GAO

Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

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RAILROAD REGULATION

Shipper Experiences and Current Issues in ICC Regulation of Rail Rates

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The Honorable John D. Dingell
Chairman, Subcommittee on
Oversight and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

This report, prepared at your request, provides information on the Interstate Commerce Commission's (ICC) implementation of the market dominance and rate reasonableness provisions of the Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980. As you are aware, one of the Staggers Rail Act's major goals was to provide a regulatory process that balances the needs of railroads, shippers, and the public. This report provides information on how shippers obtain rate relief (reduced rates and/or refunds of overcharges) from ICC under the Staggers Rail Act and whether any shippers have done so.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. We will then send copies to the Chairman, Senate Committee on Commerce, Science, and Transportation; the Chairman, ICC; the Secretary, Department of Transportation; the Director, Office of Management and Budget; and other interested parties.

This work was performed under the direction of Kenneth M. Mead, Associate Director. Other major contributors are listed in Appendix VI.

Sincerely yours,

J. Dexter Peach

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Assistant Comptroller General

Executive Summary

Purpose

Rail shippers and their trade associations have charged that the Interstate Commerce Commission (ICC) has made it difficult for a shipper to prove that a rail rate is unreasonable. The Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, asked GAO to determine whether and how shippers obtained rate relief (reduced rates and/or refunds of overcharges) from ICC under the Staggers Rail Act. GAO is also providing information on stand-alone cost, a principal and controversial element of ICC's guidelines for determining rate reasonableness.

Background

Prior to 1976, ICC regulated almost all rail rates to assure that they were reasonable. The Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980 deregulated the rail industry so that today, most rail traffic is not regulated and rates are limited by competition. The Staggers Rail Act also exempted contract rates from regulation and presumed them to be reasonable because a contract reflects shipper and railroad agreement.

Recognizing that not all rail markets were competitive, the acts retained ICC rate regulation where railroads had no effective competition and rates exceeded a threshold percentage—currently 180 percent—of the shipment's variable costs (those which vary with the quantity shipped). Since the lack of effective competition is decided on a case-by-case basis, GAO does not know how much traffic is subject to regulation. However, ICC has estimated that about 25 percent of rail revenues comes from shipments with revenue-to-variable cost above the 180 percent threshold.

Rather than prescribe a specific approach for determining the reasonableness of rates that exceeded the threshold percentage, the acts allowed ICC to develop rate standards which would balance the needs of railroads and shippers. The Staggers Rail Act directed ICC to consider the railroads' need for adequate revenues when assessing the reasonableness of a rate.

After a 7-year effort, in September 1985, ICC published coal rate guidelines, which it called Constrained Market Pricing. Coal represented 40.8 percent of railroad freight tons in 1985. ICC uses Constrained Market Pricing to evaluate rates on large-volume shipments of coal.

Stand-alone cost is a key element of Constrained Market Pricing which limits a rate to what a hypothetical efficient competitor would charge

for providing comparable service. Stand-alone cost is not a formula and can be interpreted and applied in different ways. Consequently, it has been controversial.

The cost to prepare a large shipment case can exceed $500,000. Because of the high cost, in March 1987, ICC proposed two simplified alternatives to Constrained Market Pricing that could be used when a Constrained Market Pricing presentation was too expensive to prepare. ICC recognizes that it needs to develop criteria on when the simplified methodologies should be used and is in the process of doing so.

Results in Brief

Most rate cases filed after the Staggers Rail Act were settled through shipper and railroad negotiations. Although only one shipper who continued through ICC's complaint process has obtained rate relief, five cases remain open and two others are being appealed.

ICC intended that its coal rate guidelines would allow shippers and railroads to estimate the rate it would prescribe. Such knowledge could help railroads set reasonable rates, help shippers evaluate proposed rates, and encourage negotiated rates. The guidelines, however, left unresolved the crucial issue of how to determine stand-alone cost. Recent case decisions have helped clarify what approaches ICC will accept.

Principal Findings

Rate Relief

About 78 percent of the estimated 1,000 rate reasonableness cases pending when the Congress passed the Staggers Rail Act or filed thereafter were withdrawn by the shipper and settled through negotiations with the railroad. Of the remaining cases, ICC ruled the railroad rate to be unreasonable in 19 cases. Five of these remain open and 3 are being appealed. Of the 12 closed cases, 7 were withdrawn by the shipper after obtaining a rate change outside the complaint process, 3 were decided by ICC in favor of the railroad after an appeal, and 1 is no longer under ICC's jurisdiction.

ICC believes many shippers have obtained rate relief through contract rates. Of the 19 cases where ICC ruled a rate to be unreasonable, shippers tried to negotiate a contract rate in 16 instances. In 6 of the 16

cases, a contract was negotiated. However, of these six only one shipper believed the contract rate to be rate relief.

Rate Reasonableness Guidance

ICC has undertaken several investigations in order to develop workable guidelines for determining a rate's reasonableness. From 1978 to 1983, ICC employed several interim standards. From February 1983 to September 1985, ICC had no official guidelines, leaving shippers and railroads with no way to judge what constitutes a reasonable rate. Finally, in September 1985, ICC adopted the coal rate guidelines.

ICC's 1985 coal rate guidelines established broad criteria for judging a rate's reasonableness, intending that details be worked out on a case-by-case basis. Some of these details, however, proved to be major issues such as what rail facilities should be considered when calculating stand-alone cost, and how costs should be apportioned among a group of shippers.

By spreading the costs of rail facilities over many shippers, a railroad serves each shipper at lower unit cost than if the rail facilities were built for and used by only one shipper. When calculated for a group of shippers, stand-alone cost incorporates these cost spreading opportunities.

ICC's coal rate guidelines recognized the importance of grouping shippers, but did not provide general definitional guidance. The guidelines also contained no practical method for apportioning fixed costs among the shippers in the group. Without better guidance on how to approach these problems, railroads and shippers developed fundamentally different grouping approaches.

As a result, railroads and shippers developed widely varying methods of calculating stand-alone cost. For example, in the Omaha Public Power District v. Burlington Northern Railroad Company case, stand-alone cost estimates ranged from the shipper's $8.98 per ton to the railroad's $38.87 per ton. Because ICC restricted its approval of the shipper's methodology to case-specific details, the decision in favor of the shipper did not provide clear guidance to other litigants.

In a later case decision, Arkansas Power and Light Company v. Burlington Northern Railroad Company et al., ICC was more specific in explaining what approaches to stand-alone cost were or were not acceptable. This should help shippers and railroads prepare case evidence. ICC has applied its proposed alternatives to two other rate cases, McCarty

Farms et al. v. Burlington Northern Railroad Company and South-West Railroad Car Parts Company v. Missouri Pacific Railroad Company, and tentatively decided that some of the rates were unreasonable.

Recommendations

This report provides information on rate relief. GAO is making no recommendations.

Agency Comments

GAO discussed the contents of this report with responsible agency officials, and their comments were incorporated where appropriate. However, as agreed with the requester's office, GAO did not obtain official agency comments on a draft of this report.

Contents

Tables

Abbreviations

ALJ	Administrative Law Judge
CMV	Calculated Market Value method
GAO	General Accounting Office
ICC	Interstate Commerce Commission
P.L.	Public Law

Introduction

Prior to 1976, the Interstate Commerce Commission (ICC) regulated almost all rail rates to assure that they were reasonable. The Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act) (P.L. 94-210) deregulated the rail industry with the expectation that competition would improve railroad efficiency, halt the industry's financial decline, and produce reasonable rates. Recognizing that not all rail markets were competitive, the 4R Act retained ICC rate regulation where railroads were market dominant[1] and could thus charge above a competitive rate. If a railroad were found to be market dominant, under criteria ICC was to establish, ICC had jurisdiction to determine whether a challenged rate was reasonable and, if unreasonable, to set a maximum rate. The Staggers Rail Act of 1980 (P.L. 96-448) created a jurisdictional threshold that further limited ICC regulation to rail rates that are currently 180 percent of the variable cost (costs which vary with the quantity shipped). Table 1.1 outlines the successive steps created by the 4R and Staggers Rail Acts for obtaining rate relief based on a shipper's complaint.

As a result of these laws, most rail traffic is not subject to ICC regulation and rates are limited by competition. Under the Staggers Rail Act, contract rates are exempt from regulation. The amount of captive traffic (that is, noncompetitive markets) is difficult to quantify because the lack of competitive alternatives is determined on a case-by-case basis following a shipper's complaint. However, according to data from a 198 ICC study of rail freight revenues and costs, only about 25 percent of rai revenues comes from shipments with a revenue-to-variable-cost ratio above the 180-percent jurisdictional threshold.

[1]Market dominance, as defined in legislation and ICC guidelines, is an absence of any type of effecti competition. Thus, the shipper has no alternative to the current rail service and is "captive" to the railroad

Table 1.1: Steps in Obtaining Rate Relief Under the 4R and Staggers Rail Acts

Step	Decision	Burden of Proof
1	Jurisdictional threshold	The railroad bears the burden of proving that the revenue-to- variable-cost ratio is less than 180 percent
2	Market dominance	The burden of proof for market dominance is divided between the shipper and the railroad based on the type of competition in question. The shipper must prove that the railroad has no rail or nonrail transportation competition for the traffic. The railroad bears the burden of proving that a substitute or alternative source for the product exists and is effective in limiting rates.
3	Rate reasonableness	The shipper must prove that the rate is unreasonable

Sources. 4R Act, Staggers Rail Act; and ICC decision served Oct. 31, 1985 in Ex Parte No 320 (Sub-No 3)

The amount of captive traffic may change over time since shipper captivity to a railroad is, in an economic sense, a short-run situation. Over the long-run, shippers will make plant location and supplier decisions that take advantage of competitive markets. But in any given time period, there will be some amount of captive traffic for which ICC is the only protection against monopolistic abuse.

The Staggers Rail Act, like the 4R Act and preceding rail legislation, did not prescribe any quantitative measures for ICC to use in determining rate reasonableness. However, the act directed ICC, when considering the reasonableness of a rate, to recognize that railroads should earn adequate revenues. The act also created the Railroad Accounting Principles Board, which was to establish cost accounting standards to support a variety of ICC decisions, including rate reasonableness.

In September 1985, ICC published its current guidelines, called "Constrained Market Pricing," for determining the reasonableness of rail-captive coal rates. In May 1986, ICC began an investigation to determine whether its guidelines could be applied to all captive shipments. On the basis of comments received, ICC decided that, in some cases, the cost of preparing Constrained Market Pricing evidence could be prohibitive relative to the relief sought. In March 1987, ICC proposed two simplified procedures that could be used when Constrained Market Pricing was inappropriate.

ICC named Constrained Market Pricing the "Coal Rate Guidelines" and named the proposed simplified alternatives the "Non-Coal Guidelines." However, ICC's application makes the terms somewhat misleading. ICC is

applying its coal rate guidelines to any commodity with transportation characteristics similar to the shipment of large volumes of coal in unit trains (single commodity trains). The noncoal guidelines apply to any commodity, including coal, with multiple origins and destinations and/or involving small shipments such that the cost of preparing Constrained Market Pricing evidence would be too high relative to the potential rate relief.

The coal rate guidelines culminated 7 years of deliberation and analysis, during which ICC used varying interim approaches to determine the reasonableness of rates. As of June 1987, ICC has ruled on two rate complaint cases using its 1985 rate guidelines and tentatively ruled on another case using its 1987 proposed noncoal guidelines. The first case to use the 1985 Constrained Market Pricing guidelines was Omaha Public Power District v. Burlington Northern Railroad Company. Decided in favor of the shipper, the case is now under appeal to the U.S. 3rd Circuit Court of Appeals.

The second case decided under the 1985 guidelines, Arkansas Power and Light Company v. Burlington Northern Railroad Company, et al., was also decided in favor of the shipper. The railroads have appealed to the courts. On May 22, 1987, ICC tentatively ruled in favor of the shippers in McCarty Farms, et al. v. Burlington Northern Railroad Company. ICC used its 1987 proposed noncoal guidelines to decide this case, which involved wheat and barley shipments. ICC gave the shippers and the railroad 45 days to comment. On July 1, 1987, ICC again used its proposed noncoal guidelines in tentatively deciding in favor of the shipper in the case of South-West Railroad Car Parts Company v. Missouri Pacific Railroad Company.

Stand-alone cost, an element of Constrained Market Pricing that limits rates to the price that would be charged by a hypothetical efficient competitor, has raised controversy. An economic concept that is intended to simulate competitive pricing, stand-alone cost eludes mathematical precision and can be applied in different ways, leading to widely varying rate calculations. The coal and public utility industries in general oppose the use of stand-alone cost and have led an effort to legislatively prohibit its use. The railroad industry does not oppose the stand-alone cost concept, but has its own views (explained in ch. 4) as to how the concept should be applied.

Objectives, Scope, and Methodology

In his April 22, 1985, letter, the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, asked us to review, among other things, how ICC was implementing the Staggers Rail Act of 1980. In particular, the Chairman was concerned that ICC's implementation had favored the railroads. After discussions with the Chairman's office, we agreed to examine several aspects of ICC's implementation of the Staggers Rail Act, including how ICC determines market dominance and rate reasonableness.[2]

Our objective was to determine whether and how shippers obtained rate relief from ICC under the Staggers Rail Act. Because of the controversy surrounding it, we also wanted to review the stand-alone cost constraint contained in the final coal rate guidelines. To accomplish these objectives, we reviewed rail legislation and applicable ICC proceedings, decisions, and guidelines to determine the criteria for market dominance and rate reasonableness. We also reviewed the economic literature on these issues. As requested by the Chairman's office, we then used a case study approach to determine how ICC applied its market dominance and rate reasonableness criteria. Based on discussions with ICC officials and a review of agency records, we identified 19 complaint cases where ICC, at some decision level, ruled a railroad rate to be unreasonable. (App. I lists the 19 cases we reviewed.) For each of these cases, we reviewed ICC's decisions and the legal documents submitted by the shippers and railroads to see what criteria ICC applied and how it was used. We did not, however, evaluate the merits of either party's evidence.

We also contacted each of the shippers and railroads or their legal representatives involved in the 19 cases to obtain their views of ICC's rate complaint process as it applied to their cases. (App. II lists the shippers and railroads contacted.) Finally, we interviewed officials at ICC and the Association of American Railroads (the railroads' trade association) for their response to the overall complaint process.

Because of the considerable controversy over ICC's use of stand-alone cost, we analyzed this issue in depth. Using the first case decided according to ICC's 1985 coal rate guidelines, we reviewed how the Omaha Public Power District and the Burlington Northern Railroad interpreted

[2]We discuss other aspects of ICC's implementation of the Staggers Rail Act in Railroad Revenues: Analysis of Alternative Methods to Measure Revenue Adequacy (GAO/RCED-87-15BR, Oct. 2, 1986) and Railroad Regulation: Competitive Access and Its Effects on Selected Railroads and Shippers (GAO/RCED-87-109, June 17, 1987).

stand-alone cost and what led ICC to decide the case in favor of the shipper. (See app. V.) We also reviewed the material on stand-alone cost submitted in the case by other railroads. In addition, we reviewed ICC's recent decisions in the cases involving Arkansas Power and Light Company and McCarty Farms.

We made this review in accordance with generally accepted government auditing standards, except that at the Committee's request, we did not obtain agency comments on the report. Our audit work was conducted from January to June 1986, and updated through July 1987.

Development of Criteria for ICC Jurisdiction and Rate Reasonableness

Together, the 4R and Staggers Rail Acts limited ICC's regulation of rail rates to instances where ICC determines that the railroad is market dominant and where a shipment's rate exceeds its cost by a percentage—known as the jurisdictional threshold—which ICC calculates each year. Once jurisdiction is established, ICC can determine whether or not a rate is reasonable. About 78 percent of the estimated 1,000 rate reasonableness cases pending when the Congress passed the Staggers Rail Act or filed thereafter, were withdrawn by the shipper and settled through negotiations with the railroad.

ICC has undertaken four investigations and issued five interim decisions or proposed guidelines as part of its effort to develop a methodology for determining rate reasonableness. This effort initially produced the September 1985 coal rate guidelines. Then, in May 1986, ICC proposed applying its coal rate guidelines to all commodities. In March 1987, ICC asked for public comment on two alternative methods that could be applied whenever a Constrained Market Pricing presentation was too expensive to prepare.

ICC developed Constrained Market Pricing (the coal rate guidelines) to assure that all coal rates are reasonable. Constrained Market Pricing allows railroads to set rates in all markets based on shippers' demand for rail service. To prevent overcharging captive shippers—those with no alternatives to their present rail service—rates are subject to constraints ICC developed that would simulate the pricing of competitive markets.

Rate cases can be lengthy. Of the five cases we reviewed that are still pending, the average case length was about 7 years. Part of the length of these cases can be attributed to ICC's effort to develop rate reasonableness guidelines. As ICC revised its interim guidelines, ongoing cases were often reopened, adding to their length. A second reason for long rate cases is that parties have frequently exercised their full rights under the Administrative Procedure Act (5 U.S.C. 551 et seq., 1982). We did not evaluate the merits of the process; however, we found that the efforts of the railroad and shipper to fully use their right to due process added to the time needed to decide a case.

Development of ICC's Market Dominance Criteria

The 4R Act provided that no rail rate could be regulated unless ICC first determined that the railroad had market dominance over the service. The 4R Act broadly defined market dominance as an absence of effective competition from other railroads or modes of transportation such as trucks and barges. The Congress left it to ICC to decide in detail how market dominance and effective competition would be determined. The Staggers Rail Act retained the market dominance concept and directed ICC to consider broadening the concept of effective competition to include not only the transportation service but also the markets for materials used by the shipper. For example, a shipper totally dependent on the existing rail service for shipments of a particular material used in the production process may be able to substitute some alternative material (e.g., oil for coal) or purchase the material from an alternative source. The Staggers Rail Act also added a jurisdictional threshold test—a minimum revenue-to-variable-cost ratio currently at 180 percent—as the first step in determining ICC's jurisdiction over a rate.

Market Dominance Implementation Under the 4R Act

The 4R Act limited ICC's rate jurisdiction to situations where the railroad was market dominant. To comply with this provision, on August 20, 1976, ICC established four tests, or "rebuttable presumptions," to determine market dominance. If any of the following conditions were true, then the railroad was presumed to be market dominant and ICC had authority to review the reasonableness of a challenged rate:

- The rate bureau test—the rate in issue had been discussed, considered, or approved under a rate bureau[1] agreement.
- The market share test—the railroad had handled 70 percent or more of the challenged transportation service during the preceding year.
- The substantial investment test—the shipper had made a substantial investment in rail-related equipment which prevented or made impractical the use of another railroad or mode of transportation.
- The cost test—the rate in issue exceeded the variable cost by 80 percent or more. This test was usually expressed in a revenue-to-variable-cost ratio percentage.

[1]Rate bureaus were railroad associations which engaged in collective rate-making under antitrust immunity. The 4R Act restricted their rate-making authority to encourage greater competition.

Market Dominance Implementation Under the Staggers Rail Act

The Staggers Rail Act replaced ICC's cost test with the jurisdictional threshold test, currently set at a revenue-to-variable-cost ratio of 180 percent. Under this test, the railroad has the burden of proving that a questioned rate does not meet or exceed the jurisdictional threshold. Faced with the necessity of repealing its cost test, and believing that market dominance was too complex to be based on a few quantitative measures, in August 1981, ICC replaced its rebuttable presumptions of market dominance with general guidelines on four types of competition.

- Intramodal: competition between railroads.
- Intermodal: competition between a railroad and another type of transportation, e.g., truck, barge, or pipeline.
- Geographic: an alternate source for the product being shipped, e.g., using coal from Wyoming to replace coal from West Virginia.
- Product: a substitute for the product being shipped, e.g., substituting oil for coal in the production of electricity.

Under ICC's guidelines, the shipper had the ultimate burden of proof on all four types of competition in order for market dominance to be established.

Shippers believed that ICC's new market dominance guidelines placed too great a burden on them and could discourage shippers, especially small ones, from challenging future rates. In October 1985, ICC accepted in principle a compromise reached by the Association of American Railroads, the National Industrial Traffic League (representing shipper interests), and the American Paper Institute. Shippers continue to bear the burden of proving the absence of intramodal and intermodal competition, but ICC shifted the burden of proving product and geographic competition from the shippers to the railroads.

Development of ICC's Rate Reasonableness Criteria

ICC has undertaken four investigations and issued five interim decisions, or proposed guidelines, as part of its effort to develop a methodology for determining rate reasonableness. ICC's effort to develop rate guidelines has focused on captive coal traffic. Coal, the highest volume commodity shipped by rail (40.8 percent of freight tons according to 1985 data from the Association of American Railroads), contributes more than any other commodity to rail freight revenues (23.2 percent in 1985). Natural gas shortages, steep increases in oil prices, and the uncertainty of oil supplies in the 1970's increased the demand for coal. Starting in 1974, railroads attempted to raise coal rates substantially above previous levels to cover their rising fuel costs and to improve their poor financial

condition. Higher coal rates appeared initially on new shipments in the West, where no established rates existed. ICC began a proceeding (Ex Parte No. 347) in 1978 to develop maximum rate guidelines for market-dominant western coal shipments, and expanded the investigation in 1980 to include eastern coal. This effort culminated in the September 1985 coal rate guidelines.

In developing its guidelines, ICC has relied on three general criteria: (1) rail rates must be reasonable where there is no effective competition, (2) these rates must allow adequate revenues for the nation's rail system, and (3) rates of a revenue-inadequate railroad can be found to be unreasonable. Believing that a negotiated rate is often better for both parties than a government-imposed rate, ICC intended that its guidelines would enable shippers and railroads to estimate the rate it would prescribe. Knowing this rate, shippers and railroads would have an incentive to avoid litigation by seeking a private contract solution.

Rate Reasonableness, 1976-83

Until the 4R Act, ICC judged rate reasonableness by comparing a challenged rate with an established rate on similar movements—a comparison approach. The 4R Act, however, required ICC to assist railroads in attaining revenue adequacy—defined as revenues adequate under honest, economical, and efficient management to cover total operating costs plus a fair profit. As the case law developed on western coal rates, ICC gave progressively less weight to rate comparisons because, with most coal-hauling railroads earning inadequate revenues by ICC standards, there was no evidence that established rates were reasonable.

In a policy shift formalized in November 1980, ICC began to judge rate reasonableness more on the cost of providing the rail service. A railroad's total cost equals variable costs—those which vary directly with the quantity shipped, such as costs for labor, fuel, and maintenance—plus fixed costs—those which do not vary with quantity, such as costs for tracks and bridges. A railroad needs to recover its total cost across all shipments to be revenue adequate.

Ideally, each shipment should be charged its attributable costs—those which the railroad incurs specifically to transport it. Because rail facilities typically serve many shipments, it is not always possible to attribute their costs to particular shipments. Deciding how much of these "unattributable costs" should be charged to each shipment is one of the principal quandaries of rail rate-making.

While cost of service became a major factor in determining rate reasonableness, it was not ICC's only consideration. In addition to directing ICC to assist railroads in attaining revenue adequacy, the 4R Act set goals of fostering competition and permitting railroads greater freedom to set rates in competitive markets. To meet these goals, ICC began to permit differential pricing, which allowed railroads to set rates in some competitive markets below fully allocated cost[2] to meet competitors' rates. To be revenue adequate, the railroad is then allowed to set some rates above the fully allocated cost on shipments where competition is not such a significant factor. In principle, captive shippers benefit from this differential pricing, even though they bear more of the fixed costs relative to shippers in competitive markets. As long as shippers with competitive alternatives make some contribution to fixed costs, captive shippers will pay less than if competitive traffic were diverted to an alternative transportation mode, thus leaving captive shippers to bear the fixed costs previously assigned to the diverted traffic.

The crucial question became to what extent captive shippers should contribute more than others to fixed costs in the interest of creating a financially healthy rail system. ICC tried various methods and techniques to increase the revenue contributed by captive shippers. To simplify the discussion, we focus on ICC's methods for allocating fixed costs. ICC switched back and forth between two allocation methods (ratio and ton/ton-mile[3]). From 1939 to 1978, ICC used the ton/ton-mile method, which distributed fixed costs by shipment weight and distance. In May 1978, believing that the ton/ton-mile method could place an inordinate portion of fixed costs on extremely heavy-loading traffic such as coal, ICC proposed using the ratio method, which distributed fixed costs in proportion to the ratio of the railroad's total variable cost to its total cost. ICC used the ratio method from 1978 to 1980. In addition, ICC decided to allow railroads to charge a 7-percent additive above fully allocated cost on captive traffic in accord with the 4R Act's requirement that ICC assist railroads in attaining revenue adequacy. The 7-percent additive was an interim measure, pending refinement of its rate methodology and represented ICC's best judgment at that time as to what were reasonable additional revenues to meet the railroads' needs. The courts upheld ICC's

[2]"Fully allocated cost" is the sum of variable costs plus an apportionment of fixed costs such that the sum of revenue from all shipments covers the railroad's total cost.

[3]A ton-mile is a ton of cargo carried 1 mile.

application of differential pricing to coal rates but rejected the percentage additive as arbitrary, capricious, and without justification.[4]

After the court's action, ICC tried to develop a rate methodology consistent with the 4R Act's revenue adequacy requirements but without using additives. In November 1980, ICC tried to introduce demand-based differential pricing, which would allocate fixed costs based on the demand for rail service of each user. As a proxy for demand-based differential pricing, ICC switched back to the ton/ton-mile approach believing that because it allocated relatively more fixed costs to heavy commodities, it placed an appropriately large share of fixed costs on shippers, like coal shippers, who are more dependent on rail service.

The Staggers Rail Act strengthened the 4R Act requirement that ICC assist railroads in attaining revenue adequacy. The Staggers Rail Act's purpose was to provide for restoring, maintaining, and improving the physical facilities and financial stability of the rail system. The Congress stated in the act that it was the policy of the United States to maintain reasonable rates where there was an absence of effective competition and where rail rates provided revenues which exceeded the amount necessary to maintain the rail system and to attract capital. The act also directed ICC, when determining whether a rate was reasonable, to recognize the policy that railroads shall earn adequate revenue.

Although it had not determined a final rate reasonableness methodology, ICC in December 1981 again rejected use of the ton/ton-mile method of allocating fixed costs and returned to the ratio method after criticism by shippers, railroads, the Department of Transportation, and ICC's Office of Special Counsel. All agreed that the ton/ton-mile method would not necessarily result in revenue adequacy nor produce demand-based rates. However, ICC remained committed to the idea of demand-based differential pricing.

Rate Reasonableness, 1983-87

In February 1983, ICC proposed new rate guidelines for captive coal traffic called "Constrained Market Pricing." These guidelines differed dramatically from ICC's interim rate methodologies. Recognizing that an arbitrary cost-allocation formula would probably not enable railroads to achieve revenue adequacy, ICC abandoned the formula approach. Instead, ICC proposed to let railroads price captive coal traffic according

[4]Houston Lighting & Power Co. v. United States, 606 F.2d 1131 (D.C. Cir. 1979) and San Antonio, Texas v. United States, 631 F.2d 831 (D.C. Cir. 1980).

to market conditions, subject to constraints that ICC believed would prevent excessive rates. After more than 2-1/2 years of comment and consideration, the final coal rate guidelines, using the Constrained Market Pricing concept, were adopted in September 1985. While final, ICC admitted that some modifications might be needed based on case experience.

The final coal rate guidelines placed the following constraints on rates:

- Revenue adequacy: a captive coal shipper should not have to pay more than is necessary for the railroad to earn adequate revenues.[5]
- Management efficiency: a captive coal shipper should not pay more than is necessary for efficient service.
- Stand-alone cost: the rate should not exceed what a hypothetical efficient competitor would charge for providing a comparable service. In calculating the stand-alone cost, a captive coal shipper should not bear the costs of any facilities or services from which it derives no benefit. Costs of facilities or services shared by a group of shippers should be apportioned according to the shippers' demand elasticities.[6]
- Phasing of rate increases: changes in coal rates should not be so high as to cause severe economic dislocations.

The first three constraints, which ICC believed would simulate competitive limits on pricing, were meant to prevent a railroad from using market dominance to charge captive coal shippers more than they should pay for efficient rail service. As we discuss Constrained Market Pricing, we will be referring to these three constraints.

The phasing constraint, which was independent of the three other constraints, came from ICC's concern that revenue-inadequate railroads could raise coal rates dramatically under its rate guidelines and might focus exclusively on raising the rates of captive coal shippers rather than trying to improve their entire rate structure. ICC's final guidelines allowed flexibility in the use and degree of phasing, requiring it only where the shipper demonstrated clear need.

Shippers and railroads petitioned the U.S. Court of Appeals for the Third Circuit to prohibit or suspend ICC's 1985 coal rate guidelines. The

[5]Revenue adequacy is discussed in our report Railroad Revenues: Analysis of Alternative Methods to Measure Revenue Adequacy (GAO/RCED-87-15BR, Oct. 2, 1986).

[6]Demand elasticity measures how sensitive a shipper is, in purchasing decisions, to a change in rail rates. Thus, the elasticity value indicates how much traffic might be lost from different shippers when rail rates rise.

court ruled on February 23, 1987, that the four constraints in the final guidelines were consistent with the 4R and Staggers Rail Acts.[7] However, the court did not review railroads' objections to how ICC might apply the guidelines in individual rate cases.

The Economic Framework of Constrained Market Pricing

ICC based Constrained Market Pricing on two economic concepts—Ramsey Pricing and Market Contestability. In developing Constrained Market Pricing, ICC was committed to the idea that revenue adequacy depended on demand-based differential pricing—allowing railroads to recover relatively more of the unattributable costs[8] from captive traffic than from traffic in competitive markets. ICC viewed Ramsey Pricing as a theoretically sound method of demand-based differential pricing that would establish prices according to each shipper's demand elasticity.[9] Because it would apportion the unattributable costs by elasticity, ICC believed Ramsey Pricing could assure revenue adequacy.

In theory, Ramsey Pricing is an economically efficient[10] answer to the question of to what extent each shipment should contribute to the railroad's unattributable costs. Under Ramsey Pricing, if a small increase in price would divert a large amount of a particular shipper's traffic to

[7]Consolidated Rail Corporation v ICC, Nos. 81-3080, 81-3082, slip op. (Third Cir., February 23, 1987).

[8]We have generally used the term "fixed cost" when referring to costs that needed to be apportioned. ICC used this term as well as the terms "constant," "common," and "overhead." In 1983 it began to use the term "unattributable." "Unattributable" is more semantically precise because some fixed costs can be attributed to particular shipments. For example, a track built solely to serve one shipper is an attributable fixed cost. Corresponding to ICC's change in terminology, we will use the term "unattributable."

[9]Our discussion of Ramsey Pricing oversimplifies this complex economic concept. A full explanation is beyond the scope of this report and is not needed for a general understanding. The Ramsey Pricing concept evolved from a theory of taxation developed in 1927 by Frank Ramsey, a British economist. For more detailed explanations of Ramsey Pricing and of how it can be applied to rail rates, see Frank Ramsey, "A Contribution to the Theory of Taxation," Economic Journal (1927), pp. 47-61; William J Baumol and David F. Bradford, "Optimal Departures From Marginal Cost Pricing," American Economic Review (June 1970), pp. 265-283; Ronald R Braeutigam, "Optimal Pricing With Intermodal Competition," American Economic Review (Mar. 1979), pp 38-49; Merrill J Roberts, "Railroad Maximum Rate and Discrimination Control," Transportation Journal (spring 1983), pp. 23-33; and Henry McFarland, "Ramsey Pricing of Inputs With Downstream Monopoly Power and Regulation. Implications for Railroad Rate Setting," Journal of Transport Economics and Policy (Jan 1986), pp. 81-90.

[10]We are referring to the economic concept of allocative efficiency, which deals with the allocation of society's scarce resources among alternative uses. An efficient allocation is often said to exist if prices, which measure the value of goods to consumers, equal incremental costs, which reflect the value of resources used by producers. Generally, however, railroads must set prices above incremental costs to cover their unattributable costs. In such cases, Ramsey prices are considered efficient because the resulting resource allocation deviates relatively little from that which would exist if all prices could be set equal to incremental costs.

competitors, that shipper would make only a small contribution to unattributable cost. The highest contribution would be charged to shippers most dependent on the service, i.e., those for whom a large increase in price would divert only a small amount of traffic. This demand-based differential pricing would allow the railroad to recover all the costs of providing service while setting prices in the most efficient manner possible.

Because Ramsey Pricing requires accurate calculations of the amount of traffic that would be diverted if rates increased, it is difficult to apply. Consequently, ICC proposed Constrained Market Pricing as a more practical way of applying Ramsey Pricing principles.

Constrained Market Pricing relies on railroads' setting rates in all markets according to their own estimates of demand—just as many firms set their prices in other industries. To prevent overcharging captive shippers, rates are subject to constraints that ICC believed would simulate the pricing of competitive markets.

Under Constrained Market Pricing, a shipper tries to prove that a railroad rate is unreasonable by calculating an alternative lower rate that still meets the railroad's need for revenue adequacy. The guidelines provide two approaches. One method combines the revenue adequacy and management efficiency constraints to estimate the railroad's revenue needs and adjust them for inefficient plant and/or operations. The resulting revenue shortfall is then apportioned among shipments based on demand elasticity, although the guidelines did not explain how. The rate is the shipper's attributable cost plus its share of this shortfall.

Because the total unattributable costs of the existing rail system are included when determining revenue shortfall, a major drawback to the first method is that the shipper is apportioned costs of facilities that it does not need or use because the total unattributable costs of the existing rail system are included when determining revenue shortfall. The other method—stand-alone cost—allows the shipper to specify the level of service provided and, therefore, the costs for which it is responsible.

The stand-alone cost test is based on the economic concept of market contestability, which theorizes that a firm operating in a noncompetitive

market will behave efficiently and competitively if it fears losing business to a new competitor entering the market.[11] One important characteristic of a perfectly contestable market is that firms can enter and exit the market without cost. To approximate a contestable market, the costs of overcoming barriers which hinder entering and exiting the market are omitted from a stand-alone cost calculation.

Stand-alone cost introduces the competitive standard of contestability into noncompetitive rail markets. It does so by estimating the theoretical maximum rate that a railroad could charge a captive shipper without diverting substantial traffic to a hypothetical new competitor which is organized to provide service to that shipper. Further, since the hypothetical competitor acquires only those facilities needed to serve the captive shipper, the shipper does not bear the costs of facilities it does not need. Stand-alone cost is discussed in more detail in chapter 4.

Proposed Alternatives to Constrained Market Pricing

After adoption of Constrained Market Pricing for coal shipments, in May 1986, ICC published a preliminary proposal for rate standards for other commodities. ICC stated in its preliminary proposal that the economic concepts of Constrained Market Pricing appeared equally applicable to all other commodities. But ICC sought comments on whether Constrained Market Pricing should apply to noncoal commodities and whether the litigation costs involved in bringing a case using Constrained Market Pricing placed too great a burden on small shippers, including small coal shippers.

After considering the comments received on its preliminary proposal, in March 1987, ICC asked for further comment on two simplified alternative methodologies that would apply whenever a Constrained Market Pricing presentation would be too expensive relative to its potential benefits—regardless of the commodity involved or the shipper's size.

Under the first alternative methodology, a modification of an Association of American Railroads' proposal, ICC would develop standard replacement costs, in current dollars, to substitute for stand-alone cost. According to ICC, these replacement costs, which would include attributable costs plus a markup, would approximate the present cost of providing service. ICC believed that rates set at these levels would, on average,

[11]For a more complete explanation of the theory of market contestability, see William J. Baumol, John C. Panzar, and Robert D. Willig, Contestable Markets and the Theory of Industry Structure.

provide adequate revenues to replace assets expended in providing service and would approximate the maximum levels permitted under Constrained Market Pricing.

The second alternative methodology, a modified Department of Transportation proposal, would base rate reasonableness on revenue-to-variable-cost ratios. According to ICC, these cost ratios would be an indirect measure of stand-alone cost and would reflect the relative demand elasticities of different shipments. ICC would examine the range of revenue-to-variable-cost ratios for other movements of the same commodity that had similar transportation characteristics (such as size and distance shipped) and were captive shipments. A rate cap, substituting for stand-alone cost, would be set at the average revenue-to-variable-cost ratio of this group of similar shipments. While this may allow differential pricing, it is not clear that the prices resulting from this methodology would reflect differences in demand.

ICC used the revenue-to-variable-cost approach in evaluating challenged rates in McCarty Farms, et al. v. Burlington Northern Railroad Company. ICC tentatively concluded that some of the rates were unreasonable, but deferred a final decision until after receiving comments from the parties, due in July 1987. ICC used the standard replacement cost method in tentatively finding the rates unreasonable in South-West Railroad Car Parts Company v. Missouri Pacific Railroad Company.

ICC recognized that to avoid arguments over whether to use Constrained Market Pricing or the simplified methodologies, it needed to develop criteria for when shippers should use the simplified methodologies. Even with such criteria, ICC noted that arguments would occur if the different approaches produced different rates. ICC therefore also asked, in March 1987, for comments on what criteria it should develop.

Finally, ICC also asked for comment on three ideas suggested in response to its May 1986 preliminary proposal. ICC cautioned that it would not allow a decision on these to delay action on the two simplified alternative methodologies. The proposals, explained below, were to (1) substitute mediation for formal complaint cases, (2) permit ICC to create competition by granting another railroad access to the market as an additional or substitute remedy for an unreasonably high rate, and (3) have ICC staff help small shippers prepare their cases.

Several parties, including the North Dakota Public Service Commission, the National Industrial Transportation League, and the Association of

American Railroads, proposed using mediation and arbitration to resolve rate disputes. The American Paper Institute suggested a mediated settlement called a "final offer" proposal whereby each party presents its best offer and an ICC Administrative Law Judge (ALJ) chooses between them. The ALJ's decision could be appealed within ICC and thereafter to the courts. Believing that this proposal had merit, ICC requested comments on whether a mandatory system would be legal and whether the simplified alternatives to Constrained Market Pricing should be applied to guide ICC in selecting the best offer.

Several parties also suggested that ICC grant a second railroad access to the market instead of determining the reasonableness of the rate. ICC granted that competitive access might be an appropriate remedy if market dominance was proven and the rate was unreasonably high. While, by tradition and statutory design, shippers almost always request a new lower rate as remedy, ICC noted that it knew of no legal barrier to considering competitive access as an alternative remedy. ICC asked for further comment on whether permitting complainants to ask for competitive access as an optional remedy, to be used in addition to or in place of prescribing future rates, would benefit the public. Refunds would remain the remedy for overcharges actually incurred.

The Department of Transportation, the North Dakota Public Service Commission, and others supported an ICC proposal to have ICC's Office of Public Assistance (Special Counsel) aid small shippers in preparing their cases.

Varying Rate Standards Have Lengthened Cases

As ICC worked from 1978 to 1985 developing its rate reasonableness methodology, it was also issuing decisions on the reasonableness of challenged rates. Whenever ICC revised its interim rate guidelines, either on its own initiative or in responding to U.S. Courts of Appeals decisions, ongoing cases were reopened to permit new evidence or to reconsider evidence already submitted. The effect was to lengthen the case proceedings. When ICC proposed Constrained Market Pricing in February 1983, it ruled that its previous maximum rate standards were no longer valid. In our opinion, this created a Catch-22 situation because previous standards could not be applied, but Constrained Market Pricing was still in the proposal stage and had not been adopted as a replacement.

ICC reopened pending coal rate cases in May 1983 and asked that new evidence be submitted based on its proposed coal rate guidelines. At the same time, ICC reopened the noncoal cases and asked for comments on

whether and to what extent the coal rate guidelines should apply to them. Subsequently, a group of shippers with pending cases petitioned ICC to hold their cases in abeyance pending final coal rate guidelines. They requested that ICC not require them to spend time and money preparing evidence based on rate standards that were subject to further change. ICC agreed and, except where required by a court to make an immediate decision in a case, held all cases in abeyance until September 1985, when the coal cases were reopened and the proceedings began again, this time based on ICC's final coal rate guidelines.

ICC has authority to choose its methodology for determining rate reasonableness and has broad discretion to "alter its past interpretation and overturn past administrative rulings and practice" in response to the "changing needs and patterns of transportation."[12] In attempting to develop an appropriate methodology to determine the reasonableness of rates, ICC changed its guidelines as new knowledge and expertise pointed to a more accurate approach. ICC can change its methodology while a case is pending in order to apply its most recent guidelines which represent the agency's best and current thinking. The general rule applied by the courts is that the standards existing at the time an ICC decision is made will be applied.

While ICC has the authority to change its rate methodology and apply new pricing methods to pending cases, ICC must also comply with the Administrative Procedure Act, which requires agencies to conclude matters "within a reasonable time." What constitutes a reasonable time is a legal issue that the courts decide on a case-by-case basis. In one of the cases we reviewed, the Potomac Electric Power Company demanded in court that ICC make a final determination of issues remaining unresolved in a case filed about 8 years previous. The U.S. Court of Appeals, District of Columbia Circuit, ruled that "However justified a single delay in the course of these proceedings may have been, the limit has been reached." Saying further that ICC's delay had a deleterious effect on the confidence and credibility the public places in the agency, the court ordered ICC to reach a final decision in the case within 60 days. However, ICC had already issued its proposed Constrained Market Pricing guidelines 5 days before the court issued its decision. Because the Potomac Electric Power Company would need more time to prepare new evidence under this radically different pricing approach, the court retracted its 60-day deadline.

[12]American Trucking Association v. Atchison, Topeka & Santa Fe Railway Co., 387 U.S. 397,416 (1967).

The issue of ICC delay is not new. In drafting the 4R Act, the Congress expressed serious concern over the need to improve the administrative efficiency of the regulatory process. Although the Congress granted ICC some discretion to reopen a case or change an earlier decision, the Congress also strongly stated that ICC must act in a timely manner. Excessive delay saps the public confidence in an agency's ability to discharge its responsibilities and creates uncertainty for the parties to a case, who must incorporate the potential effect of possible agency decision-making into future plans.

ICC officials told us that the delays in deciding rate cases were a transition problem resulting from the process of developing and interpreting rate reasonableness standards. They said that with final guidelines now established, cases are proceeding more quickly and the delays of the past will not reoccur. They noted that ICC has already issued decisions in the 3 rate cases filed in 1986 and has reduced the number of pending rate cases from about 80 a year ago to 22 currently.

The Procedural Process Also Contributed to Case Length

ICC rate cases are processed under the Administrative Procedure Act, which gives the complainant and defendant in each case rights to a due process, which can be quite lengthy. This administrative process provides both sides a full opportunity to present their facts and viewpoints. We made no attempt to evaluate the merits of the process, but we did find that the process itself is one reason for the length of ICC cases. Of the five cases we reviewed that are still pending, the average case length was about 7 years.

The 19 rate cases we reviewed generally followed the same procedural process. Acting on a shipper's complaint, ICC assigned the case to an ALJ (an ICC employee who presided over the case hearings). The shipper then filed an opening statement giving the facts and history of the case and explaining why the railroad should be found to be market dominant and why the rate should be found unreasonable.

The railroad then filed a statement, which sometimes argued that it was not market dominant but always contended that the rate was reasonable. The shipper then filed a statement rebutting the railroad's arguments. Often, in the 19 cases we reviewed, the shipper or the railroad would petition ICC for extra time to prepare its written statements.

After reviewing the evidence submitted, the ALJ made an initial decision on market dominance and rate reasonableness. The losing party petitioned ICC to review the case. The winning side filed a written statement explaining why the case should not be reviewed. The losing party then filed a statement rebutting the winner's argument. This process of filing a written statement which was rebutted in a written statement by the opposing side, which was in turn rebutted, continued throughout the administrative process.

Based on the appeal petition from the losing party, the case was reviewed by either the Review Board (no longer used) or Division I or II, all of which are ICC review panels. The reviewing panel either affirmed or reversed the ALJ's decision. Whichever side lost the reviewing panel's decision then appealed to the full commission.

After more written statements and rebuttals, the full commission made its decision. At this stage, the only appeal was to the courts. Judicial review under the Administrative Procedure Act looks at the process ICC followed in reaching a decision but does not ordinarily reconsider the reasonableness of the rate. If the court finds an error in ICC's procedures, the case is returned to ICC. Appendix III illustrates this procedural process. Appendix IV shows the procedural process followed in the case of Amstar Corporation v. The Atchison, Topeka & Santa Fe Railway Co., et al., which was typical of the 19 cases we reviewed.

Case Histories and Views on the Complaint Process

We reviewed the 19 cases where ICC, usually at the ALJ level, ruled that a railroad rate was unreasonable under the Staggers Rail Act and awarded a reduced rate and/or reparations. Appendix I shows the status of each case. Ten cases involved coal shipments; the other 9 concerned various commodities including iron ore, fuel oil, and corn syrup. Ten cases were filed before the 1980 Staggers Rail Act; 9 were filed after the act. Five of the 19 cases are still open; the average length is about 7 years. Three cases are under appeal to the courts. Of the 11 closed cases, (1) shippers in 7 instances withdrew their case after obtaining a rate change outside the complaint process, (2) ICC dismissed 3 cases after reversing a lower level decision and concluding that the railroad was not market dominant or that the rate had not been proven unreasonable, (3) 1 case was ruled outside of ICC's jurisdiction, and (4) in 1 case, ICC ruled in favor of the shipper, who has since obtained rate relief although the case remains under appeal to the courts.

Twelve of the shippers were (or represented) electric public utilities; the remaining 7 included private companies, a federal agency, and a group of 6 farmers. Eighteen of the 19 shippers were relatively large, having $100 million or more in annual revenues. Nine of these large shippers had over $1 billion in annual revenues. Shipper cost estimates for legal and other consultant fees associated with their case were less than $500,000 in seven cases, $500,000 to $1 million in five cases, and over $1 million in five cases. (Two shippers did not comment on the cost of their case.)

We contacted each of the shippers, or their legal representatives, involved in these 19 cases to discuss their experiences in bringing an ICC railroad rate complaint. All of these discussions preceded ICC's decisions in the Omaha Public Power District and Arkansas Power and Light Company cases in which ICC ruled in favor of the shippers. The discussions also preceded ICC's proposal to allow use of simplified alternative methodologies when a Constrained Market Pricing presentation would be too expensive to prepare. Some of the shippers we interviewed have since obtained contract rates and withdrawn their complaints.

We asked the shippers (1) why they chose to use ICC's formal complaint process, (2) whether and how they would like to see the process changed, (3) whether they would begin the process again if charged what they considered to be an unreasonable rate, and (4) whether the shipper considered negotiating a contract rate. Where a shipper withdrew the complaint upon obtaining a contract rate, we asked (1) whether or not the shipper believed the complaint case strengthened its

bargaining position with the railroad, (2) how the contract rate compared with what the shipper reasonably expected would have resulted from the complaint process, and (3) whether these shippers considered contract rates to be a form of rate relief. We also contacted officials of eight railroad companies, representing one or more of the defendant railroads in each of the 19 cases, and spoke with officials at ICC and the Association of American Railroads to obtain their views on the complaint process.

Controversy Over Market Dominance Was Not Evident in Our Case Studies

The major issue in ICC's implementation of the Staggers Rail Act market dominance provisions has been the use of product and geographic competition. Until the 1985 shift in burden of proof (see ch. 2), shippers believed that proving the absence of product and geographic competition was too great a burden. Shippers also dislike the use of product and geographic competition because it broadens the concept of a market and tends to reduce cases where the railroads are market dominant.

Notwithstanding these controversies, market dominance was not a major issue in 12 of the 19 cases we reviewed. In six cases, the railroad did not attempt to disprove that it was market dominant. Further, product and geographic competition, the more contentious criteria, were discussed in only eight cases. ICC officials and representatives of the Association of American Railroads told us the lack of market dominance issues in most of our cases, 10 of which were coal, was not representative of rate cases in general and probably reflects the fact that railroads will not belabor the issue where their market dominance is clear, particularly in cases involving heavy bulk commodities such as coal.

Views on Rate Reasonableness

When we contacted the 19 shippers, none had received reparations or had a rate reduced through ICC's rate complaint process even though one or the other had been awarded by some ICC level in each case. Seven cases had been closed without a final ruling in favor of the shipper, the remaining 12 were then still open. Sixteen shippers said they tried negotiating for a contract rate prior to filing their complaint and/or during their case proceedings, primarily because they viewed the complaint process as being too lengthy and too costly, and preferred to negotiate. Nine shippers obtained or expected to obtain rate changes (mainly contract rates) outside of the complaint process.

Five shippers withdrew their complaints upon obtaining contract rates or other rate changes outside of ICC's process. Of these, three said the

rate they obtained compared favorably with what they believe ICC might have awarded. In addition, three shippers viewed their involvement in a rate complaint case as having strengthened their bargaining position during negotiations with the railroads. Only one of these five shippers, however, considered contract rates to be a form of rate relief.

In contrast to the shippers' views, ICC officials considered contract rates, as authorized by the Staggers Rail Act, to be a form of rate relief. These officials told us that the current trend is for shippers and railroads to negotiate contract rates, saying further that only three rate cases were filed in 1986 and none had been filed as of July 1987. In the opinion of the Association of American Railroads' representatives, contract rate negotiation is preferable to the adversarial complaint process. They also viewed most captive shippers as having the bargaining power to negotiate for such rates, either because of the large volume of traffic shipped or because of a multiplant operation, which gives a shipper more bargaining leverage.

In our discussions with officials of the eight railroad companies, five said that contract negotiations have essentially become the preferred way of conducting business with their customers as opposed to being involved in rate litigation. One railroad company spokesperson said it is not in the railroad's interest to charge a shipper a rate which can be challenged and contract rates are preferred for the predictability and stability they offer. Another railroad official believed that rate litigation should be avoided and credited the Staggers Rail Act for allowing the use of contract rates.

Views on the Complaint Process

Thirteen of the shippers we talked to said they chose to use ICC's formal complaint process because their attempts at negotiating for reasonable rates with the railroads failed and/or because there was no other recourse available for seeking rate relief. Based on their experiences, 18 shippers commented on the need to improve the rate complaint process, specifically citing ICC's lack of clearly defined market dominance and rate reasonableness criteria.

Eleven shippers opposed ICC's use of stand-alone cost. Reasons for their opposition varied. One said stand-alone cost failed to provide an upper limit for determining reasonable rates. Another voiced uncertainty that railroads would supply shippers with correct cost data. Our analysis of the shipper responses found that in general, the shippers we contacted did not fully understand the stand-alone cost concept, particularly the

potential for grouping to lower a shipper's stand-alone cost. Another complaint voiced by seven of the shippers was that the complaint process is biased in favor of the railroads and/or that ICC is unresponsive to the captive shipper situation.

Despite their criticisms, 10 of the shippers said they would probably use the complaint process again if charged what they considered to be unreasonable rates. Several qualified their opinion by saying they would use the complaint process again if they determined it would be cost-effective for them to do so, and if they determined that a reasonable chance of obtaining a ruling in their favor existed. Five said they would do so because they viewed ICC's complaint process as the only system available for seeking rate relief. One shipper declined comment on our questions. Eight shippers, however, said they would probably not go through the complaint process again for one or more of the following reasons:

- The process is too costly and time-consuming for the shipper, and negotiating with the railroad is preferable.
- ICC's lack of clear criteria for determining rate reasonableness acts as a deterrent for the shipper.
- "The railroads seem to be the sure winners."

Seven of the shippers we contacted told us they were involved in efforts to change the rate complaint process, such as participating in Consumers United for Rail Equity, which has proposed legislation to restructure the revenue adequacy, market dominance, and rate reasonableness provisions of the Staggers Rail Act. Other shippers would like to see the complaint process changed by establishing upper and lower boundaries on what can be considered reasonable rates and specifying time limits for ICC to decide these cases.

All of the eight railroads, on the other hand, were generally satisfied with the complaint process, although they made some suggestions for improvements. For example, spokespersons for three railroads said that changing rate guidelines and understaffing within ICC contributed to the delays and time involved in some of these cases. One railroad's spokespersons thought the complaint process could be improved by providing a summary judgment procedure, which would permit parties to file affidavits that there are no material factual disputes, allowing judgment to be made quickly based on the facts as stated. All but one railroad spokesperson viewed ICC's criteria for jurisdictional threshold, market dominance, and rate reasonableness as clear. Two, however, indicated it may

be too early to tell whether the current guidelines, and specifically the concept of stand-alone cost, are workable since they have yet to be tested in court.[1]

[1]Subsequent to these interviews, the U.S. Court of Appeals for the Third Circuit ruled that ICC's 1985 guidelines are consistent with the 4R and Staggers Rail Acts. However, the court did not review railroad objections to how ICC might apply the guidelines in individual rate cases.

The Meaning, Interpretation, and Application of Stand-Alone Cost

Stand-alone cost is an upper limit on the rate that a market-dominant railroad can charge to a captive coal shipper. ICC defines stand-alone cost as the "least cost at which an [hypothetical] efficient competitor could provide the service." The practical application of stand-alone cost has stirred debate between shippers and railroads.

Stand-Alone Cost: What It Is, What It Is Not

Stand-alone cost is an analytical tool, not a rate formula. ICC did not precisely define how to calculate stand-alone cost in its 1985 coal rate guidelines.[1] Because of the complexity and unique character of each rate case, ICC preferred that shippers and railroads develop stand-alone cost calculations appropriate to their individual cases.

Stand-alone cost is ICC's attempt to simulate the rate that would exist if the market-dominant railroad had effective competition. It is not expected that a complaining shipper would actually build an alternative to the railroad; stand-alone cost is a means of calculating the rate that would be charged by a hypothetical efficient competitor. Given that stand-alone cost serves as a rate ceiling, shippers have an incentive to produce a low stand-alone cost and railroads have an incentive to produce a high stand-alone cost.

Stand-alone cost is also not the cost of building and operating a hypothetical new railroad. As explained in the 1985 guidelines, the efficient competitor used in determining stand-alone cost does not have to be a railroad, nor does it have to be new—a shipper can assume that the efficient competitor would use a mix of old and new assets.

Stand-alone cost does not necessarily relate to just one shipper. When ICC first proposed stand-alone cost, it defined the concept as the cost of serving a shipper alone, as if the shipper were isolated from the railroads' other customers. However, a railroad can serve multiple shippers more efficiently (with a lower unit cost) than it can serve each shipper

[1]However, two requirements that are clearly stated by ICC are (1) use of depreciated current costs to determine the value of assets and (2) use of the current nominal cost of capital (today's cost of money) to determine the rate of return on assets.

in isolation because in this way, a railroad can take advantage of production economies.[2] A footnote in ICC's proposal explained that stand-alone cost could be computed for a group of shippers, thus lowering the stand-alone cost for an individual shipper. ICC's 1985 final guidelines gave greater emphasis to the idea of grouping traffic when computing stand-alone cost.

The Issue of Grouping

The idea of grouping—identifying other shippers to share costs—is the key to calculating an affordable stand-alone cost. It is unlikely that even a large captive shipper could afford the cost of a hypothetical efficient competitor serving it alone because an isolated shipper could not benefit from the production economies that are needed for efficient rail service.

Although shippers and railroads generally agree that traffic grouping is appropriate in simulating competitive market conditions, there is no prescribed method of determining which shippers to include in the group. ICC's 1983 proposed guidelines merely said that stand-alone cost may be computed for a group of shippers using the same facilities. In its 1985 final guidelines, ICC stressed the importance of grouping, saying that "Without grouping, [stand-alone cost] would not be a very useful test . . . ." ICC also said in its 1985 guidelines that it saw no need to restrict traffic that could potentially be included in a group.

Shippers and railroads disagree on the conditions under which shippers may be included in a group for stand-alone cost calculations. Shippers in general would define their shipper group to include other shippers using some or all of the same facilities used by the complaining shipper. However, shippers would define the group's stand-alone cost to include only the costs of operating facilities used by the complaining shipper. Railroads in general oppose this methodology, arguing that if shippers are to be grouped, then stand-alone cost must be increased to include the cost of facilities benefiting the group, including facilities not used by the complaining shipper.

A major source of shipper/railroad disagreement is the difference between calculating costs based on facilities used and costs based on

[2]By production economies, we mean one or more of the following terms: economies of scale, scope, and density. Economies of scale exist when the average cost of service decreases as the size of the rail operation increases. Economies of scope exist when two or more services can be provided at lower cost than if these services were provided separately. For example, shipments with diverse origins and destinations may be able to use the same mainline track and thereby lower their unit cost. Economies of density exist when the average cost of service declines as a result of increasing the number of shipments over a given track segment.

facilities which provide benefit. The shippers' stand-alone cost method seems to rely on wording in ICC's 1983 proposed guidelines, which described a shipper group in terms of shippers using the same facilities. Thus, shippers include in stand-alone cost only the cost of operating facilities used by the complaining shipper. However, the railroads' interpretation of ICC's 1985 final guidelines is that a captive shipper should contribute to facilities or services from which it derives benefit.[3] Railroads argue that a complaining shipper benefits from facilities it does not use because these facilities are necessary to attract the other shippers in the group to use the railroad. Without these "other" facilities, noncomplaining shippers in the group would use other transport means, and the complaining shipper would be unable to include them in a group to share costs.

The Issue of Apportioning Group Costs

Once stand-alone cost has been calculated for a group of shippers, the problem remains of determining the stand-alone cost for the complaining shipper in order to establish the upper limit on the challenged rate. ICC's 1985 guidelines left the problem of apportioning group costs to a case-by-case resolution but said the apportionment should be based on demand elasticities.

This brings the problem of determining a reasonable rate full circle—back to the problem of apportioning unattributable costs to a particular shipment. ICC's 1978 decision to establish coal rate guidelines was based on the inability of formula cost-allocation methods to efficiently and equitably apportion unattributable costs in a manner that would assure revenue adequacy. Yet, the final coal rate guidelines offered no apparent solution to the problem of apportioning these costs—instead, the guidelines left the issue to be decided individually in each case. The guidelines' suggestion that group costs be apportioned according to demand elasticities is an idea, from the Ramsey pricing concept, that ICC had already rejected as impractical. ICC offered Constrained Market Pricing as an alternative to Ramsey Pricing because of the impracticality of Ramsey Pricing's dependence on accurate calculations of demand elasticities. Rather than solving the problem of apportioning unattributable costs, stand-alone cost redirects it from apportioning costs for the entire rail system to apportioning costs for a portion of the rail system.

[3]The 1985 guidelines state that a captive coal shipper should not bear the costs of any facilities or services from which it derives no benefit

Application of Stand-Alone Cost to Rate Cases

Stand-alone cost, as described in ICC's 1985 guidelines, was first used to decide the case of Omaha Public Power District v. Burlington Northern Railroad Company. In January 1986, an ICC ALJ found that the challenged rate of $13 14 per ton for the first quarter of 1985[4] exceeded the stand-alone cost of $9.48 per ton and was, therefore, unreasonable. Because the stand-alone cost was also less than the rate calculated at the jurisdictional threshold,[5] the ALJ set the maximum rate at the jurisdictional threshold level of $9.56 per ton. In November 1986, ICC affirmed the ALJ's decision. The Burlington Northern Railroad petitioned ICC to allow additional evidence. In May 1987, ICC denied the petition and affirmed its November 1986 decision. The Burlington Northern Railroad has appealed to the U.S. 3rd Circuit Court of Appeals, where the case is now pending.

This case illustrates the widely differing interpretations of stand-alone cost. Because these interpretations are complex, we will highlight the differences and refer the interested reader to appendix V, which explains them in more detail.

Because there is no single accepted stand-alone cost methodology, Omaha Public Power District and Burlington Northern Railroad offered several calculations using different methodologies. Their major difference was grouping methods which resulted in wide differences in stand-alone cost. ICC's guidelines authorize the use of any method for computing stand-alone cost as long as the method is explained, documented, and justified. The Burlington Northern Railroad calculated the cost of serving Omaha Public Power District alone—with no group cost sharing—and developed stand-alone cost calculations ranging from $34.13 to $38.87 per ton. Omaha Public Power District grouped its traffic with other shippers and calculated its lowest stand-alone cost as $8.98 per ton. In this lowest cost calculation, group unattributable costs were apportioned to each coal shipper uniformly according to what service unit (for example, gross ton-miles) had the greatest influence on the specific cost element. This avoided the apportionment problem by assuming that all coal shippers in its group had the same demand elasticities. With this assumption, Omaha Public Power District could apportion costs based on each shipper's traffic volume such that each shipper paid the same percentage markup over variable costs.

[4]The challenged rate was actually a series of rates over time. To simplify the discussion, we focused on the most recent rate evaluated by ICC, which was $13 14 per ton for the first quarter of 1985.

[5]ICC's authority is limited to rates exceeding 180 percent of variable costs.

We did not evaluate Omaha Public Power District's grouping methodology. However, the difference between Omaha Public Power District's and Burlington Northern Railroad's calculated stand-alone cost demonstrates how grouping of shippers to take advantage of production economies can lower the cost of serving an individual shipper. Because ICC defined stand-alone cost as the least cost of an efficient competitor, the ALJ accepted the lowest stand-alone cost calculation presented.[6]

Upon appeal of the ALJ decision by both Omaha Public Power District[7] and Burlington Northern Railroad, the full Commission affirmed the ALJ's findings, but cautioned that Omaha Public Power District's approach might not be appropriate in other situations.

In May 1987, ICC issued its second decision using the 1985 guidelines and again decided in favor of the shipper. In Arkansas Power and Light Company et al. v. Burlington Northern Railroad Company, et al., ICC found some of the rates unreasonable and ordered the railroads to pay $22.1 million in reparations. Using ICC's Constrained Market Pricing guidelines, the shipper presented evidence on the revenue adequacy, management efficiency, and stand-alone cost constraints. ICC ruled that the shipper had not shown violations of the revenue adequacy or management efficiency constraints, but had proven that some rates exceeded the stand-alone cost constraint. The railroad has 60 days to appeal to the courts.

Arkansas Power and Light Company's stand-alone cost presentation mirrored Omaha Public Power District's successful stand-alone cost strategy, including the assumption that all shippers in the group had similar demand elasticities.

The major difference between the Arkansas Power and Light Company case and the Omaha Public Power District case is in the way ICC wrote its decision. In the Omaha case, ICC restricted its approval of the shipper's stand-alone cost presentation to case-specific details and cautioned that the methodology might not be appropriate in other situations. Thus, the Omaha case left important stand-alone cost issues unresolved.

[6]Omaha's calculated stand-alone cost was $8.98 per ton. Because ICC believed Omaha had made technical errors in its treatment of the cost of capital and taxes, the ALJ revised Omaha's stand-alone cost to $9.48 per ton.

[7]Omaha objected to the ALJ's technical revisions, which increased the stand-alone cost. The final ICC decision affirmed the ALJ's revisions.

In contrast, ICC used the Arkansas case to discuss various approaches to stand-alone cost, along with the revenue adequacy and management efficiency constraints, and to explain why ICC preferred one approach over another. ICC did so to encourage more consistent submissions of evidence.

Similarly, ICC's May 1987 decision, which affirmed its November 1986 decision in the Omaha case, clarified why it had accepted the shipper's stand-alone cost presentation and why it had rejected the railroad's arguments.

The Burlington Northern Railroad has appealed ICC's decision in the Omaha case to the U.S. 3rd Circuit Court of Appeals. A Burlington Northern attorney told us the railroad believes that the shipper had not met the burden of proving the rates unreasonable and that ICC's decision contravened the 1985 guidelines. The court has yet to rule.

GAO Observations

ICC intended that its coal rate guidelines would enable both a shipper and a railroad to estimate the rate ICC would prescribe. Knowing this rate, the shipper and railroad would have an incentive to avoid litigation, which requires time and resources, and seek a private contract solution. ICC believed negotiated rates could often be more efficient and more advantageous to both parties than a government-imposed rate. In addition to these advantages, the ability to estimate an ICC-prescribed rate would help railroads set reasonable rates and help shippers decide whether to file a formal complaint.

During the 7-year period 1978 to 1985, ICC worked on its coal rate guidelines. From 1978 to February 1983, shippers and railroads had to contend with shifting rate reasonableness criteria. The absence of guidance from February 1983 until September 1985 left shippers and railroads with no way of judging what constituted a reasonable rate. Thus, for 33 months railroads had no ICC guidance on setting fair rates, and shippers could not judge their reasonableness.

The 1985 final coal rate guidelines have left some important issues unresolved. Shippers and railroads continue to interpret stand-alone cost very differently, and disagree on how to define a shipper group and the costs it should cover. Such divergent interpretations are possible because the guidelines do not define how stand-alone cost should be calculated. Results of the lack of agreement were illustrated in the case of Omaha Public Power District v. Burlington Northern Railroad Company, in which stand-alone costs ranged from the shipper's estimated $8.98 per ton to the railroad's $38.87 per ton.

Further, the guidelines offered no practical approach to calculating stand-alone cost in a group setting. Historically, a central problem of rail rate-making has been to apportion unattributable costs fairly among individual shipments while allowing railroads to recover total costs. According to the guidelines, these costs should be apportioned based on shippers' demand elasticities. This guidance is the same as Ramsey Pricing principles, the strict application of which ICC rejected in 1983 as impractical.

ICC intentionally avoided a formula approach to stand-alone cost because it wanted to allow shippers and railroads flexibility in designing methodologies appropriate to the unique aspects of each case. ICC indicated it would rely on these case-by-case decisions to clarify its guidelines.

ICC's first decision based on the 1985 guidelines left important issues unresolved. For example, the Omaha Public Power District handled the apportionment problem by assuming that all coal shippers had similar elasticities so that unattributable costs could be apportioned by usage. Remaining committed to differential pricing, ICC accepted Omaha's approach but noted it might not be appropriate in other cases.

Subsequent ICC decisions, however, have helped to clarify approaches that are or are not acceptable. ICC's May 26, 1987, decision affirming its decision to grant the shipper rate relief in the Omaha case helped clarify why the shipper's methodology had been accepted. ICC's May 7, 1987, decision in the Arkansas case, which also granted rate relief, gave greater credence to the methodology established in the Omaha case. Barring adverse court action, these decisions have begun the process of clarifying acceptable methodologies under ICC's 1985 guidelines. Shippers and railroads should have a better understanding of what evidence to present. However, judicial review is a key factor remaining because courts have overruled ICC in the past and returned rate decisions for further ICC consideration.

Shippers who have feared the time and money needed to prepare a case under ICC's Constrained Market Pricing now appear to have less burdensome alternatives. ICC has proposed simplified methodologies and applied one of them in tentatively concluding that rates were unreasonable in the McCarty Farms case and the South-West Railroad Car Parts case.

Status of Cases Where ICC Ruled a Rate Unreasonable

Case number	Title	Commodity	Decision level[a]	Length[b] (years)	Rate relief obtained?[c]	Status
36114 36114 1[d]	Potomac Electric Power Co. v. Consolidated Rail Corp.	Coal	ALJ[f]	8.6	No	Dismissed
36180	San Antonio Texas; Acting by and Through Its City Public Service Board v. Burlington Northern Railroad Co. et al.	Coal	Full Commission	11.7	No	Withdrawn
37276 37276.1[d]	Coal, Wyo., to Redfield, Ark.	Coal	Full Commission	7.1	No	Under appeal
37338	South Carolina Public Service Authority v. Clinchfield Railroad Co., et al.	Coal	ALJ	3.5	No	Withdrawn
37409	Aggregate Volume Rate on Coal, Acco, Utah, to Moapa, Nev.	Coal	Full Commission	7.3	No	Open
37437	Arizona Electric Power Cooperative, Inc. v. The Atchison, Topeka & Santa Fe Railway Co., et al.	Coal	ALJ	7.2	No	Open[h]
37450	Central Illinois Light Co. v. The Atchison, Topeka & Santa Fe Railway Co., et al.	Coal	ALJ	3.3	No	Withdrawn
37466	The Aluminum Association Inc., et al. v. The Akron, Canton & Youngstown Railroad Co., et al.	Aluminum ingot	ALJ	2.9	No	Dismissed
37478	Amstar Corp. v. The Atchison, Topeka & Santa Fe Railway Co., et al.	Corn syrup	Review Board[g]	7.0	No	Open
37507[e] 37516	(1) Rates on Iron Ore, Randville to Escanaba via Iron Mountain embracing (2)The Hanna Mining Co. v. Chicago & North Western Transportation Co., et al.	Iron ore	Full Commission	3.4	No	Withdrawn
37625	Westinghouse Electric Corp. v. The Atchison, Topeka & Santa Fe Railway Co., et al.	Nuclear reactor parts	Review Board	2.4	No	Withdrawn
37809[e] 37809.1 37815S	McCarty Farms Inc., et al. v. Burlington Northern Inc.	Wheat & barley	ALJ	6.3	No	Open
37891S[e] 37998S 38302S 38376S	Commonwealth Edison Co., et al., v. Aberdeen & Rockfish Railroad Co., et al.	Nuclear waste	ALJ	6.3	Yes	Under appeal
38088S	Arizona Public Service Co. v. The Atchison, Topeka & Santa Fe Railway Co., et al.	Fuel oil	ALJ	6.1	No	Dismissed
38184S[e] 38185S 38186S	Pennsylvania Power & Light Co. v. Consolidated Rail Corporation	Coal	ALJ	4.3	No	Withdrawn

(continued)

Case number	Title	Commodity	Decision level[a]	Length[b] (years)	Rate relief obtained?[c]	Status
38566	Rates on Iron Ore to Escanaba, Mich , Chicago and Northwestern	Iron ore	Full Commission		No	Not under ICC jurisdiction
38738	Western Farmers Electric Cooperative v. Burlington Northern Railroad Co.	Coal	ALJ	4.6	No	Withdrawn
38783	Omaha Public Power District v. Burlington Northern Railroad Co.	Coal	ICC	5 5	No	Under appeal
38446[e]	General Electric Co. v. Consolidated Rail Corporation, et al.	Super-heaters	Review Board	6.3	No[i]	Open

[a]Highest ICC level which ruled that the rate was unreasonable.

[b]As of July 1987 for open cases.

[c]Whether shippers received a reduced rate and/or reparations through ICC's complaint process.

[d]Continuation of original case.

[e]Consolidated case.

[f]Admistrative Law Judge.

[g]ICC appeals board made up of 3 employees, not necessarily Commissioners.

[h]The parties have reached an agreement in principle and asked ICC to hold this case in abeyance pending possible voluntary dismissal

[i]ICC ruled the rate unreasonable and awarded rate relief The shipper has petitioned ICC to order payment, and the railroads, after some adjustments to the amount of reparations, do not take exception to the shipper's petition We therefore expect that the shipper will receive rate relief in this case

List of Shippers and Railroads Contacted

Shippers

Aluminum Association, Inc.
Amstar Corporation
Arizona Public Service Company
Arizona Electric Power Cooperative
Arkansas Power and Light Company
Central Illinois Light Company
Cleveland Cliffs Iron Company
Commonwealth Edison Company[a]
General Electric Company
Hanna Mining Company
McCarty Farms[b]
Nevada Power Company
Omaha Public Power District
Pennsylvania Power & Light Company
Potomac Electric Power Company
San Antonio Public Service Board
South Carolina Public Service Authority
U.S. Department of Energy[a]
Western Farmers Electric Corporation
Westinghouse Electric Corporation

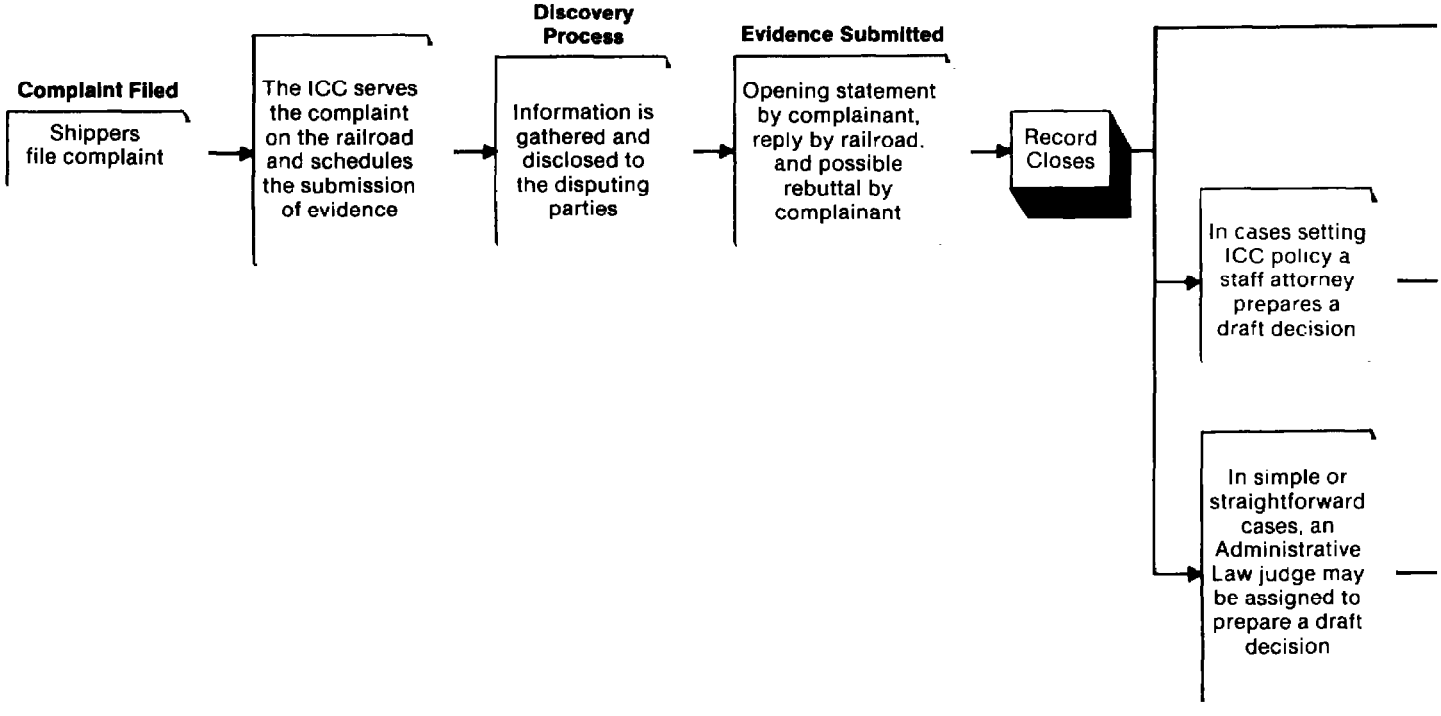
Railroads

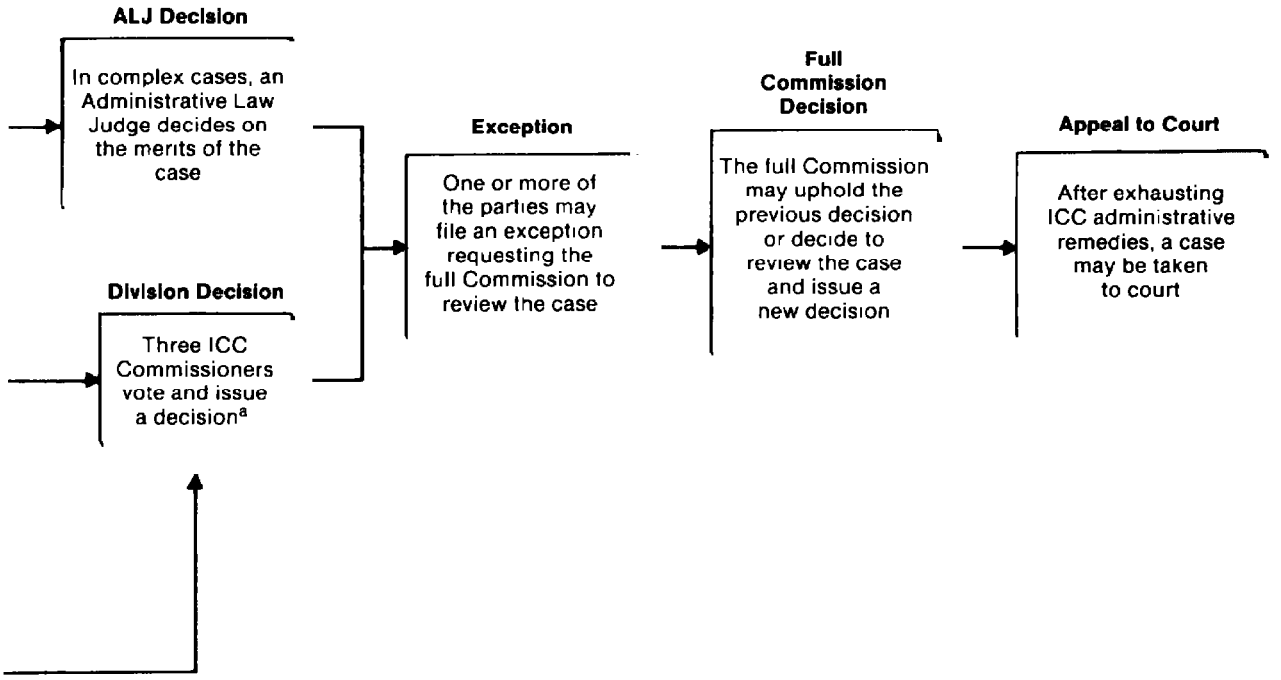
Atchison, Topeka and Santa Fe Railway Company
Burlington Northern Railroad Company
Chicago and Northwestern Transportation Company
Clinchfield Railroad Company
Consolidated Rail Corporation
Denver and Rio Grande Western Railroad Company
Missouri Pacific Railroad Company
Southern Pacific Transportation Company

[a]Commonwealth Edison Company and the Department of Energy were co-complainants in one of the rate cases we reviewed (listed in app. I). We contacted both and combined their responses in our analysis

[b]Six farmers joined as complainants. We contacted two, and tried unsuccessfully to contact the others, then combined their responses.

Flowchart of ICC's Complaint Process





[a]In July 1986, ICC disbanded use of divisions ICC is currently drafting rules to make this change permanent.

Illustration of the Procedural Steps Involved in a Rate Reasonableness Case

Amstar Corporation v. The Atchison, Topeka, and Santa Fe Railway Co. et al.

(ICC DOCKET NO 37478)

Date	Procedural Action
July 16, 1980	Filing date.
Aug. 19, 1980	Complainant's due date for opening statement of facts and argument extended to Sept. 17, 1980.
Sept. 17. 1980	Complainant filed opening statement.
Oct. 17, 1980	Defendant filed statement of facts and argument.
Nov. 4, 1980	Due date for complainant's reply to defendant's statement extended to Nov. 13, 1980
Nov. 13, 1980	Complainant replied to defendant's statement of facts and argument.
Jan. 23, 1981	ALJ found the railroad to be market dominant but ruled that the rate was reasonable. Case dismissed.
Feb. 24, 1981	Complainant filed administrative appeal.
Mar. 6, 1981	Case assigned to Review Board No. 2.
Mar. 16, 1981	Defendant replied to administrative appeal.
Aug. 20, 1981	Review Board No. 2 affirmed that the railroad was market dominant but found the rate to be unreasonable
Sept. 14, 1981	Defendant petitioned for administrative review.
Oct. 2, 1981	Complainant replied to defendant's petition for administrative review.
Mar. 15, 1982	Commission decided to reopen the case for parties to submit new evidence based on ICC's Dec. 21, 1981, rate guidelines.
Apr 8, 1982	Complainant petitioned to vacate order to reopen the case.
Apr. 2 7, 1982	Complainant filed supplement to petition to vacate order to reopen the case.
Apr. 28, 1982	Defendant replied to petition to vacate order to reopen the case.
May 17, 1982	Complainant replied to defendant's reply to petition to vacate order to reopen the case.
June 7, 1982	Defendant replied to complainant's supplement to petition to vacate the order to reopen case.
Aug 12, 1983	ICC reopened the case and asked for comments on using its Feb. 24, 1983, coal rate guidelines.
Sept. 1, 1983	Complainant filed petition to vacate ICC's Aug. 12, 1983, decision to reopen case.
Sept. 21, 1983	Defendant replied to petition to vacate the Aug. 12, 1983 decision.
Nov 9, 1983	Commission decision denied complainant's petition to vacate order, and ordered the case held in abeyance pending a final decision on the coal rate guidelines.
Nov. 14, 1983	Defendant filed comments on using the Feb. 24, 1983, coal rate guidelines (requested in ICC's Aug. 12, 1983, decision).
Jan. 17, 1984	Commission decision denied complainant's petitions to vacate orders of March 19. 1982, and Aug. 12, 1983
Apr. 4, 1986	Commission set May 25, 1986, for submission of additional evidence on market dominance based on ICC's October 1985 changes to the burden of proof for product and geographic competition.

Stand-Alone Cost Interpretations in Omaha Public Power District v. Burlington Northern Railroad Company

This case attracted attention because it was the first time ICC's 1985 coal rate guidelines figured in a rate reasonableness decision and thus could influence pending and future rate cases. Given the enormous volume of data presented in the case, the level of technical detail, and the complexity and subtlety of the arguments, we will only sketch the major points. After a brief background section, we will discuss the three steps in a stand-alone cost calculation: (1) identifying shippers and facilities, (2) calculating the cost of these facilities, and (3) apportioning costs among shippers. While this organization helps to explain stand-alone cost, actual calculations are not cleanly partitioned. Because step 2 is a common regulatory problem not unique to stand-alone cost, we will focus on steps 1 and 3.

Background

Omaha Public Power District (Omaha) is a public utility with a coal-fired electricity-generating plant in Arbor, Nebraska. The Burlington Northern Railroad Company (Burlington), alone, offered single-line service from the coal source, the Powder River Basin in Wyoming, to the plant. In challenging Burlington's rate of $13.14 per ton,[1] Omaha presented several stand-alone cost methodologies. Without rejecting the shipper's other approaches to stand-alone cost, the ALJ decided in Omaha's favor and specifically accepted its lowest cost approach. The ALJ prescribed a rate of $9.56 per ton and ordered refunds of overcharges. After an appeal of the initial decision, a group of concerned railroads submitted its views on stand-alone cost, which ICC agreed to include in the case record. These railroads, which opposed Omaha's approach, feared the ALJ's decision might set a precedent, thereby endorsing its widespread use. After reviewing the case, ICC affirmed the ALJ's decision.

Approaches to Identifying Shippers and Facilities

Original arguments in this case relied on the 1983 preliminary guidelines, which focused on an isolated shipper and only mentioned the possibility of grouping in a parenthetical statement and subsequent footnote. Thus, Burlington treated Omaha as being isolated from the railroad's other customers. After publishing its 1985 guidelines, which emphasized the importance of grouping, ICC asked if either party wanted to submit additional evidence. Neither chose to do so. In applying the 1985 guidelines, the ALJ rejected Burlington's approach, saying it contradicted the 1985 final guidelines.

[1]This was a reduced rate offered to government agencies, such as a public power district. The case dealt with a series of rates governing the movement over a period of years. We are presenting rate and cost figures for the first quarter of 1985.

In contrast, Omaha grouped its traffic with other shippers to take advantage of production economies. Because ICC did not prescribe rules for defining a shipper group,[2] Omaha offered diverse approaches to calculate stand-alone cost. These approaches fall into two general categories, which ICC referred to as "trunk line" and "network."[3] Each treats shipper groups differently.

What Is a Shipper Group?

When we speak of a group of shippers, we do not mean a confederation of shippers known to each other and explicitly banded together for a common purpose. Group refers, rather, to an imaginary construct whose purpose is to specify the service provided by the hypothetical competitor. The group is defined by identifying shippers who would use the hypothetical competitor's facilities and thereby may be construed as suitable candidates for sharing its costs. The group is used for analytical purposes to incorporate the production economies inherent in railroad operations. Only the complaining shipper participates in and is directly affected by the case.

Trunk Line Approach

In the trunk line[4] approach to stand-alone cost, the shipper group is a by-product of the process identifying the rail facilities needed to serve the complaining shipper. This approach begins with a map of the entire railroad and then deletes segments not needed by the complaining shipper. The remaining segments, those needed by the complaining shipper, define the scope of service provided by the hypothetical competitor. Other shippers who use these segments are potential members of the shipper group.

In its case, Omaha reduced the Burlington network to just those facilities used for Omaha's traffic. This resulted in 11 rail segments which were used by many other shippers. Omaha defined its group to include all shippers who transported shipments along any or all of the 11 rail segments.

[2]The 1985 guidelines emphasized the importance of grouping, without specifically explaining how groups were to be formed or restricting their membership or structure in any way.

[3]ICC introduced the terms "trunk line" and "network" in its decision in Arkansas Power and Light Company et al. v. Burlington Northern Railroad Company et al., and we adopt them here. A variety of less descriptive terms was used in the Omaha case itself.

[4]Conceptually, a trunk line is a portion of a railroad system. Not all of the shipments using the trunk line will originate and/or terminate on it.

Network Approach

The network[5] approach begins when a presenter, in this case Omaha, identifies a plausible group of shippers, and then determines what rail facilities the hypothetical competitor needs to serve them. Omaha identified an 11-member shipper group[6] of midwestern electric utilities. All of the 11, including Omaha, used coal to generate electricity and used rail facilities linking them to sources of coal in Wyoming. Omaha then identified the rail facilities needed, which it called the Central States Network.

Comparison of the Two Approaches

The major difference between the trunk line and network approaches is the scope of services provided by the hypothetical competitor. In general, the network approach envisions the hypothetical competitor as providing full service, i.e., from origin to destination, for each group member. In contrast, the trunk line approach envisions the hypothetical competitor as providing full service for the complaining shipper but partial service for the other group members, who will need additional services from other carriers to reach their destinations.

Having briefly mentioned these principal differences, we will now concentrate on the trunk line approach. We do so for several reasons: (1) Omaha based most of its case on the trunk line approach, (2) the ALJ and ICC accepted this approach in their decisions, and (3) ICC did not fully discuss network in its final decision. Omaha had presented a network approach as rebuttal evidence to Burlington's criticism of its trunk line approach. Although the ALJ considered the network approach as an alternative approach to stand-alone cost, ICC saw it only as support for Omaha's trunk line presentation.

Is the Hypothetical Competitor Economically Sound?

According to ICC's guidelines, the hypothetical competitor must be economically self-sustaining. Omaha argued that its trunk line approach realistically simulates a sustainable competitive alternative. The hypothetical competitor would acquire enough facilities to serve its targeted market (Omaha, in this case) and increase revenues by soliciting additional traffic from shippers capable of using its route. This additional traffic would yield lower unit costs.

[5]Network refers to a self-contained railroad system with all shipments originating and terminating within the network.

[6]The number of shippers has nothing to do with the number of segments used in the trunk line approach.

Omaha's approach excluded off-line costs[7] by treating each of the 11 rail segments as a discrete financial unit with its own costs and traffic base. Omaha assumed that shippers in its group would cover the stand-alone costs of the trunk line segments, while the costs of off-line segments would be covered by shippers using them. This assumption, and ICC's acceptance of the approach, was a major basis of Burlington Northern's appeal.

The railroads protested that the hypothetical trunk line does not simulate a workable alternative because it cannot guarantee that revenues will cover all costs. They disagreed with the assumption that other shippers in the group would ship their traffic on the hypothetical line. Although the rate estimated for this line is the total rate for the complaining shipper, it is only a partial rate for other shippers in the group. Adding this partial rate to all the other rates that these shippers need to pay along their route in order to move their goods may increase their total rates. If so, traffic on the trunk line could drop as shippers seek less expensive alternatives, and the trunk line may not be economically self-sustaining.

Far from excluding off-line costs, the railroads insist that they must be taken fully into consideration. To do so, they argue, requires knowing (1) the actual costs of the off-line segments used by the other shippers in the group and (2) the contributions which nongroup shippers are willing to make toward these segments. To determine whether trunk line revenues would cover costs, railroads contend that the trunk line's scope must expand to give full origin-to-destination service to all shippers whose traffic benefits the complaining shipper. This expansion resembles an unending chain, whereby one shipper benefits from other shippers using the railroad, and they in turn benefit from still more shippers. The railroads admitted that the resulting rail network would provide far more services than the complaining shipper needs. Hence, they insist that the trunk line approach to stand-alone cost is neither practical nor appropriate.

To counter railroad objections to its trunk line presentation, Omaha used the results of its network approach to suggest that trunk line revenues would cover costs. Omaha showed that the 11 Central States Network shippers as a group paid more than the stand-alone cost of providing

[7]Costs of those facilities not used by the complaining shipper but which other shippers in the group must use to obtain full service. Principal among these are costs of the lines which bring shipments to and from the trunk line

them full service, thus this network was self-sustaining. Omaha then argued that the trunk line would cover its costs since it had lower costs and would serve more shippers.

The ALJ found in Omaha's presentation sufficient evidence to suggest that off-line costs would also be covered. Taking into consideration the nature of the traffic in question, he based his finding on a presumption that group revenues would be higher than costs.[8]

ICC's final decision affirmed Omaha's use of the trunk line approach. ICC said that (1) a stand-alone cost analysis must show that group revenues will cover total costs of serving the group and (2) Omaha benefitted from the economies of density produced by other coal shippers using that route and other off-line services. ICC agreed with the ALJ that off-line costs in this instance would likely be covered and thus the hypothetical competitor would be self-sustaining. Admitting the lack of "perfect parallel" between the network and the trunk line approaches, ICC did not require a direct comparison of revenues and costs. This decision in turn made moot the question of whether the shipper is obligated to contribute to the off-line costs of facilities from which it benefits.

One likely issue in Burlington's court appeal is whether Omaha met its burden of proof in establishing that the hypothetical competitor's costs would be covered. Burlington believes that the presumption that group revenues would cover group costs was inconsistent with the final guidelines, and circumvented the burden of proof requirement.

Common Ground?

Despite their disagreements, the parties may have reached some common ground in the network approach to grouping. Omaha used the network approach exemplified by the Central States Network in several stand-alone cost calculations. The ALJ did not reject these, but instead chose Omaha's trunk line approach because, in this case, it provided the lowest acceptable stand-alone cost. Despite some reservations about Omaha's specific calculations, the railroads generally supported the network approach, saying it offered a sound basis for calculating stand-alone cost.

[8]According to the ALJ, in the final guidelines "the presumption is that revenues from such group traffic would make a positive contribution to net railway operating income." The guidelines actual wording was ". . . we think it reasonable and practical to assume that the revenue contribution of other (i.e., noncomplaining) shippers will be at the level of their current rates. However, this presumption is rebuttable . . . . "

How Costs Are Calculated

Omaha calculated stand-alone cost in two ways: the Calculated Market Value method (CMV) and the Engineering method. In general, CMV relies on the costs of the railroad's actual facility and operations, while the Engineering method allows greater flexibility to redesign the existing rail network or to design an entirely new network.

While there are important disagreements between railroads and shippers over appropriate costing methods, these controversies are not new and are not unique to stand-alone cost. For example, they disagree on measuring variable costs and the cost of capital, using depreciated current value as a rate base, and using particular tax rates. The Railroad Accounting Principles Board, an organization created by the Staggers Rail Act to develop cost accounting principles, has been examining these issues in detail. In February 1987, the Board issued a detailed exposure draft of its proposed railroad accounting principles. These principles addressed rate-making issues only to the extent that accurate cost information is required. The draft included a section addressing the application of cost accounting principles which are likely to be most useful in preparing stand-alone cost evidence.

Appendixes to the 1983 preliminary guidelines contained a proposed methodology (CMV) for calculating the value of assets, return on assets, and operating costs. In particular, ICC emphasized the importance of basing stand-alone cost on local factors, and cautioned against an overreliance on overall system averages. As explained in the 1985 guidelines, ICC did not intend that these methods be a prescribed methodology, but rather included them as a demonstration that a stand-alone cost presentation was feasible. In the final decision on this case, ICC referred to CMV as tentative costing procedures.

These methods are not paired with the trunk line and network approaches to grouping. In fact, Omaha used both the CMV method and the engineering method to calculate stand-alone cost for its Central States Network.

Apportioning Unattributable Costs

If no grouping occurs, ICC compares the calculated stand-alone cost with the proposed rate. This rate is reasonable if it is lower than stand-alone cost, thus showing that the present railroad service costs the shipper less than the best alternative offered. The rate is unreasonable if it exceeds stand-alone cost, thus showing that an efficient competitor

could better serve the shipper. When a rate is found to be unreasonable, ICC will prescribe a new rate equal to stand-alone cost.[9]

Apportionment becomes an issue when determining rate reasonableness in a group setting. For a single isolated shipper, apportionment poses no problem because the shipper bears all costs. But in a group setting, the complaining shipper must show that its attributable costs, plus its portion of the group's unattributable costs, are less than the protested rate.

In keeping with its commitment to demand-based differential pricing, ICC's guidelines stated that individual group members should ideally bear unattributable costs on the basis of Ramsey Pricing principles, i.e., according to their demand elasticities. Recognizing the difficulty of quantifying elasticity, ICC indicated it would accept "qualitative" evidence about the shippers' relative demand elasticities. Beyond this concession, ICC preferred to resolve apportionment problems through adjudication.

Omaha's interpretation of this guideline prompted a methodological shortcut. In its trunk line approach, Omaha presented qualitative evidence that all coal shippers in its group had similar demand elasticities. For example, group members were shipping the same commodity from the same general origin, with the same unit-train service, for consumption in electric utility plants. Having assumed similar demand elasticities, Omaha could apportion costs based on usage, thus avoiding the complicated task of specifying demand-based differential prices.

Railroads emphasized that Omaha's fully-allocated cost formula contradicted the principle of differential pricing, which is the cornerstone of Constrained Market Pricing. Rejecting the assumption that all coal shippers had the same demand elasticities, the railroads said that for example, cost differences of off-line segments could limit shippers' demands for the trunk line. From their perspective, common elasticities must be demonstrated, not assumed. Given the practical difficulties of sophisticated elasticity calculations, Omaha representatives counterargued that its qualitative evidence sufficed.

ICC's final decision accepted Omaha's assumption of similar demand elasticities based on the evidence in this particular case. Nevertheless, ICC reaffirmed the importance of demand-based differential pricing and

[9]Because ICC's jurisdiction is restricted to rates that are 180 percent of variable cost, the prescribed rate must be at least that high.

observed that Omaha's assumption might not be warranted in other situations.

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