BEFORE THE
SURFACE TRANSPORTATION BOARD

Ex Parte No. 705

COMPETITION IN THE RAILROAD INDUSTRY

JOINT REPLY COMMENTS

of

ALLIANCE FOR RAIL COMPETITION, THE AMERICAN CHEMISTRY COUNCIL, AMERICAN FOREST AND PAPER ASSOCIATION, AMERICAN PUBLIC POWER ASSOCIATION, THE CHLORINE INSTITUTE, COLORADO WHEAT ADMINISTRATIVE COMMITTEE, CONSUMERS UNITED FOR RAIL EQUITY, EDISON ELECTRIC INSTITUTE, GLASS PRODUCERS TRANSPORTATION COUNCIL, IDAHO BARLEY COMMISSION, IDAHO WHEAT COMMISSION, KANSAS WHEAT COMMISSION, LARGE PUBLIC POWER COUNCIL, MONTANA FARMERS UNION, MONTANA WHEAT & BARLEY COMMITTEE, NATIONAL ASSOCIATION OF WHEAT GROWERS, NATIONAL GRAIN AND FEED ASSOCIATION, THE NATIONAL INDUSTRIAL TRANSPORTATION LEAGUE, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, NEBRASKA WHEAT BOARD, OKLAHOMA WHEAT COMMISSION, PORTLAND CEMENT ASSOCIATION, SOUTH DAKOTA WHEAT COMMISSION, TEXAS WHEAT PRODUCERS BOARD, THE FERTILIZER INSTITUTE, U.S. CLAY PRODUCERS TRAFFIC ASSOCIATION, AND WASHINGTON GRAIN COMMISSION

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The above-named parties, hereafter referred to as the "Interested Parties," hereby submit these Joint Reply Comments in response to the Board's Notice in this proceeding served January 11, 2011. On April 12, 2011 these same Interested Parties submitted Joint Comments in this proceeding, which is intended as a public forum "to discuss access and competition in the rail industry," with a view as to "what, if any, measures the Board can and should consider to modify its competitive access rules and policies" and other related topics. In these Joint Reply Comments, these Interested Parties discuss and reply to comments submitted by various other parties in this proceeding, and in particular the Initial Comments of the Association of American Railroads ("AAR") and the individual Class I rail carriers. The Interested Parties are also submitting as Appendix A to this Reply, the Report of Dr. Nicholas Economides, Professor of Economics at New York University and a specialist on network industries. Professor Economides' Report responds specifically to the Verified Statement of Dr. Robert Willig submitted with the AAR's Initial Comments.

The opening Joint Comments of the Interested Parties, and the initial comments of many other parties describe in detail the vastly changed circumstances, in terms of greatly reduced rail competition, greatly improved rail finances, and other factors, that confront the Board today, as compared with the circumstances confronting the ICC when it adopted the current rail competition policy during the 1980's and 1990's. As shown below, the comments of the AAR and individual railroads offer little to counter these arguments. While asserting that railroads compete with one another, the railroad parties offer precious little, if any, hard evidence that such competition exists or is meaningful. If shippers really have bargaining leverage with the railroads, for example, how is it that rail rates continued to increase in the face of the worst recession since the Great Depression? If the laws of supply and demand were really operating, prices should have fallen as demand decreased. The reality, of course, is that the prices charged by monopolists are influenced very little by demand, and very much by the exclusive limited supply controlled by the monopolist. Plainly, the promises of the railroads during the major merger proceedings that they would compete vigorously have ceased to be operative since the mergers were approved and active oversight concluded.

For the most part, the railroads do not and cannot contend that meaningful rail-to-rail competition exists. Instead, they focus their primary attention on the insupportable arguments that their monopoly status is necessary; that competition is not necessary as long as shippers have a theoretical regulatory remedy; that their finances are still precarious and would be devastated by any change in rail competition policy; and that, in any event, the Board lacks the legal authority to change the status quo. Each of these points is addressed below.

I. THE RAILROADS' COMMENTS FUNDAMENTALLY MISUNDERSTAND THE ROLE THAT COMPETITION SHOULD PLAY IN THE REGULATORY STRUCTURE

Instead of seriously contending that meaningful competition exists, much of the railroad comments are devoted to two themes that essentially concede the lack of competition. First, some railroads say, we don't need competition because we have regulation — if shippers don't like the rate, they can file a rate complaint.[1] Second, the railroads resurrect their familiar refrain that monopoly pricing is necessary if railroads are to earn adequate revenues and attract capital.[2]

Saying that we do not need competition so long as we have regulation turns upside-down the Staggers Act policy "to allow, **to the maximum extent possible, competition** and the demand for services to establish reasonable rates for transportation by rail."[3] That policy is the keystone of the entire regulatory scheme, because in that principle Congress states that competition, not regulation, is the preferred means of setting rates. In adopting that policy, Congress not only mandated that the ICC and later the Board should preserve competition, for example through the review and conditioning of proposed mergers, but affirmed the ICC's and Board's ability to use various statutory authorities to enhance competition through the use of reciprocal switching and other access tools. As was demonstrated amply in the Interested Parties' opening Joint Comments, rail-to-rail competition in the post-merger world has disappeared, and the Board is not required to stand idly by, helpless to exercise its existing statutory powers to remedy this lack of competition, simply because it also has regulatory

[1] See, e.g., Comments of BNSF at 3; AAR Comments at 13.

[2] See, e.g., Comments of AAR at 16-18.

[3] 49 U.S.C. § 10101(1) (emphasis added).

authority over the rates of movements where there is lack of effective competition. As shown in Part V below, the Board continues to have ample statutory authority to facilitate greater competition, and the railroad arguments to the contrary lack any legal merit.

II. CONTINUATION OF THE STATUS QUO IS NOT NECESSARY FOR THE RAILROADS TO MAKE HEALTHY PROFITS

The railroad comments present a false choice between the status quo and radical "open access." The railroads inflexibly oppose "any change" or "any modification" to the current regulatory scheme, while suggesting that shippers want to restructure the entire industry.[4] This is not true. Shippers simply want the Board to exercise its existing statutory powers so that competition is robust, so that shippers are not forced to choose between swallowing a rate that bears no relation to what would be charged in a competitive marketplace, or resorting to extremely cumbersome and expensive rate reasonableness proceedings. As noted, the statute says that, **to the maximum extent** possible, shippers should not have to resort to regulatory remedies. Instead, competition should set the rates.

Perhaps the ICC and Board in the past were justified in interpreting the competitive access provisions of the statute to provide what amounted to "protectionism" as the rail industry emerged from decades of failing finances. It is not the intent of the Interested Parties to engage in a historical debate. But clearly, in light of all of the evidence of overflowing coffers at the major railroads today, and the absence of any meaningful rail-to-rail competition, such uniformly pro-railroad interpretations are no longer defensible, in light of the clear mandate of the statutory rail competition policy to allow competition to set rates to the maximum extent possible. Indeed,

[4] See, AAR Comments, pp. 2, 3.

the evidence of railroad pricing power and extremely strong railroad finances continues to accumulate even as this proceeding progresses.[5]

Moreover, the railroads' "doom and gloom" scenario concerning the effects of adopting pro-competitive policies is unwarranted. The Interested Parties have suggested the telecommunications industry as a model for the type of real deregulation at which the Board should aim. Even in a political climate in which skeptics question most government regulation, there have simply not been any public contentions that remaining telecommunications oversight, necessary for the implementation of telecom deregulation, is onerous or should be removed. The reason is simple. Telecommunications deregulation has been enormously successful, resulting in competition that has maintained rates at affordable levels and given incentives for carriers to greatly expand their reliability and service offerings. The result has been a boom in telecom investment. For the most part, the FCC focuses on regulating interconnections, and that minimal regulation by the FCC has gone a long way in terms of ensuring vigorous competition that has benefitted US businesses and consumers. Attached as Appendix B is a recent issue advertisement placed in the Washington Post by Sprint which states in eloquent fashion the benefits to our economy of vigorous competition. The ad notes that "[c]ompetition keeps us all

[5] See, *e.g.,* William Greene, Morgan Stanley, May 13, 2011, "Rail Fast Track: Shipper Survey Suggests Volume and Pricing Growth Strong," p. 1; Goldman Sachs Global Investment Research, May 12, 2011, p. 1, citing "solid . . . [rail] pricing growth" in 2011, with rail pricing at "inflation-plus levels (avg. 4.8%)"; Journal of Commerce Online, May 4, 2011, "CSX Splits Stock, Hikes Dividend, Buys Shares"; UTU News, March 25, 2011, "Rail execs remain bullish for 2011"; Dahlman Rose and Company Industry Note, May 2, 2011, p. 1, citing "all around good" financial news; nsinfo@nscorp.com press release, May 12, 2011, citing "second highest revenues ever in 2010" and "record revenues, income from railway operations, and earnings per share in first-quarter 2011"; Dahlman Rose and Company, May 19, 2011, Target Update, Transportation Rail, p. 1, citing "trucking industry challenges such as high fuel prices, environmental mandates, and driver shortages resulting from new safety regulation" as providing a favorable environment for rail pricing; Thomas Wadewitz, J.P. Morgan North American Equity Research, May 19, 2011, citing the expectation of "continued pricing above rail inflation."

from returning to a Ma-Bell-like, sorry-but-you-have-no-choice past." What the Interested Parties are asking is that the Board take the step to revise its competition policies, in order to provide shippers relief from a "sorry-but-you-have-no-choice" present.

The railroads and their economic expert, Dr. Willig, contend that, in the event the Board were to mandate more competitive access, the railroads should be permitted to build monopoly rents into the access price through implementing what they call "efficient component pricing." Although the Board does not have to address the details of access pricing in this preliminary proceeding, the Interested Parties would like to point out that "efficient component pricing" as outlined by Dr. Willig is not required for railroads to maintain their financial soundness in the face of more competition. The Interested Parties' economic witness, Dr. Nicolas Economides of NYU's Stern School of Business, testifies in his attached verified statement that the FCC in the telecommunications arena specifically rejected "efficient component pricing" because of its monopoly component. Dr. Economides suggests in his verified statement that the FCC's regulation of interconnections shows that access pricing can be done in a way that is straightforward, predicable and consistent with industry profitability.

In fact, **Dr. Willig himself** argued to the FCC that "efficient component pricing" should not be adopted precisely because it would lock in the monopoly profits of incumbent carriers:

> [A]pplying ECPR to the existing rate structure would result in component prices that lock in the [incumbent's] monopoly profits and inefficiencies, would attract inefficient entry where [current] rates are too high, and would preclude efficient entry where rates are too low. **ECPR was never intended to (and cannot) substitute for competition for the monopoly elements,** or limit to fully competitive levels the prices paid by end users for services that use those network elements.

> Of course, as unbundling proceeds and competition spreads as a result of economic-cost-based pricing of network elements, end-user prices should be driven toward incremental costs.[6]

The FCC relied on this affidavit in its First Report and Order in this docket released August 8, 1996, 11 F.C.C.R. 15,499 at 15,839 ¶662 and concluded that:

> ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based. Moreover, the ECPR does not provide any mechanism for moving prices toward competitive levels....[7]

III. THE RECORD IN THIS PROCEEDING SHOWS THAT RAILROAD ACTIONS ARE HARMING THE ECONOMY, AND THAT INCREASED RAIL-TO-RAIL COMPETITION WOULD FOSTER OUR NATION'S OVERALL ECONOMIC HEALTH AND COMPETITIVENESS

The railroads correctly note that the nation's overall financial performance has suffered in recent years.[8] In fact, although there are many causes of the recession that the nation entered in 2008 and that has continued to adversely affect the overall economy at least into 2009, the record in this proceeding shows that the railroads' methods of setting rates and other charges, and their refusal to compete even when they were capable of doing so, has exacerbated the economic difficulties for many shippers. In some cases, the railroads' practices have actually resulted in business leaving the United States. The Interested Parties presented a large number of such circumstances for a wide variety of shippers in Section V of their opening Joint Comments filed on April 12, 2011, and the other opening Comments in this proceeding have provided many more examples. These shipper Comments, when read in conjunction with the circumstances

[6] Affidavit of William J. Baumol, Janusz A. Ordover and Robert D. Willig at 8-9 (emphasis added), submitted May 16, 1996 in support of comments of AT&T in CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers.

[7] 11 F.C.C.R. at 15859 ¶709.

[8] AAR Comments, p. 6.

presented for other shippers in the Interested Parties' opening Joint Comments, demonstrate beyond any doubt that the increased rail-to-rail competition promised by the Staggers Act and various ICC and STB rulemakings and policy pronouncements over the years, is largely absent today. We believe it is clear that the STB will have to modify its policies in order to encourage the competition intended by Congress. Moreover, the shipper comments taken together provide a decisive response to a key railroad contention, namely that increasing access is simply a "revenue transfer," to "redistribute revenues from the railroads to a subset of shippers."[9] The testimony in this proceeding in fact shows that railroad monopoly pricing is harming the economy as a whole, and that improved rail competition policies would provide net public benefits well beyond the immediate rate effects, as shippers would increase their own economic activity in this country and avoid further outsourcing of American jobs. Indeed, it is the *current* situation that can be described as a "revenue transfer" from shippers, their customers, and the American economy as a whole, to the rail industry.

For the Board's convenience, we summarize the problems railroad practices are causing for shippers by sectors, first, for the general governmental parties to this proceeding (the Department of Transportation ("DOT") and the Department of Justice ("DOJ")); and then sector-by-sector for those shippers who commented specifically on the lack of rail-to-rail competition and railroad market power. In this regard, we note the obvious point that shippers (and the U.S. Department of Agriculture ("USDA"), for agricultural shippers) know their own businesses and industries far better than the railroads know the shippers' businesses and industries. Thus, the Board should rely on the comments included in this summary, rather than unsupported railroad claims, about the lack of competition and railroad market power.

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[9] See, *e.g.*, AAR Comments, pp. 12, 13, 15.

A. <u>The Departments of Justice and Transportation Expressed Serious Concerns About Recent Trends in Railroad Rates and Capacity, and Called on the Board to Investigate Them</u>

The Departments of Justice and Transportation, in an unprecedented joint filing, stated the following in their opening Comments:

- The Agencies believe the Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980 have produced substantial benefits for railroads, shippers, and the public at large by fostering a decline in average rail rates until 2004.

- However, since 2004, and through 2009, rail rates have increased and excess rail system capacity has ended.

- DOJ and DOT believe it is appropriate to investigate the extent to which relevant circumstances (such as rail capacity constraints, industry consolidation, and increasing revenue adequacy) have changed, and whether a proper balance of these or other considerations warrants different policy choices (*e.g.*, on rate regulation or access or trackage rights) to serve the same underlying statutory goals.

- STB must properly apply the following principles: (1) shippers should not be required to pay more than necessary for carriers to earn adequate revenues; (2) shippers should not pay more than is necessary for efficient service; (3) shippers should not pay for facilities or services that do not benefit them; and (4) responsibility for payment of facilities should be based on demand elasticities of each shipper.

The Interested Parties applaud DOJ and DOT for joining in these important Comments. The Interested Parties agree with DOJ and DOT that the Board's own standards provide that shippers should not be required to pay more than is necessary for carriers to earn adequate revenues. Given that railroads are now earning more than adequate revenues, these principles demonstrate that the Board should adopt pro-competitive policies that provide increased competition and lower rates to rail-dependent shippers.

B. <u>The North Carolina Department of Transportation Provided Information Supporting the Views of DOJ and DOT</u>

- "This concern includes competitive pricing compared to truck rates as well as competitive pricing compared to other South Atlantic port rates. There is currently only one Class 1 railroad that could provide intermodal rail to/from the Port of Wilmington to/from Charlotte and beyond.

- "Despite bridges being raised to allow for double-stacking along this corridor from Wilmington to Charlotte, that service is not established because the rail provider quoted an intermodal rail rate to establish intermodal service from the Port of Wilmington to Charlotte (and beyond) that was more than double the truck rate for the same origin/destination. In addition, the quoted rate was more than double the rail rate for other South Atlantic ports (specifically Savannah) to the same origin/destination (i.e., Charlotte). Without competitive rail rates, the Port of Wilmington is not able to attract ocean carriers that can reach beyond a one day truck trip, limiting the market opportunities not only for imports but also for exports, which drive container volume over the port. As a result, not as many ocean carriers will bring vessels to NC, limiting the number of trade lanes that can be reached. Most ocean carriers are looking to access markets other than just NC (i.e.. Midwest and Mississippi Valley), and this access is achieved by intermodal rail (because trucks are too expensive). This lack of trade lanes and ocean carrier services severely limits the ability of NC businesses to use NC ports to reach global markets. This translates into jobs lost for NC to other South Atlantic port states and also translates into higher costs for our state's businesses to move goods." (pp. 1-2)

- "Railroads are very reluctant to change the flow of traffic on their networks/system to accommodate new business, especially when new business could jeopardize current volumes on the existing network. This makes it difficult for businesses in NC to use smaller ports like Morehead City and Wilmington because of the unwillingness of the rail to price the rail competitively. Other states have established volumes of cargo movement (such as Norfolk with coal, Savannah with containers), and the rail providers are reluctant to disrupt the established flow of equipment to accommodate new services. These scenarios are often repeated and significantly hamper economic development opportunities for our state." (p. 5)

C. The Department of Agriculture Expressed Serious Concerns About the Problems That Railroad Practices Are Causing in the Agricultural Sector of the U.S. Economy, Which Shipper Associations Corroborated

The Comments of the Department of Agriculture ("USDA") shows the harm that the lack of railroad competition in having in the agricultural sector:

- Because there are many agricultural producers with operations that are relatively small in size, and their products are homogeneous, individual agricultural producers of grain and oilseed crops are considered "price-takers." That is, they have little or no ability to influence the price received for their products, and therefore, are unable to pass cost increases forward to buyers. Instead, these producers tend to absorb cost increases, especially in the short-run.

- Despite the initial success of the Staggers Act, agricultural producers and shippers continue to express concern about decreased rail-to-rail competition, rapidly increasing rail rates, poor rail service, rail capacity constraints, and the fair allocation of rail capacity. Greater rail market concentration has increased the need for stronger rail-to-rail competition. The top four railroads originated 84 percent of the grain and oilseed traffic during 2009, compared to 53 percent during 1980. The top four railroads transported 94 percent of the wheat during 2009, compared to 80 percent in 1994.

Accordingly, USDA recommended that the Board adopt mandatory reciprocal switching as a means of increasing rail-to-rail competition – for a distance up to 30 miles and for a fee of up to 180 percent of the Uniform Rail Costing System variable cost. The USDA stated that, currently, reciprocal switching fees, when the service is available, typically exceed $500 per railcar and have a variable cost near $100. As a result, the marketing opportunities for many agricultural shippers have been limited to only those locations on the railroad serving the shipper. The Interested Parties find these Comments compelling and this is one possible practical test that the Board, after hearing full comments on this issue, may want to consider.[10]

The Agricultural Retailers Association (this statement was a joint statement from 12 total agricultural organizations representing grain and rice, farmer cooperatives, cotton, renewable fuels, and commercial poultry producers) corroborated USDA's concerns in its opening Comments:

- "All sectors that rely on transportation need a financially healthy rail industry, but we also need railroads to actively compete for business in agriculture and other sectors. If the U.S. can build an improved competitive position, both domestically and globally, industries can grow and produce more jobs in the U.S. The railroads, as well as other commercial transport modes, can make a strong contribution to the U.S. competitive position." (p.1)

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[10] While the railroads themselves charge each other terminal trackage rights fees based on their actual costs, as a result of settlements in merger and acquisition proceedings, the USDA believes that such a reciprocal switching fee must be set at a level no lower than the Board's jurisdictional threshold for rate prescriptions. If a reciprocal switching fee were a rate, USDA would be correct. But if in fact the fee is a trackage rights fee, the Board could conclude that the fee need only be set at the involved railroad's actual costs, as the Board has done in merger and acquisition proceedings. Regardless of how it views the fee, the Board would promote rail-to-rail competition by following USDA's recommended approach, and the fee recommended by USDA would more than cover the railroad's costs.

- "The fact that individual agriculture shipper locations tend to be lower volume than many industries and markets often shift direction means that agricultural shippers cannot afford heavy litigation costs to solve situations where competition seems to be lacking (whether the absolute rate level is excessive to reach a market; or a switch is closed or priced so high as to impede economic access; service levels; or other problems). In the years it will take to pursue litigation, markets may change and render a litigation victory moot." (p.3)

- "While many rail rates are not an issue, some are and it appears to be a growing problem in some areas of the country. Rail rates for agricultural markets (as well as coal and chemicals) increased strongly even in relative soft rail markets from 2006 to 2010 (see chart on the next page). Ag rates increased 30% across these four years, compared to an average of 24% across all product lines. While complete data is not available for intermodal shipments because of the lack of comparable data for two of the major carriers, it appears that intermodal rate increases continue to lag considerably behind the rate increases in other product shipments." (p.3)

- "Given the economics of the typical agricultural shipper for any particular shipping location, it is highly unlikely that such shipper would ever bring a stand alone cost case with a rail carrier. It simply cannot be justified given the litigation and costs involved. Agricultural shippers have been advocates of providing rate relief through the small rate case proceeding (utilizing the 3-B standard), but in general, the risk vs. potential reward of such a case is not well balanced and is against the interests of the shipper. We estimate a typical 3-B case in our industry would cost about $250,000, and the total maximum benefit over 5 years would be $1 million. Given the risk of losing, plus the likelihood that even if a case is won, the benefit might be less than the maximum allowed, we see few if any situations where agricultural shippers will find the 3-B small rate case approach appealing to use as it now stands." (p.3)

- "Switching is a problem in many agricultural markets. Sometimes a switch is physically closed or closed by the high costs imposed by the carrier(s). (We have witnessed switch charges increasing from $100 per car to over $500 per car in approximately 3 years.)" (p. 4)

- "Unreasonable business practices by carriers are increasingly a concern of shippers, because such practices are risk-and-cost shifting methods that increase the cost of doing business of the shipper which affects the competitiveness of the agricultural and food industries served by rail, but are not related directly to rail rates. For example, in the recent past, we have observed exorbitant charges by rail carriers for overloaded cars; we've also seen a proposal by a carrier to assess penalties on the shipper for build-up of snow and ice on railcars in transit—an issue that is not under the shipper's control; other carriers have required as a condition of carriage that the shipper fully indemnify the railroad against any loss and damage to the grain handling facility even when the damage is caused directly by railroad employees that are operating equipment on site. Another practice issue is a railroad's demand for a minimum volume commitment as a precondition to a shipper receiving an assured supply of cars. The agricultural industry provides more than 50 percent of the cars utilized to ship grain/grain products, but these shipper owners of cars have little say in new regulations and the associated costs imposed on such equipment, as the rail industry maintains tight control on the regulation of private cars through its own industry governing bodies." (p. 6)

Badger CURE also corroborated these filings, by asserting the following, on behalf of numerous shippers, including agricultural shippers:

- In many areas of Wisconsin, one railroad has a monopoly for freight such as coal and chemicals, many agricultural commodities, and pulp, starch and clay used in papermaking that can only move by rail. Also, because of consolidation and the level of rates they can charge captive shippers, that one railroad can and often does choose to ration service or to not compete for freight such as paper, timber, lumber and other manufactured merchandise that can also move by truck. Both captive and non-captive shippers are, therefore, captive to take-it-or-leave-it rates and service from that one railroad at their Wisconsin locations.

The Wisconsin Central Group confirmed Badger CURE's Comments about the situation in the upper Midwest:

- In our region, the problem is a failure of competition and competition policy. The primary competitiveness problem is not with captive freight but, rather, with non-captive freight - specifically freight which contributes to going concern value with revenue/variable cost ratios between 100 and 180. (p. 2)

It is clear that the agricultural sector is being harmed by various railroad anti-competitive and monopolistic practices.

D. Coal-Burning Electricity Generators and Coal Producers Documented the Lack of Rail-to-Rail Competition and Its Adverse Impacts on the U. S. Economy

In addition to the agriculture sector, coal-burning utilities and a coal producer set out compelling examples of the lack of rail-to-rail competition.

1. AES (in various States)

    - AES Eastern Energy: Railroads not competing for traffic (p. 8)

    - AES Shady Point: "Over the past five months rail service has degraded considerably to all four plants, but the lack of rail alternatives to maintain coal supplies at adequate levels has led to AES filing several Electric Emergency Incident and Disturbance Reports with the United States Department of Energy, notifying it that the plant coal supplies were reaching dangerously low levels." (p. 10)

2. <u>Ameren Corporation (in Illinois and Missouri)</u>

   - "Prior to 2004, Ameren found that the western carriers were interested in securing additional business and would compete vigorously for new traffic. Rail rates gradually decreased from the time that Ameren commenced using Powder River Basin coal in 1990 due to the non-incumbent competing railroad taking contracts as they came due by bidding lower rates, or the incumbent carrier reducing its rates to keep the business. As shown on the graph below, Ameren's rail rates increased dramatically after 2004." (p.3)

   - "From 2004 to 2011, Ameren issued bids for rail rate quotes for eleven competitive rail-served plants. Not a single one of these plants changed carriers as a result of these requests for new rates. In other words, the railroad that was handling the business at the time of the quote retained the business. The non-incumbent railroad, at the time of the quote, quoted a rate, on average, that was 43% higher than the rate of the incumbent railroad." (p. 4)

   - "Another phenomenon which began occurring after 2004 was what Ameren terms "'nonresponsive bidding.'" These are carrier responses to rate requests which clearly indicate that the carrier is not interested in the business. This type of bid includes no response, a response which imposes extreme one-sided conditions which make the quote unacceptable, or varying from Ameren's material bid parameters. During the 2004 to 2011 timeframe, Ameren received five non-responsive bids of these types." (p. 5)

   - "Since 1990, Ameren constructed four build-outs at plants to allow second rail carrier access, and also formed three short line railroads. Ameren also purchased a rail line and built barge facilities to allow competitive access to three additional plants. These facilities were often built by obtaining a favorable rate prior to construction from the competing carrier. However, after 2004, Ameren found that both western carriers had adopted the policy of not quoting to "non-physical" points. In other words, railroads would not quote a rate if the physical track had not already been constructed. This further stifled competitive alternatives as a shipper is unlikely to invest in new facilities if the rate at the connection is unknown. During the 2004 to 2011 timeframe, Ameren received three non-responsive bids of this type." (p. 5)

3. <u>Colorado Springs Utility (in Colorado)</u>

   - Rates have increased substantially – by 30% - in recent years, over and above CSU's prior contract rates. (p. 14)

- "Railroads have also unilaterally imposed rail car maintenance requirements on shippers which exceed the standards promulgated by the AAR. This is a form of cost shifting in that all the costs are borne by the shippers while any benefits are, at best, shared between the imposing railroad and shipper." (p. 16)

- "Between 1990 and 2003, numerous parties, including utilities such as OPPD and CSU, sought to take advantage of the competition between the Class I railroads by incurring the sometimes substantial investment to construct rail tracks connecting their facilities to alternate railroads… However, shippers have stopped seeking authority from the STB to construct tracks to create rail-to-rail competition, which is a strong indication that they doubt that such competition will occur and justify the significant costs of building out." (p. 16)

- "Utilities submit that the railroads' adoption and usage of their fuel surcharge formulas is further evidence that there is a lack of competition in the railroad industry. In a truly competitive environment in any industry, all other things being equal, the attempt by one competitor to assess a surcharge or fee that over recovered the costs it was trying to recoup would cause the loss of business to another company that established a surcharge that more closely tracked those costs. Yet all of the Class I railroads are still assessing fuel surcharges that are not being implied fairly and consistently, and which over-compensate them for their actual fuel costs for particular movements." (pp. 17-18)

4. <u>Oklahoma Gas & Electric Company (in Oklahoma and Arkansas)</u>

   - Railroads are not competing for OG&E's traffic. (pp. 11-12)

5. <u>Omaha Public Power District</u>

   - "1994, considerable resources invested in build out to competing railroad." (p. 1)

   - "In 2008 after extensive negotiations, OPPD signed a contract that increased the delivered fuel costs for North Omaha Power Station and Nebraska City Power Station by over $100 million per year over 2008 levels. As a direct result, OPPD was required to raise residential industrial electricity rates an average of 11% and 27% per month, respectively." (p. 8)

6. <u>Southern Coal Corporation (a coal producer in West Virginia, Virginia, Tennessee, and Kentucky)</u>

   - Lack of competition is "jeopardizing Southern Coal's viability as a productive and profitable company." (p. 1)

   - Monopoly service is "undermining the ability of companies like Southern Coal to successfully compete in the marketplace, both domestically and abroad." (p. 2)

7. Texas Municipal Power Agency

- "TMPA expended significant amounts of effort and money to prosecute a rate case in which the STB found BNSF Railway Company's ("BNSF") rates unreasonable over a 20- year analysis period. Now, only 10 years into the case analysis and prescription period, BNSF is unilaterally attempting to raise TMPA's rates." (p.1)

- "In addition to the base rate increase that BNSF is trying to impose, BNSF is also attempting to impose a fuel surcharge, coal dust suppression costs and potentially increased demurrage charges that were already considered in the rate case analysis." (p.1)

- "The lack of competition has resulted in substandard rail service to Gibbons Creek and will result in dramatically increased costs for TMPA's operations at the end of the 20-year rate case and earlier if the Board does not enforce the rate case decision." (p.1)

E. Chemical Shippers Testified to the Loss of Rail-to-Rail Competition and the Harm It Is Causing the U.S. Economy

1. Arkema, Inc. (with facilities in 15 states)

- "At the same time, for many of our products and materials, we are often unable to pass along the increased shipping costs because competition from foreign companies has driven the individual product prices down. Thus, we are forced with having to sell our products and materials at a lower price while simultaneously having to absorb increasing shipping costs." (p. 3)

- "In addition, with fewer rail options we are finding that our facilities are increasingly "captive" to only one rail carrier. In fact, we have true competition, i.e., competitive service at both ends of the rail shipment, for only one percent of our shipments. Further, a full seventy one percent of our shipments are captive at both ends of the shipment, and twenty-eight percent of our shipments have competition at only one end of the shipment." (p. 4)

- "For some of our shipping routes and products, we have seen rates increase as much as 150% to over 300% just in the last five years. These rates far outpace normal, inflationary costs and directly affect our operations, sales, and our own ability to invest in our manufacturing infrastructure." (p. 4)

- "Unfortunately, we are finding that, in many cases, our competitors have less transportation costs than we do, despite the fact that they are shipping their materials or products from thousands of miles away. They can do this because they can ship directly to a port that may be closer to the end-user or to a port that enjoys greater competitive rail service that can result in lower rail shipping costs once the products arrive in the United States." (p.7)

2. CF Industries, Inc. (operates seven nitrogen fertilizer manufacturing complexes in the central U.S. region and Canada; phosphate mining and production operations in Central Florida; and a network of fertilizer distribution terminals and warehouses, located primarily in major grain-producing states in the U.S. Midwest)

    - " 'Competition' in the rail industry over the past decade has generally produced increased rates and decreased service."

    - Most CF facilities are dependent on rail, no viable alternative to rail for most of the product CF ships. Seven of eight facilities have access to only a single railroad, resulting in rates that are given on a "take it or leave it" basis. CF facilities that are not rail dependent have been able to achieve much better rates than those that are rail-dependent.

    - CF generally receives rate quotes with Revenue/Variable Cost ("RVC") ratios well above 180 percent, and in some cases the RVC ratios were well over 1000 percent.

    - Remedies available to address rates have proven ineffective, as described in the comments of The Fertilizer Institute ("TFI"). Adequate remedies should compensate shippers charged excessive rates and also act as a deterrent to railroads from charging such rates in the future.

3. Diversified CPC International Inc (a manufacturer of blowing agents for the plastic foam industry, propellants for consumer aerosol products, and various specialty gases in Illinois)

    - "Diversified CPC relies on Class I railroads for inbound shipments of raw materials and to deliver products to customers. Diversified CPC is a responsible customer for the railroads. All of our shipments occur in tank cars so the business the railroads are not required to furnish assets for our business. Also, we respect the need for the railroads to have fluid operations and we have been proactive in planning for efficient management of our fleet. The consulting firm that manages our rail transportation performs annual fleet optimization studies; we have implemented strategies and reduced our rail car fleet by 41%. More important, we have invested millions of dollars in infrastructure to grow business and to increase rail shipments."

    - "Still, Diversified CPC has been a victim of significant rail rate increases that have caused us to lose business. Our raw material suppliers have seen similar increases which impacts our production costs. While we have sourcing options, the preponderance of our rail destinations are captive to one Class I railroad creating rail bottlenecks. There is no question that this lack of competition has resulted in higher rates."

4. Dow Chemical Company (with facilities in over 24 states)

- Dow notes that the Joint Comments detail the substantial changes that have occurred in the state of competition in the rail industry.

- Dow particularly supports changes to expand access to reciprocal switching and bottleneck rates.

5. E.I. Dupont De Nemours And Company (with facilities in 33 States)

- "Most of the DuPont businesses are subject to foreign competition. Our foreign competitors can choose strategically where they enter the U.S. rail system to maximize the number of carriers that will compete for their business and minimize the length of the hauls to their customers. If a foreign competitor finds that its rates are increasing out of a particular port, it can route its shipments to another, more advantageous port. The DuPont sodium business in Niagara Falls has experienced this first hand on the Gulf Coast, where it has struggled to compete for sales against French imports because neither serving carrier will provide rates to allow DuPont to compete for that business. Perhaps the railroads view this as a zero-sum game because they will also handle the import traffic. If so, it is a very short-sighted perspective because over the long run it will force domestic plant closures, which will cost the railroads far more business than just the imported commodity. In the case of the Sodium business, DuPont is the only remaining US domestic producer." (pp. 3-4)

- "For example, for its 2007 rail discussions, DuPont benchmarked its current transit times against 1992 transit times for the same lanes. There was no change in the transit tunes in this time period. But the consequence of much higher rail rates means that DuPont is now paying substantially more for the same service. This hardly indicates a competitive rail market." (p. 6)

- "It is unfortunate that the railroads appear to forget the substantial capital investments made by DuPont to configure its plants to rely on rail transportation, while touting their own investments as justification for higher rates. For the longest time, railroads have openly stated that "freight rail helps customers create jobs when their logistics supply chains are redesigned around the greater efficiencies of rail."' But, so do the investments made by DuPont and other shippers that enable their wide-spread use of rail." (p. 8)

- "The prospect of new business is attractive only if that new business will pay the higher rates demanded by a railroad. If competitive rail rates are necessary to develop that new business, however, railroads are seldom interested if those rates cannot meet their desired higher levels. When new businesses don't develop or existing businesses can't grow, new jobs are not created; or worse, if rail rates help to render existing businesses non-competitive, existing jobs are lost." (p. 9)

- "Furthermore, some railroads have completely disassociated contract terms and conditions from rates. While one carrier was not willing to provide rates more than a month before existing contracts expired, it urged DuPont to accept general terms and conditions before receiving rates. A second carrier refused to discuss any terms and conditions prior to rate acceptance. But there are certain contract terms that are highly contingent upon rates. While the Board cannot influence the negotiation process used by rail carriers, we share it as yet further evidence of railroads exploiting market power to dictate, rather than negotiate, commercial terms." (p. 9)

- "Poor access to rail competition is also sending the American chemical industry offshore. Foreign manufacturers have access to competition and lower rail rates because of the many locations at which they can access the U.S. rail network. In fact, if DuPont were investing in many of its production facilities today, it would be cheaper to move its industrial Chemical production overseas and then import that production into the U.S. The country and American workers simply cannot afford to have railroads drive off DuPont and the chemical industry by stubbornly refusing to compete." (p. 14)

6. <u>M & G Polymers USA, LLC (the world's third largest producer of polyethylene terephthalate ("PET") for packaging applications and a technological leader in the polyester market in Apple Grove, WV, with a plant captive to CSXT)</u>

   - "M&G has been forced to pay increasingly high rates for rail transportation in recent years. During the economic slowdown of 2008-2009, prices dropped on goods and services throughout the economy. While trucking companies reduced their rates in an attempt to increase business, railroads providing transportation to M&G did not follow suit. Instead, the railroads restricted capacity by closing facilities and, generally, curtailing supply. Rail rates have simply continued their inexorable climb, especially now that the economy is growing again and truck supply is very tight. With these rate increases, railroads have curtailed West Virginia's economic growth. In M&G's experience, the railroads' desire for ever-increasing rates even supersedes the promise of additional traffic. The PET business is competitive, and M&G is always searching for new markets for its products. Unfortunately, rail rates are a major impediment to M&G's ability to grow its business. Due to this unfavorable environment, M&G is evaluating options to move production capacity from a captive production location to one that has competition and, as a result, much more favorable transport economics." (p. 3)

   - "The refusal to compete is especially apparent when M&G attempts to use a rail-truck transload movement to provide a competitive option to a captive rail destination. To determine if M&G is attempting to "truck around" a competing rail carrier, railroads often ask M&G the identity of the ultimate customer when M&G requests a rate quote to a bulk transload facility. In a truly competitive market, the railroad delivering to a bulk terminal should not care who is the ultimate recipient of the cargo by truck." (pp. 3-4)

- "If a railroad is already serving a PET consumer not supplied by M&G, and M&G attempts to bid for that business, M&G has discovered that the railroads have little interest in offering a competitive transportation rate so that M&G can supply the consumer. In the railroad's mind, the business already belongs to it (because the railroad serves the customer) so there is no need to provide a competitive transportation rate to help M&G win the business. Even when M&G can show that it would grow the business and increase traffic, the railroads' rates do not budge. The above example highlights an important point. Most of M&G's customers are captive to a single railroad and M&G has found the railroads insensitive to their rates precluding or being fatal to an M&G business opportunity." (p. 4)

- "M&G has also found that, where rail options exist on a particular route, railroads frequently take whatever steps possible to eliminate that competition. For example, the North America supplier of a key M&G feedstock material for PET production is located in Canada. M&G receives deliveries of this material in joint-line service via CN and CSXT, with interchange at Toledo, Ohio. There is no rail competition for this movement. M&G's Canadian supplier has various other business throughout the U.S. with CSXT. When the Canadian supplier transferred some of its non-M&G traffic away from CSXT to NS, CSXT told the Canadian supplier that its captive M&G traffic rates would increase to make up for the lost revenue. Thus, the railroads use their captive traffic to preclude truly market-based pricing on completely separate traffic that actually has theoretical competition." (p. 4)

- "Another way that railroads eliminate rail competition is by leasing track to M&G's customers that tie the customer to a single railroad. Because M&G, not M&G's customer, pays the freight, M&G is left holding the bag for the increased line-haul rates due to the elimination of rail competition. A case in point is an M&G customer in the Midwest that is open to reciprocal switching and theoretically had rail competition between BNSF and UP. Unbeknownst to M&G, BNSF offered to lease track space to the customer for railcar storage, but with a provision restricting the lease track's use to only railcars moved by BNSF in line-haul service. Moreover, railcars transported by UP incurred a switching fee of $500 under the Lease. M&G only learned of this restrictive lease when it attempted to ship a railcar to the customer via UP. When BNSF charged the customer $500 for the switch, the customer directed M&G to only ship via BNSF in the future." (p. 5)

- "Railroads also use routing and bizarre pricing to limit M&G's ability to obtain competition and/or reasonable rates. For example, the Apple Grove facility is approximately 14 rail miles from a potential connection to NS at Point Pleasant, WV, and 35 miles from another potential connection to NS at Kenova, WV.

However, routing protocols used by CSXT and NS mean that M&G products are often interchanged in Cincinnati (188 miles away) or other distant cities, thus forcing M&G to use CSXT for a significant distance." (p. 5)

- "Even where these routing protocols do not apply, CSXT's irrational pricing curtails M&G's ability to use the closest connection points to NS. In particular, the CSXT tariff rate from Apple Grove to Cincinnati is $2794 + Fuel Surcharge of $75.20 (188 miles at $0.40 per mile), creating a total rate of $2869.20. This equates to $15.26 per mile for the 188-mile trip. In contrast, the CSXT tariff rate from Apple Grove to Point Pleasant is $3074 + Fuel Surcharge of $5.60 (14 miles at $0.40 per mile), which produces a total rate of $3079.60, or $219.97 per mile. Similarly, the CSXT tariff rate from Apple Grove to Kenova is also $3074 + Fuel surcharge of $14.80 (35 miles at $0.40 per mile), which is a total rate of $3088.80, or $88.25 per mile. The CSXT is clearly curtailing competition by making it fourteen times more expensive (per mile) for M&G to convey traffic to the competition at the nearest location." (p. 6)

- "Despite the significant and continuing rate increases noticed by M&G and described in these Comments, M&G has also become aware that railroads are using other means to increase their bottom lines. Demurrage is a prime example. Both Class I railroads and shortline railroads have dramatically increased demurrage charges recently, with some railroads' charges jumping from $20 per day to $75 per day." (p. 6)

- "Many railroads are not only increasing demurrage fees but also enforcing demurrage very strictly. The key factor that makes demurrage an additional revenue stream, however, is that railroads are also increasing the likelihood of demurrage by reducing the number of days that a customer is switched and by consolidating operations through reduction of rail yard space. Due to this artificial limit on capacity, congestion is increased and cars are bunched. For many customers, M&G ships products on a continuing and staggered basis so that the customer has a steady supply (such as one or two railcars per day) for its ongoing operations. Due to the railroads' artificial reduction in capacity, these railcars get stuck in congestion and are bunched together in groups of 8,10, or more. Many customers cannot accept delivery of this many railcars in a single day, and, as a result, the railroad charges demurrage when holding the railcars on railroad track until delivery can occur." (p. 7)

- "Railroads have also used their rate adjustment indices as revenue streams. In prior years, some of M&G's contract rates were adjusted annually by a blend of the RCAF-U and RCAF-A indices. As a result, a reduction in railroad costs from productivity enhancements was partially shared with M&G. Now, however, M&G's rates are almost universally adjusted using the All-Inclusive Index Less Fuel ("AIILF"), which does not include the impact of railroad productivity. This is a form of stealth rate increase for the railroads." (p.7)

- "As mentioned earlier, M&G has two PET production units in North America, at Apple Grove, WV and Altamira, Mexico. While Apple Grove is captive to a single railroad, the Altamira facility is dual-served. For shipments from Altamira into the United States, M&G is able to choose the initial American railroad because M&G can select which border crossing to use. As a result of the competitive options existing for Altamira traffic, but absent for Apple Grove traffic, M&G has found that rail rates from Altamira to the western U.S. have RA/C ratios that average approximately 40% to 50% less than ratios for rates from Apple Grove to the same destinations. This rate differential is pushing PET production away from the U.S., as shown by two examples from M&G's own business. First, PET shipments into the Pacific Northwest are roughly equidistant from M&G's Apple Grove and Altamira facilities, but the significant savings in rail cost attributable to competition means that M&G produces that PET at Altamira rather than Apple Grove. As a second example, the cost to M&G to ship PET from the Mexico-U.S. border to a small city in the Northeastern U.S. is less than the rail cost from Apple Grove to the same city. Again, this perverse pricing creates an incentive for M&G to produce PET in Mexico rather than the much closer Apple Grove facility." (p. 8)

- "Imports from overseas also have the distinct advantage of either bypassing the railroad altogether or being able to create competition by having the freedom to select the incoming port (and servicing railroad). M&G has lost business to imports in locations as close to the coast as Washington state to as far as 400 miles from the nearest port - the reason being that our logistic costs were non competitive." (p. 8)

- "Where competition does not exist, railroads benefit from the extreme expense, length, and uncertainty of rate cases because shippers are forced to either accept the high cost of increased rail rates or the high cost of litigating a rate case. In other words, the time and cost of a rate case reinforce railroad anti-competitive behavior and even encourage railroads to set unreasonably high rail rates on captive, non-competitive lanes." (p. 9)

- "By the time the Board issues a decision in M&G's rate case, M&G expects that it will have spent $15 million to $20 million in consultant fees, legal fees, and payment of inflated tariff rates during a three year period just to obtain what should be M&G's right - a reasonable rail rate. Although the legal and consultant expenses are substantial in their own right, the vast majority of this cost estimate is attributable to the inflated tariff rates." (p. 9)

- "If the Board cannot devise a more expedient and less costly rate reasonableness method to protect captive shippers from railroad market power, it needs to create greater competition that will allow the marketplace to do the job." (p. 10)

- "Reciprocal switching only succeeds at creating competition if the second railroad actually wants to compete. The rail industry, however, has consolidated to the extent where just two carriers may not be sufficient to spur competition. So long as competition is restricted to a few geographic areas, it is easier for two railroads to not challenge the other competitively. Each has an understood franchise over certain customers that are off-limits to the other. Therefore, the best way to ensure competition is to substantially increase the number of competitive locations so that it becomes much more difficult not to compete." (p. 11)

7. Mississippi Lime Company (a producer of lime and calcium-based products in Kentucky and Missouri)

   - MLC's focus in this proceeding is on its manufacturing facility near Ste. Genevieve, MO. (p. 1)

   - "As examples, UP train service from Ste. Genevieve to St. Louis was reduced from seven-days-per-week to five-days-per-week, and maintenance of UP's tracks within MLC's plant site was drastically reduced. These and other unsettling matters involving UP have caused MLC to participate in this proceeding to investigate potential means to obtain the service of a second rail carrier." (p. 4)

   - "Moreover, increased rail competition, or a potential for such an increase, often leads to more efficient shipper and/or rail carrier operations that result in an overall increase in rail traffic volume. A case in point is a project under active consideration whereby MLC would construct plant trackage at Ste. Genevieve for storage of approximately 125 railcars at very substantial cost. MLC would be more likely to incur that expense if the availability of rail service by a second rail carrier were to influence service improvement on the part of UP. The substantially improved plant operating efficiency that would result from that extensive on-site railcar storage capacity would enable MLC to ship up to an additional 1,000 carloads per year. The potential for increased rail competition would thus be likely to result in a substantial increase in MLC's overall traffic, not a decrease." (p. 7)

8. National Association of Chemical Distributors

   - "Chemical distributors depend on rail service to send and receive shipments. Because they are captive to only one railroad, many of these companies have been subject to large and frequent price hikes and undependable service year after year. The increased costs and shipment delays caused by the current rail situation are ultimately passed down the supply chain, raising prices to the consumer level." (p. 2)

9 Occidental Chemic al Corporation (in Alabama, Georgia, Illinois, Kansas, Louisiana, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Texas)

   - "In 2010, OxyChem shipped 63,000 loaded railcars and incurred more than $220MM in rail freight charges. Over the past five years, including a period of general economic recession, OxyChem has experienced exorbitant rate increases. Our rates have increased on average from 30% to 160% for all chemical commodities. During this same time frame, rail costs, as reflected in the RCAF-U and RCAF - A (Rail Adjustment Factors), increased 19% and 23% respectively. In fact, over the past two years the RCAF-U and RCAF-A decreased by 8 and 10% respectively. Furthermore, these excessive increases serve to reduce the global competitiveness of our customers and ultimately increase the cost paid by consumers for end products." (p. 2)

- "Over 70 percent of our origin/destination pairs are served by only one railroad, which effectively provides that railroad with monopolistic pricing power in that market." (p. 2)

- Example of a paper barrier. (p. 2)

- "As we negotiate contracts, there are undoubtedly several lanes which are more costly than others. As negotiations wind down, we have asked several Railroads to take multiple lanes to common carriage (tariff) rates, allowing us to be in a position to file a rate case. The Railroads have either refused to offer common carriage rales to OxyChem or have stated that, if OxyChem insists on a common carriage rate being quoted, the rail carrier will withdraw all of the contract rates it has offered, including for movements for which OxyChem has not requested a common carriage rate. "Unfortunately, the railroads can and frequently do, bundle rates in contract rate proposals. They are required to provide a tariff rate to a shipper upon request, but the decision to offer contract rates is the railroad's alone." Quite frankly, this is the reason that many shippers have not been able to seek relief from the Board. Shippers cannot afford to pay tariff rates on all lanes while a Rate Case is tried. Shippers should be able to request and receive tariff rates on any lane." (p. 4)

10. <u>Olin Corporation (a producer of chlorine and caustic soda in 11 different locations in various States)</u>

    - According to the Chlorine Institute, chlorine products and their derivatives contribute more than $46 billion to the U.S. economy each year through sales of chlorine and other building block chemicals that are used to make thousands of essential products. The chlor alkali industry alone contributes over $7 billion directly to the U.S. economy each year. (p. 3)

    - In addition to its importance to our nation's health and economy, chlorine is vital to U.S. security. The Department of Homeland Security has deemed chlorine to be an essential asset to the "critical infrastructure." Moreover, chlorine is used in materials that promote the national defense, including bullet-proof vests, helmets, and parachutes. Chlorine is helping to protect the men and women in our armed services. (p.3)

- For example, the NS continues to impose rate-based fuel surcharges that significantly over-recover its fuel costs. The NS continues to do so despite the STB's ban on them in 2007 because they are unreasonable. As a result of this market dominance abuse, Olin was forced to become a named plaintiff in a lawsuit against the four largest Class I railroads alleging conspiracy to impose a rate-based fuel surcharge. The plaintiffs in this action, along with Olin, are currently seeking class certification. This lawsuit alleges that the defendant railroads conspired to coordinate their fuel surcharge programs as a means to fix, raise, maintain, and/or stabilize prices of rail freight transportation services sold in the United States. (p. 4)

- Olin provided eight pages of specific examples of railroads refusing to compete for its traffic – see Exhibit A, pp. 26-34.

11. PPG Industries, Inc. (in Louisiana, Ohio, Texas, and West Virginia)

- "PPG has seen the cost per ton to ship chlorine throughout its system increase over 100% (excluding mileage income) since 2004. In comparison, the cost per ton for all other chlor-alkali chemicals (excluding TIH) shipped by PPG has only risen slightly more than 20% (excluding mileage income) since 2004. In comparison the all inclusive index less fuel, a rail index that tracks costs, has only risen 31 % during this same time period." (p. 3)

- "PPG's plant in Natrium, WV is captive to one railroad (CSXT) while PPG's facility in Lake Charles, LA has access to three railroads (BNSF, KCS, UP). The cost per ton for shipments of chlorine from Natrium, WV were approximately 70% higher than those from Lake Charles, LA in 2004. This premium increased to almost 85% in 2010." (p. 4)

- "PPG was unable to even quote new business which would have been beneficial for the Natrium plant as the cost to transport the product was higher than the product's price." (p. 4)

- "The lack of competition at the customer location also results in the payment by PPG of substantially inflated freight rates. For example, PPG ships chlorine from the Lake Charles, LA facility, which is served by BNSF, KCS, and UP, to Laporte, TX, which is captive to UP. Even though PPG has access to multiple carriers at Lake Charles, the UP is able to effectively cut off PPG's access to this competition on shipments to Laporte by protecting the single-line haul to Laporte. Reciprocal switching at Laporte — which is just outside Houston, TX— will restore that access by giving PPG the option of using BNSF, which operates a line within 25 miles of Laporte." (p. 4)

- "Another issue faced recently by PPG involves a captive rail customer with a new tariff requirement published by a short-line carrier. The short-line carrier is one of three railroads participating in the route to the customer; since the customer is captive to the short-line, PPG must use the short-line to move a TIH car on a 25-mile segment to the destination. However, the short-line has now implemented a tariff requiring a permit and special train for TIH movements. The total cost to move chlorine to this customer is now double to quadruple the cost prior to the new requirements taking effect, depending on how many cars are moved at a time. The cost increase is primarily attributable to a special train cost of approximately $15,000 per movement. While filing a rate or unreasonable practice case at the STB is an option, there are substantial costs and delays associated with such remedies." (p. 5)

- "Already, PPG has exited export business from the Laporte, TX facility due to railroad behaviors. In this instance, the railroad chose not to haul a TIH product under the intermodal exception to the common carrier obligation which prevented PPG access to the West Coast ports. PPG tried to truck the product to the port, but it became uneconomical to do so, and instead, PPG was not able to participate in the export business. The same result would likely have occurred if, instead of refusing the traffic, the railroad effectively cut off access to rail service by increasing its rate to the port." (p. 6)

- "PPG is aware of opportunities to increase jobs and grow with the Marcellus Shale opportunities near the Natrium, WV plant. However, as PPG examines potential opportunities, the concern over being captive to a single railroad and the lack of competitive alternatives from this plant is a concern. In discussions with interested parties looking to co-locate a more than $1 billion chemical facility in Natrium, WV, the lack of competitive rail service is a very serious concern and a true potential barrier to new business. PPG wants to continue to see the region and the economy grow and not have the potential growth stifled by an uncompetitive rail system." (p. 6)

- "Where rail transportation is not involved, growth in the chemical industry has flourished, despite the weakened U.S. economy. An example of such growth involves chemical exports supported by a competitive U.S. cost position mainly attributed to natural gas. In 2010, U.S. shippers of polyvinyl chloride (PVC), a major end-use consumer of chlorine, exported on average 34% of their sales which is a historical record level. The majority of chlorine for PVC moves via pipeline. Had the PVC industry been forced to move chlorine via rail, the rail rates would have negatively impacted the competitiveness of the industry to export and, thereby, help combat a weak U.S. economy." (p. 6)

12. <u>The Fertilizer Institute</u>

- "The so-called 'railroad pricing renaissance' has hit both captive and competitive shippers alike, although rate increases have been greater for captive traffic. For example, in just the past three years, one shipper of phosphates by unit train has seen its rates at a captive facility increase by 29.4 percent, while rates at another facility also owned by this shipper with both direct rail and barge options have risen only 8.2 percent over the same time frame." (p. 3)

- Phosphate shippers, overall, have experienced rate increases of 60 percent from 2006-2010 for highly-efficient unit train shipments in railroad-owned cars, and a 61 percent increase in private cars. During this same period, the Consumer Price Index rose by only 6 percent. Other examples were given for shipments of other types of commodities, with a similar increase in rates. The ability of railroads to increase rates at a pace several times greater than their costs have increased, while also increasing their traffic volumes, strongly suggests the exercise of substantial market power. (p. 3)

- The fact that competitive shippers also are experiencing large rate increases is a particularly troubling sign. It calls into question a key assumption underlying the STB's prior merger approvals, which is that two rail carriers would aggressively compete with one another. (p. 4)

- "A TFI member that ships urea, UAN, phosphates and anhydrous ammonia by rail has analyzed its rail rate increases over several key lanes for these commodities and compared those increases to changes in various cost indices. From 2004-2011, rail rates for urea increased by 114%, contrasted with changes over that same time period of 37% in the RCAF-U and 27% in the Producer Price Index ("PPI"). In key lanes for both UAN and phosphates, rail rates increased by 102% from 2004-2011. For anhydrous ammonia, the increases have been just as pronounced, but over a shorter time frame. This ability of railroads to increase rates at a pace several times greater than their costs have increased, while also increasing their traffic volumes, strongly suggests the exercise of substantial market power." (p. 4)

- "Over the years, railroads have unbundled charges and services in a way that demonstrates that rates have in fact risen even more than is revealed by examining just the line-haul rates. Many services that the railroads once performed as part of their line-haul are either billed separately today or are now performed by the shipper at its expense. For example, UP requires some TFI members to pre-classify cars at their own facilities by destination so it is easier for UP's yard crews to assign the cars to outbound trains. In some cases, routing protocols have increased transit times, which requires shippers to invest in more rail cars to handle the same volume of traffic. Some carriers require that shippers submit rate disputes on-line, but they do not inform the shipper when the claim has been resolved or whether the claim has been granted or denied; rather, the shipper must maintain the claim for the carrier by continually checking the status of its claim on-line. All of these changes shift costs to the shipper that are above and beyond rail rate increases." (p. 5)

- Intermodal competition has only been of limited effectiveness as a constraint on rail rates. Barges are not universally available and trucks are an inherently higher cost alternative than rail and are not very practical for high volume lanes.

- "By their pricing decisions, railroads also are dictating the markets that TFI members can reach with their commodities. For example, Gulf Coast export markets effectively have been closed to grain produced in Nebraska and the Dakotas because the railroads, through their rates have forced this grain towards the Pacific Northwest. In essence, the railroads are placing their thumbs on the scales of the grain markets to favor certain markets over others. This skews the ability of grain producers to compete globally and artificially distorts global markets." (p. 5)

- "While the most evident changes wrought by reduced rail competition are front and center in rate increases, there also have been significant non-rate impacts. TFI members have experienced service reductions in the form of less frequent switching, even at high volume facilities. When bunching of cars occurs due to inconsistent railroad service, the railroads still will assess demurrage against a destination receiver that is not equipped to unload all the cars within the allotted time after they are constructively placed. TFI members that once had service commitments in their contracts can no longer get them. Contract terms have become much shorter, even at competitive locations, as railroads place greater value on their ability to increase rates more quickly than upon securing volume commitments for extended time periods. Even with these shorter contract terms, it is common for contracts also to have a 30-day cancellation clause, which renders contracts of little more value to a shipper than a tariff. Railroads consistently cancel rates that have not been used in 12 months, even though the nature of many businesses is that a customer can be won and lost from one year to the next. When that rail rate is needed in order to regain the business, the railroad frequently does not respond in a timely manner, which causes the opportunity to be lost. Any railroad that has such confidence in its ability to continually increase rates while reducing service commitments is displaying confidence in its own market power." (p. 6)

- "TFI members must invest in their business infrastructure just like the railroads invest in theirs. They constructed current production facilities in the United States under the assumption that there would be a competitive rail system on which to transport their products to market. Skyrocketing rail rates are jeopardizing those investments and putting new investments in jeopardy. It is not in their interest to invest in new or additional production capacity when they cannot economically get their product to market. Through their pricing decisions, the rail industry has taken a very short term view by milking the sunk investments of existing production capacity at the cost of lost future investments in additional capacity and infrastructure. As a consequence, this country will lose the jobs associated with the construction and subsequent operation of new facilities. Although the rail industry touts the jobs that it creates, the customers that railroads service are responsible for many more jobs. When those jobs start to disappear, so will the rail industry jobs." (p. 15)

13. TOTAL Petrochemicals USA, Inc. (in Louisiana and Texas)

- "Over the years, TOTAL has built some of the world's most competitive manufacturing sites, with scale and efficiencies rivaling any in other regions. In addition to world-scale operations, the success of our sites hinges on an efficient, safe, and cost effective transportation and distribution network that today moves product to hundreds of customer facilities all over North America. Of the annual volumes of TOTAL products moving by rail, 4 billion pounds per year are comprised of plastics pellets transported in covered hopper cars." (p. 2)

- "Due to insufficient competition in the rail industry, transporting products via rail often involves spotty service, unpredictable delivery and in recent years, skyrocketing freight rates, even in the midst of an economic downturn." (p. 2)

- "The railroads then typically use the bulk of these excessive profits to fund massive intermodal capital projects designed to transport the resulting waves of imported goods back into U.S. markets. To make matters worse, today importers can choose their ports of entry into the United States based on areas with competitive rail service, and strategically avoid captive areas where railroads engage in noncompetitive pricing practices. Unfortunately, TOTAL'S customers cannot pick up and move so easily." (p. 2)

- "Railroads have brought their monopolistic pricing power into full view over the last several years, in one recent example, an eastern railroad increased TOTAL'S base rates almost 50% from 2007 to 2009. Included in these rates were captive lane increases of as much as 100%, resulting in revenue/variable cost (R/VC) ratios of 800% or more. This included an attempt of an increase by nearly 13% from already excessive rates in a recession year. As a consequence of these rate increases, TOTAL'S ability to compete in certain eastern markets was impaired." (p. 2)

- "In one TOTAL experience, while renewing a contract, the Class I railroad moved a rate up sharply without any negotiations, citing circumstances where another shipper accepted the much higher rate. The railroad insisted upon moving TOTAL to that new level regardless of efficiencies, economies of scale, alternative transportation options or any other components of a normal, competitive environment." (p. 2)

- "The Class I railroads' exercise of monopoly pricing power and the impact of their actions on the price of U.S. manufactured goods have driven companies out of markets or forced them to move their operations overseas, destroying U.S. jobs in the process. For example, in 2007 a TOTAL customer in California who processed plastic pellets for a packaging application announced the closure of their plant, citing lack of economic viability related in large part to raw material transportation costs. The material supply had come from either the eastern half of the U.S. or from the U.S. Gulf Coast. When faced with the potential shutdown, TOTAL requested a lower rate from the railroad in order to meet the customer's needs. The railroad declined. When the railroad was told that if the rate did not come down to a reasonable level, the business would move overseas, again the railroad would not adjust the price. The customer closed their plant in California and moved the site to China. As a result, jobs were lost in California, TOTAL lost a customer, and the carrier lost 300 carloads per year (presumably some was regained via import intermodal traffic)." (p. 3)

- "For TOTAL, during contract negotiations with a Class I railroad, TOTAL presented data demonstrating the railroad's overwhelming Revenue to Variable Cost ratio on the TOTAL portfolio of lanes. A railroad vice president stated they "don't care about Revenue to Variable Cost numbers." The railroad is run on market rate, not RVC, he exclaimed." (p. 4)

- "In order to bring a Large Rate Case, the shipper must incur years of inflated tariff rates, significant legal and consulting costs, and internal staffing demands, with potential exposure in the tens of millions of dollars. Few companies can make such investments, no matter the damage being done by the railroad's monopolistic price behavior. In addition, the outcome is not certain, even if seemingly straightforward. Carrier, Shipper, and the STB must pore over mountains of paperwork to discern fact from fiction, and relative data from obscure." (p. 4)

- "In a recent case, TOTAL requested rates through bulk transloading terminals as an option to direct moves to the customer on another competing railroad. TOTAL was told by the Class I railroad that their internal policy is to not quote rates to bulk terminals that would truck around competitive railroad deliveries. This is a clear example of duopolistic behavior that results in an anti-competitive marketplace." (p. 5)

F. <u>The Forest Products Industry Suffers from the Same Problems as The Other Industries</u>

Roseburg Forest Products Company (a forest products manufacturer in Mississippi, Montana, Oregon, and South Carolina), summarized its views of railroad practices and the lack of rail-to-rail competition:

- Roseburg began by acknowledging the positive effects of deregulation (pp. 1-3)

- However, "[t]wenty years ago, Roseburg had a very diverse customer base. Our shipments were pretty evenly divided across the Nation. Thirty percent of our shipments would go to the Northeast; thirty percent to Texas; thirty percent to California and Arizona and about 10% to the Midwest. By spreading across a wide region we were in a better position to level out our production, minimize our overhead costs and better insulate ourselves from cyclical market demand. Day in and day out, we were shipping about the same number of railcars from our plants. Today, our distribution pattern looks much different. We still have a presence in the Northeast and Texas but it isn't the size it used to be. Higher freight rates and lack of competitive rail alternatives have forced us to focus on markets closer in like the Pacific Northwest, California and Arizona. The volume of railcar shipments from our mills in the Pacific Northwest have declined." (p. 3)

- "There are very few joint line routes available and those that remain are significantly higher than the single line routes. The Rule 11 interchange rates have been largely cancelled as well. Carriers are opting for longer hauls and no longer interested in this type of business. The Rule 11 rates offered today are very high and usually render rail shipments non-competitive. In partial reaction to this, Roseburg purchased property served by BNSF so we could maintain some the Customers we've been selling to for many years." (p. 4)

- "Another thing Roseburg has noticed is that carriers are not as interested in shorter mileage hauls. Looking back, a sizeable percentage of our business to California was moving via rail. Most of the truck hauls from Southern Oregon to California are between 300 and 800 miles; yet the SP considered this to be one of their most important markets and went to great lengths to ensure the rates were competitive with truck. Today, trucks have gained an ever increasing share of Roseburg's business; UP has not been interested in regaining some of the lost business. (p. 4)

Not only do Roseburg's Comments corroborate the lack of rail-to-rail competition today, but also that the railroads, despite their oft-repeated commercials and claims, have driven traffic off the rails and onto the Nation's highways.

G. <u>Other General Industry Filings Corroborate These Industry-Sector Comments</u>

1. <u>Manufacture Alabama (trade association representing hundreds of companies in a wide range of industries, all of which are vital parts of a manufacturing base crucial to Alabama's economy and job base)</u>

    - "Many of our member companies depend on Class I freight railroads to deliver their goods to customers, and most of our members are suffering from exorbitant rates and unreliable service from the railroads on a daily basis. The current rail regulatory program denies access to competition for many American rail customers, including manufacturers. Our members believe this lack of competition has resulted in higher rates and inefficient service. Manufacturers compete in a global marketplace and the rates manufacturers are being charged by freight railroads are putting American manufacturers at a severe competitive disadvantage." (p.1)

2. <u>Mercury Group (a shipper-based mobile energy study group focused on best practices and market innovations to reduce the energy consumption, energy costs and</u>

emissions associated with the movement of products to market. The Mercury Group's participants include market leading companies across the consumer goods industry, food industry, paper industry, retail, building products, manufacturing and machinery industries)

- "Railroad industry-wide reliance on indexed fuel surcharges, whether percent-of-revenue or mileage based, creates pervasive distortions in the state of competition in the railroad industry. Shippers are being asked to pay for fuel costs that have virtually no relationship to the freight they are shipping. This economic distortion is now part of virtually every freight transaction and makes for an ineffective marketplace. Consideration of competitiveness in the railroad industry, including the potential impacts of any proposed changes to the Board's access rules and policies requires and the financial health of the industry, requires consideration both captive and non-captive freight and industry fuel surcharge practices." (p. 2)

- "The benefits of transparency are not exclusive to the shippers. When the Railroads are paid accurately for the fuel costs they incur to move freight, competitive marketplace functions more efficiently." (p. 7)

3. National Coal Transportation Association

- Since 2003, no petitions for build-outs have been filed because the ROI for the capital investment was no longer acceptable. Duopoly does not guarantee robust competition, because Wall Street penalizes excess capacity, so rail carriers will not invest in an overcapacity situation and not aggressively seek to undercut the other carrier's business.

4. National Industrial Transportation League

- "In its survey, League members reported that rates are 10-50% higher at captive facilities than at dual served facilities." (p. 4)

- "Moreover, in response to the League's survey on rail competition the vast majority of the respondents found that geographic competition was not effective in restraining rail rates." (p. 6)

- "Today, many rail contracts look no different than a tariff, contain cancellation rights on 3 0-days notice, and are devoid of any service obligations. The railroads' refusal to negotiate and enter into mutual contract terms illustrates their dominant market position." (p. 6)

- "Further, despite rising rail rates, railroads are shifting more of their costs onto their customers to maximize their profits even further. Today, many more shippers furnish their own rail cars, handle the switching of cars at their plants, and may be made responsible for maintenance of certain rail infrastructure." (p. 6)

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The large number of these filings by affected shippers or organizations speaking for them, the consistency of the shippers' stories, as well as the filings from various unrelated proceedings cited in Interested Parties' opening Comments filed on April 12, 2011, all demonstrate that (1) railroads have increased their monopoly power in recent years due to mergers and acquisitions approved by the STB and the ICC, (2) railroads refuse to compete even when they could do so, (3) these practices are harmful to the ability of many shippers to compete or even to do business in the United States, and (4) as a result, the current business practices of the major freight railroads are harmful to the overall U.S. economy.

IV. THE CURRENT REGULATORY REGIME HAS RESULTED IN THE RAILROADS GENERATING GREATER PROFITS THAN THEY CAN OR WILL REINVEST IN THEIR RESPECTIVE RAIL SYSTEMS

The opening Comments of the AAR boldly assert that there is no reason for a change in regulatory policies and that the continuation of those policies is required to keep the rail industry in a position to reinvest in, and attract new capital to, the national rail system. What the AAR does not say, of course, is that the four major railroads are currently earning profits so substantial that they cannot profitably reinvest them in their respective systems. Hence, railroad stock buy-back programs have flourished in recent years.

Companies generating profits have three things they can do with those profits. They can declare dividends to their shareholders; they can reinvest in their companies; or they can buy back their stock to increase earnings per share and give their shareholders additional value without requiring those shareholders to pay taxes on dividends. Of course, a stock buy-back program is used when the profits of a specific company are so great that profitable reinvestment is not desirable. That is precisely the situation facing the four major railroads at this time and for the past several years.

Although the four major railroads have been buying back stock periodically for many years, stock buy-back programs began in earnest in 2006. That year, the big-four repurchased over $2 billion of their stock. In 2007, that number grew to $6 billion and in 2008, $5 billion was used to repurchase stock. The "Great Recession" put a hold on these programs for much of 2009, but by September of 2009 an additional $1.6 billion had been repurchased. Most recently, CSXT announced that its 2011 "capital budget" was $2 billion and it would repurchase an additional $2 billion of its own stock over the next three years.

The remarkable ability of the nation's railroads, particularly the big four, to continue raising prices in the face of the "Great Recession" that afflicted the rest of the country over the last three years is well documented. In fact, throughout this period of time, the railroads continually boast of the "Railroad Pricing Renaissance" in their quarterly earnings call with stock analysts. To suggest that this newfound pricing ability bears any resemblance to conditions that existed throughout the period preceding and immediately following the Staggers Act is simply absurd. The rail industry is extremely healthy financially, and its ability to raise capital and invest in its rail system cannot seriously be doubted.

The AAR argues that the "improved financial performance of the railroad industry" should not have "*any* influence" on the Board's approach to access regulation, and that there is "*no* nexus" between the overall financial health of a railroad and the need to permit competition though access to a second carrier, as permitted by statute.[11] This argument is utter nonsense. In its decision in Ex Parte No. 445 (Sub-No. 1), *Intramodal Rail Competition*, 1 I.C.C.2d 822

[11] AAR Comments, p. 16 (emphasis added).

(1985), the agency specifically cited the Staggers Act's goal of "railroad revenue adequacy" as a justification for its narrow competitive access rules.[12] In affirming the agency's rules, the reviewing court specifically indicated that the rules were to "assist[] railroads' efforts to earn adequate revenues."[13] Similarly, in the *Bottleneck Decisions*[14] the railroads themselves argued that their own revenue inadequacy required the Board to dismiss the utilities' bottleneck complaints, *Bottleneck Decisions,* 1 S.T.B. at 1062, and the agency in fact dismissed the complaints because requests for bottleneck rates, if granted, would be inconsistent with "Congress' goal [in the 4-R and Staggers Acts] of revitalizing the rail industry."[15] The reviewing court made crystal clear the intimate connection between the goal of revenue adequacy and the agency's refusal to permit complaints to seek bottleneck rates except through the Board's competitive access rules:

> *In the present case, the Board determined that exploiting bottlenecks by refusing to provide separately challengeable bottleneck rates also assists carriers in achieving revenue adequacy.* Specifically, in the MidAmerican case, allowing UP to provide only an origin-to-destination rate enables it to charge up to SAC over the entire 750-mile route, rather than just over the 90-mile section from Council Bluffs to Sergeant Bluff. Were UP required to provide a separate bottleneck rate, it would be forced to charge lower competitive rates from the mine to Council Bluffs. Similarly, in the CP&L and PPL cases, allowing the bottleneck carriers to negotiate through rates and joint rates for origin-to-destination service enables the, rather than the shippers, to take advantage of the competition between non-bottleneck carriers. After negotiating competitive rates for the non-bottleneck carriage, the bottleneck carriers will be able to charge

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[12] *Id.* at 837.

[13] *Baltimore Gas and Electric Company v. ICC,* 817 F.2d 108, 115 (D.C. Cir. 1987).

[14] *Central Power and Light Company v. Southern Pacific Transportation Company,* and embraced cases, 1 S.T.B. 1059 (1996), *petition for clarification granted,* 2 S.T.B. 235 (1997), *aff'd MidAmerican Energy Company v. Surface Transportation Board,* 169 F.3d 1099 (8th Cir. 1999) ["*MidAmerican Energy*"].

[15] *Id.* at 1065.

> the bottleneck shippers up to SAC for the entire route, rather than just over the bottleneck.

Certainly, if the agency could – *and did* – take the railroads' revenue *inadequacy* into account in setting the balance of interests that the agency has to weigh under the often-conflicting policies set forth in the Staggers Act and ICCTA, 49 U.S.C. 10101, it can – *and should* – take the railroads' current, and as the AAR admits, "improved financial performance" in setting the proper balance in 2011.[16]

While the Interested Parties are deeply concerned about the continued application of regulatory policies that were developed during an entirely different railroad era, they do not wish to see the railroads lose the ability to earn those profits that are necessary for them to expand and improve their networks. For the railroads to suggest otherwise is simply a red herring. What the Interested Parties do desire is a more balanced regulatory structure with programs and policies that recognize and reflect the basic premise of the Staggers Act that *effective* competition, coupled with such regulatory intervention as may be necessary to fill the void in the absence of such effective competition, should establish reasonable rail rates.

V. CONTRARY TO THE RAILROADS' ASSERTIONS, THE BOARD HAS AMPLE AUTHORITY UNDER GENERAL ADMINISTRATIVE LAW AND THE TEXT OF THE ACT TO CHANGE ITS POLICIES, WHETHER OR NOT THERE ARE CHANGED CONDITIONS, AS LONG AS IT EXPLAINS ITS REASONS FOR DOING SO

In their Joint Comments filed April 12, 2011, the Interested Parties discussed in detail the

[16] *MidAmerican Energy*, 169 F.3d at 1107 [emphasis added]. AAR argues that the Board's decision in the *Bottleneck Cases* were "compelled by the statute . . . " AAR Comments, p. 40. But as the above quote and other text of the reviewing court's decision in the *Bottleneck Cases* makes clear, the reviewing court correctly recognized and affirmed the agency's decision on the basis that the agency's *discretion* ("Based on these economic factors and extensive expert testimony, the Board concluded that the Act did not require carriers to provide separate bottleneck rates. Regardless of how we would resolve the tension in the Act if we were to independently rule on the utilities' claims, we cannot say that the Board's interpretation was incorrect. The Board's considerable expertise in the economic underpinnings of the railroad industry is entitled to a great degree of deference . . . .", *id.* at 1107).

fact that the Board has both the authority and the discretion to change its policies to facilitate rail-to-rail competition.[17] The Interested Parties also directly addressed the legal questions posed by the Board in its decision initiating this proceeding. In the course of that discussion, the Interested Parties addressed the discretionary text of the statutory provisions at issue here and the legislative history; and both Board and court precedent construing those provisions.[18] The Joint Comments also extensively discussed the court review of the agency's decisions which put in place the current regulatory rules. The AAR argues that appellate courts affirmed the agency's decision in the Ex Parte No. 445 and *Midtec* decisions as the only one possible under the statute.[19] The Joint Comments showed that the reviewing courts affirmed the agency's decisions *not* because the agency's interpretation was the only one permissible under the statute, but because the statute gave the agency *discretion* and the agency's exercise of that discretion in the case then under review was properly explained.[20] Finally, the Joint Comments briefly discussed

[17] See, Joint Comments, pp. 20-46.

[18] See, *e.g., id.* at 23-29; 42-43; 45.

[19] See, AAR Comments, pp. 26-30.

[20] See, Joint Comments at 32-34, 45-46. At page 30 of its Comments, the AAR argues, for example, that there are "statutory constraints" on the ability of the Board to adopt a new approach. AAR justifies this argument with the wild exaggeration that the only alternative to the current approach is a "radical restructuring of the railroad industry." *Id.* at 30. But the Interested Parties strongly believe that the Board could fashion a fair, balanced and equitable system that would replace the current competitive access rules under Ex Parte No. 445 (Sub-No. 1), which have been shown in the Joint Comments to have *completely* prevented even a *single shipper* from winning a competitive access case in the twenty five years since they have been promulgated; indeed, the rules are so restrictive that there has not even been a single challenge brought in over twenty years. See Joint Comments, pp. 29-32. Similarly, the AAR argues that the "public interest" standard under 49 U.S.C. 11102(c) requires "more than a mere desire on the part of shippers or other interested parties for something that would be convenient" and requires "some actual necessity or some compelling reason." AAR Comments, p. 32. But the Interested Parties are fully confident that the Board can craft a fair, balanced and equitable system that would require more than mere "convenience" in permitting, for example, reciprocal switching

general administrative law – virtually "hornbook" law – that gives any federal administrative agency broad discretion to change its policies, *with or without a change in circumstances*, as long as the agency adequately explains why it is doing so.[21] In the course of this discussion, the Joint Comments noted that the Board *had* in fact changed one of its major pre-ICCTA policies after the passage of the ICC Termination Act in 1999 and had been affirmed in that change under the familiar deferential *Chevron* standard, when it decided to forego consideration of product and geographic competition in making market dominance determinations.[22]

The AAR and two of the individual railroads take a different tack in their comments. The AAR briefly argues that there are certain "statutory constraints" on the Board's ability to change its policies, erecting the "boogeyman" argument that the Congress did not intend to mandate a "radical restructuring" of the rail industry.[23] More to the point, the AAR also briefly cites and discusses the Supreme Court's decision in *Bob Jones University v. United States,* and suggests that the Board cannot change its policies because the Congress, in passing ICCTA, somehow

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under the clear statutory authority given to it under the statute. Finally, the AAR argues that abolishing the competitive access rules for reciprocal switching would require the development of a meaningful public interest standard that would apply only to reciprocal switching, because the courts have allegedly held that the same standard should be applied to both reciprocal switching and terminal access. AAR Comments, pp. 32-33. But the Board could easily provide a separate standard for reciprocal switching on the basis of its separate statutory authorization for reciprocal switching where such access is "necessary for competitive rail service," 49 U.S.C. 11102(c). Moreover, because a terminal trackage rights remedy is more invasive than reciprocal switching, the Board could find that the public interest requires reciprocal switching even where it might not require terminal trackage rights.

[21] *Id.* at 39-41.

[22] *Id.* at 40-41.

[23] AAR Comments p. 30.

"ratified" all of the Board's existing precedent.[24] Two of the railroads, the NS and CSXT, take this erroneous position a step further, arguing extensively on the basis of the *Bob Jones University* case and other cases, that the Board is without the authority to change its policies, because the Congress in ICCTA "ratified" the Board's current interpretations of the statute, and thereby made it legally impossible to change its position now.[25] But in passing ICCTA, the Congress did not "ratify" the complex web of pre-ICCTA policies – it "ratified," by repeating in ICCTA the very same discretionary words that it had given the ICC in the Staggers Act and even before – the Board's *discretion* to make changes when and if the agency believed that change was necessary.

In their opening Joint Comments, the Interested Parties noted that the agency itself, in its prior Ex Parte No. 575 proceeding, had indicated that it had the discretion to change its rules.[26] The fact of the matter is that the Ex Parte No. 575 proceeding was *not* the only time that the Board has itself indicated that it had the discretion to change its current competitive access policies if it wanted to – it has made this clear to Congress after the passage of ICCTA.

Specifically, on October 23, 2003 – well after the passage of ICCTA, but near the beginning of the post-ICCTA efforts to enact pro-competition legislation[27] -- the Board was called before the Congress to testify regarding "Railroad Shipper Issues and S. 919, the Railroad Competition Act of 2003," one of the competition bills then before the Congress and one of the

[24] AAR Comments, pp. 31-32.

[25] See, CSXT Comments, pp. iii, 5-10, 26-29, 52; NS Comments, pp. 15-28.

[26] *Id.* at 34-35.

[27] See, NS Comments, pp. 22-23, fn. 20 and 21.

bills cited by CSXT and NS in recounting the history of competition bills in the Congress.[28] The Board's witness was its Chairman, the Honorable Roger Nober. In a colloquoy with Senator Conrad Burns of Montana, the following exchange took place:

> Senator BURNS. While we have got you on the hot seat, we might as well leave you right there. Mr. Nober, there is a quote here that is sort of made by you that has some of us sort of-gave us some anxious moments. I quote from you: ''Look, I am not going to insult your intelligence and tell you I could not change, that our board could not interpret some of the core rulings that you want us to make a change.'' You were talking to some shippers. ''We could, but we are not going to.''
>
> Could that be the core of our problem here? Would you like to revise and extend?
>
> Mr. NOBER. Certainly, Senator. In my testimony I did, I acknowledged that that is true, that *the doctrines that many of the shippers would like to see changed, which are our bottleneck doctrine and our Midtek* [sic] *or terminal trackage rights doctrine, are administrative doctrines and as a matter of law an administrative agency can change administrative doctrines.* Not everyone on our board has always acknowledged that but *I as a student of Congress will tell you that we certainly can.* Now, whether or not we should and we would are different questions.[29]

Thus, far from "proving" that Congress "ratified" and cast in stone the Board's pre-ICCTA competitive access policies when it failed to enact competitive access legislation after the passage of ICCTA, the record shows that Congress was well aware that the Board believed – correctly – that it itself *has* the power to make changes administratively.

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[28] See, CSXT Comments, p. 9, fn. 14; NS Comments, p. 22, fn. 20.

[29] Hearing Before the Committee on Commerce, Science, and Transportation, United States Senate, One Hundred Eighth Congress First Session, October 23, 2003, p. 20 (emphasis added). Interestingly, the NS Comments themselves note that ICC Chairman Gail McDonald, in pre-ICCTA testimony, also noted that the ICC had authority to order competitive access. NS Comments, p. 18, fn 10. Thus, in making no change to the text of the relevant statutory provisions governing competitive access in ICCTA, the Congress was simply continuing the discretion which the agency had all along.

In any event, the AAR, NS and CSXT are simply wrong legally. It is utterly well-settled that administrative agencies have very broad discretion to change their policies, with our without a change in circumstances, as long as they adequately explain the reasons for doing so.[30] Indeed, the *Bob Jones University* case, cited by the AAR for its "ratification" argument, itself notes that administrative agencies are given broad discretion "to meet changing conditions and new problems."[31] Although CSXT argues (incorrectly) that there is a "strong legal presumption" against changing rules and policies that have been adopted by the agencies, affirmed by the courts and "ratified" by the Congress, even CSXT's own citations and quotations indicate that agencies can change their policies as long as they supply a "reasoned analysis" or "reasoned explanation" for the change."[32] Indeed, CSXT concedes (as it must) that there is no "heightened standard" for review of a change in policy as distinct from a new promulgation – the agency must simply show that there are "good reasons" for the new policy.[33] The Interested Parties believe that the agency is well aware of its responsibilities under the Administrative Procedure Act, and that the record in this case fully justifies a new look at policies that are now decades old.

The AAR, CSXT, and NS "ratification" argument is spurious. In *Red Lion Broadcasting v. FCC,* 395 U.S. 367, 382 n. 11 (1969), the Supreme Court noted that "unsuccessful attempts at

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[30] *Chevron U.S.A. Inc. v. Natural Resources Def. Council, Inc.,* 467 U.S. 837, 843, 863 (1984); *Greater Boston Television Corp. v. FCC,* 444 F.2d 841, 852 (D.C. Cir.), *cert denied,* 403 U.S. 923 (1971); *FCC v. Fox,* 129 S. Ct. 1800, 1811 (2009); *Motor Vehicle Mfr's Ass'n v. State Farm,* 463 U.S. 29, 43, 57 (1983).

[31] *Bob Jones University v. United States,* 461 U.S. 574, 596 (1983).

[32] See CSXT Comments, pp. 5-6.

[33] CSXT Comments, p. 6.

legislation are not the best guides to legislative intent."[34] Indeed, in the *Bob Jones University* case itself, the Supreme Court noted that "[o]rdinarily, and quite appropriately, courts are slow to attribute significance to the failure of Congress to act on particular legislation," citing the *Aaron v. SEC* and *Red Lion Broadcasting* cases cited above; and declared that "nonaction by Congress is not often a useful guide. . . ."[35]

The cases cited by the AAR, NS and CSXT are readily distinguishable, often by their own terms. The *Bob Jones* case involved a ruling by the Internal Revenue Service as to whether certain nonprofit schools failed to qualify as tax-exempt organizations because they discriminated on the basis of race. The Supreme Court upheld a ruling by the IRS to that effect, which embraced, as part of that determination, common-law standards of "charity," which meant that such activities must be consistent with public policy.[36] The Supreme Court held that the IRS was *required* to determine whether the purpose of the institution was "not . . . at odds with the common community conscience,"[37] and noted that, "over the past quarter of a century, every pronouncement of this Court and myriad Acts of Congress and Executive Orders attest a firm national policy to prohibit racial segregation and discrimination in public education."[38] In other words, far from having discretion, the IRS was compelled to rule as it did in determining that the institutions in question did not qualify as charitable institutions. In this context, the Court noted

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[34] See also, *Fogarty v. United States,* 340 U.S. 8, 13-14 (1950); *United States v. United Mine Workers*, 330 U.S. 258, 281-282 (1947); *Aaron V. SEC,* 446 U.S. 680, 694 n.11 (1980).

[35] 461 U.S. at 600.

[36] *Id.* at 586-588.

[37] *Id.* at 592.

[38] *Id.* at 593; and see discussion at 593-599.

that, in this case, "[t]he evidence of congressional approval of the policy embodied in Revenue Ruling 71-447 *goes well beyond the failure of Congress to act on legislative proposals*." *id.* at 601 (emphasis added), since in the *Bob Jones* case the Congress had "*affirmatively manifested* its acquiescence in the IRS policy" at issue in the case when it *specifically enacted* a provision affecting the very same tax-exempt status provision at issue in the IRS revenue ruling for the institutions at issue in that case.[39] The factual situations in the *Bob Jones* case and the situation involving the Board's discretion under its regulatory statute are thus completely different.

While the AAR, NS and CSXT all cite the *Bob Jones* case in support of the their argument, NS and CSXT go even further relying on a weak set of general "*see*" citations.[40] However, the cases cited by NS and CSXT provide, if that is possible, even less support for the railroads' "ratification" argument than the *Bob Jones* case itself. The case of *FDA v. Brown and Williamson Tobacco Corp.*, 529 U.S. 120 (2000), for example, involved the FDA's decision to regulate tobacco products after it had disavowed any such authority since the agency's inception 73 years before. In affirming the court of appeals reversal of the agency's claim to authority, the Supreme Court analyzed the agency's action under the familiar *Chevron* standards, but found that Congress had *not* given the agency discretion, but had specifically spoken to the very matter at issue.[41] In making that finding, the Court found that the agency's authorizing statute by its terms did not permit the agency to regulate tobacco, *id.* at 134-136, and found that Congress had *directly* spoken to the issue in legislation and had "directly addressed the problem of tobacco and health through legislation" on six separate occasions when it actually passed laws dealing with

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[39] *Id.* at 600-601 (emphasis added).

[40] See, CSXT Comments at 7-8; NS Comments at 15-16.

[41] *Id.* at 133.

the issue."[42] Moreover, as in *Bob Jones*, the Court specifically noted that, in making its decision, "[*w]e do not rely* on Congress' failure to act – its consideration and rejection of bills that would have given the FDA this authority – in reaching this conclusion. Indeed, *this is not a case of simple inaction by Congress* that purportedly represents its acquiescence in any agency's position. To the contrary, Congress has enacted several statutes representing the particular subject of tobacco and health, creating a distinct regulatory scheme for cigarettes . . ."[43] None of these crucial distinctions is even adverted to by NS and CSXT, and their reliance on the *Brown and Williamson* case is utterly misplaced.[44]

The AAR's discussion regarding the Board's alleged lack of discretion to revise the precedent set forth in its *Bottleneck Decisions*,[45] in light of the U.S. Supreme Court's decision in

[42] *Id.* at 137-139.

[43] *Id.* at 155 (emphasis added).

[44] The NS/CSXT citations to and very brief discussion of *Square D Co. v. Niagara Frontier Tariff Bureau, Inc.*, 476 U.S. 409, 420 (1986); *Lindahl v. Office of Pers. Mgmt.*, 470 U.S. 768, 783 fn 15 (1985); *Federal Deposit Ins. Corp. v. Philadelphia Gear Corp.*, 476 U.S. 426, 437 (1986); and the more than 100-year old case of *United States v. G. Falk & Bros.*, 204 U.S. 143, 151 (1907) are similarly unavailing. See CSXT Comments at 7; NS Comments at 16. As the Board well knows, the *Square D* case did not involve administrative action at all, but instead involved the Supreme Court's decision not to overrule its *own* precedent in *Keogh v. Chicago and Northwestern R. Co.,* 260 U.S. 156 (1922) in light of affirmative statutory action by Congress when it revisited the specific area of law (the Reed-Bulwinkle Act) and half a century of precedent. The brief footnote cited by NS and CSXT in *Lindahl* is also unavailing: the case involved the nature of a potential preclusion of judicial review of a decision by the Office of Personnel Management and the Merit Systems Protection Board, in light of Congress' action to specifically amend the statute at issue, where the legislative history of the specific amendment indicated Congress' specific understanding of the matter at issue before the Court, *id.* at 778-781. The *Philadelphia Gear* case, cited by NS (but not by CSXT) simply affirmed under familiar *Chevron* standards a longstanding administrative interpretation by the Federal Deposit Insurance Corporation that had been reversed by the Court of Appeals on the (erroneous) ground that Congress had spoken directly to the question at hand. *Id.* at 439. Each of these factual circumstances are completely different from the factual situation at issue here.

[45] See footnote 3, *supra.*

Great Northern Railway Company v. Sullivan, 294 U.S. 458 (1935), is similarly misplaced, as is the argument on the same subject by CSXT and NS, who also apply their spurious "ratification" argument to the Board's *Bottleneck* decisions.[46] In their Joint Comments, the Interested Parties showed that the Board has the discretion to revise its bottleneck precedent, and that the Supreme Court's decision in *Great Northern* was not an obstacle.[47] As discussed therein, the reviewing court in *MidAmerican Energy*[48] did *not* affirm the agency on the basis of the agency's reading of the *Great Northern* decision in the *Bottleneck Cases*, but rather purely on the discretion of the Board in light of the provisions of the Staggers Act.

The Eighth Circuit's decision to base its affirmance of the Board's *Bottleneck Decisions* on the Board's discretion, rather than on the agency's reading of *Great Northern,* was completely correct, since the Board's reading of *Great Northern* in the *Bottleneck Decisions* was in fact wrong. *Great Northern* was the product of a statute in which the agency had comprehensive authority over the rates of a carrier. However, in the Staggers Act, the Congress indicated that *competition*, not regulation, should govern, and, as the Board itself recognized in its *Bottleneck Decisions,* the Congress ended the "open routing" system that that had been the hallmark of pre-Staggers Act law.[49] Requiring a carrier to quote, and the agency to adjudicate the reasonableness of, a bottleneck rate would be consistent with the pro-competitive thrust mandated by Congress in the Staggers Act, and therefore well within the Board's discretion.

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[46] See AAR Comments, pp. 38-42; CSXT Comments, pp. 22-35; NS Comments, pp. 20-22.

[47] See, Joint Comments, pp. 45-46.

[48] *Id.*

[49] 1 S.T.B. at 1065; see also, *MidAmerican Energy* at 1105.

VI. THE BOARD SHOULD OPEN INDIVIDUAL PROCEEDINGS TO CONSIDER REVISIONS TO ITS RAIL TRANSPORTATION POLICIES

For all of the reasons stated in the Interested Parties' opening comments, and these reply comments, a proceeding or proceedings under 49 U.S.C. § 721 should be established so that the Board can investigate, on a proper record with appropriate factual finding, whether to amend existing competition policies to permit and require greater rail competitive access. Such a proceeding(s) should examine: (1) what, if any, changes should be made to the reciprocal switching rules adopted in Ex Parte No. 445; (2) what, if any, changes should be made to the terminal access precedent followed by the Board; (3) what, if any, changes should be made to the bottleneck access rules; and, (4) what, if any, additional conditions should be imposed to the major rail mergers of the 1990s to reduce the anti-competitive effects of conscious parallelism in the rail to rail transportation market.

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May 27, 2011

APPENDIX A

BEFORE THE SURFACE TRANSPORTATION BOARD

DOCKET EX PARTE NO. 705

COMPETITION IN THE RAIL INDUSTRY

VERIFIED STATEMENT OF

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PROFESSOR OF ECONOMICS
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I. INTRODUCTION

A. Qualifications

1. My name is Nicholas Economides. I am Professor of Economics at the Stern School of Business of New York University, located at 44 West 4th Street, New York, NY 10012.

2. I received a B.Sc. in mathematical economics (first-class honors) from the London School of Economics in 1976, a master's of arts in economics from the University of California at Berkeley in 1979, and a Ph.D. in economics from Berkeley in 1981.

3. From 1981 to 1988, I was assistant and then associate professor of economics at Columbia University. From 1988 to 1990, I was associate professor of economics at Stanford University. I have taught at the Stern School of Business since 1990. During the academic year 1996-1997, in January 2001-August 2001 and January 2004-August 2004 I was visiting professor at Stanford University. Between June 2007 and December 2007, I was a visiting professor at the Haas School of Business at the University of California at Berkeley. I am currently a visiting professor at the Haas School of Business at the University of California at Berkeley.

4. I specialize in industrial organization, antitrust, and network industries. I have published more than 90 research papers in the areas of industrial organization, microeconomics, antitrust, network economics, finance, and telecommunications policy, and I have given numerous seminar presentations at academic and government institutions and conferences. I have published academic research articles in the *Antitrust*

Bulletin, the *Antitrust Law Journal,* the *American Economic Review*, the *International Economic Review*, the *International Journal of Industrial Organization*, the *Journal of Economic Theory*, the *Journal of Industrial Economics*, the *Journal of Law and Economics,* and the *Rand Journal of Economics*, among others. I was editor of the *International Journal of Industrial Organization*, a leading journal in Industrial Organization for seven years. I teach graduate (M.B.A, and Ph.D.) courses in antitrust, industrial organization, microeconomics, and telecommunications. A copy of my curriculum vitae is attached as Attachment 1.

5. I have been compensated at an hourly rate of $800, and my compensation is not contingent on the outcome of this proceeding. My research into the matters discussed below continues, and I reserve the right to modify or supplement my opinion as additional information becomes available.

B. Purpose of Report

6. I have been asked by counsel to review and comment upon the Verified Statement submitted in this case by Dr. Robert Willig on behalf of the Association of American Railroads, in particular his view about the use of the Efficient Component Pricing Rule to establish prices for interconnections (including pricing of bottleneck segments) among carriers. In addition, I have been asked to comment upon aspects of analogous interconnection pricing in the telecommunications industry.

C. Materials Reviewed

7. In preparing this report, I have reviewed the statement of Dr. Willig as well as portions of the accompanying comments submitted by the Association of American Railroads.

II. SUMMARY OF CONCLUSIONS

8. I assume that the objective of regulation of railroad transportation is to promote more efficient, economic transportation. To achieve this objective, I conclude that:

(a) It is optimal to allow competition and pricing for all routes and all components of a route. Restricting pricing to only the origin-to-destination routes is likely to restrict competition and cause prices to be significantly above costs.

(b) "Reciprocal switching" should be allowed at all feasible points in the railroad network and pricing of bottlenecks should be cost-based.

(c) To promote economic efficiency, use of ECPR or its derivative pricing rules should be avoided since the ECPR tends to preserve monopoly profits and keep prices high even in the presence of competition in some parts of a network.

III. ECONOMIC ANALYSIS

<u>Competition and pricing in all parts of the network</u>

9. Telecommunications competition has taught us that economic efficiency where outputs are produced efficiently and prices are close to costs is achieved by (i) allowing competition in all telecommunications services, as well as all components of these

services; and (ii) imposing selectively specific regulations to eliminate monopoly power arising from bottlenecks.

10. Like in the railroad network, in telecommunications, often final services are produced by using the facilities of more than one network, each owned by different parties. Competition and pricing of services in parts of the telecommunications network achieves productive efficiency as well as allocative efficiency in services that span all or part of the network. Thus, products and services are produced efficiently and are priced close to cost.

11. In the railroad network, that can be achieved by allowing pricing and competition in all routes, including sub-routes and components of routes. Restricting pricing only to end-to-end routes restricts competition. Lack of competition in general results in prices significantly exceeding cost.

Reciprocal switching

12. In telecommunications, there are bottlenecks, often controlled by a single company. For example, in the fixed local telecommunications network, the "last mile" connection of residential customers to the broader telecommunications network is owned by a single company, a local exchange carrier, and can be a source of monopoly power. To ensure competitive outcomes, the Telecommunications Act of 1996, Pub. Law No. 104-104, 110 Stat. 56 (1996) and the rules and orders of the Federal Communications Commission implementing the Act, have imposed cost-based reciprocity under which call termination rates are reciprocal and cost-based. See 47 C.F.R. Subpart H, Subpart H—Reciprocal Compensation for Transport and Termination of Telecommunications Traffic. In New Zealand where no reciprocity was imposed and regulation was light,

dominant carrier Telecom New Zealand was able to use high call termination rates to drive competitors out of business. See Economides, Lopomo and Woroch (1996, 2009).

13. In the railroad network, reciprocal switching should be allowed at all feasible points in the railroad network and pricing of bottlenecks should be cost-based.

No ECPR

14. Some propose the Efficient Component Pricing Rule ("ECPR") as the appropriate pricing rule for pricing of bottlenecks in the railroad network. The ECPR preserves the monopoly rents in monopolized bottlenecks even as other parts of the network become competitive. For this and other reasons, the FCC it its First Report and Order on the Implementation of the Telecommunications Act ruled that the ECPR was inappropriate as a rule to determine prices of the telecommunication network.[1]

15. The ECPR requires those accessing a monopolized bottleneck to pay the bottleneck monopolist the full monopoly price. Thus, the ECPR will preserve monopoly rents of a monopolized bottleneck even when the rest of the network is competitive. Under ECPR, prices for routes that include the bottleneck include a payment for the full monopoly price of the bottleneck. Thus, application of the ECPR keeps prices significantly above cost in many routes even when most parts of these routes are competitive.

16. ECPR-based pricing includes the *private* opportunity cost of the access monopolist. However, in general, private opportunity cost differs from social opportunity

[1] *See* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 F.C.C.R. 15,499 (1996) (No. 96-98).

cost. For example, private opportunity cost can be large while social opportunity cost is zero.[2] And economic theory teaches that, to achieve efficiency, *social* (rather than *private)* opportunity costs and benefits should guide pricing decisions.

17. This was clearly recognized by the FCC in its implementation of the 1996 Act when it decided that the "ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based."[3] Dr. Willig submitted an affidavit in that proceeding arguing against using the ECPR. He noted "Indeed, applying ECPR to the existing rate structure would result in component prices that lock in the [incumbent local exchange carrier's] monopoly profits and inefficiencies ..."[4]

18. The implementation of the 1996 Act and interconnection regulation in telecommunications has coincided with a period of large and rapid investment and innovation in telecommunications services, and has been compatible with financially healthy competitors.

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[2] Private opportunity costs can be significant while social opportunity costs are zero. For example, suppose companies A and B are competing for the business of customer C, which is worth $C to each of them. For simplicity, assume that companies A and B are equally cost efficient in serving C. If customer C used to buy from company A and now buys from B, firm A's private opportunity cost is $C. However, the social opportunity cost of customer C buying from B rather than A is exactly zero, since society does not gain or lose when customer C is served by B rather than A. Since firm A's loss was firm B's gain, private opportunity costs and gains cancel each other, and the social opportunity cost of customer C buying from B rather than A is zero.

[3] Id. para 709, at 15,859.

[4] *See* Affidavit of William J. Baumol, Janusz A. Ordover, and Robert D. Willig para 23, at 8-9, submitted May 16, 1996 in support of comments of AT&T in CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996.

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VERIFICATION

I, Nicolas Economides, state under penalty of perjury that the foregoing statement is true and correct and that I am qualified and authorized to file this statement. Executed on May 24, 2011.

Nicolas Economides

Attachment 1: Curriculum Vitae of Nicolas Economides

CURRICULUM VITAE

March 2011

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Current Position
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Executive Director, NET Institute, www.NETinst.org, December 2002-
January 2011-August 2011: Visiting Professor, Haas School of Business, University of California, Berkeley.
June 2007-December 2007: Visiting Professor, Haas School of Business, University of California, Berkeley.
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Academic year 1997-1998: Visiting Scholar, Federal Reserve Bank of New York.
Academic year 1996-1997: Visiting Professor, Stanford University.
January 1989 - August 1990: Visiting Associate Professor, Stanford University.
July 1988 to August 1990: Associate Professor, Columbia University, Department of Economics.
September 1981 - June 1988: Assistant Professor, Columbia University, Department of Economics.
Research Assistant for Professor Andreu Mas-Colell, October 1979 - June 1981.
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Ph.D. 1981, University of California, Berkeley.
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B.Sc. 1976, London School of Economics. First Class Honors.

Research Interests
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Teaching Experience
Ph.D. Industrial Organization, Topics in Industrial Organization, Strategic Interaction in Markets and Industries, Networks, Telecommunications Economics and Strategic Issues in Digital Convergence, Network Economics and the "New Economy," Ph.D. Microeconomics, MBA Microeconomics, Undergraduate Industrial Organization, Seminar in Industrial Organization, Seminar in Microeconomics.

A. PUBLISHED AND ACCEPTED PAPERS

2011 "Tying, Bundling, and Loyalty/Requirement Rebates," forthcoming, Einer Elhauge (Ed.), *Research Handbook on the Economics of Antitrust Law*, at http://www.stern.nyu.edu/networks/Economides_Tying_Bundling_and_Loyalty_Requirement_Rebates.pdf.

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B. WORKING PAPERS

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4. "Broadband Openness Rules Are Fully Justified by Economic Research," NET Institute Working paper #10-02, April 2010, at http://www.stern.nyu.edu/networks/Economides_Broadband_Openness_Rules.pdf.

5. "To Surcharge or Not to Surcharge? A Two-Sided Market Perspective of the No-Surcharge Rule" with David Henriques, mimeo.

6. "Two-sided Price Discrimination," with Ben Hermalin, mimeo.

7. "Bank Network Formation and Sustainability," with Matthew Pritsker, mimeo.

8. "Unbundling Music: The Effect of Online Selling of Individual Songs on Prices," with Sherif Nasser, mimeo.

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10. "Dynamic Duopoly with Network Effects" (with Matt Mitchell and Andrzej Skrzypacz), mimeo., at http://www.stern.nyu.edu/networks/Dynamic_Duopoly_with_Network_Effects.pdf .

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18. "Compatibility and Market Structure for Network Goods," Discussion Paper EC-98-02, Stern School of Business, N.Y.U. (with Fredrick Flyer), http://www.stern.nyu.edu/networks/98-02.pdf.

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21. "The Incentive of a Multiproduct Monopolist to Provide All Goods," Discussion Paper no. EC-95-09, Stern School of Business, N.Y.U., http://www.stern.nyu.edu/networks/95-09.pdf.

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24. "Mixed Bundling in Duopoly," Discussion Paper EC-93-29, Stern School of Business, N.Y.U., http://www.stern.nyu.edu/networks/93-29.pdf.

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29. "The Benefits of Franchising and Vertical Disintegration in Markets for Locationally Differentiated Products," mimeo.

30. "Variable Compatibility Without Network Externalities," Discussion Paper No. 157, Center for Economic Policy Research, Department of Economics, Stanford University.

31. "The Choice of Strategy Space in Duopoly," mimeo.

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35. "Stable Open Shop Unions," Discussion Paper No. 247, Columbia University, Department of Economics.

C. WORK IN PROGRESS

1. The Economics of networks and complementarity
2. Two-sided network pricing and two-sided price discrimination
3. Loyalty-Requirement contracts and other vertical restrictions
4. Compatibility, Add-ons, Adapters and Interfaces
5. Network Security
6. Liquidity and the Demand for Immediacy in Financial Transactions
7. Vertical Relations, Complementary Goods, and Franchising
8. Product Quality and Variety, Entry, and Welfare Considerations
9. Endogenous Formation of Markets
10. Bundling
11. Two-Part Tariffs, and other Non-Linear Pricing Schemes
12. Patents and antitrust

D. PROFESSIONAL ACTIVITIES

- Created in December 2002 and is the Executive Director of the NET Institute, www.NETinst.org. The Networks, Electronic Commerce and Telecommunications ("NET") Institute is a non-profit institution devoted to research on network industries, electronic commerce, telecommunications, the Internet, "virtual networks" comprised of computers that share the same technical standard or operating system, and on network issues in general. The NET Institute functions as a world-wide focal point for research and open exchange and dissemination of ideas in these areas. The NET Institute competitively funds cutting edge research projects in these areas of research. It organizes conferences and seminars on these issues. In its four years of operation, the NET Institute has funded (with about $1.250 million) through competitive proposals over 180 researchers (typically assistant professors) who received summer grants for research in the areas mentioned above. The NET Institute's Board consists of Professor Kenneth Arrow (Stanford), Dr. Vinton G. Cerf (Google), Professor Nicholas Economides (NYU), David Heiner (Microsoft), Dr. Nathan Myhrvold (Intellectual Ventures) and Professor Ariel Pakes (Harvard).

- Co-editor, *Journal of Economics & Management Strategy* (JEMS).
- Editor, *International Journal of Industrial Organization*, 1993-2002.
- Editor, *Telecommunications Policy.*
- Editor, *European Academy for Standardization Yearbook.*
- Editor, *Netnomics.*
- Editor, *International Journal of Management and Networks Economics* (IJMNE)
- Editorial Board, *Information Economics and Policy* (IEP)
- Editorial Board, *Quarterly Journal of Electronic Commerce* (QJEC)
- Editorial Board, *Journal of Financial Transformation* (JFT)
- Editorial Board, *Policy and the Internet*
- Editor, *Economics of Networks,* Social Science Research Network.
- Advisory Board, *Journal of Competition and Regulation in Network Industries*
- Advisory Board, *Industrial Organization: Theory,* Social Science Research Network.
- Advisory Board, *Industrial Organization: Industry Studies,* Social Science Research Network.
- Advisory Board, *Industrial Organization: Productivity, Innovation, and Technology,* Social Science Research Network.
- Advisory Board, *Industrial Organization: Regulation, Antitrust, and Privatization,* Social Science Research Network.
- Advisory Board, *Economist Intelligence Unit.*
- Editor of a special issue of the *International Journal of Industrial Organization* on Network Economics.
- Chairman, *Roundtable for Electronic Commerce and Telecommunications*, an industry-sponsored interdisciplinary research and educational program at New York University's Stern School of Business.
- Referee for *The American Economic Review, Annales d'Economie et de Statistique, Australian Economic Papers, B.E. Journals in Economic Analysis and Policy, Econometrica, The Economic Journal, Economic Theory, Economica, The European Economic Review, The European Journal of Political Economy, Harvard Law Review, International Economic*

Review, The International Journal on Media Management, International Journal of Industrial Organization, The Journal of Economic Theory, The Journal of Economics, Management and Strategy, The Journal of Evolutionary Economics, The Journal of Finance, The Journal of Industrial Economics, Journal of Institutional and Theoretical Economics, The Journal of International Economics, Journal of Organizational Computing, Journal of Political Economy, Journal of Regional Science, Kyklos, Marketing Science, Mathematical Social Sciences, Quarterly Journal of Economics, Quarterly Review of Economics and Finance, The Rand Journal of Economics, The Review of Economic Studies, Scandinavian Actuarial Journal, Regional Science and Urban Economics, Zeitschrift fuer Nationaloekonomie, as well as for the National Science Foundation.

- Career Award Panel, National Science Foundation, 2006.

- Drafting Committee of the new Hellenic Competition Law, 2010.

- Has made numerous presentations of current research at leading Universities and at conferences, including the Winter and Summer Meetings of the Econometric Society and the American Economic Association, the Annual Congress of the European Economic Association, the European Association for Research in Industrial Economics, the Telecommunications Policy Research Conference, and many others. Has organized the Industrial Organization and the Economic Theory Workshops at Columbia University 1982-1988. In recent years, he organized the Industrial Organization Workshop at the Stern School of Business, N.Y.U.

- Has created a server on the Internet on *The Economics of Networks*. This server contains information on networks, working papers, and a very extensive interactive bibliography on this subject. The *Economist* magazine has rated this web site among the top 4 economics site in the world. Since its creation in March 1995, it has been visited over 4.2 million times.

- Outside reviewer in numerous promotion and tenure cases.

Ph.D. students supervised while at Stern (graduated)

- Asim Ansari, Professor of Marketing at the Columbia Business School.
- Angelos Antzoulatos, Professor of Economics, University of Piraeus, Greece.
- Ravi Aron, Professor of Information Systems at the Wharton School, University of Pennsylvania.
- Cristian Dezso, Assistant Professor, University of Maryland.
- Mark Ginsburg, Assistant Professor of Information Systems at the University of Arizona.
- Jeffrey Heisler, Professor of Finance at the Business School of Boston University.
- Evangelos Katsamakas, Assistant Professor of Information Systems at Fordham University
- Ravi Mantena, Assistant Professor of Information Systems at the University of Rochester
- Sergio Meza, Assistant Professor of Marketing at the University of Toronto Business School
- Sherif Nasser, Assistant Professor of Marketing, Olin School of Business, Washington University
- Gal Oestreicher-Singer, Assistant Professor of Information Systems, Tel Aviv University
- Chris Stefanadis, Assistant Professor of Economics at Arizona State University.
- Shivakumar Viswanathan, Associate Professor of Information Systems at the Business School of the University of Maryland.

- Mingdi Xin, Assistant Professor of Information Systems, University of British Columbia.

E. PROFESSIONAL MEMBERSHIPS

- Member of the American Economic Association, the Industrial Organization Society, the European Industrial Organization Society, and the Econometric Society.
- National Research Council and National Academies of Sciences, head of committee on usability and security of computer systems
- University Senator and University Faculty Council member, New York University; Finance Committee of the University Senators Council; head of the Finance Committee of the University Senators Council; head of the Housing Committee of the University Senators Council

F. AWARDS

1. Glucksman Fellowship award, 1991-1992, 1993-1994.
2. National Science Foundation research grant, 1984 - 1988.
3. Summer Research Grant, Stern School of Business, 1990-1996.
4. Research Associate, Columbia Institute for Tele-Information, Columbia Business School.
5. Research Associate, Center for the Study of Futures Markets, Columbia Business School.
6. Fellowship by the Center for Law and Economics, Columbia University, 1984 - 1986.
7. Council for Research in the Social Sciences research grant, Summer 1985.
8. Council for Research in the Social Sciences research grant, Summer 1984.
9. Council for Research in the Social Sciences research grant, Summer 1982.

G. REFERENCES

References are available upon request.

H. CORPORATE AFFILIATIONS

Advisor to the U.S. Federal Trade Commission, the governments of Canada, Greece, Ireland, New Zealand, and Portugal, Attorneys General of several States, major telecommunications corporations, a number of the Federal Reserve Banks, the Bank of Greece, and major Financial Exchanges. Advisory Board, *Economist Intelligence Unit*, Quadriserv. A list of cases where I have served as an expert on antitrust, regulatory, and public policy matters is available upon request.

I. RECENT SEMINARS AND CONFERENCE PRESENTATIONS

- Speaker, Measuring Systemic Risk Conference, Chicago, December 15, 2010
- Organizer and speaker, NET Institute Conference, New York, November 19, 2010

- The Health Care Delivery System as Innovation Zone, NYU Medical Center, November 15, 2010
- Speaker, Entrepreneurship and Stern School of Business, October 7, 2010
- Speaker, TPRC, Washington DC, October 3, 2010
- Speaker, WIN conference, Stern School of Business, September 24, 2010
- Presentation by Ben Hermalin of joint work, Economics dept., UC Berkeley, September 7, 2010
- Speaker, Summer Institute in Competitive Strategy, Haas School of Business, UC Berkeley, July 22, 2010
- Speaker, University of Athens, June 2, 2010
- Speaker, Hellenic Competition Commission, Athens, June 1, 2010
- Speaker, American Bar Association, May 25, 2010
- Organizer and speaker, NET Institute Conference, New York, April 16, 2010
- Speaker, George Mason Law Review 13th Annual Symposium on Antitrust Law, Washington DC, February 4, 2010
- Speaker, Institute of Advanced Legal Studies, University College London, January 21, 2010
- Speaker, Oxford University, January 20, 2010
- Speaker, Security and Privacy Day Conference, NYU-Poly, December 4, 2009
- Speaker, Hearings of the New York City Council, November 20, 2009
- Speaker, Debate on Net Neutrality, Web 2.0 Conference, November 17, 2009
- Speaker, World Economic Forum, New York, October 1, 2009
- SIEPR/Microsoft Conference on Internet Economics, Stanford, CA, September 24-25, 2009
- Speaker and Committee Chairman, National Academy of Sciences conference on Usable Security and Privacy, Washington, DC, July 21-22, 2009
- Speaker, New York State Bar Association, New York, June 17, 2009
- Speaker, Engineering School, University of Athens, June 3, 2009
- Speaker, 3rd International Conference on Competition Law and Policy, Athens, May 29, 2009
- Speaker, Competition Policy Workshop, Santorini, May 28, 2009
- Speaker, Convergence of Broadband Telecommunications and Media, Athens, May 20, 2009
- Organizer and speaker, NET Institute Conference, New York, May 8, 2009
- Speaker, NYU Law School, March 3, 2009
- Speaker, Yale University, February 17, 2009
- Speaker, NYU Poly, February 13, 2009
- Speaker, USC Law School, Los Angeles, January 27, 2009
- Speaker, USC Economics Department, Los Angeles, January 26, 2009
- Speaker, American Economic Association Meetings, San Francisco, January 3, 2009
- Speaker, New York City Bar Association, New York, November 25, 2008
- Speaker, NYU Law School, November 11, 2008
- Speaker, Wharton School, November 4, 2008
- Speaker, Axinn, Veltdrop, Harkrider, October 6, 2008
- Speaker, Telecommunications Policy Research Conference, Arlington, VA, September 29, 2008
- Speaker, Brookings Institution, September 16, 2008

- Speaker, Telecommunications Regulator, Athens, Greece, June 2, 2008
- Speaker, Athens Business School, May 29, 2008
- Speaker, IIOC conference, May 17, 2008
- Speaker Fordham University, May 2, 2008
- Organizer and speaker, NET Institute Conference, New York, April 18, 2008
- Seminar Speaker, Stern School of Business, February 19, 2008
- Seminar Speaker, UC Santa Barbara, December 5, 2007
- Seminar Speaker, Haas School of Business, University of California, Berkeley, November 29, 2007
- Speaker, Northwestern University School of Law, Conference: "The End of the Microsoft Antitrust Case?," November 15, 2007
- Seminar Speaker, Marshall School, USC, Los Angeles, November 9, 2007
- Seminar Speaker, Annenberg School, USC, Los Angeles, November 8, 2007
- Seminar Speaker, iSchool, University of California, Berkeley, November 7, 2007
- Seminar Speaker, Economics Department, University of California, Berkeley, October 30, 2007
- Seminar Speaker, UC Santa Cruz, October 9, 2007
- Seminar Speaker, University of Maryland, September 28, 2007
- Speaker, Telecommunications Policy Research Conference, Arlington, VA, September 29, 2007
- Speaker, The Reform of EC and Greek Competition Law, Athens, Greece, June 1-2, 2007
- Organizer and speaker, NET Institute Conference, New York, April 20, 2007
- Keynote Speaker, Hawaii International Conference on System Sciences, January 3-6, 2007.
- Speaker, Structuring Regulatory Frameworks for Dynamic and Competitive South Eastern European Markets, Athens, Greece, December 18 - 19, 2006.
- Speaker, The Future of Telecommunications, University of Southern California, Los Angeles, October 13, 2006
- Seminar Speaker, University of Southern California, Los Angeles, October 12, 2006
- Speaker, Telecommunications Policy Research Conference, Arlington, VA, September 30, 2006
- Speaker, Telecommunications Policy Research Conference, Arlington, VA, September 29, 2006
- Speaker, Stepping Stones And Stumbling Blocks: Lessons From The Telecom Wars Conference, George Mason Law School, Arlington, VA, September 28, 2006
- Seminar speaker, University of California, Berkeley, September 26, 2006
- Speaker, American Bar Association, San Francisco, September 15, 2006
- Seminar speaker, University of California, Berkeley, September 13, 2006
- Organizer and speaker, NET Institute Conference, New York, April 21, 2006
- Speaker and session chairman, Industrial Organization Conference, Boston, April 9, 2006
- Discussant, Industrial Organization Conference, Boston, April 8, 2006
- Speaker, Industrial Organization Conference, Boston, April 8, 2006
- Speaker, Quello Telecommunications Conference, Washington DC, April 6, 2006
- Speaker, Open Source in the International Marketplace, University of Pennsylvania Law School, Philadelphia, March 31, 2006

- Speaker, Rotman School of Business, University of Toronto, November 21, 2005
- Speaker, Telecommunications Policy Research Conference, September 24, 2005
- Speaker, Japan Fair Trade Commission, Tokyo, September 20, 2005
- Speaker, University of Tokyo, Tokyo, September 16, 2005
- Speaker, Stern's Center for Digital Economy Research Workshop, June 16, 2005, see http://w4.stern.nyu.edu/news/news.cfm?doc_id=4608
- Speaker, NYU Law School, April 7, 2005
- Organizer and speaker, NET Institute Conference, New York, April 1, 2005
- Speaker, University of California, Santa Cruz, January 11, 2005
- Speaker, American Economic Association Meetings, Philadelphia, January 8, 2005
- Speaker, Stern School of Business, November 16, 2004
- Speaker, Department of State, Washington DC, November 12, 2004
- Speaker, NYU Law School, November 5, 2004
- Speaker, Athens Business School and University of Athens, Athens, Greece, October 19, 2004
- Speaker, "Law of Network Potential" Conference, University of California, Berkeley, October 14, 2004
- Speaker, Telecommunications Conference, Stanford University, Stanford, California, October 9, 2004
- Speaker, Telecommunications Policy Research Conference, Arlington, Virginia, October 1-3, 2004
- Speaker, "After the Closing of the Spectrum Frontier: What Spectrum Allocation Models Work Best, When, And Where?," Columbia University, New York, September 27, 2004
- Speaker, University of California, Berkeley, July 31, 2004
- Speaker, Stanford University, July 12, 2004
- Speaker, University of California, Davis, April 27, 2004
- Session chairman and discussant, IIOC conference, Chicago, IL, April 24, 2004
- Speaker, IIOC conference, Chicago, IL, April 23, 2004
- Speaker, University of Arizona, April 19, 2004
- Speaker, Stern School of Business, New York, March 11, 2004
- Speaker, Hoover Institution, Stanford University, Stanford, CA, March 9, 2004
- Speaker and organizer, NET Institute conference, New York, NY, December 12, 2003
- Speaker, Stern School of Business, New York, NY. December 4, 2003
- Speaker, Federal Trade Commission, Washington DC, November 6, 2003
- Speaker, Department of State, Washington DC, November 5, 2003
- Speaker, Telecommunications Policy Research Conference, Arlington, Virginia, September 19-21, 2003
- Speaker, "Network Economics and Antitrust," Law School, New York University, March 31, 2003
- Speaker, "Complexities and the Limits of Organization" conference, Columbia University, February 24, 2003
- Speaker, "Integration, Investment And Innovation: Future Directions for the Telecommunications Industry" conference, Georgetown University, February 21, 2003
- Seminar speaker, Stern School of Business, October 31, 2002

- Speaker, Conference: "On the future agenda for economic policy," Stanford University, October 24-26, 2002
- Speaker, Telecommunications Policy Research Conference, Alexandria, VA, September 28-30, 2002
- Speaker, American Bar Association Meetings, Washington DC, August 11, 2002
- Speaker, New Economy Conference, Athens, Greece, June 7, 2002
- Keynote speaker, Austrian Economic Association Conference – NOEG, Vienna, Austria, May 16, 2002
- Speaker, Trends for the New Economy Conference, Texas A&M, April 19, 2002
- Speaker, organizer, and moderator, CEO Summit on Rebuilding Confidence in the US Economy, New York University, December 7, 2001, see http://www.stern.nyu.edu/networks/summit.html
- Seminar speaker, Stern School of Business, November 13, 2001
- Speaker, Telecommunications Policy Research Conference, Alexandria, VA, October 29, 2001
- Session chairman, Telecommunications Policy Research Conference, Alexandria, VA, October 28, 2001
- Speaker, Conference: "Key Drivers For Wireless 3G," Columbia University, October 25, 2001
- Speaker, Federalist Society, "The Microsoft Decision, What's Next?," New York, October 24, 2001
- Speaker and moderator, "Antitrust Concerns in Network Industries," American Bar Association Meetings, Chicago, August 7, 2001
- Speaker, "Antitrust Concerns in Network Industries," New York Bar Association, June 14, 2001
- Speaker, Supercomm Conference, Atlanta, June 4, 2001
- Seminar speaker, Hoover Institution, Stanford University, May 7, 2001
- Seminar speaker, Economics Department, Stanford University, May 7, 2001
- Conference speaker, AT&T, April 25, 2001
- Seminar speaker, Stern School of Business, April 24, 2001
- Seminar speaker, MIT, April 23, 2001
- Seminar speaker, Law School, Stanford University, April 18, 2001.
- Seminar speaker, Graduate School of Business, Stanford University, March 21, 2001.
- Seminar speaker, University of California, Berkeley, March 18, 2001.
- Seminar speaker, University of California, Santa Barbara, March 12, 2001.
- Seminar speaker, University of California, Los Angeles, March 2, 2001.
- Seminar speaker, Stanford University, February 28, 2001.
- Speaker, "Consumers in the Digital Age Conference," *Hastings Law Journal* Symposium, San Francisco, February 11, 2001.
- Speaker: "Microsoft Antitrust," Winter Meetings of the American Economic Society, New Orleans, January 7, 2001.
- Keynote speaker, Canadian Competition Bureau, Ottawa, Canada, November 15, 2000.
- Speaker, Southern Economic Association, Arlington, Virginia, November 12, 2000.
- Seminar speaker, Stern School of Business, New York University, October 17, 2000.

- Seminar speaker, Columbia University Law School, October 10, 2000.
- Speaker, New York University School of Law, September 25, 2000.
- Seminar speaker at the Federal Reserve Bank of Philadelphia, September 18, 2000.
- Webcast presentation on the AOL-Time Warner merger, Yahoo FinanceVision, July 28, 2000.
- Speaker and session organizer, Conference of the European Financial Management Association, Athens, June 29, 2000.
- Seminar speaker, Athens Business School, June 26, 2000.
- Speaker, Credit Suisse First Boston, New York, May 11, 2000.
- Conference organizer and speaker, *The Law and Economics of United States v. Microsoft*, Stern School of Business and NYU School of Law, May 5, 2000. See http://www.stern.nyu.edu/eco/conference/ .
- Speaker, "The Telecommunications Act of 1996," American Enterprise Institute, Washington DC, April 27, 2000.
- Seminar Speaker, "United States v. Microsoft," Stern School of Business, April 25, 2000.
- Speaker, "The Telecommunications Act of 1996," American Enterprise Institute and USC Annenberg Center for Communications Studies, Los Angeles, April 7, 2000.
- Session Organizer and Discussant: "Dynamic Oligopoly," Winter Meetings of the Econometric Society, Boston, January 7-9, 2000.
- Speaker, Competition Policy for the Cyber-World, Columbia University, November 18-19, 1999.
- Speaker and co-organizer, Whither Social Science Data and Data Infrastructure Conference, Stern School of Business, New York, November 12-13, 1999.
- Telecommunications Policy Research Conference, Alexandria, Virginia, September 26, 1999.
- Organizing Committee, EARIE conference, Turin, Italy, September 3-6, 1999.
- Speaker, Athens Laboratory of Economic Research, Athens, Greece, June 16, 1999.
- Speaker, Stockholm School of Economics, Stockholm, Sweden, June 4, 1999.
- Speaker, Swedish Competition Authority, Stockholm, Sweden, June 3, 1999.
- Panelist, Roundtable on remedies in the Microsoft case, Progress and Freedom Foundation, March 17, 1999.
- Seminar speaker, Federal Communications Commission, Washington DC, January 7, 1999.
- Session organizer and speaker, "Network Industries," ASSA meetings, New York, January 5, 1999.
- Panelist, "The Microsoft Case," ASSA meetings, New York, January 3, 1999.
- Speaker, Law and Economics Seminar, Columbia University, "The Microsoft Case," December 7, 1998.
- Organizing Committee and speaker, First International Conference on Information and Computation Economies, Charleston, NC, October 26, 1998.
- Speaker, Telecommunications Policy Research Conference, Alexandria, Virginia, October 4, 1998.
- Session chairman, Telecommunications Policy Research Conference, Alexandria, Virginia, October 4, 1998.
- Speaker, Conference on Real Options in Telecommunications, Columbia University, October 2, 1998.
- Keynote speaker, EARIE conference, Copenhagen, August 28, 1998.

- Speaker, Summer program, Social Science Research Council, Airlee House, VA, August 8, 1998.
- Speaker, Conference on "Competition, Convergence and the Microsoft Monopoly: The Future of the Digital Marketplace," Progress and Freedom Foundation Conference, Washington DC, February 4, 1998.
- Speaker and session organizer, American Economic Association Winter Meetings, Chicago, January 4-6, 1998.
- Speaker, Telecommunications Policy Conference, organized by the Japanese Ministry of Telecommunications and the Japan-US Center of Stern, Tokyo, Japan, December 4, 1997.
- Speaker, Information Systems Seminar, Stern School of Business, November 6, 1997
- Speaker, Conference on "Pricing and Costing a Competitive Local Telecommunications Network," organized by the American Enterprise Institute, November 4, 1997.
- Speaker, Industrial Organization Seminar, Stern School of Business, September 30, 1997.
- Speaker and session organizer, Telecommunications Policy Research Conference, Alexandria, Virginia, September 27-29, 1997.
- Speaker, Voice-on-the-Net Conference, Boston, September 25, 1997.
- Speaker, Conference on Internet Telephony, organized by the National Telecommunications Infrastructure Initiative, Washington DC, September 4, 1997.
- Speaker, Federal Communications Commission, Washington DC, September 3, 1997.
- Seminar speaker, Stanford University, August 7, 1997.
- Speaker, Workshop on Synthetic Economies, conference organized by the Institute for Defense Analyses, Washington DC, July 23-24, 1997.
- Speaker, Western Economic Association, Seattle, July 10, 1997.
- Seminar speaker, University of California, Irvine, May 5, 1997.
- Speaker, Institutional Investors, Athens, Greece, June 19, 1997.
- Seminar speaker, Stanford University, April 9, 1997.
- Speaker, Voice-on-the-Net Conference, San Francisco, April 1, 1997.
- Seminar speaker, Stanford University, March 3, 1997.
- Seminar speaker, Stanford University, February 25, 1997.
- Speaker, University of California, Berkeley, February 6, 1997.
- Speaker and organizer, Stern School of Business, Roundtable for Electronic Commerce, November 22, 1996.
- Seminar speaker, University of California, Berkeley, November 5, 1996.
- Seminar speaker, Stern School of Business, October 24, 1996.
- Speaker and session organizer, Telecommunications Policy Research Conference, October 6, 1996.
- Seminar speaker, Federal Reserve Bank of St. Louis, May 17, 1996.
- Speaker, Consortium on Telecommunications Conference at Northwestern, May 10, 1996.
- Organizer, Roundtable for Electronic Commerce, Stern School of Business, April 26, 1996.
- Seminar speaker, Workshop on Clearing Houses at the Cleveland Federal Reserve Bank, April 19, 1996.
- Speaker at the Canadian Competition Bureau, March 28, 1996.
- Seminar speaker at Princeton University, February 27, 1996.
- Seminar speaker at INSEAD, January 17, 1996.

- Speaker at the Ecole Polytechnique / University of Paris I Colloquium on the Cement Industry, January 15, 1996.
- Presenter of two research papers and organizer of as session at the ASSA conference, January 5-7, 1996.
- Seminar speaker at the Federal Trade Commission, December 07, 1995.
- Seminar speaker at the University of Toronto, November 06, 1995.
- Seminar speaker at Yale University, October 26, 1995.
- Speaker at the Workshop on Telecommunications conference, Wellington, New Zealand, October 18-19, 1995.
- Speaker at the CIRANO conference on networks, Montreal, October 13, 1995.
- Speaker in Workshop on "Economic Survival" at the Stern School of Business, October 12, 1995.
- Speaker at the 1995 Telecommunications Policy Research Conference, September 30 - October 2, 1995.
- Speaker at the New York Law School conference on "The Senate Telecommunications Bill: A Primer," August 23, 1995.
- Speaker at the Interoperability Conference, Freedom Forum, Washington DC, July 6-7, 1995.
- Speaker at the New York Law School conference on "The Senate Telecommunications Bill: A Primer," June 29, 1995.
- Speaker at the CEPR conference of Mobile Telephony at CREST-LEI, ENSAE, Paris, June 8, 1995.
- Speaker at the Annual National Conference of Economic Research in France, University of Nantes, June 9, 1995.
- Speaker at a seminar at the Stockholm School of Economics, May 29, 1995.
- Speaker at a conference on the "Restructuring and Privatization of the Electricity Industry in Europe," Athens, Greece, May 25, 1995.
- Speaker at a joint seminar of Economics and GBA at Chicago, May 4, 1995.
- Seminar speaker at the London School of Economics, April 28, 1995.
- Seminar speaker at the Federal Reserve Bank of Philadelphia, April 21, 1995.
- Speaker at a conference of *Electronic Call Market Trading* at the Stern School, April 20, 1995.
- Speaker at the "Utilities Regulation Network Conference," Milan, Italy, April 7-8, 1995.
- Seminar speaker at the Stanford Business School, March 14, 1995.
- Seminar speaker at the University of California, Berkeley, March 13, 1995.
- Seminar speaker at the University of California, Los Angeles, March 10, 1995.
- Speaker and member of the organizing committee at "Strategic Alliances and Interconnection," Symposium organized by the International Telecommunications Society, University of Colorado at Boulder, January 9, 1995.

J. <u>RECENT ARTICLES, TELEVISION, AND RADIO PROGRAMS WITH QUOTES OF NICHOLAS ECONOMIDES ON ANTITRUST, TELECOMMUNICATIONS AND OTHER ISSUES ON THE ECONOMICS OF NETWORKS (SINCE JANUARY 1998)</u>

- Kathimerini, February 6, 2011, Trichet bonds
- Denver Post, December 1, 2010, Level 3 – Comcast
- NHK TV (Japan), September 1, 2010, Featured in special report on Greek and European Debt Crisis
- Washington Post, August 10, 2010, Silicon Valley criticizes Google-Verizon accord
- PC Magazine, August 4, 2010, Intel's Next Legal Challenges: Nvidia, New York
- Wired Magazine, August 4, 2010, FTC Settles With Intel Over Monopoly Accusations
- The BigMoney, July 8, 2010, Checking In With Foursquare
- NHK TV (Japan), July 2, 2010, Featured in special report on Greek and European Debt Crisis
- ERT 5 (Greece), June 15, 2010, Greek Debt Crisis
- Press TV, May 18, 2010, Greek and European Debt Crisis
- ERT 5 (Greece), April 14, 2010, Greek Debt Crisis
- Fuji TV (Japan), April 13, 2010, U.S. Financial Reform
- ERT 5 (Greece), March 26, 2010, Greek Debt Crisis
- NHK TV (Japan), March 22, 2010, Google in China
- Investors Business Daily, February 24, 2010, EU's Google antitrust probe
- Christian Science Monitor, December 18, 2009, Twitter attacked
- Financial Times, November 9, 2009, Why we need net neutrality
- Financial Times, November 4, 2009, Legal challenges mount for Intel
- ERT TV (Greece), September 14, 2009
- Ethiopian Review - Jul 25, 2009, Gov't Spending Shatters Postwar Records
- Bloomberg, Jul 7, 2009, Microsoft Is Said to Be in Talks to Settle EU Cases
- Fuji TV (Japan), July 2, 2009
- Fuji TV (Japan), February 27, 2009
- BBC Radio, February 27, 2009
- Fuji TV (Japan), February 20, 2009
- Manager-magazin.de, Feb 4, 2009, LinkedIn auf Deutsch Neuanfang im "nuklearen Winter"
- Heise.de, Dec 23, 2008, Soziale Schrumpfung
- BBC TV, November 5, 2008, The US Election and the Financial Crisis
- Bloomberg Radio, October 31, 2008, Candidates Tax Plans
- NYU Washington Square News, Oct 24, 2008, Tourism decline spells trouble for economy
- Economic Times, Sep 9, 2008,Move over to foundations & alliances

- Boston Globe February 22, 2008, Microsoft lifts veil of secrecy on software

- CBS News, Apr 18, 2008, FC: OMFG, Like, Totally, Ning
- Fast Company, Apr 11, 2008, Ning's Infinite Ambition
- NHK TV, February 20, 2008, Microsoft's Proposed Acquisition of Yahoo.
- Bloomberg News, February 21, 2008, Microsoft Makes Changes to Ease EU Competition Fight, at http://www.bloomberg.com/apps/news?pid=newsarchive&sid=azE39eAmWCLU
- Fox Business News, February 15, 2008, Microsoft-Yahoo merger, at http://www.foxbusiness.com/video/index.html?playerId=videolandingpage&streamingFormat=FLASH&referralObject=99ddf513-eb7a-464a-ad26-e43e1b93dc96&referralPlaylistId=search|economides

- BusinessWeek, January 15, 2008, "EU-Microsoft II: The Rematch"
- Electronic Engineering Times, September 20, 2007, "Microsoft's EU loss may have ripple effect on Apple, Intel"
  http://www.stern.nyu.edu/networks/quotes/Electronic_Engineering_Times_9_20_2007.htm
- Jerusalem Post, September 18, 2007, "Microsoft hit with record fine"
  http://www.stern.nyu.edu/networks/quotes/Jerusalem_Post_Sept_18_2007.mht
- Financial Times, September 17, 2007, "US technology groups fear EU laws"
  http://www.stern.nyu.edu/networks/quotes/FT_Sept_18_2007.mht
- Business Week, September 17, 2007, "Microsoft's Big European Defeat: What Now?
  http://www.businessweek.com/print/globalbiz/content/sep2007/gb20070917_608668.htm
- InformationWeek, September 17, "Microsoft's EU Loss May Set Precedent For Intel, Apple, Others"
  http://www.stern.nyu.edu/networks/quotes/InformationWeek_ Sept_17_2007_files.mht
- Bloomberg News, September 17, 2007, "Microsoft Loses Appeal Against EU Antitrust Order"
  http://www.stern.nyu.edu/networks/quotes/Bloomberg_Sept_17_2007 newer.mht
- Delaware News Journal, November 1, 2006, "Verizon now can offer TV service in Delaware"
  http://www.delawareonline.com/apps/pbcs.dll/article?AID=/20061101/BUSINESS/311010002/1003
- ABCNews, October 27, 2006, "Silicon Valley Strikes Again: Dot-Com Bubble Version 2.0?"
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- Business Week, March 20, 2006, "Why Fierce Price-Cutting Could Be Gone In A Flash"
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- CNN, September 29, 2005, "Google partners with NASA."
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  http://informationweek.com/story/showArticle.jhtml?articleID=166401187
- AFP, June 28, 2005, "AMD files antitrust suit against Intel"
  http://www.stern.nyu.edu/networks/quotes/AFP_June_28_2005.htm
- AFP, May 26, 2005, "Microsoft, acculé par Bruxelles, joue la montre pour sauver ses prerogatives"
  http://www.stern.nyu.edu/networks/quotes/AFP_May_26_2005.htm
- Cincinnati Enquirer, January 29, 2005, "Global giant sees chances for growth"

http://news.enquirer.com/apps/pbcs.dll/article?AID=/20050129/BIZ01/501290353/1076

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- Wall Street Journal Europe, December 23, 2004, "Microsoft Must Implement Antitrust Sanctions Now --- Top European Court Orders Immediate Compliance With Regulator's Ruling" http://www.stern.nyu.edu/networks/quotes/WSJ_Europe_December_23_2004.pdf
- New York Post, December 23, 2004, "Euro-Trashed" http://www.nypost.com/business/37018.htm
- Philadelphia Inquirer, December 23, 2004, "EU court orders Microsoft not to delay changes" http://www.stern.nyu.edu/networks/quotes/Philadelphia_Inquirer_December_23_2004.htm
- Seattle Post Intelligencer, December 23, 2004, "More on EU decision" http://www.stern.nyu.edu/networks/quotes/Seattle_Post_Intelligencer_December_23_2004.htm
- Bloomberg News, December 22, 2004, "Microsoft Loses Bid to Suspend EU Antitrust Order" http://www.stern.nyu.edu/networks/quotes/Bloomberg_December_22_2004.htm
- Associated Press Radio, December 22, 2004, "EU court keeps Microsoft sanctions" http://www.ap.org/
- Bloomberg Radio, December 22, 2004, "Impact of EU court's decision to deny a preliminary injunction to Microsoft" [MP3] http://www.stern.nyu.edu/networks/quotes/Bloomberg_Radio_12222004_Economides.mp3
- CRN.com, December 22, 2004 "Microsoft To Ship Stripped-Down Windows In Europe" http://www.crn.com/sections/breakingnews/breakingnews.jhtml?articleId=56200032
- AFP, December 22, 2004 "Microsoft's settlement strategy hits brick wall in Europe" http://news.yahoo.com/news?tmpl=story&u=/afp/20041222/ts_alt_afp/usitmicrosoftcompany_041222194914
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APPENDIX B