted times (in yellow) are those that differ from the pad time by more than 0.30 seconds - a standard that Meet Manager uses to flag possible discrepancies.
50	1	0.25	0.01270%	0.25	30.00	0.00381	29.99	40.00	0.00508	39.99	50.00	0.00635	49.99	60.00	0.00762	59.99	
100	2	0.25	0.01270%	0.5	60.00	0.00762	59.99	80.00	0.01016	79.98	100.00	0.01270	99.98	120.00	0.01524	119.98	
200	4	0.25	0.01270%	1	120.00	0.01524	119.98	160.00	0.02032	159.97	200.00	0.02540	199.97	240.00	0.03048	239.96	
400	8	0.25	0.01270%	2	240.00	0.03048	239.96	320.00	0.04064	319.95	400.00	0.05080	399.94	480.00	0.06096	479.93	
800	16	0.25	0.01270%	4	480.00	0.06096	479.93	640.00	0.08128	639.91	800.00	0.10160	799.89	960.00	0.12192	959.87	
1500	30	0.25	0.01270%	7.5	900.00	0.11430	899.88	1,200.00	0.15240	1199.84	1,500.00	0.19050	1,499.80	1,800.00	0.22860	1,799.77	

Analysis supporting Proposed addition to Article 105.1.7 (Pool Measurement) - pool length shortage impact on final times (to be considered when reviewing the Rule proposal from the Oregon LMSC):

# of lengths Shortage (inches) % short					Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)	Time if pool was long enough (in seconds)	Impact (in seconds)	Adjusted time (truncated to 2 decimals)
SCY					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length		
50	2	0.375	0.04167%	0.75	30.00	0.01250	29.98	40.00	0.01667	39.98	50.00	0.02083	49.97	60.00	0.02500	59.97
100	4	0.375	0.04167%	1.5	60.00	0.02500	59.97	80.00	0.03333	79.96	100.00	0.04167	99.95	120.00	0.05000	119.95
200	8	0.375	0.04167%	3	120.00	0.05000	119.95	160.00	0.06667	159.93	200.00	0.08333	199.91	240.00	0.10000	239.90
500	20	0.375	0.04167%	7.5	300.00	0.12500	299.87	400.00	0.16667	399.83	500.00	0.20833	499.79	600.00	0.25000	599.75
1000	40	0.375	0.04167%	15	600.00	0.25000	599.75	800.00	0.33333	799.66	1,000.00	0.41667	999.58	1,200.00	0.50000	1,199.50
1650	66	0.375	0.04167%	24.75	990.00	0.41250	989.58	1,320.00	0.55000	1319.45	1,650.00	0.68750	1,649.31	1,980.00	0.82500	1,979.17
SCM					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length		
50	2	0.375	0.03810%	0.75	30.00	0.01143	29.98	40.00	0.01524	39.98	50.00	0.01905	49.98	60.00	0.02286	59.97
100	4	0.375	0.03810%	1.5	60.00	0.02286	59.97	80.00	0.03048	79.96	100.00	0.03810	99.96	120.00	0.04572	119.95
200	8	0.375	0.03810%	3	120.00	0.04572	119.95	160.00	0.06096	159.93	200.00	0.07620	199.92	240.00	0.09144	239.90
400	16	0.375	0.03810%	6	240.00	0.09144	239.90	320.00	0.12192	319.87	400.00	0.15240	399.84	480.00	0.18288	479.81
800	32	0.375	0.03810%	12	480.00	0.18288	479.81	640.00	0.24384	639.75	800.00	0.30480	799.69	960.00	0.36576	959.63
1500	60	0.375	0.03810%	22.5	900.00	0.34290	899.65	1,200.00	0.45720	1199.54	1,500.00	0.57150	1,499.42	1,800.00	0.68580	1,799.31
LCM					Pace: 30 sec/length			Pace: 40 sec/length			Pace: 50 sec/length			Pace: 60 sec/length		
50	1	0.375	0.01905%	0.375	30.00	0.00571	29.99	40.00	0.00762	39.99	50.00	0.00952	49.99	60.00	0.01143	59.98
100	2	0.375	0.01905%	0.75	60.00	0.01143	59.98	80.00	0.01524	79.98	100.00	0.01905	99.98	120.00	0.02286	119.97
200	4	0.375	0.01905%	1.5	120.00	0.02286	119.97	160.00	0.03048	159.96	200.00	0.03810	199.96	240.00	0.04572	239.95
400	8	0.375	0.01905%	3	240.00	0.04572	239.95	320.00	0.06096	319.93	400.00	0.07620	399.92	480.00	0.09144	479.90
800	16	0.375	0.01905%	6	480.00	0.09144	479.90	640.00	0.12192	639.87	800.00	0.15240	799.84	960.00	0.18288	959.81
1500	30	0.375	0.01905%	11.25	900.00	0.17145	899.82	1,200.00	0.22860	1199.77	1,500.00	0.28575	1,499.71	1,800.00	0.34290	1,799.65
SCY					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length		
50	2	0.500	0.05556%	1	30.00	0.01667	29.98	40.00	0.02222	39.97	50.00	0.02778	49.97	60.00	0.03333	59.96
100	4	0.500	0.05556%	2	60.00	0.03333	59.96	80.00	0.04444	79.95	100.00	0.05556	99.94	120.00	0.06667	119.93
200	8	0.500	0.05556%	4	120.00	0.06667	119.93	160.00	0.08889	159.91	200.00	0.11111	199.88	240.00	0.13333	239.86
500	20	0.500	0.05556%	10	300.00	0.16667	299.83	400.00	0.22222	399.77	500.00	0.27778	499.72	600.00	0.33333	599.66
1000	40	0.500	0.05556%	20	600.00	0.33333	599.66	800.00	0.44444	799.55	1,000.00	0.55556	999.44	1,200.00	0.66667	1,199.33
1650	66	0.500	0.05556%	33	990.00	0.55000	989.45	1,320.00	0.73333	1319.26	1,650.00	0.91667	1,649.08	1,980.00	1.10000	1,978.90
SCM					Pace: 15 sec/length			Pace: 20 sec/length			Pace: 25 sec/length			Pace: 30 sec/length		
50	2	0.500	0.05080%	1	30.00	0.01524	29.98	40.00	0.02032	39.97	50.00	0.02540	49.97	60.00	0.03048	59.96
100	4	0.500	0.05080%	2	60.00	0.03048	59.96	80.00	0.04064	79.95	100.00	0.05080	99.94	120.00	0.06096	119.93
200	8	0.500	0.05080%	4	120.00	0.06096	119.93	160.00	0.08128	159.91	200.00	0.10160	199.89	240.00	0.12192	239.87
400	16	0.500	0.05080%	8	240.00	0.12192	239.87	320.00	0.16256	319.83	400.00	0.20320	399.79	480.00	0.24384	479.75
800	32	0.500	0.05080%	16	480.00	0.24384	479.75	640.00	0.32512	639.67	800.00	0.40640	799.59	960.00	0.48768	959.51
1500	60	0.500	0.05080%	30	900.00	0.45720	899.54	1,200.00	0.60960	1199.39	1,500.00	0.76200	1,499.23	1,800.00	0.91440	1,799.08
LCM					Pace: 30 sec/length			Pace: 40 sec/length			Pace: 50 sec/length			Pace: 60 sec/length		
50	1	0.500	0.02540%	0.5	30.00	0.00762	29.99	40.00	0.01016	39.98	50.00	0.01270	49.98	60.00	0.01524	59.98
100	2	0.500	0.02540%	1	60.00	0.01524	59.98	80.00	0.02032	79.97	100.00	0.02540	99.97	120.00	0.03048	119.96
200	4	0.500	0.02540%	2	120.00	0.03048	119.96	160.00	0.04064	159.95	200.00	0.05080	199.94	240.00	0.06096	239.93
400	8	0.500	0.02540%	4	240.00	0.06096	239.93	320.00	0.08128	319.91	400.00	0.10160	399.89	480.00	0.12192	479.87
800	16	0.500	0.02540%	8	480.00	0.12192	479.87	640.00	0.16256	639.83	800.00	0.20320	799.79	960.00	0.24384	959.75
1500	30	0.500	0.02540%	15	900.00	0.22860	899.77	1,200.00	0.30480	1199.69	1,500.00	0.38100	1,499.61	1,800.00	0.45720	1,799.54