

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 1 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Metals Futures</b>									
COMEX GOLD	GC	302,440	410,635.14	-26.3%	281,314.91	7.5%	328,317	292,708.16	12.2%
NYMEX HOT ROLLED STEEL	HR	571	218.95	160.7%	420.22	35.8%	484	249.77	93.9%
NYMEX PLATINUM	PL	17,755	18,143.05	-2.1%	16,683.48	6.4%	21,404	18,539.5	15.4%
PALLADIUM	PA	7,053	7,296.05	-3.3%	5,043.61	39.8%	5,857	5,756.93	1.7%
URANIUM	UX	103	46.57	121.8%	35.96	187.3%	28	23.6	17.8%
COMEX SILVER	SI	109,482	120,929.24	-9.5%	77,979.74	40.4%	97,786	93,709.48	4.4%
COMEX E-Mini GOLD	QO	454	338.43	34.1%	489.13	-7.3%	396	378.57	4.6%
COMEX E-Mini SILVER	QI	50	38.38	29.9%	40.7	22.5%	54	38.48	40.6%
COMEX COPPER	HG	121,273	142,496.62	-14.9%	114,167.48	6.2%	134,931	106,919.22	26.2%
COMEX MINY COPPER	QC	16	29.95	-46.4%	18.04	-11.1%	21	33.08	-35.7%
ALUMINUM	A38	0	0	-	3.13	-100.0%	0	0.13	138.9%
ALUMINUM	AEP	183	137.43	33.3%	105.43	73.7%	80	119.58	-33.0%
ALUMINUM	ALA	11	3.57	220.0%	1.74	557.2%	25	23.48	5.6%
ALUMINUM	ALI	0	0	-	0	-	0	24.91	-100.0%
ALUMINUM	AUP	387	226.76	70.6%	374.04	3.5%	412	330.51	24.5%
ALUMINUM	CUP	0	0	-	0	-	1	0	-
ALUMINUM	EDP	76	22.86	234.4%	163.91	-53.4%	74	41.69	76.8%
ALUMINUM	MJP	26	80.71	-68.1%	70.43	-63.5%	53	67.37	-20.8%
COPPER	HGS	67	163.67	-58.8%	113.52	-40.6%	70	21.83	221.1%
E-MICRO GOLD	MGC	7,702	5,353.38	43.9%	10,738.96	-28.3%	7,093	4,582.46	54.8%
FERROUS PRODUCTS	BUS	90	8.1	1010.6%	104.65	-14.1%	82	6.02	1259.2%
GOLD	GPS	0	0	-	0	-	0	0	-100.0%
Gold Kilo	GCK	0	13.57	-100.0%	0	-	1	15.42	-96.2%
IRON ORE 62 CHINA PLATTS FUTURES	PIO	0	41.43	-100.0%	0	-	0	40.83	-100.0%
IRON ORE 62 CHINA TSI FUTURES	TIO	228	176.19	29.5%	208.35	9.5%	183	378.24	-51.5%
LNDN ZINC	ZNC	140	0.48	29209.4%	200.04	-30.2%	58	0.54	10634.0%
SILVER	SIL	593	374.57	58.2%	412.78	43.6%	387	286.88	34.9%
<b>Metals Options</b>									
COMEX COPPER	HX	1,951	603.57	223.3%	1,990.13	-2.0%	1,406	378.19	271.8%
COMEX GOLD	OG	42,332	35,158.43	20.4%	51,016.22	-17.0%	46,467	39,590.04	17.4%
COMEX SILVER	SO	8,048	4,987.52	61.4%	6,371.61	26.3%	7,467	5,744.35	30.0%
COPPER	H1E	5	0	-	0.52	949.5%	1	0	-
COPPER	H2E	1	0	-	1	-42.9%	1	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 2 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Metals Options</b>									
COPPER	H3E	0	0	-	0.26	9.5%	0	0	-
COPPER	H4E	0	0	-	0	-	1	0	-
COPPER	H5E	0	0	-	0	-	0	0	-
GOLD	OG1	444	394.76	12.4%	788.78	-43.8%	528	184.91	185.6%
GOLD	OG2	514	426.62	20.4%	935.43	-45.1%	487	183.11	165.8%
GOLD	OG3	811	219.48	269.5%	587.09	38.1%	543	179.37	202.9%
GOLD	OG4	317	155.9	103.5%	311.61	1.8%	338	99.62	239.6%
GOLD	OG5	325	0	-	0	-	142	41.69	239.7%
HOT ROLLED COIL STEEL CALL OPTION	HRO	14	0	-	0	-	1	1.43	-9.5%
IRON ORE 62 CHINA TSI CALL OPTION	ICT	0	61.14	-100.0%	0	-	1	78.33	-98.9%
IRON ORE 62 CHINA TSI PUT OPTION	ICT	0	35.71	-100.0%	0	-	6	113.01	-95.1%
NYMEX PLATINUM	PO	130	176.14	-26.4%	126.09	2.8%	185	132.31	39.5%
PALLADIUM	PAO	45	326.95	-86.1%	47.74	-4.9%	124	281.78	-56.1%
SILVER	SO1	27	0.71	3713.3%	52.35	-48.0%	24	2.95	711.5%
SILVER	SO2	44	0.19	22747.1%	45.04	-3.4%	22	0.94	2248.3%
SILVER	SO3	36	0.86	4050.2%	28.96	22.8%	29	2.63	1010.7%
SILVER	SO4	35	0.05	74129.8%	16.74	111.1%	17	0.81	1975.7%
SILVER	SO5	31	0	-	0	-	12	0.02	68317.3%
<b>Energy Futures</b>									
CRUDE OIL PHY	CL	1,312,884	1,315,986	-0.2%	1,065,517.57	23.2%	1,222,863	1,254,753.52	-2.5%
CRUDE OIL	WS	0	724.24	-100.0%	0	-	67	322.51	-79.1%
MINY WTI CRUDE OIL	QM	29,317	11,199	161.8%	20,433.87	43.5%	17,564	12,269.53	43.2%
BRENT OIL LAST DAY	BZ	108,108	74,779.52	44.6%	98,686.39	9.5%	86,918	88,940.61	-2.3%
HEATING OIL PHY	HO	215,085	169,013.24	27.3%	172,439.7	24.7%	185,512	173,557.54	6.9%
HTG OIL	BH	1	0	-	0.52	119.1%	1	1.47	-64.9%
MINY HTG OIL	QH	0	0.19	0.0%	0.17	9.5%	0	0.14	37.0%
RBOB PHY	RB	188,274	177,016.43	6.4%	201,143.57	-6.4%	199,178	201,482.41	-1.1%
MINY RBOB GAS	QU	0	0.19	50.0%	0.17	64.3%	0	0.2	-8.9%
NATURAL GAS	HP	10,380	5,470.33	89.7%	4,634.57	124.0%	5,795	6,566.21	-11.7%
LTD NAT GAS	HH	30,294	14,921.1	103.0%	20,052.3	51.1%	18,038	13,956.53	29.2%
MINY NATURAL GAS	QG	5,361	1,351.29	296.8%	2,055.3	160.9%	1,670	1,175.76	42.0%
PJM MONTHLY	JM	0	0	-	0	-	0	0.52	-100.0%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 3 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
NATURAL GAS PHY	NG	677,112	476,500.71	42.1%	533,212.65	27.0%	458,641	423,771.38	8.2%
RBOB GAS	RT	0	88.1	-100.0%	0.52	-100.0%	62	114.92	-46.0%
3.5% FUEL OIL CID MED SWA	7D	0	3.33	-100.0%	1.74	-100.0%	3	4.48	-41.1%
3.5% FUEL OIL CIF BALMO S	8D	0	0	-	0	-	0	0.76	-45.9%
AEP-DAYTON HUB DAILY	VD	0	0	-	0	-	0	0	-
AEP-DAYTON HUB MTHLY	VM	0	0	-	0	-	0	0	-
AEP-DAYTON HUB OFF-PEAK M	VP	0	0	-	0	-	0	0	-
ALGON CITY GATES NAT GAS	N7	0	0	-	0	-	0	0	-
ALGONQUIN CITYGATES BASIS	B4	0	0	-	0	-	0	0	-
ANR LOUISIANA BASIS SWAP	ND	0	0	-	0	-	0	0	-
ANR OKLAHOMA	NE	0	0	-	0	-	0	0	-
ARGUS LLS VS. WTI (ARG) T	E5	868	2,626.19	-67.0%	1,015.48	-14.6%	1,039	692.52	50.0%
ARGUS PROPAN FAR EST INDE	7E	266	187.24	42.3%	340.39	-21.7%	282	123.21	129.2%
ARGUS PROPAN(SAUDI ARAMCO)	9N	130	52.67	146.5%	139.26	-6.8%	134	49.77	169.8%
AUSTRIALIAN COKE COAL	ACT	0	5.71	-100.0%	0	-	0	0.52	-83.4%
AUSTRIALIAN COKE COAL	ALW	0	0	-	0	-	0	4.34	-100.0%
BRENT BALMO SWAP	J9	0	0	-	0	-	1	2.5	-50.9%
BRENT CALENDAR SWAP	CY	101	121.67	-16.8%	231	-56.2%	165	133.09	23.8%
BRENT CFD SWAP	6W	0	0	-	0	-	1	0	-
BRENT FINANCIAL FUTURES	BB	48	48.1	-1.0%	156.52	-69.6%	90	186.33	-51.7%
BRENT FINANCIAL FUTURES	MBC	0	0	-	0	-	1	0	-
BRENT FINANCIAL FUTURES	MDB	0	2.48	-100.0%	0	-	1	1.43	-32.4%
BRENT OIL LAST DAY	BZL	0	0	-	0	-	0	0	-
BRENT OIL LAST DAY	BZS	0	0	-	0	-	0	0	-
CAISO SP15 EZGNHUB5 MW P	9X	0	0	-	0	-	0	34.37	-100.0%
CAISO SP15 EZGNHUB5 PEAK	9Z	0	0	-	0	-	0	0	-
CANADIAN LIGHT SWEET OIL	CIL	0	0	-	0	-	0	31.79	-100.0%
CENTERPOINT BASIS SWAP	PW	0	22.14	-100.0%	0	-	0	4.32	-96.4%
CEU ENERGY	DEB	66	0	-	0	-	19	0	-
CEU ENERGY	TTF	175	0	-	10.52	1567.8%	78	0	-
CEU ENERGY	UKG	97	0	-	14.22	580.3%	209	0	-
CHICAGO ETHANOL SWAP	CU	4,143	5,214.81	-20.5%	3,382.43	22.5%	4,545	5,399.11	-15.8%
CHICAGO ULSD (PLATTS) SWA	4C	0	0	-	0	-	0	0	-
CHICAGO ULSD PL VS HO SPR	5C	44	7.38	501.3%	14.13	214.1%	22	7.09	204.4%
CHICAGO UNL GAS PL VS RBO	3C	0	0	-	0	-	4	0	-
CIG BASIS	CI	0	34.76	-100.0%	1.09	-100.0%	1	6.3	-84.9%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 4 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG	
<b>Energy Futures</b>									
CIG ROCKIES NG INDEX SWA	Z8	0	0	-	0	-	0	3.12	-100.0%
CINERGY HUB OFF-PEAK MONT	EJ	0	0	-	0	-	0	0	-
CINERGY HUB PEAK MONTH	EM	0	0	-	0	-	0	0	-
CIN HUB 5MW D AH O PK	K2	0	0	-	0	-	0	1,411.6	-100.0%
CIN HUB 5MW D AH PK	H5	26	28.57	-10.3%	36.78	-30.4%	53	79.19	-32.6%
CIN HUB 5MW REAL TIME O P	H4	0	0	-	0	-	0	1,718.61	-100.0%
CIN HUB 5MW REAL TIME PK	H3	0	0	-	0	-	6	110.93	-94.2%
COAL SWAP	ACM	3	3.33	-14.3%	0	-	2	7.25	-66.1%
COAL SWAP	SSI	0	0	-	0	-	0	0	-
COLUMB GULF MAINLINE NG B	5Z	0	0	-	0	-	0	4.32	-100.0%
COLUMBIA GULF ONSHORE	GL	0	0	-	0	-	0	5.77	-100.0%
CONWAY NATURAL GASOLINE (OPIS) SWA	8L	44	5.71	663.3%	4.96	780.0%	11	12.77	-10.4%
CONWAY NORMAL BUTANE (OPIS) SWAP	8M	3	3.57	-6.7%	3.91	-14.8%	12	34.81	-64.9%
CONWAY PROPANE 5 DECIMALS SWAP	8K	654	502.38	30.1%	733.43	-10.9%	754	428.65	76.0%
CRUDE OIL	LPS	171	134	27.9%	150	14.3%	211	182.12	15.9%
CRUDE OIL OUTRIGHTS	42	9	6.67	37.1%	9.7	-5.7%	12	25.05	-53.9%
CRUDE OIL OUTRIGHTS	CC5	1	0	-	9.13	-84.4%	1	2.6	-45.2%
CRUDE OIL OUTRIGHTS	CPD	0	0	-	0	-	13	0	-
CRUDE OIL OUTRIGHTS	CSN	0	0	-	0	-	0	0.13	-100.0%
CRUDE OIL OUTRIGHTS	CSW	1	7.38	-80.6%	0	-	10	11.71	-14.8%
CRUDE OIL OUTRIGHTS	DBL	0	19.57	-100.0%	0	-	0	8.81	-95.2%
CRUDE OIL OUTRIGHTS	FE	0	0	-	0	-	0	1.43	-100.0%
CRUDE OIL OUTRIGHTS	GSW	0	2.14	-100.0%	0	-	0	0.87	-47.7%
CRUDE OIL OUTRIGHTS	HTT	1,812	2,046.67	-11.5%	2,344.17	-22.7%	2,282	910.67	150.6%
CRUDE OIL OUTRIGHTS	LSW	0	57.86	-100.0%	0.65	-100.0%	1	17.86	-91.9%
CRUDE OIL OUTRIGHTS	SSW	0	0	-	0	-	0	4.16	-100.0%
CRUDE OIL OUTRIGHTS	UMD	0	0	-	0	-	21	0	-
CRUDE OIL OUTRIGHTS	UNS	0	0	-	0	-	33	0	-
CRUDE OIL OUTRIGHTS	WCC	0	0	-	0	-	0	107.09	-100.0%
CRUDE OIL OUTRIGHTS	WCW	103	813.57	-87.3%	108.48	-5.1%	280	315.13	-11.1%
CRUDE OIL PHY	CLL	0	0	-	0	-	0	0	-
CRUDE OIL PHY	HCL	481	0	-	0	-	44	0	-
CRUDE OIL SPRDS	38	0	0	-	0	-	9	0	-
CRUDE OIL SPRDS	WTT	510	2,042.14	-75.0%	366.87	39.1%	1,790	608.5	194.2%
CRUDE OIL TRADE AT MARKER SINGAPOR	CLS	0	0	-	0	-	0	0	-
DAILY PJM	AOR	0	0	-	0	-	0	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 5 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG	
<b>Energy Futures</b>									
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DAILY PJM	0	0	-	0	-	0	0	-	
DATED BRENT (PLATTS) DAILY SWAP	0	0	-	0	-	0	6.06	-100.0%	
DATED TO FRONTLINE BRENT	0	19.05	-100.0%	6.52	-100.0%	14	62.55	-76.8%	
DIESEL 10P BRG FOB RDM VS	0	0	-	0	-	0	0	-	
DIESEL 10PPM BARGES FOB B	0	0	-	0	-	0	0.01	-100.0%	
DOMINION TRAN INC - APP I	0	139.05	-100.0%	0	-	0	12.64	-100.0%	
DOMINION TRANSMISSION INC	0	214.67	-100.0%	0	-	1	229.94	-99.8%	
DUBAI CRUDE OIL BALMO	0	0	-	0	-	1	0	-	
DUBAI CRUDE OIL CALENDAR	729	198.19	267.7%	2,059.57	-64.6%	430	354.7	21.3%	
DY EURO 3.5% FUEL OI RDA	0	0	-	0	-	0	6.49	-100.0%	
EASTERN RAIL DELIVERY CSX	0	0.71	-100.0%	0	-	1	21.02	-95.0%	
EAST/WEST FUEL OIL SPREAD	0	0	-	0	-	1	5.43	-85.2%	
EIA FLAT TAX ONHWAY DIESE	15	5.52	169.8%	13.39	11.3%	14	33.09	-58.7%	
ELEC ERCOT DLY OFF PK	0	0	-	0	-	0	0	-	
ELEC ERCOT DLY PEAK	0	0	-	0	-	0	0	-	
ELEC ERCOT DLY PEAK	0	0	-	0	-	0	0	-	
ELEC ERCOT OFF PEAK	0	0	-	0	-	84	0	-	
ELEC FINSETTLED	47	0	-	0	-	0	0	-	
ELEC FINSETTLED	49	0	-	0	-	0	0	-	
ELEC MISO PEAK	0	0	-	0	-	0	16.56	-100.0%	
ELEC MISO PEAK	0	0	-	0	-	0	0	-	
ELEC NYISO OFF-PEAK	0	0	-	0	-	0	303.9	-100.0%	
ELEC NYISO OFF-PEAK	0	0	-	0	-	0	0	-	
ELECTRICITY ERCOT PEAK	0	0	-	0	-	0	2.99	-100.0%	
ELECTRICITY OFF PEAK	46	0	-	0	-	0	0	-	

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 6 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
ELECTRICITY OFF PEAK	4P	2,637	0	-	0	-	239	0	-
ELECTRICITY OFF PEAK	50	0	0	-	0	-	0	0	-
ELEC WEST POWER OFF-PEAK	MDA	0	0	-	0	-	0	0	-
ELEC WEST POWER PEAK	MDC	0	0	-	0	-	0	6.67	-100.0%
ERCOT DAILY 5MW PEAK	ERW	0	0	-	0	-	0	0	-
ERCOT HOUSTON Z MCPE 5MW PEAK SWA	I1	0	0	-	0	-	8	16.8	-50.0%
ERCOT NORTH ZMCPE 5MW OFFPEAK	I8	0	0	-	0	-	0	0	-
ERCOT NORTH ZMCPE 5MW OFFPEAK SWA	I6	0	1,866.67	-100.0%	0	-	84	498.36	-83.0%
ERCOT NORTH ZMCPE 5MW PEAK	I5	0	100	-100.0%	0	-	22	29.48	-26.2%
ETHANOL SWAP	MT2	13	0	-	3.04	322.4%	3	0	-
ETHANOL T2 FOB ROTT INCL DUTY SWAP	Z1	308	264.71	16.2%	217.22	41.6%	163	190.67	-14.5%
EURO 1% FUEL OIL NEW BALM	KX	0	0	-	0	-	0	0.08	82.5%
EURO 3.5% FUEL OIL RDAM B	KR	11	35.24	-68.2%	7.04	58.9%	24	21.11	15.8%
EURO 3.5% FUEL OIL SPREAD	FK	0	8.57	-100.0%	0.26	-100.0%	4	19.33	-81.3%
EURO-DENOMINATED PETRO PROD	NCP	0	0	-	0	-	3	6.55	-57.9%
EURO GASOIL 10PPM VS ICE	ET	0	0.24	-100.0%	0	-	2	1.86	-14.3%
EUROPE 1% FUEL OIL NWE CA	UF	6	0	-	2.61	119.0%	2	3.07	-23.3%
EUROPE 1% FUEL OIL RDAM C	UH	0	0	-	0	-	0	0.17	-92.4%
EUROPE 3.5% FUEL OIL MED	UI	0	15.24	-98.7%	6.91	-97.2%	4	7.36	-42.0%
EUROPE 3.5% FUEL OIL RDAM	UV	153	414.05	-63.1%	144.91	5.3%	332	338.02	-1.7%
EUROPEAN GASOIL (ICE)	7F	60	70.95	-15.8%	58.87	1.4%	30	133.42	-77.6%
EUROPEAN NAPHTHA BALMO	KZ	9	6.43	36.3%	19.43	-54.9%	13	15.83	-17.2%
EUROPEAN NAPHTHA CRACK SPR	EN	406	359.1	13.0%	693.83	-41.5%	446	326.1	36.7%
EUROPE DATED BRENT SWAP	UB	120	0	-	48.26	148.6%	20	11	85.0%
EUROPE JET KERO NWE CALSW	UJ	0	0	-	0	-	0	0.45	-63.0%
EUROPE NAPHTHA CALSWAP	UN	124	93.48	33.2%	226.26	-45.0%	164	128.6	27.7%
EURO PROPANE CIF ARA SWA	PS	98	82.86	17.9%	126.7	-22.9%	88	61.8	41.7%
FLORIDA GAS ZONE3 BASIS S	FP	0	0	-	0	-	0	0	-
FREIGHT MARKETS	FLP	16	0.86	1772.3%	24.57	-34.7%	9	7.02	34.1%
FREIGHT MARKETS	FRC	0	0	-	0	-	3	0	-
FREIGHT MARKETS	FRS	0	0	-	0	-	0	0	-
FREIGHT MARKETS	T2D	58	0	-	41.74	38.6%	20	0	-
FREIGHT MARKETS	TC6	0	0	-	0	-	1	0	-
FREIGHT MARKETS	TD3	0	0	-	0	-	0	0	-
FREIGHT MARKETS	TD8	0	0	-	6.52	-100.0%	1	0	-
FUEL OIL CRACK VS ICE	FO	69	75.62	-9.2%	122.39	-43.9%	162	170.56	-5.2%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 7 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>								
FUEL OIL NWE CRACK VS ICE	0	0	-	0	-	1	0	-
FUEL OIL (PLATS) CAR CM	0	0	-	0	-	1	0.09	666.5%
FUEL OIL (PLATS) CAR CN	0	0	-	0	-	1	0	-
FUELOIL SWAP:CARGOES VS.B	1	8.14	-91.2%	4.17	-82.9%	9	12.87	-28.7%
GAS EURO-BOB OXY NWE BARGES	253	152.24	66.3%	311.13	-18.6%	352	297.94	18.0%
GAS EURO-BOB OXY NWE BARGES CRK	609	813.76	-25.2%	915.48	-33.5%	854	902.32	-5.3%
GASOIL 0.1 CIF MED SWAP	0	0	-	0	-	0	0	-
GASOIL 0.1CIF MED VS ICE	0	0	-	0	-	0	0.22	-80.1%
GASOIL 0.1 CIF NWE VS ISE	0	0	-	0	-	0	0	-
GASOIL 0.1 CIF VS ICE GAS	0	0	-	0	-	0	0.09	-100.0%
GASOIL 0.1 RDAM BRGS VS I	0	5.71	-100.0%	0	-	0	1.27	-96.6%
GASOIL 0.1 ROTTERDAM BARG	1	2.14	-42.2%	0.65	89.8%	6	0.67	861.0%
GASOIL 10P CRG CIF NW VS	0	0	-	0	-	0	0.11	-100.0%
GASOIL 10PPM VS ICE SWAP	0	0.71	-100.0%	0	-	0	3.15	-98.4%
GASOIL BULLET SWAP	0	0	-	0	-	0	0.56	-100.0%
GASOIL CALENDAR SWAP	1	0	-	0	-	0	1.06	-73.1%
GASOIL CRACK SPREAD CALEN	29	352.14	-91.8%	4.35	561.5%	164	325.38	-49.5%
GASOIL MINI CALENDAR SWAP	38	5.67	574.8%	13.57	181.9%	12	6.36	91.6%
GROUP THREE ULSD (PLATTS)	2	0	-	0	-	1	0.54	99.1%
GROUP THREE UNLEAD GAS (P	0	0	-	0	-	2	0	-
GRP THREE ULSD(PLT)VS HEA	182	263.57	-30.9%	152.83	19.2%	169	207.06	-18.3%
GRP THREE UNL GS (PLT) VS	83	95.48	-13.5%	151.52	-45.5%	101	52.55	91.5%
GULF COAST 3% FUEL OIL BA	33	53.9	-37.9%	50.52	-33.7%	59	55.14	6.3%
GULF COAST JET FUEL CLNDR	10	2.14	360.0%	0	-	6	4.28	41.3%
GULF COAST JET VS NYM 2 H	1,084	1,303.57	-16.9%	962.3	12.6%	1,670	1,970.08	-15.2%
GULF COAST NO.6 FUEL OIL	1,456	2,846.24	-48.8%	1,850.39	-21.3%	2,491	2,467.69	0.9%
GULF COAST NO.6 FUEL OIL	40	251.33	-84.3%	29.65	33.3%	75	76.54	-2.5%
GULF COAST ULSD CALENDAR	12	2.57	370.4%	18.74	-35.5%	15	24.13	-36.2%
GULF COAST ULSD CRACK SPR	11	0	-	5.22	119.0%	7	16.75	-57.4%
HEATING OIL BALMO CLNDR S	0	0	-	0	-	1	3.59	-70.8%
HEATING OIL PHY	0	0	-	0	-	0	0	-
HENRY HUB BASIS SWAP	0	0	-	724.26	-100.0%	138	228.28	-39.4%
HENRY HUB FINANCIAL LAST	0	83.9	-100.0%	22.7	-100.0%	116	18.43	527.3%
HENRY HUB FINANCIAL LAST	0	6.38	-100.0%	0	-	4	3.84	-0.7%
HENRY HUB INDEX SWAP FUTU	0	0	-	724.26	-100.0%	138	218.8	-36.8%
HENRY HUB SWAP	7,970	8,779.48	-9.2%	7,148.65	11.5%	7,970	8,876.43	-10.2%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 8 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
HOUSTON SHIP CHANNEL BASI	NH	0	260.95	-100.0%	0	-	0	40.07	-100.0%
HUSTN SHIP CHNL PIPE SWP	XJ	0	0	-	0	-	0	3.11	-100.0%
ICE BRENT DUBAI SWAP	DB	185	955.95	-80.6%	427.83	-56.7%	450	508.79	-11.6%
ICE GASOIL BALMO SWAP	U9	0	0	-	0	-	0	0.04	-100.0%
IN DELIVERY MONTH EUA	6T	0	0	-	54.26	-100.0%	5	12.34	-56.4%
INDIANA MISO	FAD	0	0	-	0	-	0	0	-
INDIANA MISO	FTD	0	0	-	0	-	0	0	-
INDIANA MISO	FTM	0	0	-	0	-	0	0	-
INDIANA MISO	PDD	0	0	-	0	-	0	0	-
INDIANA MISO	PTD	0	0	-	0	-	0	0	-
INDONESIAN COAL	MCC	0	0	-	0	-	0	0.02	-100.0%
INDONESIAN COAL ICI4	ICI	10	0	-	11.52	-15.3%	7	0	-
ISO NEW ENGLAND OFF-PEAK	KI	0	0	-	0	-	0	0	-
ISO NEW ENGLAND PK LMP	NI	0	0	-	0	-	0	0.04	-100.0%
JAPAN C&F NAPHTHA CRACK S	JB	8	39.52	-80.6%	1.74	340.8%	8	28.76	-71.7%
JAPAN C&F NAPHTHA SWAP	JA	53	74.48	-29.3%	124.48	-57.7%	96	72.61	31.9%
JAPAN NAPHTHA BALMO SWAP	E6	1	0	-	3.57	-73.3%	3	6.1	-55.7%
JET AV FUEL (P) CAR FM ICE GAS SWAP	1V	0	0	-	0	-	0	0.16	-86.1%
JET CIF NWE VS ICE	JC	0	13	-100.0%	0	-	3	5.4	-48.8%
JET FUEL BRG FOB RDM VS I	9Q	0	0	-	0	-	0	0.02	-100.0%
JET FUEL CRG CIF NEW VS I	6X	0	0.1	-100.0%	0	-	0	0.28	-100.0%
JET FUEL UP-DOWN BALMO CL	1M	256	196.67	30.0%	309.57	-17.4%	283	330.7	-14.5%
LA CARB DIESEL (OPIS)	LX	0	0	-	0	-	0	0	-
LA CARB DIESEL (OPIS) SWA	KL	6	5.95	0.0%	10.43	-43.0%	13	9.18	45.4%
LA CARBOB GASOLINE(OPIS)S	JL	20	14.29	36.7%	36.96	-47.2%	24	12.01	97.7%
LA JET FUEL VS NYM NO 2 H	MQ	0	0	-	0	-	0	0.11	-100.0%
LA JET (OPIS) SWAP	JS	33	35.24	-5.4%	82	-59.3%	91	81.67	11.8%
LLS (ARGUS) CALENDAR SWAP	XA	0	0	-	0	-	3	0	-
LLS (ARGUS) VS WTI SWAP	WJ	133	392.33	-66.0%	224.65	-40.6%	256	242.25	5.7%
LOS ANGELES CARB GASOLINE	MH	0	0	-	0	-	0	0	-
MARS (ARGUS) VS WTI SWAP	YX	47	65.24	-28.1%	56.52	-17.0%	96	147.27	-34.8%
MARS (ARGUS) VS WTI TRD M	YV	603	1,813.67	-66.7%	687.39	-12.3%	948	1,016.09	-6.7%
MARS BLEND CRUDE OIL	MB	0	47.62	-100.0%	0	-	10	64.8	-84.6%
MCCLOSKEY ARA ARGS COAL	MTF	1,189	1,344.71	-11.5%	868.78	36.9%	1,132	2,086.72	-45.7%
MCCLOSKEY RCH BAY COAL	MFF	100	125.48	-20.3%	64.57	54.9%	139	229.33	-39.3%
MGF FUT	MGF	0	1.43	-66.7%	1.74	-72.6%	1	1.37	-15.6%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 9 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
MGN1 SWAP FUT	MGN	6	3.33	71.4%	2.61	119.0%	4	4.65	-24.6%
MICHIGAN BASIS	NF	0	7.43	-100.0%	0	-	0	11.9	-100.0%
MICHIGAN MISO	HMO	0	0	-	0	-	0	460.78	-100.0%
MICHIGAN MISO	HMW	0	0	-	0	-	0	24.81	-100.0%
MINI GAS EUROBOB OXY NWE ARGS BALM	MEB	17	9.29	85.6%	10.74	60.5%	16	20.39	-19.7%
MINI RBOB V. EBOBARG NWE BRGS BALMO	MXR	0	4.29	-100.0%	0	-	15	24.79	-41.2%
MINI RBOB V. EBOB(ARGUS) NWE BRGS	MXB	63	71.57	-12.0%	139.22	-54.8%	87	106.64	-18.9%
MJC FUT	MJC	2	5.48	-56.5%	3.7	-35.6%	6	5.65	11.4%
MNC FUT	MNC	239	130.95	82.8%	245.35	-2.5%	197	189.98	3.9%
MONT BELVIEU ETHANE 5 DECIMAL	C0	402	600.95	-33.1%	711.39	-43.5%	745	1,047.8	-28.9%
MONT BELVIEU ETHANE OPIS BALMO	8C	4	8.57	-55.6%	5.43	-29.9%	7	12.42	-41.4%
MONT BELVIEU LDH PROPANE 5 DECIMAL	B0	6,504	4,819	35.0%	7,343.96	-11.4%	5,959	4,422.56	34.7%
MONT BELVIEU LDH PROPANE OPIS BALM	8O	89	53	68.1%	69.43	28.3%	116	78.07	49.2%
MONT BELVIEU NATURAL GASOLINE 5 DEC	7Q	374	749.05	-50.0%	487	-23.2%	396	276.22	43.5%
MONT BELVIEU NATURAL GASOLINE BALM	R0	2	22.86	-91.7%	10.22	-81.4%	16	14.48	8.0%
MONT BELVIEU NORMAL BUTANE 5 DECIM	D0	1,567	2,037.67	-23.1%	2,516.83	-37.7%	1,724	1,418.59	21.5%
MONT BELVIEU NORMAL BUTANE BALMO	8J	44	27.81	57.5%	67.26	-34.9%	52	33.51	54.2%
NAT GAS BASIS SWAP	TZ6	0	20.1	-100.0%	0	-	0	11.2	-100.0%
NATURAL GAS	XIC	0	0	-	0	-	0	0.19	-100.0%
NATURAL GAS FIXED PRICE SWAP FUTURE	DSF	0	0	-	0	-	0	1.56	-100.0%
NATURAL GAS INDEX	TZI	0	0	-	0	-	0	2.84	-100.0%
NATURAL GAS PEN SWP	NP	2,602	4,007.57	-35.1%	1,336.74	94.6%	1,682	4,007.82	-58.0%
NEPOOL CNCTCT 5MW D AH O	P3	0	0	-	0	-	0	0	-
NEPOOL CONECTIC 5MW D AH	P2	0	0	-	0	-	0	0	-
NEPOOL INTR HUB 5MW D AH	H2	0	0	-	1,372.39	-100.0%	588	1,017.92	-42.2%
NEPOOL INTR HUB 5MW D AH	U6	0	0	-	73.7	-100.0%	55	74.78	-26.7%
NEPOOL NE MASS 5MW D AH O	P8	0	0	-	0	-	0	60.78	-100.0%
NEPOOL NE MASS 5MW D AH P	P7	0	0	-	0	-	0	3.31	-100.0%
NEPOOL RHD ISLD 5MW D AH	U4	0	0	-	0	-	0	0	-
NEPOOL RHODE IL 5MW D AH	U5	0	0	-	0	-	0	0	-
NEPOOL W CNT MASS 5MW D A	L9	0	0	-	0	-	0	0	-
NEPOOL W CNTR M 5MW D AH	R6	0	0	-	0	-	0	0	-
NEW ENGLAND HUB PEAK DAIL	CE	0	0	-	0	-	0	0	-
NEW YORK ETHANOL SWAP	EZ	16	52.62	-69.5%	7.61	110.9%	52	40.04	29.5%
NEW YORK HUB ZONE G PEAK	GN	0	0	-	0	-	0	0	-
NEW YORK HUB ZONE J PEAK	JN	0	0	-	0	-	0	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 10 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
NGPL MID-CONTINENT	NL	62	28.57	116.7%	68.17	-9.2%	20	20.23	1.1%
NGPL TEX/OK	PD	147	51.43	185.2%	848.7	-82.7%	206	39.89	415.6%
N ILLINOIS HUB DAILY	UD	0	0	-	0	-	0	0	-
N ILLINOIS HUB MTHLY	UM	0	0	-	0	-	0	0	-
NO 2 UP-DOWN SPREAD CALEN	UT	0	0	-	0	-	13	15.84	-18.8%
NORTHEN NATURAL GAS DEMAR	PE	0	0	-	0	-	0	0	-
NORTHEN NATURAL GAS VENTU	PF	0	2.29	-100.0%	0	-	0	0.57	-24.6%
NORTHERN ILLINOIS OFF-PEA	UO	0	0	-	0	-	0	0	-
NORTHWEST ROCKIES BASIS S	NR	0	0	-	0	-	0	13.37	-100.0%
N ROCKIES PIPE SWAP	XR	0	0	-	0	-	0	1.45	-82.4%
NY1% VS GC SPREAD SWAP	VR	24	71.67	-66.1%	7.17	238.5%	60	101.63	-41.0%
NY 2.2% FUEL OIL (PLATTS	Y3	0	0	-	0	-	0	0	-
NY 3.0% FUEL OIL (PLATTS	H1	0	0	-	0	-	8	14.11	-45.2%
NY HARBOR 1% FUEL OIL BAL	VK	0	0	-	0	-	0	0.11	99.2%
NY HARBOR HEAT OIL SWP	MP	225	50.81	342.6%	259.52	-13.3%	120	101.66	17.8%
NY HARBOR LOW SULPUR GAS 1000MBBL	NLS	29	0	-	0	-	15	18.5	-19.7%
NY HARBOR RESIDUAL FUEL 1	MM	30	37.14	-20.4%	28.65	3.2%	49	112.82	-56.4%
NY HARBOR RESIDUAL FUEL C	ML	2	0	-	0	-	0	0	-
NYH NO 2 CRACK SPREAD CAL	HK	25	20	27.1%	14.35	77.2%	37	60.75	-39.2%
NYISO A	KA	0	0	-	0	-	0	0	-
NYISO A OFF-PEAK	KB	0	0	-	0	-	0	0	-
NYISO CAPACITY	LHV	0	0	-	17.39	-100.0%	3	1.96	42.0%
NYISO CAPACITY	NNC	3	0	-	0	-	3	9.98	-65.7%
NYISO CAPACITY	NRS	0	6.29	-100.0%	2.61	-100.0%	1	12.55	-88.5%
NYISO G	KG	0	0	-	0	-	0	0	-
NYISO G OFF-PEAK	KH	0	0	-	0	-	0	0	-
NYISO J	KJ	0	0	-	0	-	0	0	-
NYISO J OFF-PEAK	KK	0	0	-	0	-	0	0	-
NYISO ZONE A 5MW D AH O P	K4	0	0	-	1,924.52	-100.0%	191	141.82	34.5%
NYISO ZONE A 5MW D AH PK	K3	0	0	-	82.17	-100.0%	8	29.5	-72.4%
NYISO ZONE C 5MW D AH O P	A3	0	0	-	0	-	0	0	-
NYISO ZONE C 5MW D AH PK	Q5	0	0	-	0	-	0	0.48	-100.0%
NYISO ZONE G 5MW D AH O P	D2	550	0	-	607.83	-9.5%	2,700	3,379.16	-20.1%
NYISO ZONE G 5MW D AH PK	T3	30	121.9	-75.2%	31.74	-4.7%	91	249.37	-63.4%
NYISO ZONE J 5MW D AH O P	D4	0	0	-	0	-	0	980.95	-100.0%
NYISO ZONE J 5MW D AH PK	D3	0	86.43	-100.0%	0	-	0	115.97	-100.0%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 11 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
NYMEX ALUMINUM FUTURES	AN	0	0	-	0	-	0	0	-
NYMEX ULSD VS NYMEX HO	UY	0	0	-	0	-	0	0	-
NY ULSD (ARGUS) VS HEATING OIL	7Y	0	0.62	-100.0%	0	-	1	35.69	-97.4%
ONEOK OKLAHOMA NG BASIS	8X	0	0	-	0	-	12	7.74	50.6%
ONTARIO POWER SWAPS	OFD	0	0	-	0	-	0	0	-
ONTARIO POWER SWAPS	OFM	0	0	-	0	-	0	0	-
ONTARIO POWER SWAPS	OPD	0	0	-	0	-	0	2.19	-98.0%
ONTARIO POWER SWAPS	OPM	0	0	-	0	-	0	2.81	-100.0%
PANHANDLE BASIS SWAP FUTU	PH	0	0	-	0	-	1	13.25	-91.1%
PANHANDLE PIPE SWAP	XH	0	0	-	0	-	0	13.97	-100.0%
PERMIAN BASIS SWAP	PM	0	0	-	0	-	0	5.98	-100.0%
PETROCHEMICALS	22	5	6.76	-23.9%	14.09	-63.5%	9	4	113.4%
PETROCHEMICALS	32	2	7.19	-66.2%	4.74	-48.8%	7	5.2	35.5%
PETROCHEMICALS	3NA	0	0	-	0.26	-8.7%	0	0	-
PETROCHEMICALS	51	0	0	-	0	-	0	0	-
PETROCHEMICALS	8I	0	21.33	-100.0%	20.57	-100.0%	29	28.34	2.8%
PETROCHEMICALS	91	23	39.86	-43.0%	28.22	-19.5%	21	13.38	54.6%
PETROCHEMICALS	HPE	0	0	-	0	-	0	0	-
PETROCHEMICALS	JKM	159	7.86	1921.2%	101.3	56.8%	68	3.14	2053.3%
PETROCHEMICALS	MAA	0	0	-	0	-	0	0	-
PETROCHEMICALS	MAC	0	0	-	0	-	0	0.22	-100.0%
PETROCHEMICALS	MAE	25	4.29	480.0%	12.61	97.1%	11	2.16	410.6%
PETROCHEMICALS	MAS	18	0	-	7.39	138.4%	9	1.62	452.5%
PETROCHEMICALS	MBE	17	8.57	100.0%	39.13	-56.2%	38	52.99	-27.7%
PETROCHEMICALS	MNB	61	96.24	-37.1%	33.09	83.1%	85	83.27	1.7%
PETROCHEMICALS	MPS	10	2.86	238.3%	6.09	58.8%	6	0.43	1247.2%
PETRO CRCKS & SPRDS ASIA	JNC	0	0	-	0	-	0	0.65	-100.0%
PETRO CRCKS & SPRDS ASIA	STI	0	0	-	0	-	0	0.79	-100.0%
PETRO CRCKS & SPRDS ASIA	STR	14	0	-	0	-	2	1.14	50.9%
PETRO CRCKS & SPRDS ASIA	STS	1	18	-92.1%	0	-	2	7.31	-68.2%
PETRO CRCKS & SPRDS NA	CRB	330	16.67	1881.4%	231.52	42.6%	129	12.03	968.2%
PETRO CRCKS & SPRDS NA	EXR	90	99.52	-9.2%	151.52	-40.4%	135	117.28	14.7%
PETRO CRCKS & SPRDS NA	FOC	10	7.14	33.3%	6.52	46.0%	30	31.18	-3.6%
PETRO CRCKS & SPRDS NA	GBB	21	60.71	-65.5%	42.39	-50.6%	55	55.86	-1.8%
PETRO CRCKS & SPRDS NA	GCC	0	0	-	0	-	8	5.67	32.3%
PETRO CRCKS & SPRDS NA	GCI	26	16.67	54.0%	42.35	-39.4%	63	45.88	37.2%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 12 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG	
<b>Energy Futures</b>									
PETRO CRCKS & SPRDS NA	GCM	0	0	-	0	-	1	0.26	175.1%
PETRO CRCKS & SPRDS NA	GCU	303	474.1	-36.1%	106.35	184.7%	527	284.12	85.3%
PETRO CRCKS & SPRDS NA	GFC	0	0	-	0	-	0	2.32	-92.6%
PETRO CRCKS & SPRDS NA	HOB	22	152.71	-85.9%	3.13	589.1%	39	142.58	-72.4%
PETRO CRCKS & SPRDS NA	KSD	0	0	-	0	-	0	0.32	-100.0%
PETRO CRCKS & SPRDS NA	MFR	0	0	-	0	-	0	0	-
PETRO CRCKS & SPRDS NA	NFG	0	0	-	0	-	0	0.47	-54.3%
PETRO CRCKS & SPRDS NA	NYF	0	0	-	0	-	0	4.87	-100.0%
PETRO CRCKS & SPRDS NA	NYH	0	0	-	0	-	0	0	-
PETRO CRCKS & SPRDS NA	RBB	158	312	-49.4%	240.65	-34.4%	248	366.58	-32.3%
PETRO CRCKS & SPRDS NA	RVG	695	757.86	-8.3%	708.13	-1.8%	753	749.9	0.4%
PETRO CRCKS & SPRDS NA	SF3	1	0	-	0	-	1	0.06	2198.0%
PETRO CRK&SPRD EURO	1NB	77	30.71	151.9%	54.7	41.5%	85	57.23	48.5%
PETRO CRK&SPRD EURO	1ND	0	0	-	0	-	0	1.84	-76.6%
PETRO CRK&SPRD EURO	43	0	6.71	-100.0%	1.96	-100.0%	15	15.13	-2.8%
PETRO CRK&SPRD EURO	BFR	0	0	-	0	-	0	0	-
PETRO CRK&SPRD EURO	BOB	47	63.1	-26.0%	59.61	-21.7%	76	84.52	-9.7%
PETRO CRK&SPRD EURO	EGB	0	0	-	0	-	0	0.02	-100.0%
PETRO CRK&SPRD EURO	EGN	0	0	-	0	-	0	0.08	-100.0%
PETRO CRK&SPRD EURO	EOB	0	0	-	0.39	-100.0%	1	0.55	74.0%
PETRO CRK&SPRD EURO	EPN	33	52.33	-36.9%	73.26	-55.0%	45	24.93	81.3%
PETRO CRK&SPRD EURO	EVC	54	164.48	-67.1%	60.52	-10.5%	91	116.06	-21.5%
PETRO CRK&SPRD EURO	FVB	0	0	-	0	-	0	0	-
PETRO CRK&SPRD EURO	GCB	0	0	-	0	-	3	3.2	-8.4%
PETRO CRK&SPRD EURO	GOC	0	0	-	0	-	0	0.52	-30.3%
PETRO CRK&SPRD EURO	MGB	5	3.81	37.5%	0	-	1	0.65	46.0%
PETRO CRK&SPRD EURO	MUD	0	0.48	0.0%	0	-	1	3.89	-80.8%
PETRO CRK&SPRD EURO	NBB	0	0	-	0.87	-100.0%	1	0.58	35.2%
PETRO CRK&SPRD EURO	NOB	108	53.57	101.9%	134.83	-19.8%	89	51.73	72.6%
PETRO CRK&SPRD EURO	SFB	0	0	-	0	-	1	0.77	-30.1%
PETROLEUM PRODUCTS	EWB	0	0	-	0	-	0	0	-
PETROLEUM PRODUCTS	EWG	209	258.33	-19.2%	378.04	-44.8%	240	130.08	84.2%
PETROLEUM PRODUCTS	MBS	0	0	-	0	-	0	0.35	-100.0%
PETROLEUM PRODUCTS	MGS	0	0	-	0	-	0	0.09	-100.0%
PETROLEUM PRODUCTS	MME	1	1.43	0.0%	0	-	0	0.22	19.4%
PETROLEUM PRODUCTS	MPE	0	0	-	0	-	0	0.43	-100.0%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 13 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG	
<b>Energy Futures</b>									
PETROLEUM PRODUCTS	VU	14	0	-	0	-	6	13.05	-55.8%
PETROLEUM PRODUCTS ASIA	E6M	0	0.95	-100.0%	2.61	-100.0%	3	1.05	193.8%
PETROLEUM PRODUCTS ASIA	MJN	108	48.67	121.6%	80.48	34.0%	92	83.96	9.3%
PETROLEUM PRODUCTS ASIA	MSB	0	0	-	0	-	0	0.19	-100.0%
PETRO OUTFRIGHT EURO	0B	2	2.38	-20.0%	0	-	1	0.71	-24.2%
PETRO OUTFRIGHT EURO	0C	0	1.9	-100.0%	0	-	0	0.3	-67.3%
PETRO OUTFRIGHT EURO	0D	71	85.9	-17.4%	52.7	34.7%	63	109.42	-42.5%
PETRO OUTFRIGHT EURO	0E	0	0.38	-100.0%	0	-	1	17.77	-94.2%
PETRO OUTFRIGHT EURO	0F	21	20.62	2.5%	9.57	121.0%	24	49.06	-51.0%
PETRO OUTFRIGHT EURO	1T	0	0	-	0	-	0	0.44	-61.9%
PETRO OUTFRIGHT EURO	33	0	0	-	0	-	0	0.35	-100.0%
PETRO OUTFRIGHT EURO	5L	2	0	-	0	-	1	3.07	-62.9%
PETRO OUTFRIGHT EURO	63	2	0.48	300.0%	0.22	776.2%	1	3.36	-72.2%
PETRO OUTFRIGHT EURO	6L	0	0	-	0	-	0	0.03	-100.0%
PETRO OUTFRIGHT EURO	7I	4	0	-	11.39	-69.1%	5	5.01	6.3%
PETRO OUTFRIGHT EURO	7R	3	6.9	-49.7%	6.91	-49.7%	13	10.84	19.5%
PETRO OUTFRIGHT EURO	88	1	0.71	33.3%	0	-	1	0.32	65.9%
PETRO OUTFRIGHT EURO	CBB	1	0.48	150.0%	0	-	0	0.23	53.2%
PETRO OUTFRIGHT EURO	CGB	0	0	-	0	-	0	0.22	-100.0%
PETRO OUTFRIGHT EURO	CPB	6	0.24	2439.9%	8.26	-26.8%	15	12.35	20.5%
PETRO OUTFRIGHT EURO	EFF	1	0	-	2.09	-52.1%	1	1.34	-40.6%
PETRO OUTFRIGHT EURO	EFM	0	0	-	0	-	0	1.96	-100.0%
PETRO OUTFRIGHT EURO	ENS	0	0	-	0	-	1	0.78	-19.8%
PETRO OUTFRIGHT EURO	ESB	0	0	-	0	-	0	0.3	-100.0%
PETRO OUTFRIGHT EURO	EWN	34	18.33	86.8%	38.83	-11.8%	34	32.43	4.5%
PETRO OUTFRIGHT EURO	FBD	0	0	-	0	-	0	0.09	-100.0%
PETRO OUTFRIGHT EURO	FLB	0	0	-	0	-	0	0	-
PETRO OUTFRIGHT EURO	GES	0	0	-	0	-	0	0	-
PETRO OUTFRIGHT EURO	MBB	2	0	-	0	-	1	2.38	-41.9%
PETRO OUTFRIGHT EURO	MBN	7	28.33	-74.8%	7.83	-8.7%	39	47.99	-18.1%
PETRO OUTFRIGHT EURO	MEF	17	0	-	31.13	-44.8%	6	0	-
PETRO OUTFRIGHT EURO	SMU	0	0	-	0	-	2	0.17	1276.2%
PETRO OUTFRIGHT EURO	T0	0	0	-	0	-	0	0.71	-94.5%
PETRO OUTFRIGHT EURO	ULB	0	0	-	0	-	0	1.62	-100.0%
PETRO OUTFRIGHT EURO	V0	0	0	-	0	-	4	0.65	550.5%
PETRO OUTFRIGHT EURO	X0	0	0	-	0	-	1	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 14 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
PETRO OUtright NA	FCB	0	0	-	2.78	-100.0%	3	7.95	-56.2%
PETRO OUtright NA	FOM	0	0	-	0	-	0	0.22	-84.1%
PETRO OUtright NA	JE	2	0	-	0	-	0	1.82	-73.7%
PETRO OUtright NA	JET	94	129.81	-27.9%	185.65	-49.6%	144	190.85	-24.6%
PETRO OUtright NA	JTB	43	17.86	140.0%	90.87	-52.8%	33	16.51	97.2%
PETRO OUtright NA	MBL	0	0	-	0	-	0	1.15	-85.0%
PETRO OUtright NA	MEN	18	28.14	-36.9%	17.43	1.9%	20	28.35	-27.7%
PETRO OUtright NA	MEO	119	131.1	-9.3%	143.39	-17.1%	166	396.55	-58.1%
PETRO OUtright NA	MFD	0	0	-	0	-	0	0.88	-51.0%
PETRO OUtright NA	MMF	1	0	-	2.74	-53.1%	1	2.21	-57.0%
PETRO OUtright NA	NYT	0	0	-	0	-	0	2.71	-100.0%
PETRO OUtright NA	XER	0	0	-	0	-	1	0	-
PJM AD HUB 5MW REAL TIME	V3	1,112	708.57	57.0%	0	-	279	1,248.26	-77.6%
PJM AD HUB 5MW REAL TIME	Z9	61	0	-	0	-	62	98.84	-37.4%
PJM AECO DA OFF-PEAK	X1	0	0	-	0	-	0	0	-
PJM AECO DA PEAK	Y1	0	0	-	0	-	0	0	-
PJM APS ZONE DA OFF-PEAK	W4	0	0	-	0	-	0	0	-
PJM APS ZONE DA PEAK	S4	0	0	-	0	-	0	0	-
PJM ATSI ELEC	MOD	0	0	-	0	-	0	202.6	-100.0%
PJM ATSI ELEC	MPD	0	0	-	0	-	0	11.04	-100.0%
PJM BGE DA OFF-PEAK	R3	0	0	-	0	-	0	0	-
PJM BGE DA PEAK	E3	0	0	-	0	-	0	0	-
PJM COMED 5MW D AH O PK	D9	0	0	-	0	-	0	369.65	-100.0%
PJM COMED 5MW D AH PK	D8	0	0	-	0	-	0	20.24	-100.0%
PJM DAILY	JD	0	0	-	0	-	0	0	-
PJM DAYTON DA OFF-PEAK	R7	0	0	-	0	-	0	917.73	-100.0%
PJM DAYTON DA PEAK	D7	0	0	-	0	-	0	22.73	-100.0%
PJM JCPL DA OFF-PEAK	F2	0	0	-	0	-	0	0	-
PJM JCPL DA PEAK	J2	0	0	-	0	-	0	0	-
PJM NI HUB 5MW REAL TIME	B3	0	9.52	-100.0%	55.65	-100.0%	28	343.29	-92.0%
PJM NI HUB 5MW REAL TIME	B6	0	910.48	-100.0%	0	-	26	7,444.37	-99.7%
PJM NILL DA OFF-PEAK	L3	0	92.57	-100.0%	33.48	-100.0%	3	2,985.88	-99.9%
PJM NILL DA PEAK	N3	0	7.62	-100.0%	1.83	-100.0%	0	170.96	-99.8%
PJM OFF-PEAK LMP SWAP FUT	JP	0	0	-	0	-	0	0	-
PJM PECO ZONE5MW PEAK CAL MO DAY A	4N	141	0	-	0	-	13	0	-
PJM PPL DA OFF-PEAK	F5	0	0	-	0	-	0	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 15 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
PJM PPL DA PEAK	L5	0	0	-	0	-	0	0	-
PJM PSEG DA OFF-PEAK	W6	2,637	0	-	0	-	340	0	-
PJM PSEG DA PEAK	L6	141	0	-	0	-	18	0	-
PJM WESTH DA OFF-PEAK	E4	0	0	-	0	-	439	235.06	86.7%
PJM WESTHDA PEAK	J4	0	0	-	0	-	24	37.32	-36.2%
PJM WESTH RT OFF-PEAK	N9	1,112	1,291.43	-13.9%	1,704.35	-34.7%	1,606	9,460.67	-83.0%
PJM WESTH RT PEAK	L1	86	219.05	-60.9%	111.09	-22.9%	263	902.99	-70.9%
PLASTICS	PGP	34	12.86	162.6%	50.39	-33.0%	22	25.9	-16.4%
PREMIUM UNLD 10P FOB MED	3G	21	9.19	131.1%	3.43	518.3%	12	3.74	227.1%
PREMIUM UNLEAD 10PPM FOB	8G	0	0.48	-50.0%	0	-	2	0.7	172.3%
PREM UNL GAS 10PPM RDAM FOB BALMO	7N	0	0	-	0	-	0	0.03	1080.9%
PREM UNL GAS 10PPM RDAM FOB SWAP	7L	0	0	-	0	-	1	0.16	777.2%
PROPANE NON-LDH MB (OPIS) BALMO SWP	1S	0	0	-	7.39	-95.5%	22	21.33	5.0%
PROPANE NON-LDH MT. BEL (OPIS) SWP	1R	590	467.86	26.0%	772.74	-23.7%	600	339.98	76.5%
RBOB CALENDAR SWAP	RL	172	377.33	-54.4%	312.22	-44.9%	268	346.05	-22.6%
RBOB CRACK SPREAD	RM	3	30.95	-91.5%	2.61	0.4%	41	46.78	-11.7%
RBOB CRACK SPREAD BALMO S	1E	0	0	-	0	-	0	0	-
RBOB GASOLINE BALMO CLNDR	1D	19	38.81	-51.4%	23.04	-18.2%	48	44.87	7.4%
RBOB PHY	RBL	0	0	-	0	-	0	0	-
RBOB SPREAD (PLATTS) SWAP	RI	0	0	-	0	-	0	0	-
RBOB VS HEATING OIL SWAP	RH	0	9.52	-100.0%	0	-	9	73.9	-88.5%
SAN JUAN BASIS SWAP	NJ	0	0	-	0	-	0	9.76	-97.4%
SAN JUAN PIPE SWAP	XX	0	0	-	0	-	2	0	-
SINGAPORE 180CST BALMO	BS	0	5.24	-90.9%	1.3	-63.5%	2	2.95	-29.5%
SINGAPORE 380CST BALMO	BT	4	17.76	-75.1%	11.35	-61.0%	10	10.94	-9.6%
SINGAPORE 380CST FUEL OIL	SE	370	395.14	-6.4%	262.22	41.1%	396	458.23	-13.5%
SINGAPORE FUEL 180CST CAL	UA	20	40.43	-49.8%	21.83	-7.1%	37	49.24	-25.8%
SINGAPORE FUEL OIL SPREAD	SD	8	6.9	20.7%	5.09	63.8%	27	30.06	-11.3%
SINGAPORE GASOIL	MAF	36	0	-	31.43	13.2%	9	0	-
SINGAPORE GASOIL	MTB	2	1.43	60.0%	0.65	250.5%	2	6.58	-63.7%
SINGAPORE GASOIL	MTS	271	208.67	30.0%	216.57	25.3%	228	227.46	0.3%
SINGAPORE GASOIL	STZ	0	0	-	0	-	19	3.46	435.2%
SINGAPORE GASOIL CALENDAR	GDH	0	0	-	0	-	0	0	-
SINGAPORE GASOIL CALENDAR	GDL	0	0	-	0	-	1	0	-
SINGAPORE GASOIL CALENDAR	GHS	0	0	-	0	-	0	0	-
SINGAPORE GASOIL CALENDAR	MGO	0	0	-	0	-	1	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 16 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
SINGAPORE GASOIL CALENDAR	MSG	6	23.48	-73.6%	16.52	-62.5%	21	13.65	54.2%
SINGAPORE GASOIL CALENDAR	SGG	0	0	-	0	-	1	0	-
SINGAPORE GASOIL SWAP	SG	75	55.38	36.3%	31.78	137.5%	204	385.58	-47.2%
SINGAPORE GASOIL VS ICE	GA	114	1.9	5907.4%	363.91	-68.6%	555	303.76	82.8%
SINGAPORE JET KERO BALMO	BX	0	0	-	0	-	1	2.32	-60.1%
SINGAPORE JET KERO GASOIL	RK	32	10.71	200.0%	13.04	146.4%	150	79.26	89.3%
SINGAPORE JET KEROSENE SW	KS	13	16.67	-21.4%	40.22	-67.4%	57	56.19	1.8%
SINGAPORE JET KERO VS. GASOIL BALMO	Z0	0	0	-	0	-	2	0.22	696.4%
SINGAPORE MOGAS 92 UNLEADED BALMO	1P	2	12.62	-81.1%	16.3	-85.4%	25	7.77	219.9%
SINGAPORE MOGAS 92 UNLEADED SWP	1N	670	440.43	52.1%	641.35	4.4%	655	354.81	84.6%
SINGAPORE NAPHTHA SWAP	SP	0	0	-	0	-	1	0	-
SING FUEL	MSD	0	2.38	-100.0%	0.22	-100.0%	0	0.52	-17.0%
SOCAL PIPE SWAP	XN	0	0	-	0	-	0	0	-
SONAT BASIS SWAP FUTURE	SZ	0	0	-	0	-	0	0	-
SOUTH STAR TEX OKLHM KNS	8Z	0	0	-	0	-	0	0	-
Sumas Basis Swap	NK	0	0	-	0	-	0	27	-98.5%
SUMAS NAT GAS PLATTS FIXED PRICE	DVS	0	0	-	0	-	0	1.32	-100.0%
TC2 ROTTERDAM TO USAC 37K	TM	9	3.81	143.8%	6.09	52.5%	5	0.35	1209.4%
TC5 RAS TANURA TO YOKOHAM	TH	8	0	-	29.57	-74.2%	5	0	-
TCO BASIS SWAP	TC	0	31.76	-100.0%	0	-	0	38.74	-100.0%
TCO NG INDEX SWAP	Q1	0	0	-	0	-	0	0	-
TD3 MEG TO JAPAN 250K MT	TL	243	0	-	132	84.3%	76	0.13	58121.2%
TENNESSEE 500 LEG BASIS S	NM	0	0	-	0	-	0	1.85	-100.0%
TENNESSEE 800 LEG NG BASI	6Z	0	0	-	0	-	0	0	-
TENNESSEE ZONE 0 BASIS SW	NQ	0	23.05	-100.0%	0	-	0	2.1	-100.0%
TETCO M-3 INDEX	IX	0	0	-	0	-	0	0	-
Tetco STX Basis	TX	0	0	-	0	-	0	0	-
TEXAS EASTERN ZONE M-3 BA	NX	0	43.24	-100.0%	0	-	0	41.18	-100.0%
TEXAS GAS ZONE1 NG BASIS	9F	0	0	-	0	-	0	0	-
Transco Zone 3 Basis	CZ	0	0	-	0	-	0	1.31	-100.0%
TRANSCO ZONE 3 NG INDEX S	Y6	0	0	-	0	-	0	27.08	-100.0%
TRANSCO ZONE4 BASIS SWAP	TR	0	0	-	0	-	0	57.31	-100.0%
TRANSCO ZONE 4 NAT GAS IN	B2	0	0	-	0	-	0	2.01	-100.0%
TRANSCO ZONE 6 BASIS SWAP	NZ	0	40.76	-100.0%	0	-	0	16.13	-100.0%
TRANSCO ZONE 6 INDEX	IT	0	0	-	0	-	0	3.71	-100.0%
UCM FUT	UCM	0	1.43	-100.0%	0	-	0	1.28	-79.8%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 17 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Futures</b>									
ULSD 10PPM CIF MED SWAP	Z6	0	0	-	0	-	0	0.13	-100.0%
ULSD 10PPM CIF MED VS ICE	Z7	0	0.71	-100.0%	0	-	0	0.35	-82.8%
ULSD 10PPM CIF NW BALMO S	B1	0	0	-	0	-	0	0.03	-100.0%
ULSD UP-DOWN BALMO SWP	1L	380	322.43	17.7%	291.3	30.3%	276	231.44	19.3%
UP DOWN GC ULSD VS NMX HO	LT	1,670	1,990.57	-16.1%	1,663.96	0.4%	1,563	2,235.81	-30.1%
WAHA BASIS	NW	0	0	-	0	-	14	26.25	-47.4%
WAHA INDEX SWAP FUTURE	IY	0	0	-	0	-	0	0	-
WESTERN RAIL DELIVERY PRB	QP	0	5.71	-100.0%	0	-	0	10.91	-99.0%
WTI-BRENT BULLET SWAP	BY	0	0	-	0	-	29	3.91	632.5%
WTI-BRENT CALENDAR SWAP	BK	874	1,812.19	-51.8%	773.7	13.0%	1,438	906.59	58.6%
WTI CALENDAR	CS	1,769	1,764.52	0.2%	1,763.04	0.3%	1,610	1,757.11	-8.4%
WTS (ARGUS) VS WTI SWAP	FF	149	286.76	-47.9%	264.7	-43.5%	382	256.24	49.3%
WTS (ARGUS) VS WTI TRD MT	FH	6	77.43	-92.6%	31.3	-81.7%	27	43.01	-37.6%
<b>Energy Options</b>									
12 MO GASOIL CAL SWAP SPR	GXZ	0	9.52	-100.0%	0	-	0	3.59	-100.0%
BRENT 1 MONTH CAL	AA	0	0	-	0	-	13	0	-
BRENT CALENDAR SWAP	BA	14	0	-	318.35	-95.7%	58	23.15	150.7%
BRENT CRUDE OIL 12 M CSO	9Y	0	0	-	0	-	9	8.66	-0.4%
BRENT CRUDE OIL 1 M CSO	9C	29	0	-	802.17	-96.4%	1,772	0	-
BRENT CRUDE OIL 6 M CSO	9L	0	0	-	0	-	4	0	-
BRENT OIL LAST DAY	BE	4,974	81.38	6012.1%	1,451.65	242.7%	1,742	161.39	979.5%
BRENT OIL LAST DAY	BZO	8,623	3,259.05	164.6%	17,205.87	-49.9%	8,055	2,018.42	299.1%
BRENT OIL LAST DAY	OS	0	2.29	-100.0%	0	-	5	16.85	-69.6%
COAL API2 INDEX	CLA	8	15.48	-49.2%	13.91	-43.5%	28	44.19	-35.7%
COAL API2 INDEX	CQA	8	0.95	775.0%	1.09	666.6%	16	3.36	369.6%
COAL API2 INDEX	MTC	0	0	-	0	-	0	0.22	-100.0%
COAL API4 INDEX	RLA	0	0	-	0	-	0	0	-
COAL API4 INDEX	RQA	0	1.43	-100.0%	0	-	0	0.13	99.1%
COAL SWAP	CPF	0	0	-	0	-	0	0.78	-100.0%
COAL SWAP	RPF	0	0	-	0	-	0	2.62	-100.0%
CRUDE OIL 1MO	WA	9,678	10,435.24	-7.3%	9,707.39	-0.3%	9,617	8,572.2	12.2%
CRUDE OIL APO	AO	2,529	3,112.62	-18.8%	832.48	203.8%	2,099	2,360.26	-11.1%
CRUDE OIL CALNDR STRIP	6F	0	0	-	0	-	1	0	-

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 18 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG	
<b>Energy Options</b>									
CRUDE OIL OUTRIGHTS	AH	0	0	-	347.83	-100.0%	34	0	-
CRUDE OIL OUTRIGHTS	DBP	0	0	-	0	-	0	0	-
CRUDE OIL OUTRIGHTS	WCI	0	0	-	16.96	-100.0%	2	50.95	-96.7%
CRUDE OIL PHY	CD	0	101.9	-100.0%	65.22	-100.0%	90	135.32	-33.6%
CRUDE OIL PHY	LC	1,179	753.1	56.6%	728.91	61.8%	556	1,076.37	-48.4%
CRUDE OIL PHY	LO	278,740	191,565.05	45.5%	176,576.09	57.9%	177,995	175,606.9	1.4%
CRUDE OIL PHY	LO1	539	781	-30.9%	1,479.3	-63.5%	731	691.6	5.7%
CRUDE OIL PHY	LO2	964	1,247.57	-22.7%	980.87	-1.7%	771	649.49	18.7%
CRUDE OIL PHY	LO3	1,354	633.67	113.6%	594.7	127.6%	582	415.77	40.1%
CRUDE OIL PHY	LO4	1,148	822.9	39.5%	987.04	16.3%	791	777.28	1.8%
CRUDE OIL PHY	LO5	1,044	0	-	0	-	309	231.55	33.3%
ELEC MISO PEAK	9T	0	0	-	0	-	0	3.55	-100.0%
ETHANOL	CE1	0	0	-	0	-	1	0.32	265.0%
ETHANOL	CE3	0	0	-	0	-	1	1.41	-54.0%
ETHANOL SWAP	CVR	150	486.57	-69.1%	164.22	-8.5%	286	291.36	-1.8%
ETHANOL SWAP	GVR	18	3.71	380.8%	0	-	15	7.18	109.8%
EUROPEAN JET KEROSENE NWE (PLATTS)	30	0	0	-	0	-	0	0	-
GASOLINE	GCE	0	0	-	0	-	0	0	-
HEATING OIL CRACK OPTIONS	CH	0	0	-	0	-	0	0.43	-100.0%
HEATING OIL CRK SPD AVG PRICE OPTION	3W	0	0	-	0	-	0	0	-
HEATING OIL PHY	LB	33	0	-	11.74	183.5%	7	11.81	-37.3%
HEATING OIL PHY	OH	2,594	1,632.76	58.9%	1,328.61	95.2%	1,506	1,544.7	-2.5%
HENRY HUB FINANCIAL LAST	E7	194	129.62	49.6%	152.22	27.4%	207	179.21	15.5%
HO 1 MONTH CLNDR OPTIONS	FA	119	0	-	4.35	2638.1%	11	7.36	52.3%
LLS CRUDE OIL	WJO	0	85.71	-100.0%	0	-	0	29.87	-98.6%
LLS CRUDE OIL	YVO	0	0	-	0	-	0	16.23	-100.0%
MCCLOSKEY ARA ARGS COAL	MTO	0	7.14	-100.0%	0	-	1	6.93	-82.0%
MCCLOSKEY RCH BAY COAL	MFO	3	0	-	3.04	9.5%	9	0	-
NATURAL GAS	G10	0	0	-	0	-	0	1.95	-100.0%
NATURAL GAS 1 M CSO FIN	G4	5,864	2,036.43	188.0%	2,204.35	166.0%	2,122	1,865.77	13.7%
NATURAL GAS 2 M CSO FIN	G2	1	95.24	-98.5%	0	-	6	50	-87.7%
NATURAL GAS 3 M CSO FIN	G3	0	1,238.1	-100.0%	8.7	-100.0%	191	633.87	-69.9%
NATURAL GAS 5 M CSO FIN	G5	0	0	-	0	-	11	17.53	-37.3%
NATURAL GAS 6 M CSO FIN	G6	576	314.29	83.3%	252.17	128.5%	416	247.92	67.8%
NATURAL GAS OPTION ON CALENDAR STR	6J	317	138.1	129.7%	185.65	70.8%	148	54.85	169.6%
NATURAL GAS PHY	KD	288	2,513.67	-88.6%	604.96	-52.5%	869	1,973.23	-56.0%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 19 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Options</b>									
NATURAL GAS PHY	LN	141,337	131,364.62	7.6%	111,068.43	27.3%	91,069	107,885.59	-15.6%
NATURAL GAS PHY	ON	20,019	12,521.1	59.9%	10,767.87	85.9%	9,633	9,629.68	0.0%
NATURAL GAS WINTER STRIP	6I	0	0	-	26.09	-100.0%	12	0	-
N ROCKIES PIPE SWAP	ZR	73	0	-	0	-	15	17.45	-12.1%
NY HARBOR HEAT OIL SWP	AT	286	136.81	109.2%	150	90.8%	138	153.16	-9.7%
NYISO ZONE G 5MW PEAK OPTIONS	9U	0	0	-	0	-	0	85.84	-100.0%
NYMEX EUROPEAN GASOIL APO	F7	0	0	-	0	-	0	0	-
PANHANDLE PIPE SWAP	PU	0	0	-	0	-	0	37.4	-100.0%
PETROCHEMICALS	4H	0	30.62	-98.4%	58.57	-99.2%	29	36.48	-21.3%
PETROCHEMICALS	4J	0	0	-	0	-	6	12.75	-54.4%
PETROCHEMICALS	4K	0	0	-	0	-	14	5.19	173.8%
PETROCHEMICALS	CPR	0	0	-	0	-	0	0.08	-100.0%
PETRO OUTRIGHT EURO	8H	0	0	-	0	-	0	1.3	-100.0%
PETRO OUTRIGHT NA	DAP	17	3.43	400.0%	0	-	2	0.31	663.3%
PJM WES HUB PEAK CAL MTH	6OA	4	0	-	11.74	-67.5%	3	17.14	-79.9%
PJM WES HUB PEAK CAL MTH	JOA	0	0	-	0	-	4	0	-
PJM WES HUB PEAK LMP 50MW	PMA	4	37.52	-89.3%	10.96	-63.5%	32	59.81	-46.0%
RBOB 1MO CAL SPD OPTIONS	ZA	0	57.14	-100.0%	0	-	3	29.04	-89.6%
RBOB CALENDAR SWAP	RA	4	2.38	50.0%	3.7	-3.4%	5	12.4	-60.9%
RBOB CRACK	RX	0	0	-	0.09	-100.0%	0	0	-
RBOB PHY	OB	699	650.71	7.4%	873.43	-20.0%	587	1,224.06	-52.1%
RBOB PHY	RF	0	8.33	-100.0%	0	-	1	5.78	-90.7%
ROTTERDAM 3.5%FUEL OIL CL	Q6	0	0	-	0	-	0	0	-
SAN JUAN PIPE SWAP	PJ	0	0	-	1.35	-100.0%	9	14.03	-34.0%
SHORT TERM	C15	0	0	-	21.74	-100.0%	2	0	-
SHORT TERM	U11	0	0	-	0	-	5	25.84	-79.4%
SHORT TERM	U12	38	0	-	6.52	484.1%	8	19.93	-58.9%
SHORT TERM	U13	5	66.76	-92.9%	0	-	2	17.14	-87.4%
SHORT TERM	U14	0	13.1	-100.0%	0	-	4	15.71	-76.3%
SHORT TERM	U15	0	23.81	-100.0%	0	-	3	22.62	-84.8%
SHORT TERM	U22	0	4.76	-100.0%	2.17	-100.0%	5	12.91	-57.6%
SHORT TERM	U23	0	0	-	0	-	4	7.24	-46.5%
SHORT TERM	U24	0	0.24	-100.0%	0	-	4	13.96	-72.9%
SHORT TERM	U25	0	0	-	2.17	-100.0%	1	4.07	-83.9%
SHORT TERM	U26	10	0	-	0	-	3	1.26	104.6%
SHORT TERM NATURAL GAS	U01	0	19.1	-100.0%	0	-	2	16.09	-85.3%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 20 of 21

Commodity		ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>Energy Options</b>									
SHORT TERM NATURAL GAS	U02	0	22.62	-100.0%	58.7	-100.0%	12	17.13	-29.6%
SHORT TERM NATURAL GAS	U03	36	2.52	1315.0%	4.35	721.4%	10	9.84	-0.2%
SHORT TERM NATURAL GAS	U04	0	0	-	16.3	-100.0%	9	5.06	68.1%
SHORT TERM NATURAL GAS	U05	10	0	-	0.43	2090.4%	7	43.9	-84.0%
SHORT TERM NATURAL GAS	U06	0	29.76	-100.0%	0	-	6	37.53	-82.8%
SHORT TERM NATURAL GAS	U07	12	10.24	16.3%	0	-	8	15.15	-47.3%
SHORT TERM NATURAL GAS	U08	0	36.29	-100.0%	4.35	-100.0%	6	22.65	-71.9%
SHORT TERM NATURAL GAS	U09	5	20.62	-76.9%	0	-	7	22.57	-68.8%
SHORT TERM NATURAL GAS	U10	0	17.95	-100.0%	0	-	5	26.1	-79.4%
SHORT TERM NATURAL GAS	U16	0	26.9	-100.0%	0	-	3	30.35	-90.1%
SHORT TERM NATURAL GAS	U17	0	45.62	-100.0%	0	-	10	22.28	-55.6%
SHORT TERM NATURAL GAS	U18	0	0	-	6.52	-100.0%	7	7.35	-4.8%
SHORT TERM NATURAL GAS	U19	0	0	-	4.35	-100.0%	2	19.74	-92.4%
SHORT TERM NATURAL GAS	U20	0	22.71	-100.0%	0	-	6	17.34	-64.6%
SHORT TERM NATURAL GAS	U21	0	23.24	-100.0%	0	-	2	13.9	-88.7%
SHORT TERM NATURAL GAS	U27	0	0	-	0	-	2	8.1	-77.4%
SHORT TERM NATURAL GAS	U28	0	0	-	0	-	0	14.09	-96.9%
SHORT TERM NATURAL GAS	U29	2	15.29	-84.4%	0	-	2	3.27	-32.8%
SHORT TERM NATURAL GAS	U30	0	46.19	-100.0%	0	-	0	20.54	-97.9%
SHORT TERM NATURAL GAS	U31	0	0	-	0	-	0	27.06	-99.6%
SINGAPORE GASOIL CALENDAR	M2	0	0	-	0	-	0	0	-
SINGAPORE JET FUEL CALENDAR	N2	0	0	-	0	-	0	0	-
SOCAL PIPE SWAP	ZN	0	0	-	0	-	0	0	-
WTI-BRENT BULLET SWAP	BV	1,497	3,336.86	-55.1%	1,384.52	8.1%	3,615	2,188.53	65.2%
WTI CRUDE OIL 1 M CSO FI	7A	6,864	6,157.14	11.5%	3,784.78	81.4%	3,737	3,033.83	23.2%
<b>Ag Products Futures</b>									
COCOA TAS	CJ	0	0.05	-100.0%	0	-	0	0.38	-94.3%
COFFEE	KT	0	0.05	-100.0%	0	-	0	0.18	-100.0%
COTTON	TT	0	0.14	-66.7%	0.3	-84.4%	0	0.08	10.0%
SUGAR 11	YO	0	0	-	0	-	0	0.18	37.5%

## NYMEX/COMEX Exchange ADV Report - Monthly

November 2018

Page 21 of 21

Commodity	ADV NOV 2018	ADV NOV 2017	% CHG	ADV OCT 2018	% CHG	ADV Y.T.D 2018	ADV Y.T.D 2017	% CHG
<b>TOTAL FUTURES GROUP</b>								
Ag Products Futures	0	0.24	-80.0%	0.3	-84.4%	0	0.82	-55.7%
Energy Futures	2,634,881	2,313,644.19	13.9%	2,178,401.74	21.0%	2,259,598	2,268,850.76	-0.4%
Metals Futures	568,699	706,775.1	-19.5%	508,690.26	11.8%	597,797	524,296.7	14.0%
<b>TOTAL FUTURES</b>	<b>3,203,581</b>	<b>3,020,419.52</b>	<b>6.1%</b>	<b>2,687,092.3</b>	<b>19.2%</b>	<b>2,857,395.34</b>	<b>2,793,148.28</b>	<b>2.3%</b>
<b>TOTAL OPTIONS GROUP</b>								
Energy Options	491,911	376,258.86	30.7%	345,298.96	42.5%	320,153	324,787.11	-1.4%
Metals Options	55,110	42,548.05	29.5%	62,319.57	-11.6%	57,801	47,015.48	22.9%
<b>TOTAL OPTIONS</b>	<b>547,021</b>	<b>418,806.91</b>	<b>30.6%</b>	<b>407,618.52</b>	<b>34.2%</b>	<b>377,953.95</b>	<b>371,802.59</b>	<b>1.7%</b>
<b>TOTAL COMBINED</b>								
Metals	623,810	749,323.14	-16.8%	571,009.83	9.2%	655,598	571,312.18	14.8%
Energy	3,126,792	2,689,903.05	16.2%	2,523,700.7	23.9%	2,579,751	2,593,637.87	-0.5%
Ag Products	0	0.24	-80.0%	0.3	-84.4%	0	0.82	-55.7%
<b>GRAND TOTAL</b>	<b>3,750,602</b>	<b>3,439,226.43</b>	<b>9.1%</b>	<b>3,094,710.83</b>	<b>21.2%</b>	<b>3,235,349.28</b>	<b>3,164,950.87</b>	<b>2.2%</b>