#### SUBMISSION COVER SHEET **IMPORTANT:** Check box if Confidential Treatment is requested Registered Entity Identifier Code (optional): 17-178 Organization: New York Mercantile Exchange, Inc. ("NYMEX") |X|DCM SEF DCO **SDR** Filing as a: Please note - only ONE choice allowed. Filing Date (mm/dd/yy): 06/22/2017 Filing Description: Amendments to Increase **Position Limits for four (4) Natural Gas Liquids Futures Contracts** SPECIFY FILING TYPE Please note only ONE choice allowed per Submission. **Organization Rules and Rule Amendments** Certification § 40.6(a) Approval § 40.5(a) Notification § 40.6(d) Advance Notice of SIDCO Rule Change § 40.10(a) SIDCO Emergency Rule Change § 40.10(h) **Rule Numbers: New Product** Please note only ONE product per Submission. Certification § 40.2(a) **Certification Security Futures** § 41.23(a) Certification Swap Class § 40.2(d) Approval § 40.3(a) **Approval Security Futures** § 41.23(b) Novel Derivative Product Notification § 40.12(a) Swap Submission § 39.5 **Product Terms and Conditions (product related Rules and Rule Amendments)** Certification § 40.6(a) Certification Made Available to Trade Determination § 40.6(a) **Certification Security Futures** § 41.24(a) Delisting (No Open Interest) § 40.6(a) Approval § 40.5(a) Approval Made Available to Trade Determination § 40.5(a) **Approval Security Futures** § 41.24(c) Approval Amendments to enumerated agricultural products § 40.4(a), § 40.5(a) "Non-Material Agricultural Rule Change" § 40.4(b)(5) Notification § 40.6(d) Official Name(s) of Product(s) Affected: See filing.

Rule Numbers: See filing.



June 22, 2017

#### **VIA ELECTRONIC PORTAL**

Mr. Christopher J. Kirkpatrick Office of the Secretariat Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

Re: CFTC Regulation 40.6(a) Certification. Notification Regarding Increasing Position Limits

for Four (4) Natural Gas Liquids Futures Contracts.

**NYMEX Submission No. 17-178** 

Dear Mr. Kirkpatrick:

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying an increase to the spot month position limits for four (4) natural gas liquids futures contracts (the "Contracts") in Exhibit 1. below commencing with the July 2017 contract month and beyond. Specifically, the increased spot month limits shall go into effect at the close of trading on July 26, 2017 for the July 2017 contract month. These contracts are available for trading on CME Globex and for submission for clearing via CME ClearPort. This submission shall become effective on July10, 2017.

#### Exhibit 1.

Contract Title	Commodity Code	Rulebook Chapter	Current Position Limits up to and including June 2017 Contract Month	Position Limits Commencing with July 2017 Contract Month and Beyond
Mont Belvieu LDH Propane (OPIS) Futures	В0	409	250	3,000
Propane Non-LDH Mont Belvieu (OPIS) Futures	1R	414	200	3,000
Mont Belvieu Ethane (OPIS) Futures	C0	410	250	2,500
Mont Belvieu Normal Butane (OPIS) Futures	D0	411	250	1,500

As a result of the increase of to the spot month position limits for the Contracts, the Exchange is also amending the spot month position limits for eleven (11) futures and option contracts which aggregate into the Contracts for position limit purposes. A comprehensive list of all impacted contracts can be found in Appendix A, which is attached under separate cover.

The Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook (the "Table") will be amended to reflect aforementioned changes. Appendix A provided under separate cover, provides the Table with additions underscored and bolded and deletions overstruck. A review of deliverable supply is attached hereto as Appendix B.

The Exchange reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("Act") and identified that amendments may have some bearing on the following Core Principles.

- <u>Contracts Not Readily Subject to Manipulation</u>: The Contracts are not readily subject to manipulation due to the deep liquidity and robustness in the underlying physical markets.
- <u>Position Limitations or Accountability</u>: The speculative position limits for the Contracts as demonstrated in this submission are consistent with the Commission's guidance.
- <u>Availability of General Information</u>: The information contained herein will be disseminated
  to the marketplace via Market Surveillance Notice. The Exchange will publish information
  on the Contracts' specifications on its website, together with daily trading volume, open
  interest, and price information.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.6(a), the Exchange hereby certifies that the aforementioned amendments comply with the Act, including regulations under the Act. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at: <a href="http://www.cmegroup.com/market-regulation/rule-filings.html">http://www.cmegroup.com/market-regulation/rule-filings.html</a>. Should you have any questions concerning the above, please contact me at (212) 299-2200 or via e-mail at <a href="mailto:CMEGSubmisisonInquiry@cmegroup.com">CMEGSubmisisonInquiry@cmegroup.com</a>.

Sincerely,

/s/Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A – Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover)

Appendix B – Cash Market Overview and Analysis of Deliverable Supply

## Appendix A

# Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook

(attached under separate cover)

### **Appendix B**

#### **Cash Market Overview and Analysis of Deliverable Supply**

New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is self-certifying amendments to increase the spot month limits for four (4) existing natural gas liquids ("NGLs") futures contracts (the "Contracts"). Exchange staff relied on long-standing precedent, which provides that the key component in estimating deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be readily available for delivery.

Contract Title	Commodity Code	Rulebook Chapter
Mont Belvieu LDH Propane (OPIS) Futures	В0	409
Propane Non-LDH Mont Belvieu (OPIS) Futures	1R	414
Mont Belvieu Ethane (OPIS) Futures	C0	410
Mont Belvieu Normal Butane (OPIS) Futures	D0	411

As a result of the increase of to the spot month position limits for the Contracts, the Exchange is also amending the spot month position limits for eleven (11) futures and option contracts which aggregate into the Contracts for position limit purposes.

Contract Title	Commodity Code	Rulebook Chapter
Propane Non-LDH Mont Belvieu (OPIS) BALMO Futures	1S	415
Daily Mont Belvieu LDH Propane (OPIS) Futures	C3D	136
Mont Belvieu LDH Propane (OPIS) BALMO Futures	80	296
Mont Belvieu Mini LDH Propane (OPIS) Futures	81	400
Mont Belvieu LDH Propane (OPIS) vs. European Propane CIF ARA (Argus) Futures	51	421
Mont Belvieu LDH Propane (OPIS) Average Price Option	4H	409A
Mont Belvieu Ethane (OPIS) BALMO Futures	8C	298
Mont Belvieu Ethane (OPIS) Average Price Option	4J	410A
Daily Mont Belvieu Normal Butane (Non-LDH) (OPIS) Futures	C4D	137
Mont Belvieu Normal Butane (OPIS) BALMO Futures	8J	299
Mont Belvieu Normal Butane (OPIS) Average Price Option	4K	411A

#### **Methodology and Data Sources**

For the purposes of determining the deliverable supply for the Contracts, the Exchange considered two components in evaluating deliverable supply:

- A. Natural gas plant processing and refinery/blender production data;
- B. Stock data;

The Exchange determined to use data collected by the U.S. Department of Energy's Energy Information Administration ("EIA") for its analysis and evaluation of deliverable supply estimates for NGLs in Mont Belvieu. The EIA provides detailed data on the key components of deliverable supply. The EIA publishes monthly and annual statistics on NGLs on a regional basis. In determining deliverable supply, the Exchange used production data for Texas (both Inland and Gulf Coast regions) and stock data from the PADD 3 (Petroleum Administration Defense District) region because of the extensive pipeline connectivity and direct connectivity to production facilities from those regions to the Mont Belvieu hub.

The table below illustrates the current and proposed spot month position limits.

Contract Title	Rulebook Chapter	Commodity Code	Current Spot Month Position Limit	Spot Month Position Limit Commencing with the July 2017 Contract Month and Beyond
Mont Belvieu LDH Propane (OPIS) Futures	409	В0	250	3,000
Propane Non-LDH Mont Belvieu (OPIS) Futures	414	1R	200	3,000
Mont Belvieu Ethane (OPIS) Futures	410	C0	250	2,500
Mont Belvieu Normal Butane (OPIS) Futures	411	D0	250	1,500

EIA provides detailed production, stocks, and trade statistics for various NGLs. EIA production data on NGLs separates supply data based on the two main production processes: natural gas plant processing and petroleum refining production. Further, EIA breaks down the production data by PADD region and by sub-regions in each PADD. The production data used for the purposes of calculating deliverable supply reflects natural gas plant production plus refinery/blender production data in the sub-regions of PADD 3, which includes the "Texas Gulf Coast" and "Texas Inland" sub-regions.

#### **Cash Market Overview**

Natural Gas Liquids ("NGLs") also referred to as Liquefied Petroleum Gases ("LPGs"), are liquid condensed hydrocarbons suspended as particles in gas under pressure and are comprised of propane and other related liquids like ethane, butane, natural gasoline (pentane) and iso-butane. NGLs are by-products of either of the following two processes: natural gas plant processing or petroleum refining and blending. In 2016, natural gas processing accounted for 85% of total NGL production in the U.S. while 15% was produced at petroleum refineries. Table 1. below illustrates the share of each production method in the production of various types of NGLs for 2016. According to the EIA, total NGL production in the U.S., which is referenced as "natural gas processing and refiner and blender net production" was 4.1 million barrels per day ("B/D") or 123 million barrels per month in 2016.

Table 1. U.S. NGL Production by Production Method<sup>1</sup>

Draduction Mathed	2016	% of Production	% of Total NGL
Production Method Natural Gas Processing	2016 Thousand B/D	Method	Production
		000/	040/
Ethane	1,253	36%	31%
Propane	1,159	33%	28%
Pentanes (Natural Gasoline)	433	12%	11%
Normal Butane	321	9%	8%
Iso-butane	312	9%	8%
Total	3,478		85%
Refining			
Propane	302	48%	7%
Propylene	281	45%	7%
Normal Butane	46	1%	1%
Ethane	3	*	*
Ethylene	1	*	*
Isobutylene	-1	*	*
Butylene	0	*	*
Iso-butane	-7	*	*
Total	625		15%
Total Production	4,103		

<sup>\*</sup> Insignificant

https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_nus\_mbblpd\_a.htm.

<sup>&</sup>lt;sup>1</sup> U.S. NGL Production - Natural Gas Plant,

http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLE\_FPF\_mbblpd\_a.htm,

U.S. NGL Production - Refinery and Blender,

NGLs are utilized as processing and blending components, feedstocks in the production of ethylene and propylene, and as fuel for heating and industrial processes. Refineries are both major consumers and producers of NGLs. Petrochemical and industrial companies, including plastics manufacturers are among end-users. The manufacturing sector purchases NGLs to use as inputs for their production process of plastic products and components.

During the natural gas plant production process, NGLs are produced as a result of the extraction of materials such as propane, ethane, and butane from natural gas in order to prevent these liquids from condensing and causing operational problems within natural gas pipelines. Fractionation is the process by which NGLs are removed from natural gas in processing plants. The process begins with the removal of the lighter NGLs from the stream. Separating lighter hydrocarbons from heavier hydrocarbons allows for ease of separating each NGL.

The economics of natural gas processing are based mainly on the natural gas-NGL price spread ("frac spread"). Low natural gas prices combined with high NGL values mean good returns for the NGL processors. Since NGLs sell at a premium to natural gas, there is often an economic incentive for operators to focus exploration and development activities on areas that have natural gas with high liquids content. This "liquids boost" is especially important in the development of unconventional resources (such as shale gas) because of the relatively high cost of drilling and completing horizontal wells. The high liquids content of certain shale formations helps operators to profitably develop shale gas resources during periods of low natural gas prices. In recent years, high levels of natural gas production have pushed prices down. The relatively high value of natural gas liquids has led producers to target "wet gas", or gas with high liquids content. The result of this liquids price premium is that wet natural gas production is increasing at a faster rate than dry natural gas production.

Product	Characteristics	Sectors
Methane (C1)	Dry gas; calorific value only; Piped or LNG' GTL feedstock	Power, heating, industry, GTL
Ethane (C2)	Both dry gas & NGL; major value as petchem feedstock; needs pipelines, big gas output	As in methane; also petchem
Propane (C3/LPG)	Needs containment; generally stripped from gas; higher capex and opex in transport; safer than butane	Generally home & business; transport use; gas supplement
Butane (C4/LGP)	Containment needed; higher BTU value; like propane, high capex & opex	Mainly industrial; also in transport
Condensate (C5+)	Light, sweet crude lookalike; almost always > 50% naphtha; Can be naphthenic or paraffinic; Moderate mid-distillate; once a liquid, remains a liquid; from wellhead or gas processing; some output sold as naphtha	Like crude, full range of products; strong impact on gasoline & petchems; can produce large volume of jet & ADO

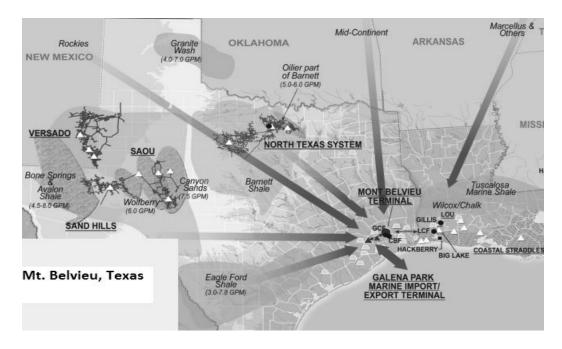
#### Mt. Belvieu, Texas

There are two key trading and storage hubs for NGLs in the U.S.: Mont Belvieu, Texas, and Conway, Kansas. With its strategic location along the U.S. Gulf Coast, proximity to major refining complexes, underground storage capacity, and access to onshore and offshore transportation for shipping liquids to market, Mont Belvieu, Texas, continues to attract plans for fractionation expansions alongside North

America's flourishing shale gas production. The site is 30 miles east of Houston and above one of the world's largest salt dome formations<sup>2</sup>.

Mont Belvieu is the largest storage area for natural gas liquids in the world, with storage capacity of 242 million barrels. Natural gas liquids are stored in underground salt caverns that are directly linked to interstate pipelines, and are connected to primary production areas in the Gulf Coast. In addition, the interstate pipelines also provide connectivity to the large demand areas in the South, Northeast and Midwest markets. Mont Belvieu is utilized as the price reference point for NGL markets in North America. Roughly 70,000 miles of pipelines are committed to the movement of NGLs in the U.S. market. In addition to pipeline delivery, NGLs are also transported via rail cars, highway transports, delivery trucks, barges, and ocean tankers.

Top NGL producers in the U.S. are midstream companies such as Enterprise, Williams, Devon Gas Services, Enbridge Energy Partners, Oneok Partners, Targa, and Anadarko. Enterprise is the biggest player in the market with 15 NGL fractionation facilities located in Texas, Louisiana, and Ohio. These facilities are linked by pipelines to some of the largest consumers of NGLs in the United States and to international markets through the import/export terminal on the Houston Ship Channel.



#### **PRODUCTION**

In 2016, U.S. natural gas processors produced approximately 3.5 million barrels per day of NGLs, while refineries produced about 625,000 barrels per day. Total U.S. production of NGLs averaged 3.9 million barrels per day over the three-year period, 2014 – 2016.

Table 2. U.S. NGL Production<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> http://www.ogj.com/articles/print/volume-112/issue-6/speical-report-worldwide-gas-processing/what-s-at-mont-belvieu.html

<sup>&</sup>lt;sup>3</sup> U.S. NGL Production - Natural Gas Plant, http://www.eia.gov/dnav/pet/pet\_pnp\_qp\_a\_EPLLE\_FPF\_mbblpd\_a.htm,

#### (Thousand barrels per day)

Natural Gas Plant	2014	2015	2016	Average
Ethane	1,091	1,130	1,253	1,158
Propane	985	1,144	1,159	1,096
Pentanes	394	434	433	420
Normal Butane	277	333	321	310
Iso-butane	268	301	312	294
Total	3,015	3,342	3,478	3,278
Refinery and Blender	2014	2015	2016	Average
Propane	306	283	302	297
Propylene	281	276	281	279
Normal Butane	76	66	46	63
Ethane	5	5	3	4
Ethylene	1	1	1	1
Isobutylene	-1	-1	-1	-1
Butylene	-6	-9	0	-5
Iso-butane	-8	-6	-7	-7
Total	654	615	625	631
Total U.S. Production	3,669	3,957	4,103	3,910

#### **Ethane**

Ethane is the lightest of the natural gas liquids and makes up almost 25% of total NGL demand. Ethane is almost exclusively used as feedstock for chemical plants in the production of ethylene and propylene, the building blocks of the plastics industry. It can also be used for fueling or left in the natural gas (methane) stream, depending on prevailing economics. Almost all ethane produced in the U.S. is produced by natural gas processors. Ethane production has increased in recent years, with supply outpacing demand, as more efficient gas processing technologies have been employed with the addition of new infrastructure. Unlike other NGLs which can be shipped by pipeline, rail or truck, ethane must be shipped by pipeline and does not have an international or export market. According to the EIA, ethane production was 630,333 barrels per day or 18.91 million barrels per month over the three-year period, 2014 - 2016.

https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_nus\_mbblpd\_a.htm.

http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLPZ\_FPF\_mbblpd\_a.htm,

http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLP\_FPF\_mbblpd\_a.htm,

http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLB0N\_FPF\_mbblpd\_a.htm, and

http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLB0I\_FPF\_mbblpd\_a.htm.

U.S. NGL Production - Refinery and Blender,

Table 3. Ethane Production<sup>4</sup>

Ethane Production (B/D)	2014	2015	2016	Average
Texas Inland				
Natural Gas Plant	519,000	533,000	555,000	535,667
Refinery and Blender	-	-		-
Texas Gulf Coast				
Natural Gas Plant	85,000	94,000	93,000	90,667
Refinery and Blender	4,000	5,000	3,000	4,000
Total	608,000	632,000	651,000	630,333

#### **Normal Butane**

Butane is used in the petrochemical industry as normal butane and iso-butane. Both are naturally occurring by-products of natural gas production and crude refining. Butane usually is a gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or petroleum refinery streams, with the former comprising 17% of total domestic volume. The main use of butane is to manufacture gasoline, which accounts for about two-thirds of butane demand, as well as all iso-butane consumption. Butane is also a major feedstock in petrochemicals. Normal butane is primarily used for gasoline blending (roughly 85%) — this is almost exclusively in the winter to boost the RVP and to assist with the start of a cold engine. The largest traded location for butane is at Mont Belvieu, Texas. According to the EIA, total normal butane production was 129,333 barrels per day or 3.88 million barrels per month over the three-year period, 2014 - 2016.

Table 4. Normal Butane Production<sup>5</sup>

Butane Production (B/D)	2014	2015	2016	Average
Texas Inland				
Natural Gas Plant	130,000	144,000	141,000	138,333
Refinery and Blender	4,000	2,000	-1,000	1,667
Texas Gulf Coast				
Natural Gas Plant	-46,000	-50,000	-59,000	-51,667
Refinery and Blender	45,000	42,000	36,000	41,000
Total	133,000	138,000	117,000	129,333

#### **Propane**

Propane comprises about 40% of the total demand, and is the largest and most liquidly traded market of all natural gas liquids. Its primary demand components are for home heating and as feedstock for chemical production. Much of this product physically moves through the U.S. Gulf Coast due to its proximity to major chemical/refinery complexes, liquids pipeline and storage hub, and major energy shipping ports. Mont

<sup>4</sup> Ethane Production, <a href="http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLE\_FPF\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3a\_mbblpd\_a.htm</a>, and <a href="https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm</a>.

<sup>&</sup>lt;sup>5</sup> Butane Production, <a href="https://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLB0N\_FPF\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3a\_mbblpd\_a.htm</a>, and <a href="https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm</a>,

Belvieu, Texas has long been the worldwide hub for propane and much of the natural gas liquids trading because of its vast salt dome storage capacity, and pipeline network connecting Mont Belvieu to the Northeast and the Midwest markets. The main NGL pipeline is the TET pipeline, which runs from Mont Belvieu through the Midwest and terminates in Upstate New York. According to the EIA, total propane production, which includes both "natural gas plant" and "refinery and blender" net production, was 560,667 barrels per day or 16.82 million barrels per month over the three-year period, 2014 - 2016.

Table 5. Propane Production<sup>6</sup>

Propane Production (B/D)	2014	2015	2016	Average
Texas Inland				
Natural Gas Plant	380,000	426,000	416,000	407,333
Refinery and Blender	12,000	8,000	7,000	9,000
Texas Gulf Coast				
Natural Gas Plant	61,000	69,000	55,000	61,667
Refinery and Blender	87,000	80,000	81,000	82,667
Total	540,000	583,000	559,000	560,667

#### **STOCKS**

Table 6 below provides the annual averages of monthly EIA stock data for PADD 3. According to the EIA, NGL stocks for ethane, propane, and normal butane averaged 91.5 million barrels over the three-year period, 2014 - 2016.

Table 6. PADD 3 NGL Stocks<sup>7</sup>

NGL Stocks (thousand barrels)	2014	2015	2016	Average
Ethane	27,796	24,390	39,511	30,565
Propane	28,081	48,738	50,783	42,534
Normal Butane	17,310	19,352	18,616	18,426
Total Stocks	73,187	92,480	108,909	91,525

Mont Belvieu serves as a hub to major refining complexes with underground storage capacity and access to onshore and offshore markets. According to the most recent data provided by the EIA, NGL working storage capacity in PADD 3 was 334.1 million barrels as of September 2016<sup>8</sup> Mont Belvieu storage capacity accounts for 72% of NGL storage in PADD 3, or 242.0 million of the total 334.1 million barrels. Illustrated in Table 7 below are the storage capacities of the 3 main operators in Mont Belvieu.

<sup>&</sup>lt;sup>6</sup> Propane Production, <a href="http://www.eia.gov/dnav/pet/pet\_pnp\_gp\_a\_EPLLPZ\_FPF\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3a\_mbblpd\_a.htm</a>, and <a href="https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm">https://www.eia.gov/dnav/pet/pet\_pnp\_refp\_dc\_r3b\_mbblpd\_a.htm</a>.

<sup>&</sup>lt;sup>7</sup> NGL Stock Data, <a href="https://www.eia.gov/dnav/pet/pet\_stoc">https://www.eia.gov/dnav/pet/pet\_stoc</a> typ c r30 EPLLE mbbl m.htm, <a href="https://www.eia.gov/dnav/pet/pet\_stoc">https://www.eia.gov/dnav/pet/pet\_stoc</a> typ c r30 EPLLPZ mbbl m.htm, and <a href="https://www.eia.gov/dnav/pet/pet\_stoc">https://www.eia.gov/dnav/pet/pet\_stoc</a> typ c r30 EPLLBON mbbl m.htm.

<sup>&</sup>lt;sup>8</sup> Working Storage Capacity PADD III, <a href="http://www.eia.gov/petroleum/storagecapacity/table1.pdf">http://www.eia.gov/petroleum/storagecapacity/table1.pdf</a>.

Table 7. Mont Belvieu Storage Capacity<sup>9</sup>

NGL Storage Capacity	Millions of Barrels
Enterprise Product Partners	145.2
Targa Resources LP	46.8
Lone Star NGL	50.0
Total Storage Capacity	242.0

According to market participants, the Mont Belvieu storage hub accounts for more than 50% of total inventories reported in EIA's PADD 3 region. The Exchange will utilize 30% of the PADD 3 inventories as part of the estimate of deliverable supply for propane, ethane, and normal butane for the three-year period of 2014 through 2016. Subsequently, after calculating 30% of PADD 3 stocks, the storage component for ethane is 9.1 million barrels, propane is 12.7 million barrels, and normal butane is 5.5 million barrels. To be conservative, the Exchange has applied a 10% reduction to account for any potential operational minimum levels of storage, and a further 10% reduction for any potential impacts from long-term contracts, although no such impacts were observed.

NGL Stocks (thousand							
barrels)	2014	2015	2016	Average	-70%	-10%	-10%
Ethane	27,796	24,390	39,511	30,565	9,170	8,253	7,427
Propane	28,081	48,738	50,783	42,534	12,760	11,484	10,336
Normal Butane	17,310	19,352	18,616	18,426	5,528	4,975	4,478

#### **Analysis of Deliverable Supply**

For the Mont Belvieu LDH Propane (OPIS) Futures contract, the Exchange based its estimate of deliverable supply on the sum of Texas Inland and Texas Gulf Coast production, plus 30% of stocks in PADD 3. As explained above, the sum of production is approximately 560,667 barrels per day, which is equivalent to 16.82 million barrels per month, or 16,820 contract equivalents (contract size: 1,000 bbls). In addition, the storage component for propane is 10.33 million barrels. Therefore, the total deliverable supply for propane is 27.15 million barrels per month, which is equivalent to 27,150 contracts. Consequently, the proposed spot month limit of 3,000 contracts represents 11.05% of the monthly deliverable supply.

For the Mont Belvieu Non-LDH Propane (OPIS) Futures contract, the Exchange based its estimate of deliverable supply on the sum of Texas Inland and Texas Gulf Coast production plus 30% of stocks in PADD 3. As explained above, the sum of production is approximately 560,667 barrels per day, which is equivalent to 16.82 million barrels per month, or 16,820 contract equivalents (contract size: 1,000 bbls). In addition, the storage component for propane is 10.33 million barrels. Therefore, the total deliverable supply for propane is 27.15 million barrels per month, which is equivalent to 27,150 contracts. Consequently, the proposed spot month limit of 3,000 contracts represents 11.05% of the monthly deliverable supply.

For the Mont Belvieu Ethane (OPIS) Futures contract, the Exchange based its estimate of deliverable supply on the sum of Texas Inland and Texas Gulf Coast production plus 30% of stocks in PADD 3. The

<sup>&</sup>lt;sup>9</sup> Mont Belvieu Storage Capacity, <a href="http://www.enterpriseproducts.com/operations/ngl-pipelines-services/ngl-storage">http://www.targaresources.com/operations/logistics-marketing/storage-terminaling/ngl-storage-facilities</a>, and <a href="http://www.energytransfer.com/ops\_ngl\_ts.aspx">http://www.energytransfer.com/ops\_ngl\_ts.aspx</a>,

sum of ethane production is 630,333 barrels per day, which is equivalent to 18.91 million barrels per month, or 18,910 contract equivalents (contract size: 1,000 bbls). In addition, the storage component for ethane is 7.42 million barrels. Therefore, the total deliverable supply for ethane is 26.33 million barrels per month, which is equivalent to 26,330 contracts. Consequently, the proposed spot month limit of 2,500 contracts represents 9.49% of the monthly deliverable supply.

For the Mont Belvieu Normal Butane (OPIS) Futures contract, the Exchange based its estimate of deliverable supply on the sum of Texas Inland and Texas Gulf Coast production plus 30% of stocks in PADD 3. As explained above, the sum of production is approximately 129,333 barrels, which is equivalent to 3.88 million barrels per month, or 3,880 contract equivalents (contract size: 1,000 bbls). In addition, the storage component for normal butane is 4.48 million barrels. Therefore, the total deliverable supply for normal butane is 8.36 million barrels per month, which is equivalent to 8,360 contracts. Consequently, the proposed spot month limit of 1,500 contracts represents 17.94% of the monthly deliverable supply.