

## NYMEX/COMEX Exchange Open Interest Report - Monthly

	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
Ag Products Futures						
COCOA TAS	CJ	0	4	-100.0%	0	-
COFFEE	KT	0	0	-	0	-
COTTON	TT	1	1	0.0%	0	-
SUGAR 11	YO	0	0	-	0	-
Energy Futures						
CRUDE OIL PHY	CL	2,115,373	2,463,668	-14.1%	2,059,836	2.7%
CRUDE OIL	WS	286	2,526	-88.7%	286	0.0%
MINY WTI CRUDE OIL	QM	5,353	4,859	10.2%	5,664	-5.5%
BRENT OIL LAST DAY	BZ	211,938	172,294	23.0%	221,956	-4.5%
HEATING OIL PHY	HO	368,303	439,305	-16.2%	364,275	1.1%
HTG OIL	BH	167	269	-37.9%	180	-7.2%
MINY HTG OIL	QH	1	1	0.0%	0	-
RBOB PHY	RB	390,737	383,668	1.8%	394,224	-0.9%
MINY RBOB GAS	QU	0	0	-	0	-
NATURAL GAS	HP	100,806	115,785	-12.9%	102,224	-1.4%
LTD NAT GAS	HH	468,265	389,877	20.1%	489,683	-4.4%
MINY NATURAL GAS	QG	2,302	2,857	-19.4%	2,815	-18.2%
PJM MONTHLY	JM	550	1,516	-63.7%	620	-11.3%
NATURAL GAS PHY	NG	1,233,590	1,438,202	-14.2%	1,264,167	-2.4%
RBOB GAS	RT	88	1,795	-95.1%	96	-8.3%
3.5% FUEL OIL CID MED SWA	7D	88	167	-47.3%	133	-33.8%
3.5% FUEL OIL CIF BALMO S	8D	0	0	-	0	-
AEP-DAYTON HUB DAILY	VD	68	152	-55.3%	68	0.0%
AEP-DAYTON HUB MTHLY	VM	0	70	-100.0%	0	-
AEP-DAYTON HUB OFF-PEAK M	VP	0	50	-100.0%	0	-
ALGON CITY GATES NAT GAS	N7	0	0	-	0	-
ALGONQUIN CITYGATES BASIS	B4	0	90	-100.0%	0	-
ANR LOUISIANA BASIS SWAP	ND	0	0	-	0	-
ANR OKLAHOMA	NE	180	1,703	-89.4%	273	-34.1%
APPALACHIAN COAL (PHY)	QL	0	0	-	0	-
ARGUS LLS VS. WTI (ARG) T	E5	41,645	59,466	-30.0%	39,993	4.1%
ARGUS PROPAN FAR EST INDE	7E	4,846	3,330	45.5%	5,290	-8.4%
ARGUS PROPAN(SAUDI ARAMCO	9N	2,074	918	125.9%	2,448	-15.3%
AUSTRIALIAN COKE COAL	ACT	0	0	-	0	-
AUSTRIALIAN COKE COAL	ALW	72	380	-81.1%	96	-25.0%
BRENT BALMO SWAP	J9	0	0	-	0	-
BRENT CALENDAR SWAP	CY	21,050	15,733	33.8%	21,164	-0.5%
BRENT CFD SWAP	6W	0	0	-	0	-
BRENT FINANCIAL FUTURES	BB	158	3,322	-95.2%	1,158	-86.4%
BRENT FINANCIAL FUTURES	MBC	0	0	-	0	-
BRENT FINANCIAL FUTURES	MDB	0	48	-100.0%	0	-
BRENT OIL LAST DAY	BZL	0	0	0.0%	0	0.0%
BRENT OIL LAST DAY	BZS	0	0	0.0%	0	0.0%
CAISO SP15 EZGNHUB5 MW P	9X	0	0	-	0	-
CAISO SP15 EZGNHUB5 PEAK	9Z	0	0	-	0	-
CANADIAN LIGHT SWEET OIL	CIL	0	77	-100.0%	0	-
CENTERPOINT BASIS SWAP	PW	2,226	9,545	-76.7%	2,769	-19.6%
CENTERPOINT EAST INDEX	II	0	0	-	0	-
CEU ENERGY	DEB	170	0	-	83	104.8%
CEU ENERGY	TTF	190	0	-	283	-32.9%

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<b>Energy Futures</b>						
CEU ENERGY	UKG	265	0	-	60	341.7%
CHICAGO ETHANOL SWAP	CU	49,872	59,409	-16.1%	52,410	-4.8%
CHICAGO ULSD (PLATTS) SWA	4C	0	0	-	0	-
CHICAGO ULSD PL VS HO SPR	5C	2,228	913	144.0%	1,657	34.5%
CHICAGO UNL GAS PL VS RBO	3C	125	3	4,066.7%	0	-
CIG BASIS	CI	6,669	23,054	-71.1%	7,938	-16.0%
CIG ROCKIES NG INDEX SWA	Z8	0	0	-	0	-
CINERGY HUB OFF-PEAK MONT	EJ	10	120	-91.7%	20	-50.0%
CINERGY HUB PEAK MONTH	EM	24	288	-91.7%	48	-50.0%
CIN HUB 5MW D AH O PK	K2	0	150,080	-100.0%	0	0.0%
CIN HUB 5MW D AH PK	H5	2,576	8,278	-68.9%	2,411	6.8%
CIN HUB 5MW REAL TIME O P	H4	149,704	472,840	-68.3%	179,384	-16.5%
CIN HUB 5MW REAL TIME PK	H3	18,374	38,474	-52.2%	20,034	-8.3%
COAL SWAP	ACM	70	160	-56.3%	80	-12.5%
COAL SWAP	SSI	0	0	-	0	-
COLUMB GULF MAINLINE NG B	5Z	773	4,686	-83.5%	615	25.7%
COLUMBIA GULF MAIN NAT G	L2	0	0	-	0	-
COLUMBIA GULF ONSHORE	GL	0	0	-	0	-
CONWAY NATURAL GASOLINE (OPIS) SWAP	8L	1,324	1,106	19.7%	1,356	-2.4%
CONWAY NORMAL BUTANE (OPIS) SWAP	8M	988	1,810	-45.4%	1,309	-24.5%
CONWAY PROPANE 5 DECIMALS SWAP	8K	22,406	16,714	34.1%	24,158	-7.3%
CRUDE OIL	CHB	0	0	-	0	-
CRUDE OIL	LPS	24,170	15,310	57.9%	23,730	1.9%
CRUDE OIL OUTRIGHTS	37	0	0	-	0	-
CRUDE OIL OUTRIGHTS	42	759	432	75.7%	192	295.3%
CRUDE OIL OUTRIGHTS	CC5	300	60	400.0%	210	42.9%
CRUDE OIL OUTRIGHTS	CPD	0	500	-100.0%	0	-
CRUDE OIL OUTRIGHTS	CSN	0	0	-	0	-
CRUDE OIL OUTRIGHTS	CSW	2,135	360	493.1%	2,280	-6.4%
CRUDE OIL OUTRIGHTS	DBL	0	0	-	0	-
CRUDE OIL OUTRIGHTS	FE	0	0	-	0	-
CRUDE OIL OUTRIGHTS	GSW	0	30	-100.0%	0	-
CRUDE OIL OUTRIGHTS	HTT	119,516	66,885	78.7%	121,494	-1.6%
CRUDE OIL OUTRIGHTS	LSW	0	2,325	-100.0%	0	-
CRUDE OIL OUTRIGHTS	SSW	0	60	-100.0%	0	-
CRUDE OIL OUTRIGHTS	UMD	0	600	-100.0%	0	-
CRUDE OIL OUTRIGHTS	UNS	0	1,878	-100.0%	0	-
CRUDE OIL OUTRIGHTS	WCC	0	1,900	-100.0%	0	-
CRUDE OIL OUTRIGHTS	WCW	11,039	23,683	-53.4%	9,396	17.5%
CRUDE OIL PHY	CLL	0	0	0.0%	0	0.0%
CRUDE OIL PHY	HCL	330	0	-	1,233	-73.2%
CRUDE OIL SPRDS	38	205	0	-	410	-50.0%
CRUDE OIL SPRDS	WTT	144,316	99,372	45.2%	144,566	-0.2%
CRUDE OIL TRADE AT MARKER SINGAPORE	CLS	0	0	0.0%	0	0.0%
DAILY PJM	AOR	4,200	20,328	-79.3%	2,400	75.0%
DAILY PJM	IDO	20,848	21,744	-4.1%	23,624	-11.8%
DAILY PJM	NOC	21,672	27,216	-20.4%	12,384	75.0%
DAILY PJM	PAP	345	531	-35.0%	625	-44.8%
DAILY PJM	PEO	3,240	12,232	-73.5%	4,096	-20.9%
DAILY PJM	PNO	20,688	99,568	-79.2%	23,552	-12.2%
DAILY PJM	PNP	1,133	3,483	-67.5%	1,375	-17.6%
DAILY PJM	PWO	20,064	49,560	-59.5%	24,064	-16.6%
DAILY PJM	PWP	939	2,140	-56.1%	1,175	-20.1%

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DAILY PJM	WOR	29,568	46,368	-36.2%	16,320	81.2%
DAILY PJM	ZAO	10,520	10,288	2.3%	14,848	-29.1%
DAILY PJM	ZGO	43,616	33,544	30.0%	29,184	49.5%
DAILY PJM	ZJO	15,760	10,600	48.7%	12,800	23.1%
DATED BRENT (PLATTS) DAILY SWAP	7G	0	0	-	0	-
DATED TO FRONTLINE BRENT	FY	3,415	10,005	-65.9%	3,565	-4.2%
DEMARCO INDEX FUTURE	DI	0	0	-	0	-
DEMARCO SWING SWAP	DT	0	0	-	0	-
DIESEL 10P BRG FOB RDM VS	7X	0	0	-	0	-
DIESEL 10PPM BARGES FOB B	U7	0	0	-	0	-
DLY GAS EURO-BOB OXY	GBR	0	0	-	0	-
DOMINION TRAN INC - APP I	IH	248	2,920	-91.5%	488	-49.2%
DOMINION TRANSMISSION INC	PG	12,962	29,811	-56.5%	13,799	-6.1%
DUBAI CRUDE OIL BALMO	BI	0	50	-100.0%	0	-
DUBAI CRUDE OIL CALENDAR	DC	37,694	10,780	249.7%	40,608	-7.2%
DY EURO 3.5% FUEL OI RDA	FOR	0	0	-	0	-
EASTERN RAIL DELIVERY CSX	QX	0	265	-100.0%	0	-
EAST/WEST FUEL OIL SPREAD	EW	42	65	-35.4%	42	0.0%
EIA FLAT TAX ONHWAY DIESE	A5	1,719	2,779	-38.1%	1,785	-3.7%
ELEC ERCOT DLY OFF PK	I4	0	0	-	0	-
ELEC ERCOT DLY OFF PK	R4	0	0	-	0	-
ELEC ERCOT DLY PEAK	I3	0	0	-	0	-
ELEC ERCOT DLY PEAK	I7	0	0	-	0	-
ELEC ERCOT DLY PEAK	N1	0	0	-	0	-
ELEC ERCOT DLY PEAK	R1	0	0	-	0	-
ELEC ERCOT OFF PEAK	I2	0	0	-	0	-
ELEC FINSETTLED	47	1,064	1,634	-34.9%	1,106	-3.8%
ELEC FINSETTLED	49	0	0	-	0	-
ELEC MISO PEAK	4L	300	3,825	-92.2%	615	-51.2%
ELEC MISO PEAK	55	0	80	-100.0%	0	-
ELEC NYISO OFF-PEAK	4M	6,360	70,200	-90.9%	12,135	-47.6%
ELEC NYISO OFF-PEAK	58	0	1,696	-100.0%	0	-
ELECTRICITY ERCOT PEAK	ERE	0	0	-	0	-
ELECTRICITY OFF PEAK	46	19,552	30,184	-35.2%	20,322	-3.8%
ELECTRICITY OFF PEAK	4P	55,380	0	-	55,380	0.0%
ELECTRICITY OFF PEAK	50	0	0	-	0	-
ELEC WEST POWER OFF-PEAK	MDA	0	0	-	0	-
ELEC WEST POWER PEAK	MDC	0	0	-	0	-
EL PASO PERMIAN INDEX SWA	IL	0	0	-	0	-
ERCOT DAILY 5MW PEAK	ERW	0	0	-	0	-
ERCOT HOUSTON Z MCPE 5MW PEAK SWAP	I1	0	3,880	-100.0%	0	-
ERCOT NORTH ZMCPE 5MW OFFPEAK	I8	0	8,400	-100.0%	0	-
ERCOT NORTH ZMCPE 5MW OFFPEAK SWAP	I6	0	155,520	-100.0%	0	-
ERCOT NORTH ZMCPE 5MW PEAK	I5	0	5,980	-100.0%	0	-
ETHANOL	Z1B	5	0	-	0	-
ETHANOL SWAP	MT2	400	0	-	390	2.6%
ETHANOL T2 FOB ROTT INCL DUTY SWAP	Z1	5,984	5,988	-0.1%	6,224	-3.9%
EURO 1% FUEL OIL NEW BALM	KX	0	0	-	0	-
EURO 3.5% FUEL OIL RDAM B	KR	98	171	-42.7%	235	-58.3%
EURO 3.5% FUEL OIL SPREAD	FK	43	379	-88.7%	46	-6.5%
EURO-DENOMINATED PETRO PROD	NCP	0	0	-	0	-
EURO GASOIL 10 CAL SWAP	GT	0	0	-	0	-
EURO GASOIL 10PPM VS ICE	ET	82	245	-66.5%	104	-21.2%

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<b>Energy Futures</b>						
EUROPE 1% FUEL OIL NWE CA	UF	241	53	354.7%	258	-6.6%
EUROPE 1% FUEL OIL RDAM C	UH	3	0	-	3	0.0%
EUROPE 3.5% FUEL OIL MED	UI	95	571	-83.4%	186	-48.9%
EUROPE 3.5% FUEL OIL RDAM	UV	9,061	10,475	-13.5%	9,559	-5.2%
EUROPEAN GASOIL (ICE)	7F	113	858	-86.8%	222	-49.1%
EUROPEAN NAPHTHA BALMO	KZ	40	267	-85.0%	184	-78.3%
EUROPEAN NAPHTHA CRACK SPR	EN	16,059	11,481	39.9%	18,168	-11.6%
EUROPE DATED BRENT SWAP	UB	4,500	662	579.8%	4,720	-4.7%
EUROPE JET KERO NWE CALSW	UJ	27	54	-50.0%	30	-10.0%
EUROPE NAPHTHA CALSWAP	UN	3,406	2,732	24.7%	4,144	-17.8%
EURO PROPANE CIF ARA SWA	PS	1,990	1,358	46.5%	2,160	-7.9%
FL GAS ZONE 3 NAT GAS IND	Q9	0	0	-	0	-
FLORIDA GAS ZONE3 BASIS S	FP	0	0	-	0	-
FREIGHT MARKETS	FLP	1,026	599	71.3%	1,223	-16.1%
FREIGHT MARKETS	FRC	115	0	-	170	-32.4%
FREIGHT MARKETS	FRS	0	50	-100.0%	0	-
FREIGHT MARKETS	T2D	2,700	0	-	2,620	3.1%
FREIGHT MARKETS	TC6	0	0	-	0	-
FREIGHT MARKETS	TD3	10	0	-	20	-50.0%
FREIGHT MARKETS	TD8	150	0	-	150	0.0%
FUEL OIL CRACK VS ICE	FO	8,660	14,030	-38.3%	9,823	-11.8%
FUEL OIL NWE CRACK VS ICE	FI	171	0	-	171	0.0%
FUEL OIL (PLATS) CAR CM	1W	14	3	366.7%	28	-50.0%
FUEL OIL (PLATS) CAR CN	1X	25	0	-	50	-50.0%
FUELOIL SWAP:CARGOES VS.B	FS	889	831	7.0%	674	31.9%
GAS EURO-BOB OXY NWE BARGES	7H	5,912	3,663	61.4%	5,919	-0.1%
GAS EURO-BOB OXY NWE BARGES CRK	7K	30,947	27,644	11.9%	33,497	-7.6%
GASOIL 0.1 BRGS FOB VS IC	6V	0	0	-	0	-
GASOIL 0.1 CIF MED SWAP	Z4	0	0	-	0	-
GASOIL 0.1CIF MED VS ICE	Z5	0	5	-100.0%	0	-
GASOIL 0.1 CIF NWE VS ISE	TU	0	0	-	0	-
GASOIL 0.1 CIF VS ICE GAS	8W	0	0	-	0	-
GASOIL 0.1 CRG CIF NW VS	4V	0	0	-	0	-
GASOIL 0.1 RDAM BRGS VS I	WQ	12	204	-94.1%	24	-50.0%
GASOIL 0.1 ROTTERDAM BARG	VL	46	60	-23.3%	71	-35.2%
GASOIL 10P CRG CIF NW VS	3V	0	0	-	0	-
GASOIL 10PPM CARGOES CIF	TY	0	0	-	0	-
GASOIL 10PPM VS ICE SWAP	TP	59	657	-91.0%	97	-39.2%
GASOIL BULLET SWAP	BG	0	0	-	0	-
GASOIL CALENDAR SWAP	GX	8	8	0.0%	10	-20.0%
GASOIL CRACK SPREAD CALEN	GZ	15,272	19,382	-21.2%	16,830	-9.3%
GASOIL MINI CALENDAR SWAP	QA	1,314	514	155.6%	1,382	-4.9%
GASOLINE UP-DOWN BALMO SW	1K	0	0	-	0	-
GROUP THREE ULSD (PLATTS)	A7	51	25	104.0%	70	-27.1%
GROUP THREE UNLEAD GAS (P	A9	125	0	-	175	-28.6%
GRP THREE ULSD(PLT)VS HEA	A6	6,430	12,997	-50.5%	7,474	-14.0%
GRP THREE UNL GS (PLT) VS	A8	5,114	4,435	15.3%	4,759	7.5%
GULF COAST 3% FUEL OIL BA	VZ	436	4,130	-89.4%	703	-38.0%
GULF COAST GASOLINE CLNDR	GS	0	0	-	0	-
GULF COAST JET FUEL CLNDR	GE	898	911	-1.4%	869	3.3%
GULF COAST JET VS NYM 2 H	ME	25,090	27,091	-7.4%	28,964	-13.4%
GULF COAST NO.6 FUEL OIL	MF	36,847	46,449	-20.7%	35,511	3.8%
GULF COAST NO.6 FUEL OIL	MG	3,419	6,442	-46.9%	3,782	-9.6%

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<b>Energy Futures</b>						
GULF COAST ULSD CALENDAR	LY	1,654	2,091	-20.9%	1,638	1.0%
GULF COAST ULSD CRACK SPR	GY	635	760	-16.4%	685	-7.3%
HEATING OIL BALMO CLNDR S	1G	0	161	-100.0%	0	-
HEATING OIL CRCK SPRD BAL	1H	0	0	-	0	-
HEATING OIL PHY	HOL	0	0	0.0%	0	0.0%
HENRY HUB BASIS SWAP	HB	10,120	3,172	219.0%	10,244	-1.2%
HENRY HUB FINANCIAL LAST	NBP	0	38	-100.0%	0	-
HENRY HUB FINANCIAL LAST	TTE	0	36	-100.0%	3	-100.0%
HENRY HUB INDEX SWAP FUTU	IN	10,120	1,929	424.6%	16,720	-39.5%
HENRY HUB SWAP	NN	1,053,368	1,232,637	-14.5%	1,034,914	1.8%
HENRY HUB SWING FUTURE	SN	0	0	-	0	-
HOUSTON SHIP CHANNEL BASI	NH	11,324	18,651	-39.3%	11,789	-3.9%
HOUSTON SHIP CHANNEL INDE	IP	0	0	-	0	-
HUSTN SHIP CHNL PIPE SWP	XJ	0	0	-	0	-
ICE BRENT DUBAI SWAP	DB	36,755	45,877	-19.9%	40,144	-8.4%
ICE GASOIL BALMO SWAP	U9	0	0	-	0	-
IN DELIVERY MONTH EUA	6T	0	3,698	-100.0%	2,450	-100.0%
INDIANA MISO	FAD	5,880	27,496	-78.6%	18,200	-67.7%
INDIANA MISO	FTD	11,760	10,416	12.9%	6,720	75.0%
INDIANA MISO	FTM	0	0	-	0	-
INDIANA MISO	PDD	690	1,432	-51.8%	1,294	-46.7%
INDIANA MISO	PDM	0	0	-	0	-
INDIANA MISO	PTD	581	539	7.8%	498	16.7%
INDIANA MISO	PTM	0	0	-	0	-
INDONESIAN COAL	MCC	0	0	-	0	-
INDONESIAN COAL ICI4	ICI	110	0	-	260	-57.7%
ISO NEW ENGLAND OFF-PEAK	KI	0	14	-100.0%	0	-
ISO NEW ENGLAND PK LMP	NI	0	17	-100.0%	0	-
JAPAN C&F NAPHTHA CRACK S	JB	186	2,105	-91.2%	251	-25.9%
JAPAN C&F NAPHTHA SWAP	JA	2,180	2,032	7.3%	2,656	-17.9%
JAPAN NAPHTHA BALMO SWAP	E6	9	8	12.5%	20	-55.0%
JET AV FUEL (P) CAR FM ICE GAS SWAP	1V	2	29	-93.1%	4	-50.0%
JET BARGES VS ICE GASOIL	JR	0	0	-	0	-
JET CIF NWE VS ICE	JC	377	542	-30.4%	360	4.7%
JET FUEL BRG FOB RDM VS I	9Q	0	0	-	0	-
JET FUEL CRG CIF NEW VS I	6X	0	0	-	0	-
JET FUEL UP-DOWN BALMO CL	1M	4,730	3,565	32.7%	5,075	-6.8%
LA CARB DIESEL (OPIS)	LX	0	0	-	0	-
LA CARB DIESEL (OPIS) SWA	KL	399	250	59.6%	340	17.4%
LA CARBOB GASOLINE(OPIS)S	JL	700	625	12.0%	810	-13.6%
LA JET FUEL VS NYM NO 2 H	MQ	0	0	-	0	-
LA JET (OPIS) SWAP	JS	1,429	1,750	-18.3%	1,689	-15.4%
LLS (ARGUS) CALENDAR SWAP	XA	521	0	-	542	-3.9%
LLS (ARGUS) VS WTI SWAP	WJ	31,924	23,148	37.9%	32,865	-2.9%
LOS ANGELES CARB GASOLINE	MH	10	0	-	10	0.0%
MARS (ARGUS) VS WTI SWAP	YX	3,890	8,289	-53.1%	5,990	-35.1%
MARS (ARGUS) VS WTI TRD M	YV	23,535	26,245	-10.3%	20,520	14.7%
MARS BLEND CRUDE OIL	MB	0	1,520	-100.0%	0	-
MCCLOSKEY ARA ARGS COAL	MTF	27,091	48,653	-44.3%	28,906	-6.3%
MCCLOSKEY RCH BAY COAL	MFF	3,148	5,743	-45.2%	3,467	-9.2%
MGF FUT	MGF	40	38	5.3%	50	-20.0%
MGN1 SWAP FUT	MGN	402	291	38.1%	374	7.5%
MICHCON NG INDEX SWAP	Y8	0	0	-	0	-

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Commodity		Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>						
MICHIGAN BASIS	NF	2,128	5,355	-60.3%	2,413	-11.8%
MICHIGAN MISO	HMO	2,968	51,840	-94.3%	5,656	-47.5%
MICHIGAN MISO	HMW	140	2,885	-95.1%	287	-51.2%
MINI GAS EUROBOB OXY NWE ARGS BALMO	MEB	104	668	-84.4%	347	-70.0%
MINI RBOB V. EBOBARG NWE BRGS BALMO	MXR	358	120	198.3%	0	-
MINI RBOB V. EBOB(ARGUS) NWE BRGS	MXB	2,851	2,139	33.3%	3,172	-10.1%
MJC FUT	MJC	350	650	-46.2%	365	-4.1%
MNC FUT	MNC	5,994	3,448	73.8%	7,315	-18.1%
MONT BELVIEU ETHANE 5 DECIMAL	C0	42,694	57,105	-25.2%	40,260	6.0%
MONT BELVIEU ETHANE OPIS BALMO	8C	210	335	-37.3%	80	162.5%
MONT BELVIEU LDH PROPANE 5 DECIMAL	B0	117,906	114,064	3.4%	127,330	-7.4%
MONT BELVIEU LDH PROPANE OPIS BALMO	8O	2,197	1,292	70.0%	1,806	21.7%
MONT BELVIEU NATURAL GASOLINE 5 DEC	7Q	19,319	17,416	10.9%	20,996	-8.0%
MONT BELVIEU NATURAL GASOLINE BALMO	R0	565	323	74.9%	40	1,312.5%
MONT BELVIEU NORMAL BUTANE 5 DECIMAL	D0	41,891	41,503	0.9%	48,111	-12.9%
MONT BELVIEU NORMAL BUTANE BALMO	8J	851	613	38.8%	790	7.7%
NAT GAS BASIS SWAP	TZ6	2,555	5,835	-56.2%	2,803	-8.8%
NATURAL GAS	HBI	0	0	-	0	-
NATURAL GAS	XIC	0	12	-100.0%	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	CFS	0	0	-	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	DSF	0	0	-	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	MFS	0	0	-	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	PFS	0	0	-	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	WFS	0	0	-	0	-
NATURAL GAS FIXED PRICE SWAP FUTURES	ZTS	0	0	-	0	-
NATURAL GAS INDEX	TZI	0	0	-	0	-
NATURAL GAS PEN SWP	NP	151,155	183,405	-17.6%	165,463	-8.6%
NEPOOL CNCTCT 5MW D AH O	P3	0	424	-100.0%	0	-
NEPOOL CONECTIC 5MW D AH	P2	0	20	-100.0%	0	-
NEPOOL INTR HUB 5MW D AH	H2	425,144	502,264	-15.4%	438,472	-3.0%
NEPOOL INTR HUB 5MW D AH	U6	25,124	35,588	-29.4%	26,092	-3.7%
NEPOOL NE MASS 5MW D AH O	P8	14,040	14,040	0.0%	14,040	0.0%
NEPOOL NE MASS 5MW D AH P	P7	765	765	0.0%	765	0.0%
NEPOOL NEW HAMP 5MW D AH	U2	0	0	-	0	-
NEPOOL NEW HAMP 5MW D AH	U3	0	0	-	0	-
NEPOOL RHD ISLD 5MW D AH	U4	0	100	-100.0%	0	-
NEPOOL RHODE IL 5MW D AH	U5	0	2,120	-100.0%	0	-
NEPOOL SE MASS 5MW D AH O	P5	0	0	-	0	-
NEPOOL SE MASS 5MW D AH P	P4	0	0	-	0	-
NEPOOL W CNT MASS 5MW D A	L9	0	848	-100.0%	0	-
NEPOOL W CNTR M 5MW D AH	R6	0	40	-100.0%	0	-
NEW ENGLAND HUB PEAK DAIL	CE	1,782	1,694	5.2%	2,239	-20.4%
NEW YORK ETHANOL SWAP	EZ	923	2,090	-55.8%	1,002	-7.9%
NEW YORK HUB ZONE G PEAK	GN	1,716	1,881	-8.8%	2,232	-23.1%
NEW YORK HUB ZONE J PEAK	JN	990	1,221	-18.9%	620	59.7%
NGPL MID-CONTINENT	NL	15,350	22,143	-30.7%	16,527	-7.1%
NGPL MIDCONTINENT INDEX	IW	0	0	-	0	-
NGPL MIDCONTINENT SWING S	PX	0	0	-	0	-
NGPL TEX/OK	PD	28,501	21,876	30.3%	28,866	-1.3%
NGPL TEXOK INDEX	OI	0	0	-	0	-
N ILLINOIS HUB DAILY	UD	178	240	-25.8%	178	0.0%
N ILLINOIS HUB MTHLY	UM	0	20	-100.0%	0	-
NO 2 UP-DOWN SPREAD CALEN	UT	150	100	50.0%	0	-



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<b>Energy Futures</b>						
NORTHERN NATURAL GAS DEMAR	PE	428	1,896	-77.4%	436	-1.8%
NORTHERN NATURAL GAS VENTU	PF	1,344	1,494	-10.0%	1,364	-1.5%
NORTHERN ILLINOIS OFF-PEA	UO	0	0	-	0	-
NORTHWEST ROCKIES BASIS S	NR	16,579	38,605	-57.1%	18,346	-9.6%
N ROCKIES PIPE SWAP	XR	59	181	-67.4%	59	0.0%
NY1% VS GC SPREAD SWAP	VR	3,240	5,218	-37.9%	2,070	56.5%
NY 2.2% FUEL OIL (PLATTS	Y3	0	0	-	0	-
NY 3.0% FUEL OIL (PLATTS	H1	110	150	-26.7%	100	10.0%
NY HARBOR 1% FUEL OIL BAL	VK	0	0	-	0	-
NY HARBOR HEAT OIL SWP	MP	11,031	6,837	61.3%	13,450	-18.0%
NY HARBOR LOW SULPUR GAS 1000MBBL	NLS	700	390	79.5%	815	-14.1%
NY HARBOR RESIDUAL FUEL 1	MM	2,129	4,048	-47.4%	1,883	13.1%
NY HARBOR RESIDUAL FUEL C	ML	50	0	-	50	0.0%
NYH NO 2 CRACK SPREAD CAL	HK	3,552	4,888	-27.3%	3,777	-6.0%
NY H OIL PLATTS VS NYMEX	YH	0	0	-	0	-
NYISO A	KA	0	0	-	0	-
NYISO A OFF-PEAK	KB	0	0	-	0	-
NYISO CAPACITY	LHV	676	397	70.3%	604	11.9%
NYISO CAPACITY	NNC	338	1,116	-69.7%	385	-12.2%
NYISO CAPACITY	NRS	370	2,142	-82.7%	436	-15.1%
NYISO G	KG	0	0	-	0	-
NYISO G OFF-PEAK	KH	0	0	-	0	-
NYISO J	KJ	0	100	-100.0%	0	-
NYISO J OFF-PEAK	KK	0	30	-100.0%	0	-
NYISO ZONE A 5MW D AH O P	K4	32,571	69,392	-53.1%	38,451	-15.3%
NYISO ZONE A 5MW D AH PK	K3	3,615	7,354	-50.8%	4,165	-13.2%
NYISO ZONE C 5MW D AH O P	A3	0	0	-	0	-
NYISO ZONE C 5MW D AH PK	Q5	0	0	-	0	-
NYISO ZONE G 5MW D AH O P	D2	528,699	529,585	-0.2%	563,195	-6.1%
NYISO ZONE G 5MW D AH PK	T3	20,243	23,750	-14.8%	21,167	-4.4%
NYISO ZONE J 5MW D AH O P	D4	142,656	261,616	-45.5%	154,416	-7.6%
NYISO ZONE J 5MW D AH PK	D3	11,281	18,191	-38.0%	12,051	-6.4%
NY JET FUEL (PLATTS) HEAT OIL SWAP	1U	0	0	-	0	-
NYMEX ALUMINUM FUTURES	AN	913	726	25.8%	1,023	-10.8%
NYMEX ULSD VS NYMEX HO	UY	0	0	-	0	-
NY ULSD (ARGUS) VS HEATING OIL	7Y	90	608	-85.2%	129	-30.2%
ONEOK OKLAHOMA NG BASIS	8X	0	730	-100.0%	62	-100.0%
ONTARIO POWER SWAPS	OFD	0	1,680	-100.0%	0	-
ONTARIO POWER SWAPS	OFM	0	0	-	0	-
ONTARIO POWER SWAPS	OPD	0	35	-100.0%	0	-
ONTARIO POWER SWAPS	OPM	0	0	-	0	-
PANHANDLE BASIS SWAP FUTU	PH	4,753	13,659	-65.2%	5,478	-13.2%
PANHANDLE INDEX SWAP FUTU	IV	0	0	-	0	-
PANHANDLE PIPE SWAP	XH	0	2,796	-100.0%	197	-100.0%
PERMIAN BASIS SWAP	PM	4,812	9,916	-51.5%	5,060	-4.9%
PETROCHEMICALS	22	116	209	-44.5%	103	12.6%
PETROCHEMICALS	32	84	66	27.3%	51	64.7%
PETROCHEMICALS	3NA	44	0	-	11	300.0%
PETROCHEMICALS	51	1	0	-	2	-50.0%
PETROCHEMICALS	8I	4,449	4,593	-3.1%	5,034	-11.6%
PETROCHEMICALS	91	697	1,112	-37.3%	856	-18.6%
PETROCHEMICALS	HPE	0	0	-	0	-
PETROCHEMICALS	JKM	4,436	900	392.9%	5,226	-15.1%

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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>						
PETROCHEMICALS	LPE	0	0	-	0	-
PETROCHEMICALS	MAA	0	0	-	0	-
PETROCHEMICALS	MAC	0	0	-	0	-
PETROCHEMICALS	MAE	770	160	381.3%	828	-7.0%
PETROCHEMICALS	MAS	379	40	847.5%	439	-13.7%
PETROCHEMICALS	MBE	515	285	80.7%	635	-18.9%
PETROCHEMICALS	MNB	2,738	3,886	-29.5%	3,456	-20.8%
PETROCHEMICALS	MPS	407	110	270.0%	358	13.7%
PETRO CRCKS & SPRDS ASIA	JNC	0	50	-100.0%	0	-
PETRO CRCKS & SPRDS ASIA	STI	0	0	-	0	-
PETRO CRCKS & SPRDS ASIA	STR	690	0	-	300	130.0%
PETRO CRCKS & SPRDS ASIA	STS	257	1,315	-80.5%	394	-34.8%
PETRO CRCKS & SPRDS NA	CRB	10,465	1,098	853.1%	9,490	10.3%
PETRO CRCKS & SPRDS NA	EXR	3,314	3,324	-0.3%	3,495	-5.2%
PETRO CRCKS & SPRDS NA	FOC	500	1,115	-55.2%	650	-23.1%
PETRO CRCKS & SPRDS NA	GBB	1,935	650	197.7%	440	339.8%
PETRO CRCKS & SPRDS NA	GCC	265	50	430.0%	290	-8.6%
PETRO CRCKS & SPRDS NA	GCI	1,731	2,372	-27.0%	1,924	-10.0%
PETRO CRCKS & SPRDS NA	GCM	0	0	-	0	-
PETRO CRCKS & SPRDS NA	GCU	21,846	20,693	5.6%	19,993	9.3%
PETRO CRCKS & SPRDS NA	GFC	0	20	-100.0%	0	-
PETRO CRCKS & SPRDS NA	HOB	4,368	10,438	-58.2%	4,714	-7.3%
PETRO CRCKS & SPRDS NA	KSD	0	0	-	0	-
PETRO CRCKS & SPRDS NA	MFR	0	0	-	0	-
PETRO CRCKS & SPRDS NA	NFG	0	0	-	0	-
PETRO CRCKS & SPRDS NA	NYF	0	375	-100.0%	0	-
PETRO CRCKS & SPRDS NA	NYH	0	0	-	0	-
PETRO CRCKS & SPRDS NA	RBB	8,259	17,032	-51.5%	10,561	-21.8%
PETRO CRCKS & SPRDS NA	RVG	17,501	14,169	23.5%	19,304	-9.3%
PETRO CRCKS & SPRDS NA	SF3	38	9	322.2%	64	-40.6%
PETRO CRK&SPRD EURO	1NB	2,310	1,987	16.3%	2,715	-14.9%
PETRO CRK&SPRD EURO	1ND	0	275	-100.0%	0	-
PETRO CRK&SPRD EURO	43	0	123	-100.0%	0	-
PETRO CRK&SPRD EURO	BFR	0	0	-	0	-
PETRO CRK&SPRD EURO	BOB	3,725	3,654	1.9%	3,998	-6.8%
PETRO CRK&SPRD EURO	EGB	0	0	-	0	-
PETRO CRK&SPRD EURO	EGN	0	0	-	0	-
PETRO CRK&SPRD EURO	EOB	30	18	66.7%	45	-33.3%
PETRO CRK&SPRD EURO	EPN	1,564	1,272	23.0%	1,792	-12.7%
PETRO CRK&SPRD EURO	EVC	4,151	7,272	-42.9%	4,495	-7.7%
PETRO CRK&SPRD EURO	FBT	0	0	-	0	-
PETRO CRK&SPRD EURO	FVB	30	0	-	30	0.0%
PETRO CRK&SPRD EURO	GCB	300	0	-	0	-
PETRO CRK&SPRD EURO	GOC	24	28	-14.3%	24	0.0%
PETRO CRK&SPRD EURO	MGB	110	80	37.5%	110	0.0%
PETRO CRK&SPRD EURO	MUD	23	177	-87.0%	46	-50.0%
PETRO CRK&SPRD EURO	NBB	0	5	-100.0%	0	-
PETRO CRK&SPRD EURO	NOB	3,413	1,924	77.4%	3,687	-7.4%
PETRO CRK&SPRD EURO	SFB	0	0	-	0	-
PETROLEUM PRODUCTS	D46	0	0	-	0	-
PETROLEUM PRODUCTS	EWB	0	0	-	0	-
PETROLEUM PRODUCTS	EWG	9,077	7,501	21.0%	9,527	-4.7%
PETROLEUM PRODUCTS	MBS	0	0	-	0	-



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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>						
PETROLEUM PRODUCTS	MGS	0	0	-	0	-
PETROLEUM PRODUCTS	MHE	0	0	-	0	-
PETROLEUM PRODUCTS	MME	30	30	0.0%	30	0.0%
PETROLEUM PRODUCTS	MPE	0	18	-100.0%	0	-
PETROLEUM PRODUCTS	VU	0	171	-100.0%	295	-100.0%
PETROLEUM PRODUCTS ASIA	E6M	0	0	-	0	-
PETROLEUM PRODUCTS ASIA	MJN	2,176	1,794	21.3%	2,464	-11.7%
PETROLEUM PRODUCTS ASIA	MSB	0	0	-	0	-
PETRO OUTRIGHT EURO	OB	50	20	150.0%	40	25.0%
PETRO OUTRIGHT EURO	OC	0	0	-	0	-
PETRO OUTRIGHT EURO	OD	4,005	4,653	-13.9%	4,125	-2.9%
PETRO OUTRIGHT EURO	OE	11	33	-66.7%	0	-
PETRO OUTRIGHT EURO	OF	739	694	6.5%	753	-1.9%
PETRO OUTRIGHT EURO	1T	27	54	-50.0%	30	-10.0%
PETRO OUTRIGHT EURO	33	0	12	-100.0%	0	-
PETRO OUTRIGHT EURO	5L	22	0	-	40	-45.0%
PETRO OUTRIGHT EURO	63	0	82	-100.0%	40	-100.0%
PETRO OUTRIGHT EURO	6L	0	0	-	0	-
PETRO OUTRIGHT EURO	7I	0	50	-100.0%	74	-100.0%
PETRO OUTRIGHT EURO	7R	77	152	-49.3%	68	13.2%
PETRO OUTRIGHT EURO	88	0	0	-	20	-100.0%
PETRO OUTRIGHT EURO	CBB	0	0	-	25	-100.0%
PETRO OUTRIGHT EURO	CGB	0	0	-	0	-
PETRO OUTRIGHT EURO	CPB	110	507	-78.3%	87	26.4%
PETRO OUTRIGHT EURO	EFF	10	13	-23.1%	63	-84.1%
PETRO OUTRIGHT EURO	EFM	0	0	-	0	-
PETRO OUTRIGHT EURO	ENS	55	250	-78.0%	70	-21.4%
PETRO OUTRIGHT EURO	ESB	0	0	-	0	-
PETRO OUTRIGHT EURO	EWN	1,014	1,097	-7.6%	1,255	-19.2%
PETRO OUTRIGHT EURO	FBD	0	0	-	0	-
PETRO OUTRIGHT EURO	FLB	0	0	-	0	-
PETRO OUTRIGHT EURO	GES	0	0	-	0	-
PETRO OUTRIGHT EURO	MBB	0	0	-	50	-100.0%
PETRO OUTRIGHT EURO	MBN	2,624	1,978	32.7%	2,385	10.0%
PETRO OUTRIGHT EURO	MEF	1,033	0	-	973	6.2%
PETRO OUTRIGHT EURO	SMU	63	0	-	126	-50.0%
PETRO OUTRIGHT EURO	T0	27	197	-86.3%	45	-40.0%
PETRO OUTRIGHT EURO	ULB	0	0	-	0	-
PETRO OUTRIGHT EURO	V0	80	25	220.0%	160	-50.0%
PETRO OUTRIGHT EURO	W0	0	0	-	0	-
PETRO OUTRIGHT EURO	X0	0	0	-	0	-
PETRO OUTRIGHT NA	FCB	0	0	-	0	-
PETRO OUTRIGHT NA	FOM	0	0	-	0	-
PETRO OUTRIGHT NA	GBA	0	0	-	0	-
PETRO OUTRIGHT NA	GUD	0	0	-	0	-
PETRO OUTRIGHT NA	JE	75	370	-79.7%	108	-30.6%
PETRO OUTRIGHT NA	JET	1,865	1,359	37.2%	2,540	-26.6%
PETRO OUTRIGHT NA	JTB	400	125	220.0%	900	-55.6%
PETRO OUTRIGHT NA	MBL	20	84	-76.2%	25	-20.0%
PETRO OUTRIGHT NA	MEN	94	100	-6.0%	348	-73.0%
PETRO OUTRIGHT NA	MEO	2,840	4,091	-30.6%	3,810	-25.5%
PETRO OUTRIGHT NA	MFD	0	44	-100.0%	0	-
PETRO OUTRIGHT NA	MMF	101	90	12.2%	135	-25.2%

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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>						
PETRO OUTRIGHT NA	NYT	0	0	-	0	-
PETRO OUTRIGHT NA	XER	0	0	-	0	-
PJM AD HUB 5MW REAL TIME	V3	230,652	324,547	-28.9%	241,252	-4.4%
PJM AD HUB 5MW REAL TIME	Z9	19,339	21,203	-8.8%	19,179	0.8%
PJM AECO DA OFF-PEAK	X1	0	0	-	0	-
PJM AECO DA PEAK	Y1	0	0	-	0	-
PJM APS ZONE DA OFF-PEAK	W4	0	0	-	0	-
PJM APS ZONE DA PEAK	S4	0	0	-	0	-
PJM ATSI ELEC	MOD	0	27,590	-100.0%	0	-
PJM ATSI ELEC	MPD	0	1,470	-100.0%	0	-
PJM BGE DA OFF-PEAK	R3	848	21,035	-96.0%	1,618	-47.6%
PJM BGE DA PEAK	E3	40	1,145	-96.5%	82	-51.2%
PJM COMED 5MW D AH O PK	D9	2,120	25,520	-91.7%	4,045	-47.6%
PJM COMED 5MW D AH PK	D8	100	1,375	-92.7%	205	-51.2%
PJM DAILY	JD	782	946	-17.3%	622	25.7%
PJM DAYTON DA OFF-PEAK	R7	68,160	124,171	-45.1%	70,120	-2.8%
PJM DAYTON DA PEAK	D7	4,900	10,350	-52.7%	5,120	-4.3%
PJM JCPL DA OFF-PEAK	F2	0	0	-	0	-
PJM JCPL DA PEAK	J2	0	0	-	0	-
PJM NI HUB 5MW REAL TIME	B3	10,770	31,385	-65.7%	11,710	-8.0%
PJM NI HUB 5MW REAL TIME	B6	88,920	689,290	-87.1%	143,616	-38.1%
PJM NILL DA OFF-PEAK	L3	145,792	494,366	-70.5%	159,120	-8.4%
PJM NILL DA PEAK	N3	9,087	27,373	-66.8%	9,945	-8.6%
PJM OFF-PEAK LMP SWAP FUT	JP	40	538	-92.6%	80	-50.0%
PJM PECO ZONE5MW PEAK CAL MO DAY AH	4N	2,960	0	-	2,960	0.0%
PJM PPL DA OFF-PEAK	F5	0	0	-	0	-
PJM PPL DA PEAK	L5	0	0	-	0	-
PJM PSEG DA OFF-PEAK	W6	90,455	70,100	29.0%	92,380	-2.1%
PJM PSEG DA PEAK	L6	4,235	2,540	66.7%	4,235	0.0%
PJM WES HUB PEAK LMP 50 M	4S	0	0	-	0	-
PJM WESTH DA OFF-PEAK	E4	185,580	374,567	-50.5%	198,124	-6.3%
PJM WESTHDA PEAK	J4	10,090	21,150	-52.3%	10,794	-6.5%
PJM WESTH RT OFF-PEAK	N9	983,772	2,024,410	-51.4%	1,057,700	-7.0%
PJM WESTH RT PEAK	L1	133,833	148,383	-9.8%	62,667	113.6%
PLASTICS	PGP	2,184	1,112	96.4%	1,984	10.1%
PREMIUM UNLD 10P FOB MED	3G	713	343	107.9%	537	32.8%
PREMIUM UNLEAD 10PPM FOB	8G	0	0	-	5	-100.0%
PREM UNL GAS 10PPM RDAM FOB BALMO	7N	0	0	-	3	-100.0%
PREM UNL GAS 10PPM RDAM FOB SWAP	7L	82	0	-	104	-21.2%
PROPANE NON-LDH MB (OPIS) BALMO SWP	1S	1,757	325	440.6%	7	25,000.0%
PROPANE NON-LDH MT. BEL (OPIS) SWP	1R	57,921	28,591	102.6%	60,778	-4.7%
RBOB CALENDAR SWAP	RL	13,995	13,671	2.4%	17,042	-17.9%
RBOB CRACK SPREAD	RM	4,074	4,895	-16.8%	4,477	-9.0%
RBOB CRACK SPREAD BALMO S	1E	0	0	-	0	-
RBOB GASOLINE BALMO CLNDR	1D	509	1,746	-70.8%	396	28.5%
RBOB PHY	RBL	0	0	0.0%	0	0.0%
RBOB (PLATTS) CAL SWAP	RY	0	0	-	0	-
RBOB SPREAD (PLATTS) SWAP	RI	0	2	-100.0%	0	-
RBOB UP-DOWN CALENDAR SWA	RV	0	0	-	0	-
RBOB VS HEATING OIL SWAP	RH	55	2,694	-98.0%	110	-50.0%
ROCKIES KERN OPAL - NW IN	IR	0	0	-	0	-
SAN JUAN BASIS SWAP	NJ	7,712	20,278	-62.0%	8,642	-10.8%
SAN JUAN PIPE SWAP	XX	216	0	-	288	-25.0%

## NYMEX/COMEX Exchange Open Interest Report - Monthly

Commodity		Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>						
SINGAPORE 180CST BALMO	BS	16	100	-84.0%	10	60.0%
SINGAPORE 380CST BALMO	BT	160	165	-3.0%	85	88.2%
SINGAPORE 380CST FUEL OIL	SE	8,973	10,578	-15.2%	10,526	-14.8%
SINGAPORE FUEL 180CST CAL	UA	575	1,227	-53.1%	699	-17.7%
SINGAPORE FUEL OIL SPREAD	SD	474	710	-33.2%	635	-25.4%
SINGAPORE GASOIL	MAF	3,322	0	-	1,230	170.1%
SINGAPORE GASOIL	MTB	61	39	56.4%	48	27.1%
SINGAPORE GASOIL	MTS	8,887	8,440	5.3%	8,920	-0.4%
SINGAPORE GASOIL	STL	0	0	-	0	-
SINGAPORE GASOIL	STZ	150	273	-45.1%	300	-50.0%
SINGAPORE GASOIL CALENDAR	GDH	0	0	-	0	-
SINGAPORE GASOIL CALENDAR	GDL	0	0	-	0	-
SINGAPORE GASOIL CALENDAR	GHS	9	60	-85.0%	0	-
SINGAPORE GASOIL CALENDAR	MGO	21	130	-83.8%	0	-
SINGAPORE GASOIL CALENDAR	MSG	388	378	2.6%	408	-4.9%
SINGAPORE GASOIL CALENDAR	SGG	0	168	-100.0%	0	-
SINGAPORE GASOIL SWAP	SG	6,695	9,104	-26.5%	6,750	-0.8%
SINGAPORE GASOIL VS ICE	GA	31,773	2,206	1,340.3%	35,703	-11.0%
SINGAPORE JET KERO BALMO	BX	0	0	-	0	-
SINGAPORE JET KERO GASOIL	RK	8,790	1,195	635.6%	9,500	-7.5%
SINGAPORE JET KEROSENE SW	KS	2,925	1,783	64.0%	3,625	-19.3%
SINGAPORE JET KERO VS. GASOIL BALMO	Z0	0	0	-	0	-
SINGAPORE MOGAS 92 UNLEADED BALMO	1P	296	545	-45.7%	50	492.0%
SINGAPORE MOGAS 92 UNLEADED SWP	1N	13,065	13,062	0.0%	15,286	-14.5%
SINGAPORE NAPHTHA BALMO	KU	0	0	-	0	-
SINGAPORE NAPHTHA SWAP	SP	0	0	-	0	-
SING FUEL	MSD	0	0	-	0	-
SOCAL PIPE SWAP	XN	0	0	-	0	-
SONAT BASIS SWAP FUTURE	SZ	0	0	-	0	-
SOUTHERN NAT LA NAT GAS	M8	0	0	-	0	-
SOUTH STAR TEX OKLHM KNS	8Z	0	120	-100.0%	10	-100.0%
Sumas Basis Swap	NK	2,698	5,836	-53.8%	2,977	-9.4%
SUMAS NAT GAS PLATTS FIXED PRICE	DVS	0	0	-	0	-
TC2 ROTTERDAM TO USAC 37K	TM	265	200	32.5%	365	-27.4%
TC5 RAS TANURA TO YOKOHAM	TH	1,205	75	1,506.7%	825	46.1%
TCO BASIS SWAP	TC	4,932	11,259	-56.2%	4,479	10.1%
TCO NG INDEX SWAP	Q1	0	0	-	0	-
TD3 MEG TO JAPAN 250K MT	TL	8,591	390	2,102.8%	7,886	8.9%
TENN 800 LEG NAT GAS INDE	L4	0	0	-	0	-
TENNESSEE 500 LEG BASIS S	NM	0	0	-	0	-
TENNESSEE 800 LEG NG BASI	6Z	0	0	-	0	-
TENNESSEE ZONE 0 BASIS SW	NQ	0	360	-100.0%	0	-
TETCO M-3 INDEX	IX	0	0	-	0	-
Tetco STX Basis	TX	0	730	-100.0%	62	-100.0%
TEXAS EASTERN ZONE M-3 BA	NX	2,364	6,223	-62.0%	2,643	-10.6%
TEXAS GAS ZONE1 NG BASIS	9F	0	5,760	-100.0%	484	-100.0%
Transco Zone 3 Basis	CZ	0	3,465	-100.0%	279	-100.0%
TRANSCO ZONE 3 NG INDEX S	Y6	0	0	-	0	-
TRANSCO ZONE4 BASIS SWAP	TR	3,172	9,415	-66.3%	3,513	-9.7%
TRANSCO ZONE 4 NAT GAS IN	B2	0	0	-	0	-
TRANSCO ZONE 6 BASIS SWAP	NZ	180	2,498	-92.8%	242	-25.6%
TRANSCO ZONE 6 INDEX	IT	0	0	-	0	-
UCM FUT	UCM	20	73	-72.6%	0	-

## NYMEX/COMEX Exchange Open Interest Report - Monthly

Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Futures</b>					
ULSD 10PPM CIF MED BALMO	X7	0	0	-	-
ULSD 10PPM CIF MED SWAP	Z6	0	0	-	-
ULSD 10PPM CIF MED VS ICE	Z7	0	32	-100.0%	0
ULSD 10PPM CIF NW BALMO S	B1	0	0	-	-
ULSD 10PPM CIF VS ICE GAS	7V	0	0	-	-
ULSD UP-DOWN BALMO SWP	1L	3,600	8,950	-59.8%	7,571
UP DOWN GC ULSD VS NMX HO	LT	41,595	38,866	7.0%	45,156
USGC UNL 87 CRACK SPREAD	RU	0	0	-	-
WAHA BASIS	NW	2,857	7,582	-62.3%	2,855
WAHA INDEX SWAP FUTURE	IY	0	0	-	-
WESTERN RAIL DELIVERY PRB	QP	0	470	-100.0%	0
WTI-BRENT BULLET SWAP	BY	5,454	654	733.9%	5,979
WTI-BRENT CALENDAR SWAP	BK	136,220	102,252	33.2%	137,707
WTI CALENDAR	CS	163,218	157,168	3.8%	171,656
WTS (ARGUS) VS WTI SWAP	FF	55,229	58,692	-5.9%	57,623
WTS (ARGUS) VS WTI TRD MT	FH	4,568	4,433	3.0%	4,848
<b>Energy Options</b>					
12 MO GASOIL CAL SWAP SPR	GXZ	0	0	-	-
1 MO GASOIL CAL SWAP SPR	GXA	0	0	-	-
BRENT 1 MONTH CAL	AA	0	0	-	-
BRENT CALENDAR SWAP	BA	7,337	3,579	105.0%	10,543
BRENT CRUDE OIL 12 M CSO	9Y	0	0	-	-
BRENT CRUDE OIL 1 M CSO	9C	36,000	0	-	33,000
BRENT CRUDE OIL 6 M CSO	9L	0	0	-	0
BRENT OIL LAST DAY	BE	92,421	14,126	554.3%	112,765
BRENT OIL LAST DAY	BZO	167,321	114,798	45.8%	206,983
BRENT OIL LAST DAY	OS	150	1,164	-87.1%	150
COAL API2 INDEX	CLA	145	260	-44.2%	95
COAL API2 INDEX	CQA	100	150	-33.3%	100
COAL API2 INDEX	MTC	0	0	-	0
COAL API4 INDEX	RLA	0	0	-	0
COAL API4 INDEX	RQA	0	30	-100.0%	0
COAL SWAP	CPF	0	30	-100.0%	0
COAL SWAP	RPF	0	385	-100.0%	0
CRUDE OIL 1MO	WA	486,700	377,664	28.9%	409,475
CRUDE OIL APO	AO	307,411	441,149	-30.3%	329,762
CRUDE OIL CALNDR STRIP	6F	0	0	-	170
CRUDE OIL OUTRIGHTS	AH	6,000	150	3,900.0%	6,000
CRUDE OIL OUTRIGHTS	DBP	0	0	-	0
CRUDE OIL OUTRIGHTS	WCI	260	7,370	-96.5%	390
CRUDE OIL PHY	CD	0	0	-	0
CRUDE OIL PHY	LC	61,335	45,606	34.5%	57,408
CRUDE OIL PHY	LO	2,838,045	2,509,416	13.1%	3,059,457
CRUDE OIL PHY	LO1	2,881	2,175	32.5%	2,652
CRUDE OIL PHY	LO2	659	368	79.1%	0
CRUDE OIL PHY	LO3	46	581	-92.1%	505
CRUDE OIL PHY	LO4	0	0	-	456
CRUDE OIL PHY	LO5	0	0	0.0%	0
ELEC FINSETTLED	PML	0	0	-	0
ELEC MISO PEAK	9T	0	0	-	0
ETHANOL	CE1	0	0	-	0
ETHANOL	CE3	0	0	-	0

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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Options</b>						
ETHANOL SWAP	CVR	7,457	14,067	-47.0%	6,896	8.1%
ETHANOL SWAP	GVR	2,231	2,077	7.4%	2,257	-1.2%
EURO-DENOMINATED PETRO PROD	NWE	0	0	-	0	-
EUROPEAN JET KEROSENE NWE (PLATTS) AVG PRC	30	0	0	-	0	-
GASOLINE	GCE	0	0	-	0	-
HEATING OIL CRACK OPTIONS	CH	0	0	-	0	-
HEATING OIL CRK SPD AVG PRICE OPTIONS	3W	0	0	-	0	-
HEATING OIL PHY	LB	1,187	233	409.4%	466	154.7%
HEATING OIL PHY	OH	58,351	53,085	9.9%	50,272	16.1%
HENRY HUB FINANCIAL LAST	E7	5,514	6,141	-10.2%	5,237	5.3%
HO 1 MONTH CLNDR OPTIONS	FA	2,100	0	-	2,600	-19.2%
HUSTN SHIP CHNL PIPE SWP	PK	0	0	-	0	-
LLS CRUDE OIL	WJO	0	1,800	-100.0%	300	-100.0%
LLS CRUDE OIL	YVO	0	2,500	-100.0%	0	-
MCCLOSKEY ARA ARGS COAL	MTO	45	850	-94.7%	90	-50.0%
MCCLOSKEY RCH BAY COAL	MFO	240	275	-12.7%	340	-29.4%
NATURAL GAS	G10	0	0	-	0	-
NATURAL GAS 1 M CSO FIN	G4	84,759	131,862	-35.7%	72,510	16.9%
NATURAL GAS 2 M CSO FIN	G2	0	0	-	0	-
NATURAL GAS 3 M CSO FIN	G3	0	31,201	-100.0%	0	-
NATURAL GAS 5 M CSO FIN	G5	0	0	-	0	-
NATURAL GAS 6 M CSO FIN	G6	20,750	16,850	23.1%	17,100	21.3%
NATURAL GAS OPTION ON CALENDAR STRP	6J	3,884	1,810	114.6%	20,502	-81.1%
NATURAL GAS PHY	KD	0	0	0.0%	0	0.0%
NATURAL GAS PHY	LN	1,946,970	2,194,015	-11.3%	2,202,405	-11.6%
NATURAL GAS PHY	ON	161,052	143,545	12.2%	191,124	-15.7%
NATURAL GAS PHY	ON1	0	0	-	0	-
NATURAL GAS WINTER STRIP	6I	0	0	-	0	-
NG HH 3 MONTH CAL	IC	0	0	-	0	-
N ROCKIES PIPE SWAP	ZR	2,974	4,987	-40.4%	3,408	-12.7%
NY HARBOR HEAT OIL SWP	AT	16,470	14,024	17.4%	16,468	0.0%
NYISO ZONE G 5MW PEAK OPTIONS	9U	0	2,800	-100.0%	0	-
NYMEX EUROPEAN GASOIL APO	F7	0	0	-	0	-
NYMEX EUROPEAN GASOIL OPT	F8	0	0	-	0	-
PANHANDLE PIPE SWAP	PU	0	7,200	-100.0%	480	-100.0%
PETROCHEMICALS	4H	3,858	4,817	-19.9%	4,490	-14.1%
PETROCHEMICALS	4J	985	855	15.2%	1,070	-7.9%
PETROCHEMICALS	4K	880	450	95.6%	1,290	-31.8%
PETROCHEMICALS	CPR	0	12	-100.0%	0	-
PETRO OUTRIGHT EURO	8H	0	50	-100.0%	0	-
PETRO OUTRIGHT NA	DAP	798	72	1,008.3%	564	41.5%
PJM MONTHLY	JO	0	0	-	0	-
PJM WES HUB PEAK CAL MTH	6OA	660	1,550	-57.4%	2,110	-68.7%
PJM WES HUB PEAK CAL MTH	JOA	0	0	-	0	-
PJM WES HUB PEAK LMP 50MW	PMA	1,787	12,130	-85.3%	2,579	-30.7%
RBOB 1MO CAL SPD OPTIONS	ZA	0	0	0.0%	0	-
RBOB CALENDAR SWAP	RA	205	75	173.3%	300	-31.7%
RBOB CRACK	RX	2	0	-	2	0.0%
RBOB PHY	OB	11,826	12,107	-2.3%	11,565	2.3%
RBOB PHY	RF	0	150	-100.0%	0	-
ROTTERDAM 3.5%FUEL OIL CL	Q6	0	40	-100.0%	0	-
SAN JUAN PIPE SWAP	PJ	1,919	3,910	-50.9%	2,347	-18.2%
SHORT TERM	C15	0	0	-	0	-

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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Energy Options</b>						
SHORT TERM	U11	0	0	-	0	-
SHORT TERM	U12	0	0	-	0	-
SHORT TERM	U13	0	0	-	0	-
SHORT TERM	U14	0	0	-	0	-
SHORT TERM	U15	0	0	-	0	-
SHORT TERM	U22	0	0	-	0	-
SHORT TERM	U23	0	0	-	0	-
SHORT TERM	U24	0	0	-	0	-
SHORT TERM	U25	0	0	-	0	-
SHORT TERM	U26	0	0	-	0	-
SHORT TERM NATURAL GAS	U01	0	0	-	0	-
SHORT TERM NATURAL GAS	U02	0	300	-100.0%	0	-
SHORT TERM NATURAL GAS	U03	0	0	-	750	-100.0%
SHORT TERM NATURAL GAS	U04	0	0	-	0	-
SHORT TERM NATURAL GAS	U05	0	0	-	0	-
SHORT TERM NATURAL GAS	U06	0	0	-	0	-
SHORT TERM NATURAL GAS	U07	0	0	-	0	-
SHORT TERM NATURAL GAS	U08	0	0	-	0	-
SHORT TERM NATURAL GAS	U09	0	0	-	0	-
SHORT TERM NATURAL GAS	U10	0	0	-	0	-
SHORT TERM NATURAL GAS	U16	0	0	-	0	-
SHORT TERM NATURAL GAS	U17	0	0	-	0	-
SHORT TERM NATURAL GAS	U18	0	0	-	0	-
SHORT TERM NATURAL GAS	U19	0	0	-	0	-
SHORT TERM NATURAL GAS	U20	0	0	-	0	-
SHORT TERM NATURAL GAS	U21	0	0	-	0	-
SHORT TERM NATURAL GAS	U27	0	0	-	0	-
SHORT TERM NATURAL GAS	U28	0	0	-	0	-
SHORT TERM NATURAL GAS	U29	0	0	0.0%	0	-
SHORT TERM NATURAL GAS	U30	0	0	-	0	-
SHORT TERM NATURAL GAS	U31	0	0	-	0	-
SINGAPORE GASOIL CALENDAR	M2	0	25	-100.0%	0	-
SINGAPORE JET FUEL CALEND	N2	0	40	-100.0%	0	-
SOCAL PIPE SWAP	ZN	0	0	-	0	-
WTI-BRENT BULLET SWAP	BV	104,434	226,666	-53.9%	105,044	-0.6%
WTI CRUDE OIL 1 M CSO FI	7A	122,750	237,020	-48.2%	142,400	-13.8%
<b>Metals Futures</b>						
COMEX GOLD	GC	451,832	494,896	-8.7%	388,430	16.3%
NYMEX HOT ROLLED STEEL	HR	13,978	12,487	11.9%	15,800	-11.5%
NYMEX PLATINUM	PL	82,839	82,135	0.9%	74,698	10.9%
PALLADIUM	PA	26,781	37,419	-28.4%	24,971	7.2%
URANIUM	UX	4,108	3,900	5.3%	4,782	-14.1%
COMEX SILVER	SI	176,289	194,009	-9.1%	184,700	-4.6%
COMEX E-Mini GOLD	QO	1,007	761	32.3%	1,000	0.7%
COMEX E-Mini SILVER	QI	206	113	82.3%	143	44.1%
COMEX COPPER	HG	224,956	285,342	-21.2%	215,249	4.5%
COMEX MINY COPPER	QC	33	273	-87.9%	37	-10.8%
ALUMINUM	A38	112	0	-	72	55.6%
ALUMINUM	AEP	12,341	15,359	-19.6%	12,912	-4.4%
ALUMINUM	ALA	1,145	2,710	-57.7%	1,615	-29.1%
ALUMINUM	ALI	0	31	-100.0%	0	-



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	Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>Metals Futures</b>						
ALUMINUM	AUP	32,499	26,731	21.6%	33,846	-4.0%
ALUMINUM	CUP	0	329	-100.0%	0	-
ALUMINUM	EDP	11,022	10,201	8.0%	11,400	-3.3%
ALUMINUM	MJP	7,528	9,052	-16.8%	8,264	-8.9%
COPPER	HGS	13,230	7,736	71.0%	13,325	-0.7%
E-MICRO GOLD	MGC	10,532	7,436	41.6%	9,130	15.4%
FERROUS PRODUCTS	BUS	4,120	615	569.9%	4,096	0.6%
GOLD	GPS	0	0	-	0	-
Gold Kilo	GCK	0	0	0.0%	0	-
IRON ORE 62 CHINA PLATTS FUTURES	PIO	80	2,720	-97.1%	160	-50.0%
IRON ORE 62 CHINA TSI FUTURES	TIO	8,697	11,385	-23.6%	9,478	-8.2%
LNDN ZINC	ZNC	28	11	154.5%	25	12.0%
METALS	LED	0	0	-	0	-
SILVER	SIL	1,191	1,248	-4.6%	2,118	-43.8%
<b>Metals Options</b>						
COMEX COPPER	HX	17,984	11,891	51.2%	15,787	13.9%
COMEX GOLD	OG	1,171,325	823,512	42.2%	1,080,006	8.5%
COMEX SILVER	SO	221,151	116,700	89.5%	210,531	5.0%
COPPER	H1E	6	0	-	115	-94.8%
COPPER	H2E	0	0	-	0	-
COPPER	H3E	0	0	-	0	-
COPPER	H4E	0	0	-	0	-
COPPER	H5E	0	0	-	0	-
GOLD	OG1	5,839	3,605	62.0%	4,764	22.6%
GOLD	OG2	6,422	1,754	266.1%	1,530	319.7%
GOLD	OG3	2,119	905	134.1%	2,818	-24.8%
GOLD	OG4	0	0	-	0	-
GOLD	OG5	0	0	0.0%	0	0.0%
HOT ROLLED COIL STEEL CALL OPTION	HRO	300	1,530	-80.4%	400	-25.0%
IRON ORE 62 CHINA TSI CALL OPTION	ICT	328	6,000	-94.5%	536	-38.8%
IRON ORE 62 CHINA TSI PUT OPTION	ICT	70	3,530	-98.0%	80	-12.5%
NYMEX PLATINUM	PO	4,413	5,079	-13.1%	5,945	-25.8%
PALLADIUM	PAO	1,124	3,406	-67.0%	834	34.8%
SILVER	SO1	102	4	2,450.0%	358	-71.5%
SILVER	SO2	184	0	-	270	-31.9%
SILVER	SO3	294	0	-	485	-39.4%
SILVER	SO4	0	0	-	0	-
SILVER	SO5	0	0	0.0%	0	0.0%
<b>TOTAL FUTURES GROUP</b>						
Ag Products Futures		1	5	-80.0%	0	-
Energy Futures		11,723,179	16,081,169	-27.1%	12,026,743	-2.5%
Metals Futures		1,084,554	1,206,899	-10.1%	1,016,251	6.7%
<b>TOTAL FUTURES</b>		<b>12,807,734</b>	<b>17,288,073</b>	<b>-25.9%</b>	<b>13,042,994</b>	<b>-1.8%</b>



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Commodity	Open Interest DEC 2018	Open Interest DEC 2017	% CHG	Open Interest NOV 2018	% CHG
<b>TOTAL OPTIONS GROUP</b>					
Energy Options	6,570,899	6,648,592	-1.2%	7,096,877	-7.4%
Metals Options	1,431,661	977,916	46.4%	1,324,459	8.1%
<b>TOTAL OPTIONS</b>	<b>8,002,560</b>	<b>7,626,508</b>	<b>4.9%</b>	<b>8,421,336</b>	<b>-5.0%</b>
<b>TOTAL COMBINED</b>					
Ag Products	1	5	-80.0%	0	-
Energy	18,294,078	22,729,761	-19.5%	19,123,620	-4.3%
Metals	2,516,215	2,184,815	15.2%	2,340,710	7.5%
<b>GRAND TOTAL</b>	<b>20,810,294</b>	<b>24,914,581</b>	<b>-16.5%</b>	<b>21,464,330</b>	<b>-3.0%</b>