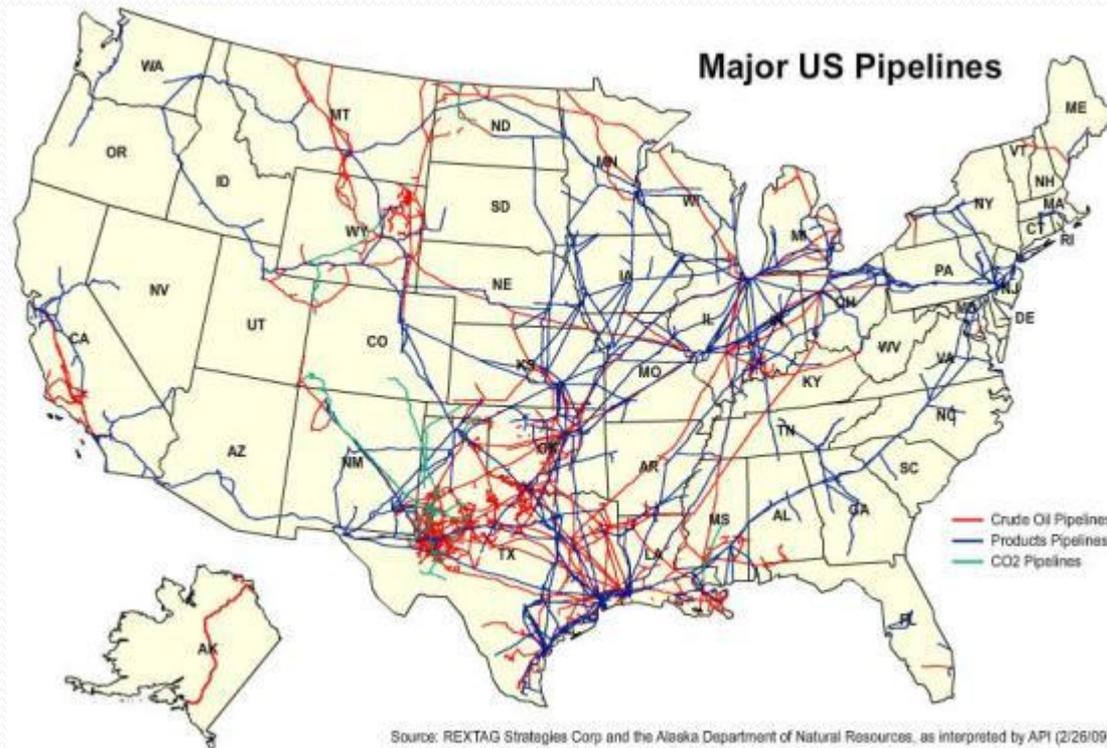

CEA Energy 101: The Association of Oil Pipe Lines (AOPL)

An Overview of the liquids pipeline industry, policy, and
how it impacts consumers

Liquid Pipeline Products

- Crude oil
- Refined petroleum products (gasoline, kerosene, diesel fuel, jet fuel)
- HVLs (butane, propane, etc.)
- Carbon Dioxide (moved as supercritical liquid, mostly for EOR and industrial consumers)
- Anhydrous Ammonia (primarily used for fertilizer production)

Pipelines in the US



How Products Move

- Liquid pipelines are powered by electric pump stations.
- To move a product on a pipeline a “shipper” must nominate space for delivery or storage by the operator.
- A single refined products pipeline can move dozens of products and grades of gasoline to marketplaces.
- Refined products are “batched” to meet the demands of customers and fuel regulations in the most economical fashion.

Typical sequence in which products are batched while in transit on Colonial System



Pipeline Facts

- Pipelines are the safest, most reliable, and environmentally favorable way to transport petroleum products and chemicals.
- Pipelines carry the feed-stocks vital for the food, pharmaceuticals, chemicals, manufacturing, and construction industries of the US.
- We have over 168,000 miles of liquid pipelines, which moves 68 percent of our domestic petroleum and refined products.
- Liquid pipelines transport 17 percent of our nation's freight, yet those services comprise only 2 percent of the country's freight bill.
- Replacing a medium-size pipeline that transports 150,000 barrels of gasoline per day would require 750 trucks, or a 225-car train everyday.
- Products on pipelines lines typically move at a walking pace (three to eight mph).
- Pipelines are resilient - During Hurricane Katrina, all affected pipelines were functioning within 5 days of the event, at 50% or more capacity.

How are we regulated?

- Safety – Pipelines are closely regulated by the Department of Transportation through the Office of Pipeline Safety (OPS) within the Pipeline and Hazardous Materials Safety Administration (PHMSA).
- Rates – Liquid pipeline rates are regulated by the Federal Energy Regulatory Commission (FERC).
- Environment – Our members must comply with a host of federal regulatory statutes administered by the EPA, Department of Interior, the Army Corps of Engineers, Department of Justice and others.
- Security – The Transportation Security Administration (TSA) has primary jurisdiction over both liquids and natural gas pipelines. AOPL member companies conduct tabletop exercises to examine worst-case scenarios as well as regular training with first responders.
- States and Local – Our members comply with several significant pipeline safety measures from state regulators and they collaborate with local stakeholders/property owners.

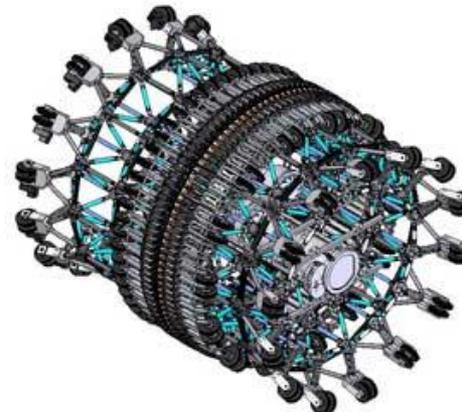
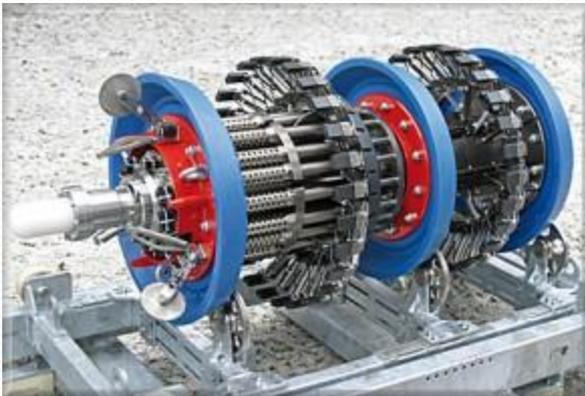
Rates and FERC

- Only 2.5 cents/gallon of gasoline is attributable to pipeline transport.
- Our “shippers” own the products; we simply provide transportation services.
- First regulator was the Interstate Commerce Commission (jurisdiction from 1906-1977).
- FERC is our current economic regulator.
- 1992 – Big changes from Congress under the Energy Policy Act. Orders FERC to develop “simplified and generally applicable” rate methodologies for oil pipelines.
- FERC adopts “rate indexing” as “simplified and generally applicable” methodology.
- Also retains other rate options:
 - ✓ Cost of service
 - ✓ Market-based rates
 - ✓ Negotiated rates

OPS and Pipeline Safety

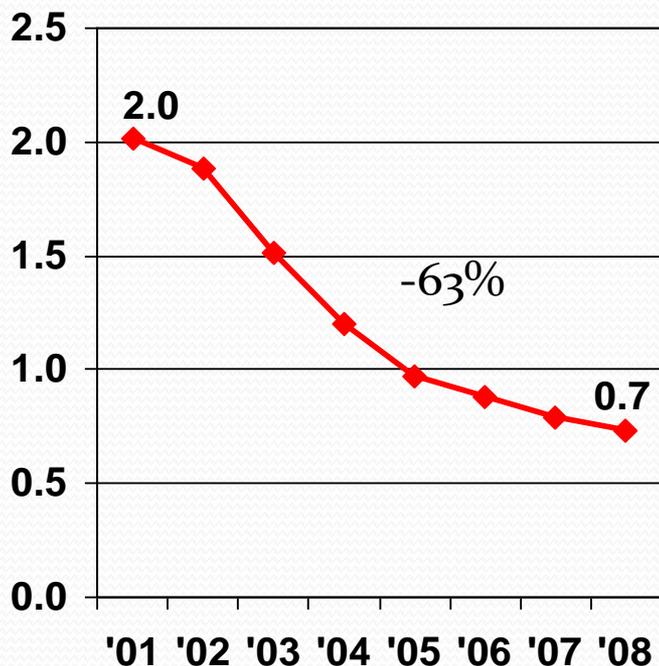
- Pipelines are closely regulated by OPS and they have every incentive to invest in safety - our members are vigilant to maintain their systems to protect the public and the environment.
- Integrity Management Plans (IMPs) - examine if a segment could impact a High Consequence Area. HCAs are population centers, navigable waters, or unusually sensitive areas like water supplies and ecological reserves. These plans are reviewed by OPS and must be updated at least every five years.
- A survey of just 15 percent of the industry revealed that operators spent over \$1 billion on IM (5 times DOT's estimate for all lines)
- AOPL member companies use advanced technology in their IMPs, like “smart pigs”, to detect issues and provide mitigation. They also use cathodic protection, ultrasonic testing, and magnetic leakage tools (MFLs) in addition to their visual and management inspections.

“Smart Pigs” and In-Line Inspection

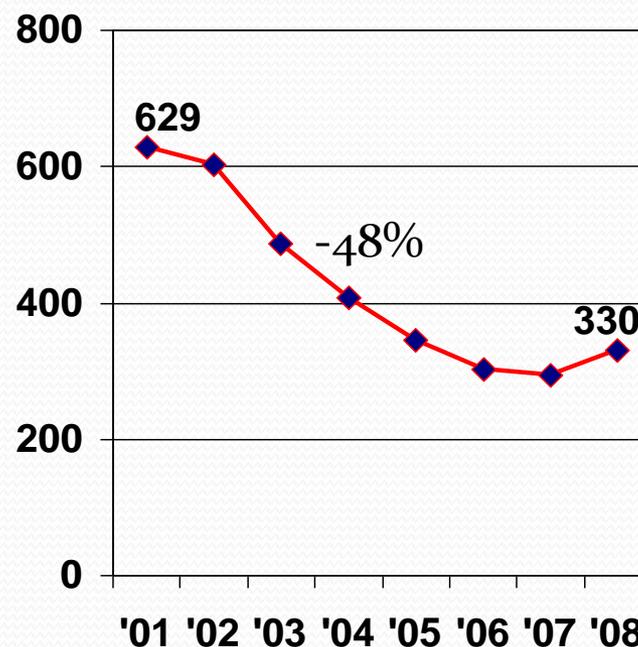


A Decade of Improvement

Number of Spills per 1,000 Miles



Barrels Released per 1,000 Miles



3-Year Averages Ending in Year Shown

Source: Pipeline Performance Tracking System, a voluntary spill reporting system involving 85% of the U.S. liquids pipeline mileage.
Percentage decline from 1999-2001 average to 2006-2008 average.

Legislative Issues

- We believe current pipeline safety regulations are strong and sufficient.
- Current authorizing legislation expires September 30th, while no funding for safety/enforcement provisions lapse we suggest Congress focus on the following issues in reauthorization:
 - Improve Damage Prevention Enforcement – Excavation damage by third parties accounts for only 7 percent of all releases, but makes up 31 percent of all significant incidents to the public and environment. Many states have weak, incomplete, or non-existent damage prevention laws.
 - Eliminate One-Call Exemptions – Many states exempt municipalities, state agencies, and local entities from using 811, the national Call Before You Dig Number.
 - Maintain Current Risk-based Focus on HCAs – We should focus our resources on these special places as Congress directed.

Future Challenges

- Biofuels -We are making great strides as an industry to meet the challenge of transporting ethanol and alternative fuels through pipelines.
- Oil Sands – Growth in the liquids pipeline industry will likely be met through increasing and stable supplies from Canada.
- CCS – Pipelines could play a large role in the potential success of CCS, if markets for CO₂ transportation develop.
- CFATS – DHS is moving forward with a proposal to regulate gasoline as a “chemical of interest” under the Chemical Facilities Anti-Terrorism Standards (CFATS) program. Such a designation is unwarranted and lacks factual credibility.

Questions?

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