

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

THOMAS LAUMANN, FERNANDA
GARBER, ROBERT SILVER, DAVID
DILLON, GARRETT TRAUB and PETER
HERMAN, representing themselves and all
others similarly situated,

Plaintiffs,

v.

NATIONAL HOCKEY LEAGUE, *et al.*

Defendants

CA No. 12-1817 (SAS)

FERNANDA GARBER, MARC LERNER,
DEREK RASMUSSEN, ROBERT SILVER,
GARRETT TRAUB, and PETER HERMAN,
representing themselves and all others
similarly situated,

Plaintiffs,

v.

OFFICE OF THE COMMISSIONER OF
BASEBALL, *et al.*

Defendants

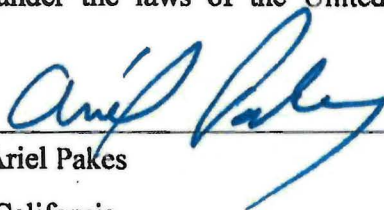
CA No. 12-3704 (SAS)

ECF Cases

SECOND SUPPLEMENTAL DECLARATION OF ARIEL PAKES

1. My name is Ariel Pakes. I submitted declarations in this matter on November 11, 2014 (“Initial Declaration”), January 16, 2015 (“Reply Declaration”), February 2, 2015 (“Supplemental Declaration”) (filed in response to new analysis contained in Dr. Noll’s December 29, 2014 Reply Declaration) and February 3, 2015 (“Corrected Supplemental Declaration”) in which I set forth my opinions concerning the fundamental methodological flaws in the analysis of Plaintiffs’ expert Dr. Roger Noll, contained in Dr. Noll’s September 19, 2014 Supplemental Declaration and in his December 29, 2014 Reply Declaration. On February 23, 2015, Dr. Noll submitted a revised version of his Reply Declaration that purports to correct certain errors in his original Reply Declaration and underlying model. This Second Supplemental Declaration updates the exhibits from my Corrected Supplemental Declaration that are impacted by Dr. Noll’s corrections.
2. Second Supplemental Exhibits 1-3 update Exhibits 1-3 to my Corrected Supplemental Declaration. I perform the same analysis detailed in my prior Declarations using Dr. Noll’s corrected data.
3. Second Supplemental Exhibit 4 is unchanged from my Corrected Supplemental Declaration but attached for the Court’s convenience.
4. Second Supplemental Exhibits 5-6 update Exhibits 5-6 to my Corrected Supplemental Declaration. I perform the same analysis detailed in my prior Declarations using Dr. Noll’s corrected data.
5. Second Supplemental Exhibit 7 is unchanged from my Corrected Supplemental Declaration but attached for the Court’s convenience.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.



Ariel Pakes

Executed on March 11, 2015 at Palo Alto, California.

**Pakes Second Supplemental Exhibit 1
Dr. Noll's Model Predicts Higher But-For Prices
When DIRECTV is Allowed to Set Prices to
Consumers for MLB Content**

Actor	Noll Reply Exhibit 2C [A]	DIRECTV MLB Prices [B]
1 Angels	\$11.40	\$42.68
2 Astros	\$11.12	\$44.39
3 Athletics	\$11.44	\$43.21
4 Blue Jays	\$10.77	\$43.03
5 Braves	\$13.07	\$41.95
6 Brewers	\$10.78	\$43.43
7 Cardinals	\$12.02	\$42.83
8 Cubs	\$11.15	\$43.69
9 Diamondbacks	\$10.67	\$44.83
10 Dodgers	\$12.75	\$41.20
11 Giants	\$11.72	\$41.77
12 Indians	\$11.05	\$44.20
13 Mariners	\$10.49	\$44.10
14 Marlins	\$11.14	\$43.44
15 Mets	\$11.68	\$42.62
16 Nationals	\$11.76	\$43.07
17 Orioles	\$12.02	\$43.46
18 Padres	\$11.57	\$42.51
19 Phillies	\$12.70	\$42.70
20 Pirates	\$11.06	\$43.53
21 Rangers	\$11.61	\$43.22
22 Rays	\$11.51	\$43.04
23 Red Sox	\$12.99	\$41.57
24 Reds	\$11.61	\$42.86
25 Rockies	\$10.66	\$43.58
26 Royals	\$10.72	\$43.93
27 Tigers	\$12.21	\$43.03
28 Twins	\$11.08	\$43.55
29 White Sox	\$10.78	\$43.86
30 Yankees	\$16.45	\$38.98
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31 BFW League Package	\$24.59	\$40.84
32 BFW League Package price relative to DIRECTV's MLB Extra Innings package price	-\$9.00	\$7.25

Source: Noll Corrected Reply

Note: DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. The predicted BFW League Package price of \$40.84 is statistically higher than \$33.59 at the 5% confidence level. The 95% confidence interval is \$39.98 to \$41.70.

[A] This column replicates Noll's Corrected Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's DIRECTV model when the model is updated to allow DIRECTV to set the prices it charges for each team's channel and the BFW League Package.

Pakes Second Supplemental Exhibit 2

Comparison of Dr. Noll's But-For Internet and DIRECTV Prices for MLB Content

Actor	Noll Reply Exhibit 2A Internet Price per month [A]	Noll Reply Exhibit 2C DIRECTV Price per month [B]	Percent Difference ([B] - [A]) / [A]
1 Angels	\$7.63	\$11.40	49.5%
2 Astros	\$6.55	\$11.12	69.8%
3 Athletics	\$7.13	\$11.44	60.4%
4 Blue Jays	\$6.84	\$10.77	57.5%
5 Braves	\$8.46	\$13.07	54.5%
6 Brewers	\$6.81	\$10.78	58.2%
7 Cardinals	\$8.24	\$12.02	46.0%
8 Cubs	\$7.49	\$11.15	48.9%
9 Diamondbacks	\$6.84	\$10.67	56.1%
10 Dodgers	\$8.60	\$12.75	48.2%
11 Giants	\$8.14	\$11.72	44.0%
12 Indians	\$6.88	\$11.05	60.7%
13 Mariners	\$6.92	\$10.49	51.6%
14 Marlins	\$6.68	\$11.14	66.8%
15 Mets	\$7.70	\$11.68	51.6%
16 Nationals	\$7.48	\$11.76	57.3%
17 Orioles	\$7.57	\$12.02	58.8%
18 Padres	\$6.81	\$11.57	69.9%
19 Phillies	\$8.41	\$12.70	51.0%
20 Pirates	\$7.29	\$11.06	51.7%
21 Rangers	\$7.40	\$11.61	56.8%
22 Rays	\$7.16	\$11.51	60.9%
23 Red Sox	\$9.10	\$12.99	42.7%
24 Reds	\$7.20	\$11.61	61.2%
25 Rockies	\$6.64	\$10.66	60.5%
26 Royals	\$6.67	\$10.72	60.7%
27 Tigers	\$8.35	\$12.21	46.1%
28 Twins	\$6.98	\$11.08	58.7%
29 White Sox	\$7.12	\$10.78	51.4%
30 Yankees	\$10.21	\$16.45	61.1%
31 BFW League Package	\$14.50	\$24.59	69.6%
Average	\$7.51	\$11.67	55.8%
Actual World League Package Price	\$20.05	\$33.59	67.5%

Source: Noll Corrected Reply

Note:

[A] This column replicates Noll's Corrected Reply Exhibit 2A.

[B] This column replicates Noll's Corrected Reply Exhibit 2C.

Pakes Second Supplemental Exhibit 3
Dr. Noll's Model Predicts a DIRECTV MLB But-For Package
Price That Is Not Lower Than the Actual World Price of the OMP
When the League Prices as a Joint Venture

Actor	Noll Reply Exhibit 2C [A]	Dr. Noll's But-For Prices Accounting for Joint Venture Incentives [B]
1 Angels	\$11.40	\$11.53
2 Astros	\$11.12	\$11.22
3 Athletics	\$11.44	\$11.56
4 Blue Jays	\$10.77	\$10.84
5 Braves	\$13.07	\$13.41
6 Brewers	\$10.78	\$10.85
7 Cardinals	\$12.02	\$12.20
8 Cubs	\$11.15	\$11.25
9 Diamondbacks	\$10.67	\$10.74
10 Dodgers	\$12.75	\$13.01
11 Giants	\$11.72	\$11.88
12 Indians	\$11.05	\$11.15
13 Mariners	\$10.49	\$10.54
14 Marlins	\$11.14	\$11.24
15 Mets	\$11.68	\$11.83
16 Nationals	\$11.76	\$11.91
17 Orioles	\$12.02	\$12.21
18 Padres	\$11.57	\$11.71
19 Phillies	\$12.70	\$12.96
20 Pirates	\$11.06	\$11.15
21 Rangers	\$11.61	\$11.75
22 Rays	\$11.51	\$11.65
23 Red Sox	\$12.99	\$13.30
24 Reds	\$11.61	\$11.76
25 Rockies	\$10.66	\$10.73
26 Royals	\$10.72	\$10.79
27 Tigers	\$12.21	\$12.42
28 Twins	\$11.08	\$11.17
29 White Sox	\$10.78	\$10.86
30 Yankees	\$16.45	\$17.07
<hr/>		
31 BFW League Package	\$24.59	\$33.40
32 BFW League Package price relative to DIRECTV's MLB Extra Innings package price	-\$9.00	-\$0.19

Source: Noll Corrected Reply

Note: DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. The predicted BFW League Package price of \$33.40 is not statistically different from the actual world OMP price of \$33.59 at the 5% confidence level. The 95% confidence interval is \$32.79 to \$34.00.

[A] This column replicates Noll's Corrected Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

Pakes Supplemental Exhibit 4 (Unmodified)
Dr. Noll's Model Predicts an Internet NHL But-For Package Price That Is Not Lower Than the Actual World Price of the OMP When the League Prices as a Joint Venture

Actor	Dr. Noll's But-For Prices Accounting for Joint Venture Incentives	
	Noll Reply Exhibit 2B [A]	[B]
1 Ducks	\$5.87	\$5.96
2 Bruins	\$6.98	\$7.23
3 Sabres	\$6.61	\$6.81
4 Hurricanes	\$5.57	\$5.65
5 Flames	\$5.81	\$5.90
6 Black Hawks	\$7.34	\$7.64
7 Blue Jackets	\$5.19	\$5.23
8 Avalanche	\$5.55	\$5.62
9 Stars	\$5.75	\$5.85
10 Red Wings	\$8.72	\$9.23
11 Oilers	\$5.66	\$5.74
12 Panthers	\$5.68	\$5.75
13 Kings	\$6.81	\$7.03
14 Wild	\$5.41	\$5.47
15 Canadiens	\$5.60	\$5.67
16 Devils	\$6.31	\$6.48
17 Predators	\$5.48	\$5.55
18 Islanders	\$5.70	\$5.78
19 Rangers	\$6.82	\$7.06
20 Senators	\$5.36	\$5.41
21 Flyers	\$8.04	\$8.50
22 Coyotes	\$5.53	\$5.60
23 Penguins	\$9.54	\$10.21
24 Sharks	\$6.34	\$6.50
25 Blues	\$6.11	\$6.24
26 Lightning	\$5.17	\$5.21
27 Maple Leafs	\$6.20	\$6.33
28 Canucks	\$6.87	\$7.09
29 Jets	\$5.35	\$5.41
30 Capitals	\$7.00	\$7.26
31 BFW League Package	\$18.08	\$25.73
32 BFW League package price relative to NHL GameCenter LIVE package price	-\$8.20	-\$0.55

Source: Noll Corrected Reply

Note: NHL GameCenter LIVE package price according to Dr. Noll is \$26.28 per month. The predicted BFW League Package price of \$25.73 is not statistically different from the actual world OMP price of \$26.28 at the 5% confidence level. The 95% confidence interval is \$24.71 to \$26.75.

[A] This column replicates Noll's Corrected Reply Exhibit 2B.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

Pakes Second Supplemental Exhibit 5A
Dr. Noll's DIRECTV MLB Model is Not in Equilibrium
Because the Yankees Have an Incentive to Deviate
Prices

Actor	Dr. Noll's BFW League Package		BFW League Package Without the Yankees	
	Dr. Noll's Incentives [A]	Joint Venture Incentives [B]	Dr. Noll's Incentives [C]	Joint Venture Incentives [D]
1 Angels	\$11.40	\$11.53	\$11.42	\$11.51
2 Astros	\$11.12	\$11.22	\$11.13	\$11.21
3 Athletics	\$11.44	\$11.56	\$11.45	\$11.55
4 Blue Jays	\$10.77	\$10.84	\$10.77	\$10.83
5 Braves	\$13.07	\$13.41	\$13.10	\$13.36
6 Brewers	\$10.78	\$10.85	\$10.78	\$10.84
7 Cardinals	\$12.02	\$12.20	\$12.03	\$12.18
8 Cubs	\$11.15	\$11.25	\$11.16	\$11.24
9 Diamondbacks	\$10.67	\$10.74	\$10.68	\$10.73
10 Dodgers	\$12.75	\$13.01	\$12.77	\$12.98
11 Giants	\$11.72	\$11.88	\$11.74	\$11.86
12 Indians	\$11.05	\$11.15	\$11.06	\$11.13
13 Mariners	\$10.49	\$10.54	\$10.49	\$10.54
14 Marlins	\$11.14	\$11.24	\$11.15	\$11.23
15 Mets	\$11.68	\$11.83	\$11.69	\$11.81
16 Nationals	\$11.76	\$11.91	\$11.77	\$11.89
17 Orioles	\$12.02	\$12.21	\$12.04	\$12.18
18 Padres	\$11.57	\$11.71	\$11.58	\$11.70
19 Phillies	\$12.70	\$12.96	\$12.72	\$12.92
20 Pirates	\$11.06	\$11.15	\$11.07	\$11.14
21 Rangers	\$11.61	\$11.75	\$11.62	\$11.73
22 Rays	\$11.51	\$11.65	\$11.52	\$11.63
23 Red Sox	\$12.99	\$13.30	\$13.01	\$13.26
24 Reds	\$11.61	\$11.76	\$11.62	\$11.74
25 Rockies	\$10.66	\$10.73	\$10.67	\$10.72
26 Royals	\$10.72	\$10.79	\$10.72	\$10.78
27 Tigers	\$12.21	\$12.42	\$12.22	\$12.39
28 Twins	\$11.08	\$11.17	\$11.09	\$11.16
29 White Sox	\$10.78	\$10.86	\$10.79	\$10.85
30 Yankees	\$16.45	\$17.07	\$23.18	\$22.90
31 BFW League Package	\$24.59	\$33.40	\$26.22	\$32.88
32 Teams Avg.	\$11.67	\$11.82	\$11.90	\$12.00
33 Price of Creating Full BFW Package	\$24.59	\$33.40	\$49.40	\$55.78
Choice Set				
34 Favorite	✓	✓	✓	✓
35 Full BFW Package	✓	✓	✓	✓
36 Partial BFW Package			✓	✓

Source: Noll Corrected Reply

Note: All values are expressed in dollars.

[A] This column replicates Noll's Corrected Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

[C] Predicted prices from Dr. Noll's model when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel.

[D] Predicted prices from the model in [B] when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel. The Yankees do not receive a portion of the League's profits, and the remaining teams each receive 1/29 of the of the BFW League Package profits.

Pakes Second Supplemental Exhibit 5B
Dr. Noll's DIRECTV MLB Model is Not in Equilibrium
Because the Yankees Have an Incentive to Deviate
Profit

Actor	Dr. Noll's BFW League Package		BFW League Package Without the Yankees	
	Dr. Noll's Incentives [A]	Joint Venture Incentives [B]	Dr. Noll's Incentives [C]	Joint Venture Incentives [D]
1 Angels	\$506,876	\$518,011	\$510,204	\$518,508
2 Astros	\$446,948	\$456,392	\$449,746	\$456,810
3 Athletics	\$501,098	\$512,079	\$504,365	\$512,557
4 Blue Jays	\$486,472	\$496,254	\$489,466	\$496,795
5 Braves	\$610,492	\$627,194	\$614,812	\$627,172
6 Brewers	\$469,906	\$479,386	\$472,804	\$479,905
7 Cardinals	\$534,299	\$546,899	\$537,839	\$547,220
8 Cubs	\$473,696	\$483,695	\$476,736	\$484,210
9 Diamondbacks	\$453,429	\$462,353	\$456,203	\$462,906
10 Dodgers	\$631,044	\$647,441	\$635,461	\$647,604
11 Giants	\$531,157	\$543,461	\$534,635	\$543,791
12 Indians	\$481,957	\$491,987	\$484,960	\$492,464
13 Mariners	\$441,581	\$450,082	\$444,221	\$450,609
14 Marlins	\$490,949	\$501,361	\$494,032	\$501,813
15 Mets	\$496,019	\$507,340	\$499,499	\$507,930
16 Nationals	\$516,787	\$528,557	\$520,122	\$528,887
17 Orioles	\$538,240	\$551,076	\$541,862	\$551,393
18 Padres	\$535,507	\$547,687	\$539,115	\$548,180
19 Phillies	\$631,197	\$647,449	\$635,666	\$647,703
20 Pirates	\$479,743	\$489,744	\$482,752	\$490,229
21 Rangers	\$483,785	\$494,670	\$486,931	\$495,044
22 Rays	\$521,515	\$533,093	\$524,869	\$533,500
23 Red Sox	\$641,962	\$659,352	\$646,735	\$659,615
24 Reds	\$506,105	\$517,558	\$509,288	\$517,815
25 Rockies	\$463,241	\$472,405	\$466,009	\$472,882
26 Royals	\$445,354	\$454,276	\$448,032	\$454,729
27 Tigers	\$571,295	\$585,336	\$575,132	\$585,550
28 Twins	\$488,171	\$498,402	\$491,292	\$498,943
29 White Sox	\$452,002	\$461,118	\$454,800	\$461,629
30 Yankees	\$1,079,109	\$1,117,457	\$1,327,714	\$1,311,156
31 BFW League Package	\$3,996,192	\$3,904,254	\$4,278,712	\$4,228,412
32 Teams Total	\$15,909,937	\$16,282,116	\$16,255,300	\$16,487,548
33 Teams Avg. (exc. Yankees)	\$511,408	\$522,919	\$514,744	\$523,324
Choice Set				
33 Favorite	✓	✓	✓	✓
34 Full BFW Package	✓	✓	✓	✓
35 Partial BFW Package			✓	✓

Source: Noll Corrected Reply

Note: All values are expressed in dollars.

[A] This column shows the profits from the analysis Dr. Noll presents in his Corrected Reply Exhibit 2C.

[B] Predicted profits from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

[C] Predicted profits from Dr. Noll's model when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel.

[D] Predicted profits from the model in [B] when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel. The Yankees do not receive a portion of the League's profits, and the remaining teams each receive 1/29 of the of the BFW League Package profits.

Pakes Second Supplemental Exhibit 6
Dr. Noll's DIRECTV MLB Model Is Not in Equilibrium Because
Each Team Has a Unilateral Incentive to Deviate

Excluded Team	Individual Team Prices [A]		League Prices [B]		Individual Team Profits [C]		Post-Deviation Industry Profits [D]
	Pre-Deviation	Post-Deviation	Reduced Package	Price of Creating Full BFW Package	Pre-Deviation	Post-Deviation	
1 Angels	\$11.40	\$14.45	\$25.05	\$39.50	\$506,876	\$590,021	\$20,185,383
2 Astros	\$11.12	\$14.19	\$24.99	\$39.18	\$446,948	\$520,459	\$20,159,053
3 Athletics	\$11.44	\$14.77	\$25.07	\$39.84	\$501,098	\$585,537	\$20,192,790
4 Blue Jays	\$10.77	\$13.03	\$24.94	\$37.97	\$486,472	\$559,715	\$20,154,959
5 Braves	\$13.07	\$18.62	\$25.33	\$43.95	\$610,492	\$732,302	\$20,273,541
6 Brewers	\$10.78	\$13.10	\$24.95	\$38.05	\$469,906	\$541,351	\$20,150,291
7 Cardinals	\$12.02	\$16.14	\$25.16	\$41.30	\$534,299	\$630,718	\$20,223,408
8 Cubs	\$11.15	\$14.12	\$25.01	\$39.13	\$473,696	\$550,713	\$20,171,835
9 Diamondbacks	\$10.67	\$13.00	\$24.94	\$37.94	\$453,429	\$522,489	\$20,145,431
10 Dodgers	\$12.75	\$17.11	\$25.31	\$42.42	\$631,044	\$748,441	\$20,268,147
11 Giants	\$11.72	\$15.14	\$25.09	\$40.24	\$531,157	\$621,554	\$20,201,525
12 Indians	\$11.05	\$13.91	\$25.02	\$38.93	\$481,957	\$559,559	\$20,173,177
13 Mariners	\$10.49	\$12.53	\$24.89	\$37.41	\$441,581	\$506,233	\$20,128,173
14 Marlins	\$11.14	\$13.96	\$25.02	\$38.97	\$490,949	\$569,790	\$20,172,952
15 Mets	\$11.68	\$15.35	\$25.08	\$40.43	\$496,019	\$582,171	\$20,195,591
16 Nationals	\$11.76	\$15.35	\$25.10	\$40.45	\$516,787	\$606,165	\$20,203,484
17 Orioles	\$12.02	\$16.05	\$25.14	\$41.20	\$538,240	\$634,953	\$20,217,994
18 Padres	\$11.57	\$14.89	\$25.09	\$39.98	\$535,507	\$625,506	\$20,203,137
19 Phillies	\$12.70	\$17.60	\$25.35	\$42.95	\$631,197	\$751,667	\$20,281,781
20 Pirates	\$11.06	\$13.82	\$24.99	\$38.81	\$479,743	\$556,390	\$20,167,924
21 Rangers	\$11.61	\$15.21	\$25.08	\$40.29	\$483,785	\$567,107	\$20,187,309
22 Rays	\$11.51	\$14.84	\$25.09	\$39.93	\$521,515	\$609,338	\$20,201,539
23 Red Sox	\$12.99	\$18.26	\$25.35	\$43.61	\$641,962	\$768,472	\$20,288,223
24 Reds	\$11.61	\$14.95	\$25.06	\$40.02	\$506,105	\$591,744	\$20,187,025
25 Rockies	\$10.66	\$12.83	\$24.91	\$37.74	\$463,241	\$532,192	\$20,141,229
26 Royals	\$10.72	\$13.14	\$24.92	\$38.06	\$445,354	\$513,884	\$20,142,035
27 Tigers	\$12.21	\$16.62	\$25.23	\$41.84	\$571,295	\$676,432	\$20,241,749
28 Twins	\$11.08	\$13.87	\$25.01	\$38.88	\$488,171	\$566,328	\$20,173,042
29 White Sox	\$10.78	\$13.20	\$24.94	\$38.13	\$452,002	\$521,396	\$20,145,182
30 Yankees	\$16.45	\$23.18	\$26.22	\$49.40	\$1,079,109	\$1,327,714	\$20,534,012

Source: Noll Corrected Reply

Note: All values are expressed in dollars. DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. Industry profits under Dr. Noll's model are \$19.91 million. Noll Corrected Reply Exhibit 4.

[A] The prices of individual teams' feeds in Dr. Noll's model before and after exclusion from the BFW League Package. The pre-deviation scenario shows the results from Dr. Noll's Reply Exhibit 2C. In the post-deviation scenario, each row represents a situation in which the given team is not included in the BFW League Package, but consumers can replicate the full bundle by purchasing the BFW League Package and the excluded team's channel.

[B] Reduced BFW League Package shows the price of the BFW League Package when the given team's feed is not included in the BFW League Package. Price of Creating Full BFW Package shows the price of purchasing both the reduced BFW League Package and the excluded team's channel.

[C] The profits earned by the excluded team.

[D] As in [A], [B], and [C], each row represents a situation in which the given team is not included in the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the excluded team's channel and the BFW League Package, which excludes the team. Industry profits represent the aggregate of all individual teams' profits from individual channels plus the profits from the BFW League Package.

Pakes Supplemental Exhibit 7 (Unmodified)
Dr. Noll's Internet NHL Model is Not in Equilibrium
Because Each Team Has a Unilateral Incentive to Deviate

Excluded Team	Individual Team Prices [A]		League Prices [B]		Individual Team Profits [C]		Post-Deviation Industry Profits [D]	
	Pre-Deviation	Post-Deviation	Reduced Package	Price of Creating Full BFW Package		Pre-Deviation		Post-Deviation
1 Ducks	\$5.87	\$11.36	\$18.53	\$29.89	\$45,771	\$52,177	\$2,053,276	
2 Bruins	\$6.98	\$13.86	\$18.67	\$32.53	\$57,384	\$67,403	\$2,061,741	
3 Sabres	\$6.61	\$10.85	\$18.55	\$29.41	\$55,080	\$63,544	\$2,055,213	
4 Hurricanes	\$5.57	\$8.50	\$18.40	\$26.90	\$44,861	\$50,284	\$2,047,607	
5 Flames	\$5.81	\$9.36	\$18.45	\$27.81	\$48,823	\$55,166	\$2,051,106	
6 Black Hawks	\$7.34	\$13.78	\$18.66	\$32.44	\$58,744	\$69,380	\$2,061,150	
7 Blue Jackets	\$5.19	\$6.55	\$18.23	\$24.78	\$40,570	\$44,721	\$2,040,167	
8 Avalanche	\$5.55	\$8.72	\$18.43	\$27.15	\$44,728	\$50,180	\$2,048,326	
9 Stars	\$5.75	\$10.60	\$18.42	\$29.03	\$43,038	\$48,764	\$2,049,472	
10 Red Wings	\$8.72	\$16.22	\$18.97	\$35.19	\$73,479	\$88,936	\$2,071,195	
11 Oilers	\$5.66	\$8.68	\$18.46	\$27.14	\$48,480	\$54,450	\$2,050,048	
12 Panthers	\$5.68	\$9.51	\$18.47	\$27.98	\$45,402	\$51,243	\$2,050,230	
13 Kings	\$6.81	\$14.56	\$18.65	\$33.21	\$52,821	\$62,262	\$2,060,222	
14 Wild	\$5.41	\$7.70	\$18.38	\$26.08	\$43,231	\$48,240	\$2,045,264	
15 Canadiens	\$5.60	\$7.86	\$18.35	\$26.20	\$47,563	\$53,099	\$2,046,696	
16 Devils	\$6.31	\$12.85	\$18.53	\$31.37	\$48,875	\$56,597	\$2,055,396	
17 Predators	\$5.48	\$7.71	\$18.32	\$26.03	\$42,998	\$47,970	\$2,044,357	
18 Islanders	\$5.70	\$8.51	\$18.38	\$26.89	\$44,171	\$49,639	\$2,046,431	
19 Rangers	\$6.82	\$16.17	\$18.66	\$34.84	\$52,611	\$62,440	\$2,061,475	
20 Senators	\$5.36	\$6.97	\$18.29	\$25.25	\$45,343	\$50,186	\$2,043,488	
21 Flyers	\$8.04	\$16.10	\$18.87	\$34.97	\$66,273	\$79,830	\$2,067,765	
22 Coyotes	\$5.53	\$8.43	\$18.39	\$26.82	\$44,470	\$49,809	\$2,047,449	
23 Penguins	\$9.54	\$18.35	\$19.12	\$37.47	\$78,563	\$96,850	\$2,076,058	
24 Sharks	\$6.34	\$12.59	\$18.54	\$31.13	\$50,884	\$58,936	\$2,056,583	
25 Blues	\$6.11	\$11.31	\$18.48	\$29.79	\$47,739	\$54,712	\$2,053,033	
26 Lightning	\$5.17	\$6.53	\$18.25	\$24.79	\$41,033	\$45,245	\$2,040,683	
27 Maple Leafs	\$6.20	\$12.25	\$18.59	\$30.84	\$52,536	\$60,497	\$2,058,209	
28 Canucks	\$6.87	\$13.12	\$18.70	\$31.82	\$59,975	\$70,021	\$2,062,752	
29 Jets	\$5.35	\$7.23	\$18.33	\$25.56	\$45,211	\$50,181	\$2,044,779	
30 Capitals	\$7.00	\$14.63	\$18.68	\$33.30	\$55,518	\$65,614	\$2,062,265	

Note: All values are expressed in dollars. NHL GameCenter LIVE package price according to Dr. Noll is \$26.28 per month. The industry profits under Dr. Noll's model are \$2.02 million. Noll Corrected Reply Exhibit 4.

[A] The profits of individual teams' feeds in Dr. Noll's model before and after exclusion from the BFW League Package. The pre-deviation scenario shows the results from Dr. Noll's Reply Exhibit 2C. In the post-deviation scenario, each row represents a situation in which the given team is not included in the BFW League Package, but consumers can replicate the full bundle by purchasing the BFW League Package and the excluded team's channel.

[B] Reduced BFW League Package shows the price of the BFW League Package when the given team's feed is not included in the BFW League Package. Price of Creating Full BFW Package shows the price of purchasing both the reduced BFW League Package and the excluded team's channel.

[C] The profits earned by the excluded team.

[D] As in [A], [B], and [C], each row represents a situation in which the given team is not included in the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the excluded team's channel and the BFW League Package, which excludes the team. Industry profits represent the aggregate of all individual teams' profits from individual channels plus the profits from the BFW League Package.