Industry Perspective – Propane

2018 SHOOPP Workshop

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National Propane Gas Association
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ABOUT NPGA

• Nearly 2700 companies that produce, transport, and sell propane to millions of customers across America for use in many diverse applications
  • Residential and commercial space heating, water heating, cooking, vehicle fuel, agricultural crop drying

• Retail propane marketers largest membership segment (about 2300 total)
  • Over 95% are small businesses
  • Membership also includes equipment manufacturers, distributors and service providers

• Propane marketers on the front lines in dealing with consumers in terms of prices they must pay and supply reliability
NATURE OF PROPANE

• Major presence in rural America

• Seasonal nature of demand
  • Winter heating demand typically 2-3 times summer demand
    – Some regions may sell 5X more propane gallons in Jan/Feb than in July
  • Relatively low demand in summer compared with other products

• Delivery infrastructure critical during peak demand periods
Propane is delivered from nearly 10,000 bulk plant storage facilities to millions of customers throughout the U.S.

Propane is stored in large tanks and underground facilities and is shipped by pipelines, rail, or truck to thousands of secondary storage facilities throughout the U.S.

Tanks used in smaller bobtail delivery trucks and larger highway transport vehicles have capacities that range from 3,000 to 12,000 gallons and are built of thick, high-strength steel.

Secondary Storage

These bulk plants consist of one or more steel tanks, with typical capacities of 16,000 to 20,000 gallons each.

Primary Storage

Propane Gas Processing

U.S. Natural Gas

U.S. Petroleum

Exports

30%

70%

2%

Other imports

Primary Above Ground Storage

Pipeline

Rail

Road

Transport

Residential

Commercial

Industrial

Global/Exports

24%

Agriculture

Boilers + Transports

Engine Fuel for UPS/Plants

Propane

8%
U.S. PROPANE STORAGE CAPACITIES:
LIMITED STORAGE ALONG DELIVERY CHAIN

<table>
<thead>
<tr>
<th>Category</th>
<th>Storage Capacity (Million Barrels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground (Primary)</td>
<td>131.58</td>
</tr>
<tr>
<td>Above-ground (Primary)</td>
<td>5.35</td>
</tr>
<tr>
<td>Railcars</td>
<td>12.36</td>
</tr>
<tr>
<td>Transports</td>
<td>0.83</td>
</tr>
<tr>
<td>Dealer Bulk (Secondary)</td>
<td>9.15</td>
</tr>
<tr>
<td>Bobtails</td>
<td>1.69</td>
</tr>
<tr>
<td>Domestic Consumer (Tertiary)</td>
<td>111.25</td>
</tr>
</tbody>
</table>
SUPPLY AND INFRASTRUCTURE CHALLENGES

• Pipelines
  • Transparency initiative
  • Enbridge Line 5
  • Reversal of Cochin Pipeline
  • Reversal of flows due to impact of shale plays

• Rail Reliability
  • Increased rail activity on existing tracks due to shale plays and pipeline issues
  • Cold weather, lower speeds, congested rails, manifest trains vs. unit trains, etc.
  • Operational concerns and increased transit times
SUPPLY AND INFRASTRUCTURE CHALLENGES

• **Truck Transportation**
  - National driver shortage impacting all trucking industries including propane
  - Drivers need CDL with hazmat endorsement (HME)
  - Hours of Service constraints
    - FMCSA regional waivers last winter a huge help to industry

• **Effect of Exports**
  - U.S. is now a net exporter of propane
  - Competing in a world market rather than just a domestic one
  - Increases in export capacity
    - Mariner East 2
SUPPLY AND INFRASTRUCTURE CHALLENGES

What is NPGA doing?

• Pipelines - remain regularly engaged with FERC
• Rail – work directly with railroads is preferred but also have a good relationship with the STB
• Truck transportation
  – Driver shortage – focused on industry workforce development initiative
    • Support enactment of DRIVE Safe Act (HR 5358)
    – Maintain dialogue with FMCSA regarding Hours of Service
• Seek Jones Act waiver for propane shipments during winter
• Ensure that propane marketers position themselves as best they can to handle supply disruptions
OUTLOOK FOR PROPANE SUPPLY

• Current supply stocks at low end of 5-year average

• **Strong exports in April and May**
  • Total inventory on a days of disposition basis, entering the summer months at levels lower than last year.*

• **Production growth should allow days of disposition to increase at a faster pace than last year during the late summer months.**
  • If crude prices remain elevated through the remainder of the year, it may lead to propane as being a favored chemical feedstock and exports may be higher than currently forecasted leading to the possibility of low days of disposition again this winter.*

* IHSMarkit
FINAL THOUGHTS

• Timely propane inventory, capacity and market data is critical in the supply planning process for NPGA’s propane marketer members
  • NPGA has worked on a collaborative basis with EIA to underscore the value to market participants and government decision makers of such data.

• EIA has made great efforts, particularly since the winter of 2013-2014 to improve the data available to propane markets and market participants.

• FROM NPGA TO EIA: THANK YOU!
THANK YOU!

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