Liquid pipeline infrastructure across the United States benefits American consumers and workers. In 2012, liquid pipelines transported 14.1 billion barrels of crude oil, refined products and natural gas liquids across 185,000 miles of pipeline. Americans benefit from liquid pipelines to heat their homes, fuel their vehicles, harvest their crops, manufacture consumer goods, and more. Nearly every gallon of gasoline American consumers put into their vehicles travels at some point through a liquid pipeline. Liquid pipelines allow American consumers to benefit from new U.S. crude oil production. Liquid pipelines are transporting growing supplies of U.S. natural gas liquids to new chemical and plastics manufacturing facilities in the U.S. and creating new, good-paying jobs for American industrial workers.

Pipelines are the least expensive, most reliable, and safest mode of transporting liquid energy. In 2012, 99.9998% of the crude oil, petroleum products, and natural gas liquids transported by pipeline reached their destination safely. A recent Department of State analysis of the Keystone XL pipeline project estimated that alternative modes of transportation would result in 2.4 to 9.0 times more crude oil released to the environment each year compared to that pipeline. The safety record of pipelines is a natural outcome of the major financial investment pipeline operators make in pipeline safety each year. In 2012, pipeline operators spent more than $1.6 billion on pipeline integrity management evaluating, inspecting and maintaining their pipelines. The result is that over the last decade, liquid pipeline incidents are down over 60 percent and volumes released from pipelines are down over 45 percent.

Pipelines are also the most cost-effective form of energy transportation infrastructure. The U.S. Energy Information Agency (EIA) reports that shipping crude by rail costs an average of two to three times more than by pipeline. There is a role for rail transportation of crude oil and petroleum products depending upon the route, availability of pipeline capacity, time horizon or specific customer needs. Liquid pipeline operators compete vigorously against other pipeline operators and railroads, trucks, and barge operators that also transport energy liquids.

New and expanded pipeline infrastructure is essential to delivering the benefits of America's energy renaissance to U.S. consumers and workers. AOPL members have made substantial investments to link new production and supply sources to refining and consuming markets. Pipeline operators have been constructing new pipelines, reversing pipelines, converting pipelines from one type of product service to another, and expanding the capacity of existing pipelines by adding horsepower to pumping stations. More than 10,000 miles of new liquids pipelines have been placed into service in the last four years.

Today's hearing will touch on the role of pipelines transporting propane to the Midwest and Southeast. Pipelines transport propane on behalf of shippers who purchase propane at supply hubs and distribute it in their local markets. Pipeline operators earn revenues by transporting product for shippers, and thus have every incentive to ship product tendered for transportation on their systems. This winter, operating within the requirements of federal regulation and contract agreements, liquid pipelines responded to the need for additional propane shipments. Pipeline operators stand ready to work with propane market participants to facilitate the delivery of sufficient propane supplies in the future. Pipeline capacity exists, especially during off-peak times, to help ensure that fuel supplies are sufficient to meet seasonal needs.
Testimony of

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Before

Subcommittee on Energy and Power
Committee on Energy and Commerce
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I am Andy Black, President and CEO of the Association of Oil Pipe Lines (AOPL). AOPL represents the owners and operators of energy liquids pipelines. I applaud the Subcommittee for its continued interest in energy infrastructure, and for holding this hearing. Thank you for the opportunity to discuss the role of pipeline infrastructure in fuel supply.

Liquid pipeline infrastructure across the U.S. benefits American consumers and workers. Pipelines are the safest and least-expensive mode of energy transportation over land. During the recent local propane shortages, pipeline operators worked with propane shippers and the federal government to facilitate the delivery of additional propane supplies. Liquid pipeline operators are expanding the nation's infrastructure network to move energy from new production and storage areas to customers. Pipeline capacity also exists, especially during off-peak times, to ensure that fuel supplies are sufficient
to meet seasonal needs. Government can help ensure the availability of adequate pipeline infrastructure by avoiding unnecessary delays in regulatory approvals and continuing to provide a transportation rate structure that supports new pipeline infrastructure investment.

**Liquid Pipeline Infrastructure Benefits American Consumers and Workers**

Liquids pipelines transport the crude oil, refined products, and natural gas liquids that American consumers and workers use every day to lead their lives and fuel their jobs. In 2012, liquid pipeline operators delivered more than 14.1 billion barrels of crude oil and petroleum products across more than 185,000 miles of pipeline in the U.S.

Liquids pipelines transport crude oil from production areas across the U.S. and Canada to storage hubs and refineries. Separate liquids pipelines transport refined petroleum products (like gasoline, diesel fuel, jet fuel, home heating oil, and propane) from refineries to local distribution terminals. Still other liquids pipelines deliver natural gas liquids products (like ethane, butane, and propane) from production areas, to and from fractionation facilities, and on to U.S. consumers, manufacturers, and industrial users.

Americans benefit from liquids pipelines to heat their homes, fuel their vehicles, dry their clothes, harvest, and dry their crops, manufacture consumer goods, and more. Nearly every gallon of gasoline American consumers put into their vehicles travels at some point through a liquids pipeline. Liquids pipelines allow American consumers to benefit from U.S. crude production regions in Texas, North Dakota, California and states in between. Liquids pipelines are transporting growing supplies of natural gas liquids from new production areas in Pennsylvania, Ohio, and Texas to chemical and plastics manufacturing facilities in the U.S. and creating new, good-paying jobs for American industrial workers.
Pipelines Are the Safest, Least Expensive Energy Transportation Infrastructure

Pipelines are the least expensive, most reliable, and safest mode of transporting large volumes of energy liquids over long distances over land. In 2012 alone, 99.9998% of the crude oil, petroleum products, and natural gas liquids transported by pipeline reached their destination safely. The Final Supplemental Environmental Impact Statement completed by the U.S. Department of State for the Keystone XL pipeline found that alternative modes of transportation would result in 2.4 to 9.0 times more crude oil released to the environment each year compared to that pipeline. Denying the XL Presidential Permit and relying upon non-pipeline transportation infrastructure would result in the additional release of between 29,778 and 172,830 gallons of crude oil to the environment.

The safety record of pipelines is a natural outcome of the major financial investment pipeline operators make in pipeline safety each year. In 2012, pipeline operators spent at least $1.6 billion on pipeline integrity management evaluating, inspecting and maintaining their pipelines. The result is that over the last decade, liquid pipeline incidents are down over 60 percent and volumes released from pipelines are down over 45 percent.

While pipeline infrastructure is the safest mode of energy transportation, liquids pipeline operators remain focused on continuous improvement with the ultimate goal of zero incidents. Pipeline operators are undertaking a number of industry-wide initiatives to improve pipeline safety performance. In 2012, pipeline operators adopted a set of industry-wide safety values, including the goal of zero incidents. Industry-wide, operator-led safety groups continue to develop new recommended practices and safety improvement tools. In 2014, the liquid pipeline industry launched the Pipeline Safety Excellence initiative to take these safety efforts to the next level. The effort includes public sharing of our safety performance record and strategic initiatives addressing a number of key safety issues.
Pipelines are also the most cost-effective form of energy transportation infrastructure and the ideal method of transporting large volumes of energy over long distances. The U.S. Energy Information Agency (EIA) reports\(^1\) that shipping crude by rail costs an average of two to three times more than by pipeline. There is a role for rail transportation of crude oil and petroleum products depending upon the route, availability of pipeline capacity, time horizon or specific customer needs. Liquid pipeline operators compete vigorously against other pipeline operators and railroads, trucks, and barge operators that also transport energy liquids.

**Recent Propane Issues**

The importance of pipelines and other midstream transportation infrastructure was underscored by what has happened this winter in propane markets. Propane inventory levels in the Midwest, downstream of pipelines, began this fall at abnormally low levels, according to the EIA\(^2\). This set the stage for the most recent supply difficulties. Large supplies of propane were needed this fall to dry crops after a harvest that was late, abundant, and often wet. Following this increased agricultural demand, the Midwest and then needed considerable supplies of propane for heating during a winter that has been early, long and often very cold. The result was more local and regional concerns with downstream propane supply than has been the case in many recent years.

An existing network of liquid pipelines delivers propane and other natural gas liquids from storage hubs in Texas and Kansas to distribution facilities across the South, Midwest and Upper Midwest. The Dixie dedicated propane pipeline runs from Texas across the south to North Carolina. Enterprise TE Products Pipeline (TEPPCO) delivers refined petroleum products and natural gas liquids, including propane, from Texas north to southern Illinois and then east to Ohio, before continuing on as a propane

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\(^1\) EIA Today In Energy, July 26, 2012, [http://www.eia.gov/todayinenergy/detail.cfm?id=7270](http://www.eia.gov/todayinenergy/detail.cfm?id=7270)  
pipeline into Pennsylvania and New York. The Mid-America Pipeline (MAPL) delivers propane and natural gas liquids from a storage hub in Kansas to Wisconsin and Minnesota. The Kinder Morgan Cochin pipeline delivers propane and natural gas liquids southward from Canada down across the Upper Midwest arcing below Lake Michigan and then up into the State of Michigan. ONEOK Partners also operates natural gas liquids pipelines in the Midwest.

It is important to recognize that pipeline operators do not own the products shipped on their systems. Like FedEx or UPS delivering the packages of others, pipeline operators transport energy products for shippers, who own the products being shipped. A pipeline earns revenue by charging a rate for the transportation services it provides to shippers. Thus, pipeline operators have every financial incentive to make deliveries, including deliveries of propane.

The rates, terms and conditions of shipping on an interstate liquid pipeline are regulated by the Federal Energy Regulatory Commission (FERC). Such matters as how much a pipeline charges a shipper to make a shipment and the order in which a product is shipped relative to other shippers' products are set forth in a tariff on file with the FERC.

This winter, when local propane supplies fell, concern naturally focused on the reasons and potential solutions. Pipeline operators were asked to help, and they responded. TEPPCO asked shippers of other refined products on its pipeline system to voluntarily defer shipments so that propane shippers could ship propane from Mont Belvieu, Texas, and some shippers agreed. ONEOK filed several tariffs at FERC to facilitate the delivery of additional propane supplies from Conway, Kansas to markets. Kinder Morgan submitted a tariff filing at FERC to facilitate the shipment of additional propane supplies and alerted shippers about available capacity on the Cochin Pipeline from Alberta. Meanwhile, Enterprise’s Mid-America Pipeline, a dedicated propane pipeline, continued to run at
maximum capacity. When officials of the Department of Energy initiated regular calls to coordinate efforts to ease the crisis, AOPL participated fully and worked with its members to help address supply and transportation issues.

FERC issued a one-week emergency order\(^3\) that was effective February 7-14, directing TEPPCO to prioritize shipments of propane from Mont Belvieu, Texas to locations in the Midwest and Northeast in order to alleviate propane supply concerns in those regions. TEPPCO voluntarily agreed to a one-week extension of the emergency order through February 21. TEPPCO complied with the emergency orders and prioritized propane transportation requests during this period. I understand from public reports an additional 500,000 barrels of propane was injected into TEPPCO, at the request of propane shippers, during the first week that the FERC emergency order was in effect. AOPL does not know whether any additional propane was injected at the request of propane shippers during the second week of the emergency order.

**Minimizing Future Energy Shortages**

This situation is not the result of inadequate pipeline infrastructure. There is enough pipeline capacity to transport propane supplies to where they are needed. Business decisions regarding the scheduling of propane supply shipments and filling downstream storage are made primarily by propane market participants and not by pipeline operators. Pipeline operators offer propane transportation service to shippers year-round. However, propane shippers do not ship consistent amounts throughout the year. Generally, propane shippers ship less propane during late winter, spring, and early summer, and more propane just before fall harvests and into winter. While decisions about shipping propane and filling downstream storage might be easy to second guess in hindsight, they are complex and involve many

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factors best explained by propane market participants. Nevertheless, propane supply concerns can in large measure be alleviated by increased off-season purchases by propane market participants in supply areas, with advance shipment to consuming areas and injection of these supplies into storage. The pipeline industry stands ready to accommodate that shift in supply planning patterns by propane market participants, should they elect to do so.

Pipeline operators and AOPL have a strong history of working with shippers and government before and during times of crisis so that American consumers and workers can continue to receive the products they need. After Hurricane Sandy produced local flooding and power outages causing reduced supplies of gasoline and other refined products in New Jersey, pipeline operators worked with government and local stakeholders to restore service. After Hurricane Katrina knocked out power for pipelines and caused concerns about supplies in the Carolinas and mid-Atlantic, pipeline operators worked with government at all levels to return pipelines to service. These rare crises demonstrate the importance to Americans of maintaining a robust and reliable pipeline network.

**Importance of New Pipelines**

One essential element to assure continued sufficient supply of energy liquids is adequate pipeline capacity, including the building of new pipelines. AOPL members have been responding to the North American energy revolution by making substantial investments needed to link new supply sources to refining and consuming markets. Pipeline operators have been constructing new pipelines, reversing pipelines, converting pipelines from one type of product service to another, and expanding the capacity of existing pipelines by adding horsepower to pumping stations. More than 10,000 miles of new liquids pipelines have been placed into service in the last four years, according to the U.S. Department
of Transportation. These new pipelines are enabling Americans to access growing production of crude oil from Texas to Alberta, growing production of natural gas liquids from North Dakota to Texas to Ohio, and increases in refining and fractionation capacity.

Pipeline shippers play a huge role in assuring the availability of needed pipeline capacity. Most new pipeline capacity projects are supported by long-term agreements between pipeline operators and shippers to assure the use of proposed pipelines and enable financing. As transportation service companies moving products for a fee, pipeline operators have every incentive to maximize shipments by their customers. When shippers express their need for service by committing to use pipelines, pipeline operators respond.

Government policies also play a huge role in assuring availability of needed pipeline capacity. Thankfully, the Interstate Commerce Act and FERC policies today allow liquid pipeline operators to respond quickly to changing needs by propane and other shippers. FERC needs to continue to honor long-term transportation agreements between pipeline operators and shippers to ensure that needed new infrastructure can be built. It is essential that States make timely decisions on siting requests for pipelines, Federal agencies process permits needed for certain pipeline construction activities, and, of course, the U.S. Department of State efficiently grants Presidential Permits for pipeline facilities crossing our national borders.

This Subcommittee and Committee have been tremendous advocates of energy infrastructure, including pipelines. AOPL appreciates your attention to these issues with this hearing today.

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