ENERGY TRANSFER PARTNERS, L.P.

Bakken Pipeline System Overview & Quality Update
February 22, 2018
ETP’S INTEGRATED HYDROCARBON BUSINESS

Asset Overview
- ETP Assets
- Legacy SXL Assets
- Terminals

Marcus Hook
Eagle Point
Nederland
Midland

Recently In-service & Announced Growth Projects
- Lake Charles LNG
- Dakota Access Pipeline
- ETCO Pipeline
- Comanche Trail Pipeline
- Trans-Pecos Pipeline

Bayou Bridge
Rover Pipeline
Revolution System
Mariner East Phase 2
FULLY INTEGRATED SERVICES BY REGION

ETP Services By Region

- Midstream
- Natural Gas Liquids
- Crude
- Interstate
- Intrastate

- Permian Basin
- MidCon/Panhandle
- Eagle Ford/SE Texas
- Ark-La-Tex
- North Texas
- Marcellus/Utica
- Bakken
- Eagle Ford/SE Texas

ENERGY TRANSFER PIPELINE ASSETS BY PRODUCT TYPE

- Natural Gas
- Natural Gas Liquids
- Crude
- Refined Products
**VALUE CHAIN DRIVEN**

**Gather ~ 11 million mmbtu/d of gas & 474,000 bbls/d of NGLs produced**

**Transport ~15 million mmbtu/d of natural gas**

**Fractionate ~430,000 bbls/d of NGLs at Mont Belvieu**

**Transport ~3.5 million barrels crude oil per day**

**One of the largest planned LNG Export facilities in the US**

**More than 7.8 billion gallons of annual motor fuel sales**
ETP CRUDE OIL SEGMENT

Crude Oil Pipelines

- ~6,500 miles of crude oil trunk and gathering lines located in the Southwest and Midwest United States
- Controlling interest in 3 crude oil pipeline systems
  - Bakken Pipeline (36.4%)
  - Bayou Bridge Pipeline (60%)
  - Permian Express Partners (~88%)

Crude Oil Acquisition & Marketing

- Crude truck fleet of approximately 370 trucks
- Purchase crude at the wellhead from ~3,000 producers in bulk from aggregators at major pipeline interconnections and trading locations
- Marketing crude oil to major pipeline interconnections and trading locations
- Marketing crude oil to major, integrated oil companies, independent refiners and resellers through various types of sale and exchange transactions
- Crude oil export capability

Crude Oil Terminals

- Nederland, TX Crude Terminal - ~27 million barrel capacity
- Northeast Crude Terminals - ~4 million barrel capacity
- Midland, TX Crude Terminal - ~2 million barrel capacity
- Evaluating expansion opportunities for up to ~9 million barrels of incremental crude oil capacity

ETP/SXL Synergy Opportunities

- SXL’s Delaware Basin Pipeline in the process of being expanded by 100 mbpd
- ETP is developing an idle 12” 100 mbpd pipeline in the basin with a portion placed into service in Feb 18
- ETP’s crude gathering system is synergistic with SXL’s Midland crude oil platform
In service date July 1, 2016
- Expansion to 200 Mbpd underway
  - Target in service of May 2018
- Inbound gathering from ETP and ACC at Loving
- Batch system; 3 segregations
- 12 bay truck station at Lea Station
- 6 bay truck station at Andrews Station
- Deliveries to Permian Express Terminal, PE 2/PE3/PELA
Strategic joint venture with ExxonMobil (ETP is the majority owner and is the operator)

Combines key crude oil pipeline network of both companies and aligns ETP’s Permian takeaway assets with ExxonMobil’s crude pipeline network

Provides increased volume opportunities: expect to achieve significantly greater long-term accretion working together as domestic crude oil production grows over time

Actively working with our partner to grow the venture
Expected to provide Midland & Delaware Basin producers new crude oil takeaway capacity (utilizing existing pipelines) from this rapidly growing area to multiple markets, including the 27 million barrel ETP Nederland, Texas terminal facility.

- Recently completed successful open season for Phase 1
- Ability to expand by minimum of 200,000 barrels per day – currently discussing with potential shippers for open season in 2Q18

- 150Mbpd Permian Express 1 commenced service April 1, 2014
- 230Mbpd Permian Express 2 commenced service July 1, 2015
 Permian Longview & Louisiana Extension

- Extends PE2 access to Finney & Anchorage
- Provides Permian crude to refineries in Arkansas & Baton Rouge, LA area
- Current capacity ~ 95Mbpd & expandable
ETP NEDERLAND
GATEWAY TO INTERNATIONAL MARKETS

- 27 MMbbls crude oil storage
- 1.2 MMbbls c3/c4 storage
- 2.5 MMbpd crude moved daily
- Five ship / four barge docks
  - Room 4 additional ship docks
- Anchorage allows for efficient staging
- Distribution to all major refineries
- Rail & truck unloading
- Crude oil blending capability
- Extensive laboratory facilities
TRADE STAR ENERGY LOGISTICS

- Founded in 2011 and headquartered in Houston, TX.
- **Technology** enabled mid-stream Logistics & Transportation Services Provider.
- “**Asset light**” model of company owned & contractor model provides unique flexibility & ability to deploy to new areas quickly and efficiently.
- +200 trucks in **Bakken, Rockies** and **Permian**. Evaluating opportunities in Marcellus/Utica, SCOOP, and Stack.
- Manage over 180,000 loads per year and strategically growing.
- ‘Full Well Site Management’ – Utilization - Visibility - Accuracy – Audit - Crude hauling - Water – Frac Sand
- Proprietary software, **Midstream Logistics**, provides real time and automated dispatching, e-ticketing, and reporting.
- Midstream Logistics offers **EDI** with customers back office systems allowing for full, seamless integration.
- Solution based culture with an emphasis on **integrity**, **confidentiality**, **traceability**.

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Joint venture between ETP (60%, operator) and Phillips 66 Partners (40%)

50 Mile Pipeline from Nederland, TX to Lake Charles, LA commenced service May 1, 2016

30” Nederland to Lake Charles segment went into service in April 2016

150 Miles 24” St. James segment expected to be complete in 2nd half 2018

Light and heavy crude service

Origin connections with Sunoco Logistics and Phillips 66 terminals at Nederland, Texas

Lake Charles connections: P66 & CITGO

St. James connections: Nustar & Plains

Lake Charles, LA to St. James, LA segment is under construction
- Dakota Access Pipeline connects Bakken production to Patoka Hub, IL, with interconnection to Energy Transfer Crude Oil Pipeline (Trunkline conversion) to reach Nederland and the Gulf Coast
  - Have commitments, including shipper flexibility and walk-up, for an initial capacity of ~470,000 barrels per day
  - Successful open season in early 2017 increased the total to ~525,000 barrels per day
  - Expandable to 570,000 barrels per day
  - Went into service and began collecting demand charges on the initial committed capacity June 1, 2017

Note: Gross JV project cost where applicable
(1) 676 miles of converted pipeline + 67 miles of new build
(2) Post closing of Bakken equity sale, ownership is ETP-38.25%, MarEn- 36.75%, and PSXP- 25%

**Project Details**

<table>
<thead>
<tr>
<th>Project</th>
<th>Asset Type</th>
<th>Miles</th>
<th>Project Cost ($bn)</th>
<th>In-service Date</th>
<th>Average Contract Duration</th>
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</thead>
<tbody>
<tr>
<td>Dakota Access</td>
<td>Crude pipelines</td>
<td>1,172</td>
<td>$4.8</td>
<td>June 1, 2017</td>
<td>9 yrs</td>
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<td>ETCO Pipeline</td>
<td>Crude pipelines</td>
<td>743(1)</td>
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</table>

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(1) 676 miles of converted pipeline + 67 miles of new build
(2) Post closing of Bakken equity sale, ownership is ETP-38.25%, MarEn- 36.75%, and PSXP- 25%
**KEY FACTS**

- The Dakota Access Pipeline does not cross Standing Rock Sioux reservation land.

- Another pipeline, the Northern Border Pipeline, has safely operated beneath Lake Oahe since 1982. DAPL follows the same route as Northern Border, but is much deeper below the bottom of the lake.

- 99.98% of the pipeline is on private land. The remaining 0.02% is owned by the Federal Government.
Notable: The Northern Border Pipeline has operated below Lake Oahe since 1982 – decades before DAPL began operating.

The Dakota Access Pipeline uneventfully operates along the same path as (but much deeper underground) the Northern Border Pipeline, which has functioned beneath the lake for 35 years.
CRUDE PETROLEUM QUALITY SPECIFICATIONS

• Two categories of shipments

  – Segregated Batch
    ▪ Must meet crude petroleum specifications listed in Item No. 10 of the tariff rules and regulations
    ▪ Shippers must provide facilities at the origin(s) including adequate storage to aggregate volumes into minimum batch sizes and support deliveries into the system at mainline rates
    ▪ Minimum segregated batch size is 100,000 barrels
  – Common Stream
    ▪ Must meet product specifications listed for defined specified grade(s)
    ▪ Must meet crude petroleum specifications listed in Item No. 10 of the tariff rules and regulations if not already listed in the specified grade(s)
    ▪ Carrier provides working storage to receive Specified Grades
CRUDE PETROLEUM QUALITY SPECIFICATIONS

Tariff Item No. 10. Quality Specifications; Restrictions

(1) Crude Petroleum that is not readily susceptible to transportation through Carrier’s existing facilities;
(2) Crude Petroleum having a vapor pressure in excess of 13.7 pounds per square inch absolute at 100°F, using ASTM D6377 methodology, or that would result in Carrier’s non-compliance with any federal, state, or local requirements regarding hydrocarbon emissions;
(3) Crude Petroleum having an API (American Petroleum Institute) gravity in excess of 78.9°;
(4) Crude Petroleum having an API gravity less than 37°;
(5) Crude Petroleum having a sulfur content weight % greater than 0.50%;
(6) Crude Petroleum exceeding 10 ppm hydrogen sulfide (H2S), using ASTM D5705-12 methodology;
(7) Crude Petroleum having basic sediment, water and other impurities of greater than one-half (1/2) of one (1) percent, with a maximum of three tenths (0.3) percent free water; and
(8) Crude Petroleum that does not meet the specifications of the connecting carriers.

Carrier reserves the right to reject any Crude Petroleum offered for transportation other than good and merchantable Crude Petroleum of acceptable character which, when measured and tested by Carrier or Carrier’s representative at the Origin Point, meets all of the qualifications under this tariff. The presence of contaminants in Crude Petroleum, including but not limited to chemicals such as chlorinated and/or oxygenated hydrocarbons and/or lead shall be reason for Carrier to reject any Crude Petroleum. Crude Petroleum containing such contaminants shall be deemed to be unmerchantable, and a Shipper who offers contaminated Crude Petroleum shall be deemed to have breached the warranty and representations set forth in Item No. 75 herein.
**CRUDE PETROLEUM QUALITY SPECIFICATIONS**

**Current Specified Grade**

<table>
<thead>
<tr>
<th></th>
<th>Bakken General*</th>
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<tbody>
<tr>
<td><strong>API Gravity, °API</strong></td>
<td>39-48</td>
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<tr>
<td><strong>Sulfur Content, Weight %</strong></td>
<td>≤0.20%</td>
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<tr>
<td><strong>BS&amp;W</strong></td>
<td>≤0.5%</td>
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<tr>
<td><strong>Max Vapor Pressure at 100°F using ASTM D6377 methodology, psi</strong></td>
<td>13.2</td>
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<tr>
<td><strong>Applicable Time Period</strong></td>
<td>October 2017</td>
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**CRUDE PETROLEUM QUALITY SPECIFICATIONS**

- Considerations for establishing product specifications
  - Varying customer needs between producers, refiners and marketers
  - Optimizing liquidity of supply
  - ND Order 25417
    - Established oil conditioning standards
    - Purpose to improve the transportation safety and marketability of crude oil
  - Product specifications established at other pipelines and rail facilities in the production areas served by DAPL
  - Delivery terminals specifications
  - RVP vs TVP vs Vapor Pressure
  - API Gravity in the production areas served by DAPL