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SURFACE TRANSPORTATION

Issues Associated With Pipeline Regulation by the Surface Transportation Board

Statement for the Record by
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Madam Chairwoman and Members of the Subcommittee:

We appreciate the opportunity to provide this statement for the record on the regulatory role of the Surface Transportation Board (STB) as the Subcommittee considers the reauthorization of this agency. Our statement presents preliminary information based on our ongoing work on STB's pipeline regulation. As you know, this work was required by the Interstate Commerce Commission (ICC) Termination Act of 1995. In asking us to study pipeline competition issues, the Congress was particularly concerned about the impact of STB's regulation on the pipeline transportation of anhydrous ammonia—an important crop fertilizer in the midwestern states.¹ A good portion of this statement will focus on this topic.

Specifically, this statement describes (1) STB's responsibilities in regulating surface transportation, (2) the historical reasons for the economic regulation of pipelines, (3) the ability of alternatives to anhydrous ammonia pipelines to compete in the Midwest, and (4) issues before the Congress as it decides whether to extend, modify, or rescind STB's authority to regulate pipelines. In summary, our preliminary work shows the following:

- The Surface Transportation Board is responsible for the economic regulation of railroads and certain pipelines, as well as some aspects of motor carrier and water carrier transportation. The majority of the Surface Transportation Board's resources and workload are devoted to examining rail issues. In fiscal year 1997, the Surface Transportation Board dedicated 89 percent of its staff years to rail issues and less than 1 percent to pipeline issues. Only 21 pipelines are under the Surface Transportation Board's jurisdiction.
- Historically, the federal government has regulated the rates charged by interstate pipelines because pipelines have inherent cost advantages that may limit competition from other pipelines as well as from other modes of transportation. For example, pipelines have low operating costs which may allow them to reduce their rates temporarily if faced with competition from other modes of transportation. Two federal agencies—the Surface Transportation Board and the Federal Energy Regulatory Commission—regulate pipelines. This regulation includes ensuring that all shippers have access to pipeline transportation services and that the rates

¹Anhydrous ammonia is a hazardous substance that is the primary source of nitrogen for growing crops. It can be applied directly as a fertilizer, or used as a component in producing other nitrogen fertilizers.

charged by pipeline carriers for these services are reasonable and nondiscriminatory.

- The ability of alternatives to anhydrous ammonia pipelines—local production plants and barge and rail transport—to compete with pipelines in the Midwest varies, depending on these alternatives’ access to the market areas served by pipelines and their ability to increase their supply of anhydrous ammonia to compete within those market areas. Our work showed that some market areas currently served by pipelines also have access to alternatives, while other market areas may not. However, even where alternatives to pipelines are available, they may not offer effective competition because they have limited ability to increase their supply of anhydrous ammonia without additional investments in capital. Because of the large number of local markets that exist along the two midwestern anhydrous ammonia pipelines, we were not able to definitively determine the number of markets that do or do not have competitive alternatives to pipelines.
- No clear conclusions can be reached on whether continued economic regulation of pipelines under STB’s jurisdiction is needed because such a determination requires the examination of competition in numerous local markets along 21 pipelines. However, as the Congress considers reauthorizing the Surface Transportation Board, pipeline regulation issues to consider include (1) whether pipelines do not face effective competition in a significant number of market areas and subsequently have the potential to charge unreasonably high rates; (2) what the costs of regulating pipelines are; (3) whether the limited number of pipeline cases before the Surface Transportation Board and its predecessor indicates there is no need for continued regulation; and, (4) whether shippers would have any recourse if STB’s economic regulation of pipelines was eliminated.

STB’s Role in Surface Transportation Regulation

STB is an independent agency administratively housed within the Department of Transportation. The successor to ICC, STB is responsible for the economic regulation of railroads and certain pipelines, as well as some motor carrier and water carrier activities. STB has fewer responsibilities and functions than ICC. STB’s fiscal year 1998 budget is nearly \$15.9 million, and it employs about 135 full-time equivalent staff, compared with ICC’s fiscal year 1994 budget of \$52.2 million and employment of 615 full-time equivalent staff. STB’s current authorization ends on September 30, 1998.

Most of STB’s regulatory oversight centers on the rail industry. This oversight encompasses enforcement of the “common carrier” obligation

(that the rates, services, and practices of carriers be reasonable), mergers and acquisitions, and the construction and abandonment of railroad lines. The ICC Termination Act eliminated, among other things, the regulatory requirement to file tariffs listing rates charged for transporting goods and requirements pertaining to contracts for the shipment of nonagricultural commodities. Rail issues constitute the majority of STB's workload. In fiscal year 1997, STB dedicated 116 of its 131 full-time equivalent staff (89 percent) to rail issues. Of the 1,429 decisions STB issued in fiscal year 1997, 988 (about 70 percent) concerned rail issues.

STB has jurisdiction over pipelines that provide interstate transportation of commodities other than oil, gas, or water. We identified 21 pipelines carrying five commodities—anhydrous ammonia, carbon dioxide, coal slurry, phosphate slurry, and hydrogen—that are subject to STB's regulation. STB's regulation of these pipelines includes ensuring that pipelines fulfill their common carrier obligations, including determining if the rates charged for these services are reasonable and nondiscriminatory. The ICC Termination Act limited STB's role in regulating pipeline rates by specifying that STB can begin a pipeline rate investigation only in response to a complaint by a shipper or other interested party. The act also eliminated the sole reporting requirement for pipeline carriers—tariff filing. According to STB, over the past 10 years only five cases involving pipelines have come before STB or ICC; one is ongoing. Because of the limited caseload, STB issued only six decisions on pipeline cases in fiscal year 1997 and devoted the equivalent of about one full-time staff member to pipeline issues.²

STB also has regulatory authority over some motor carrier functions. This oversight includes regulating the rates of household goods carriers and disposition of motor carrier undercharge cases. The ICC Termination Act eliminated some requirements for motor carriers, including tariff filing for most carriers, and transferred responsibility for others, such as registration and insurance, to the Federal Highway Administration. Finally, STB has jurisdiction over domestic water carrier transportation to or from Alaska, Hawaii, or territories and possessions of the United States. This regulation is limited to tariff filing and rate regulation. In fiscal year 1997, STB dedicated about 12 full-time equivalent staff to motor carrier and water carrier issues, primarily motor carrier issues. STB issued 420 decisions (about 29 percent of its workload) on these issues, most related to motor carrier issues.

²Each of the six decisions addressed aspects of two cases.

Pipelines Have Historically Been Regulated to Ensure That Their Rates Are Reasonable

Historically, the federal government has regulated industries engaged in interstate commerce—including common carrier pipelines—with inherent cost advantages that may limit competition from other pipelines as well as other modes of transportation. Specifically, because pipelines are expensive to build—but relatively inexpensive to operate—it is more efficient to build one large pipeline to transport a given amount of a commodity rather than two or more smaller pipelines. In addition, low operating costs may enable a pipeline to reduce its rates temporarily if faced with competition from other modes of transportation. The regulation of pipelines has been imposed to enforce the common carrier obligation, including ensuring that, in the absence of competition, pipeline carriers do not charge unreasonably high rates relative to their costs

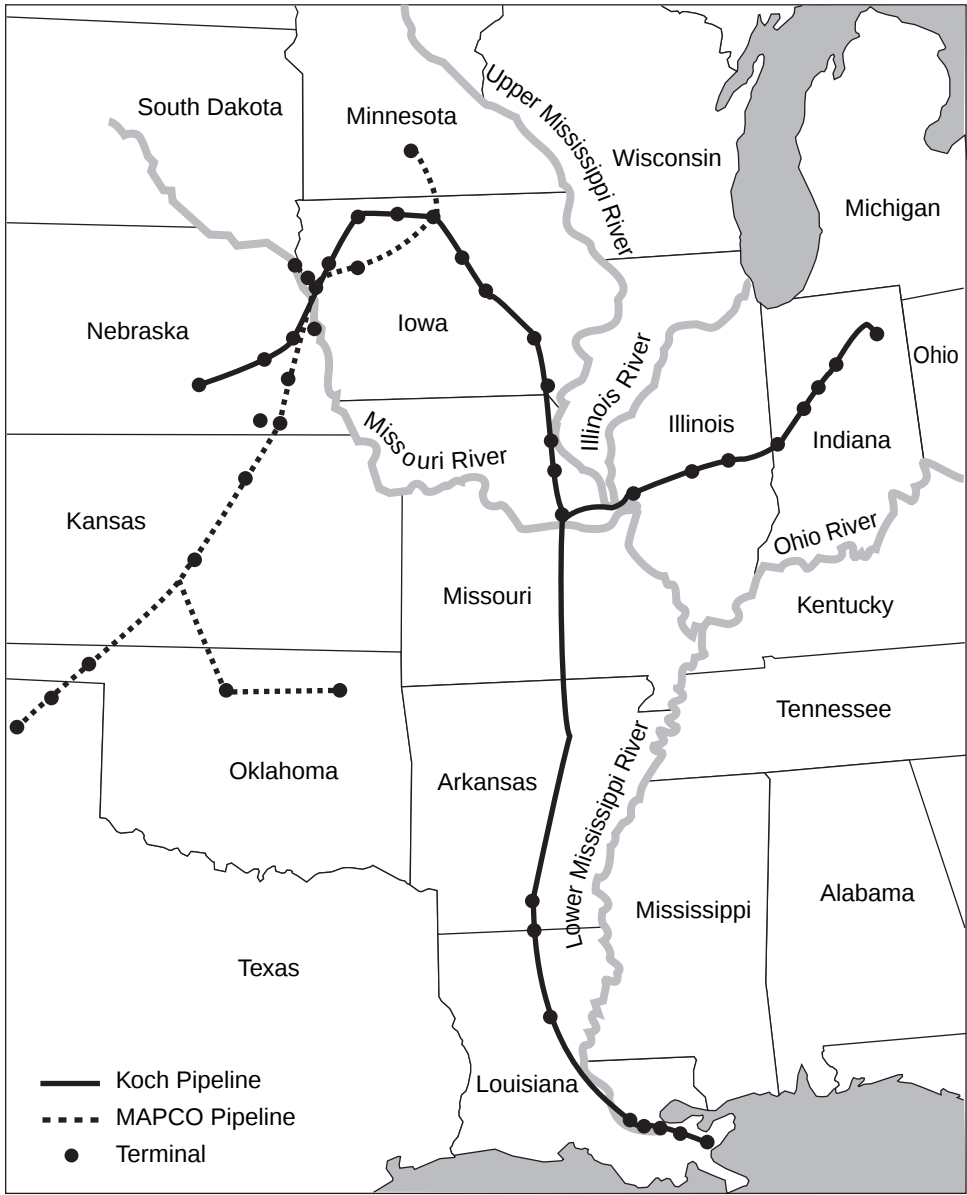
The federal economic regulation of interstate pipelines is provided by two agencies: the Federal Energy Regulatory Commission, which regulates oil and gas pipelines, and STB, which regulates the remaining pipelines. Regulation by the former covers more pipeline miles and involves more reporting requirements than the latter. For example, about 400,000 miles of oil and gas pipelines are under the jurisdiction of the Federal Energy Regulatory Commission, while fewer than 6,000 miles of pipelines are subject to STB's jurisdiction. In addition, oil and gas pipeline carriers are generally required to file tariffs and annual reports, while pipeline carriers under STB are not.

Ability of Pipeline Alternatives to Compete Varies Throughout the Midwest

The ability of alternatives to pipelines—local production within the Midwest, as well as barge and rail transport from other areas of the United States—to compete with pipelines within local market areas in the Midwest depends on two factors. First, because storage terminals are key to the distribution of anhydrous ammonia in local midwestern market areas, alternatives must have access to storage terminals within market areas that are also served by pipelines. We found that, while some local market areas currently served by pipelines also have access to alternatives, other market areas may not. Second, alternatives to pipelines must have the ability to increase their supply of anhydrous ammonia to serve these markets. We found that alternatives may not offer effective competition to pipelines because they have limited ability to increase their supply of anhydrous ammonia without additional investments in capital. Because of the large number of local markets that exist along the two midwestern anhydrous ammonia pipelines, we were not able to definitively determine the number of markets that do or do not have competitive alternatives to pipelines.

Two pipelines, one owned by Koch Pipeline Company, L.P., and one owned by MAPCO Ammonia Pipeline, Inc., carry anhydrous ammonia from Louisiana, Oklahoma, and Texas to the midwestern states. (See fig. 1.) These pipelines supplied 2.1 million tons (33 percent) of the estimated 6.4 million tons of anhydrous ammonia used in the Midwest in 1996. Three alternatives to pipelines—local production within the Midwest; barge shipments from Louisiana up the Mississippi, Illinois, and Ohio Rivers; and rail shipments primarily from other areas—also provide anhydrous ammonia to the Midwest. Local production accounted for about 3 million tons, or about 47 percent, of the total midwestern demand. Barge shipments accounted for 0.9 million tons (14 percent) and rail shipments accounted for 0.4 million tons (6 percent).

Figure 1: Map of Koch and MAPCO Pipelines



Sources: Koch Pipeline Company, L.P. and MAPCO Ammonia Pipeline, Inc.

The highly seasonal demand—lasting as little as 10 days each in spring and fall—for anhydrous ammonia applied directly to fields as a fertilizer makes it important to have large amounts of this product stored close to farms if farmers’ needs are to be met. Regardless of the means of transport, the most efficient way to meet this demand is to have large storage tanks (generally from 20,000 to 40,000 tons of anhydrous ammonia per tank) in terminals located close to fertilizer dealers and farmers throughout the Midwest. As a result, anhydrous ammonia markets in the Midwest appear to be fairly localized. Currently, 60 terminals throughout the Midwest—28 of which are located on pipelines—store anhydrous ammonia for peak-season use.

Currently, more than half of the 28 terminals located on pipelines have no alternatives to the pipelines. (See tbl. 1.) The remaining terminals have access to alternatives that may limit the pipelines’ ability to charge high rates to deliver the product to that terminal.

Table 1: Alternative Types of Access for Terminals Served by Pipelines

Type of access	Number of terminals (percent)
Single pipeline	16 (57)
Pipeline and rail	7 (25)
Pipeline, local production, and rail	2 (7)
Pipeline and barge	2 (7)
Pipelines and rail	1 (4)
Total	28 (100)

Note: No other combination of access exists, such as a location served by pipeline, barge, and rail.

Some of the 32 terminals not on the pipelines may also be able to supply anhydrous ammonia to fertilizer dealers in a pipeline terminal’s market area and effectively limit pipelines’ ability to charge high rates. For example, if the price of anhydrous ammonia were to increase at a pipeline terminal in response to higher shipping rates on the pipeline, fertilizer dealers in the area could turn to cheaper sources of anhydrous ammonia—such as terminals served by barge, rail, or local production—if available. If these other sources could increase their supply without incurring significant increases in their transport and storage costs—thus enabling them to keep their prices steady—the pipeline might be forced to keep its rates reasonable in order to retain customers.

However, the ability of these alternative sources to expand their supply of anhydrous ammonia beyond current levels without additional investment may be limited. It is unlikely that plants devoted to producing anhydrous ammonia as a first step in manufacturing other forms of fertilizer will switch to producing anhydrous ammonia for direct application. According to representatives from barge companies and barge terminals, the current fleet of barges is operating at or near capacity and terminals also have limited excess capacity. Fertilizer dealers and shippers were also skeptical about the ability of rail to expand capacity to compete with the volume of product currently provided by the pipelines. Expanding capacity in any of these modes could be expensive. For example, new barges are estimated to cost between \$4 million and \$5 million each, while new barge terminals cost approximately \$15 million.

As an alternative to the direct application of anhydrous ammonia, farmers could substitute other forms of nitrogen fertilizer. This action would lessen the need to have large amounts of anhydrous ammonia shipped to the Midwest. However, it is not clear that other nitrogen fertilizers are substitutable for anhydrous ammonia. For example, of the nitrogen fertilizers, anhydrous ammonia is best suited for fall application because it loses little of the nutrient during the winter compared with other forms of nitrogen fertilizers. In addition, anhydrous ammonia is relatively low cost and is the most concentrated form of nitrogen available. For example, in April 1997, the cost to farmers of nitrogen in anhydrous ammonia form—82-percent nitrogen content—was \$369 per ton, while the cost of nitrogen in a liquid upgrade form—28- to 32-percent nitrogen content—was \$533 per ton. Because an increase in pipeline transportation rates would represent only a small portion of the cost of anhydrous ammonia to farmers, a substantial increase in pipeline rates would be required before farmers would be likely to switch.

Issues Before the Congress in Deciding the Future of STB's Regulation of Pipelines

No clear conclusions can be reached on whether the continued economic regulation of pipelines under STB's jurisdiction is needed because such a determination requires the examination of competition in numerous local markets along 21 pipelines. Such an examination was not feasible for our study, nor was it feasible to address whether anhydrous ammonia pipelines are representative of all pipelines under STB jurisdiction. There will be several issues before the Congress as it decides whether to extend, modify, or rescind STB's authority to regulate pipelines. These issues deal with whether to substantively change or leave in place how STB regulates pipelines. We have not addressed whether the current approach to the

economic regulation of pipelines might remain substantially unchanged but carried out by another agency.

First, do pipelines under STB's jurisdiction lack effective competition in a significant number of market areas and have the potential to charge unreasonably high rates? Whether pipelines under STB's jurisdiction have such power is uncertain. As discussed above, limited competition may exist in a number of anhydrous ammonia markets on two pipelines in the Midwest while other markets may have sufficient alternatives to constrain pipeline rates. However, according to a 1986 report from the Department of Justice, all markets along a pipeline do not necessarily have to be competitive in order to justify deregulation of the pipeline.³ Instead, Justice concluded that the number of markets along a pipeline that do not have competitive alternatives—and therefore require regulation—should be balanced against the costs of regulating that pipeline.

Second, are the costs of regulation burdensome to pipeline carriers? The regulatory requirements imposed on pipeline carriers do not appear to be high. STB does not have the authority to initiate rate cases. In addition, STB does not require that pipelines file rate schedules, nor does it impose reporting requirements on pipelines wanting to start up or go out of business. In fiscal year 1997, STB devoted the equivalent of about one full-time staff member to pipeline issues. If a rate case is brought before STB, the cost to the pipeline carrier of defending the case could be substantial. The limited number of pipeline rate cases in STB's and ICC's history provides little basis for estimating the cost of these cases. However, STB officials told us that the cost of rail rate cases ranges from less than \$50,000 up to about \$1 million.

Third, does the limited number of pipeline rate cases indicate there is no need for continued regulation? It is possible that the very limited number of rate cases brought before STB and its predecessor in the last 10 years is evidence of effective competition and therefore there is no need to continue pipeline regulation. However, some shippers we talked to contend that the mere existence of a federal regulatory agency with the authority to roll back rate increases acts as a deterrent to unfair rate increases.

Finally, would shippers have recourse if STB's economic regulation of pipelines was eliminated? Absent STB or any other regulatory body, shippers that believe they are being charged unfair rates would

³Oil Pipeline Deregulation, Report of the U.S. Department of Justice, May 1986.

presumably complain to the Department of Justice or the Federal Trade Commission. However, neither of these agencies currently has the statutory authority to investigate complaints from shippers that believe they are being charged rates that are unreasonable or discriminatory, unless the complaint alleges a violation of antitrust laws.

This concludes our statement.

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