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Public Interest Comment on

Establishing Just and Reasonable Rates for Local Exchange Carriers [1]

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The Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University is dedicated to advancing knowledge of the impact of regulation on society. As part of its mission, RSP conducts careful and independent analyses employing contemporary economic scholarship to assess rulemaking proposals from the perspective of the public interest. Thus, this comment on the Federal Communications Commission's (FCC's) Notice of Proposed Rule Making (NPRM) on Establishing Just and Reasonable Rates for Local Exchange Carriers, does not represent the views of any particular affected party or special interest group, but is designed to evaluate the effect of the Commission's proposals on overall consumer welfare.

I. Introduction

Federal Communications Commission (Commission) regulations allow rural phone carriers to charge long-distance phone companies relatively high fees to access their network when the rural carrier transmits a call. The Commission seeks comment on a proposed plan to address allegations that some carriers are improperly generating increased traffic on their networks in order to profit from unreasonable access rates. This increased demand often comes from chat lines, conference calling, and similar high-volume services. Since long-distance phone companies are prohibited from passing these charges back to the customers who place the calls, all long-distance customers pay slightly higher rates in order to subsidize conference calls and chat lines that are marketed as "free" to consumers.

The Commission's conclusion that access stimulation is an unreasonable practice that violates section 201(b) of the Telecommunications Act is supported by evidence that shows that the rates charged by the carriers that engage in this process are clearly unjust and unreasonable. However, the Commission's proposed solution to the problem is flawed. Any attempt to define the increase in demand that would trigger the requirement

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of filing the revised tariff would be difficult, complicated, and arbitrary. Instead of pursuing this flawed regulatory solution, the Commission should forbear from enforcing the mandatory interconnection rules when a long-distance carrier has evidence that access stimulation is occurring.[2] Alternatively, in situations where access stimulation occurs, the Commission should forbear from enforcing the rules that prevent long-distance carriers from passing termination and interconnection charges through directly to the customers who made the calls.[3]

II. Background

The U.S. telecommunications industry is characterized by a variety of local and long-distance carriers. These carriers include wireline telecommunications providers such as "local exchange carriers" (LECs) and long-distance companies, wireless telecommunications providers, and cable telephony providers. The Commission regulates the interconnection fees that LECs can charge long-distance carriers for calls originating from the long-distance carrier's network.[4]

Incumbent LECs initiate the process of establishing these interconnection charges by filing a tariff with the Commission.[5] A tariff is a schedule of rates and regulations.[6] Tariffs must be filed in advance of their effective date in order to allow the Commission and the public sufficient time to analyze any changes in the carrier's rates, terms, and conditions.[7] Under the 1996 Telecommunications Act, certain tariffs filed by LECs are "deemed lawful" and go into effect within seven or 15 days unless rejected or suspended by the Commission.[8] A formal complaint process exists for parties who wish to challenge the proffered tariffs.[9]

The Commission's goal in evaluating these rates is to provide LECs with a reasonable rate of return based on the projected aggregate costs and projected aggregate demand for calls routed through the LEC networks.[10] Rates are targeted to produce no more than an 11.25 percent return on investment,[11] but may ultimately exceed the target rate of return

[2] The Commission has legal authority to forbear from applying unnecessary regulation to telecommunications carriers or services. *See* 47 U.S.C. § 160. Congress enacted section 10 as part of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).
[3] *Id*.
[4] *See* Jerry Ellig, *Public Interest Comment on Unified Intercarrier Compensation*, Mercatus Center at George Mason University, May 23, 2005 at 1-2. Available at http://www.mercatus.org/publications/pubid.1537/pub_detail.asp.
[5] *See* 47 U.S.C. § 203.
[6] 47 C.F.R. § 61.3(rr).
[7] *See* 47 U.S.C. § 203(b).
[8] *See* 47 U.S.C. § 204(a)(3).
[9] *See* 47 U.S.C. § 208.
[10] *See* Federal Communications Commission, *In the Matter of Establishing Just and Reasonable Rates for Local Exchange Carriers*, Notice of Proposed Rulemaking, WC Docket No. 07-135 (Adopted October 2, 2007; Released October 2, 2007) at 3. Hereinafter "Notice of Proposed Rulemaking."
[11] *Id*.

up to an allowed maximum.[12] Regulated interconnection rates between interstate long-distance calls vary widely, but can exceed five cents per minute.[13] The incremental cost of switching and terminating calls is estimated to be between zero and tenths of a cent.[14] Therefore, intercarrier compensation provides significant hidden subsidies to LECs at the expense of long distance callers.[15] Since long-distance phone companies are prohibited from passing these interconnection charges back to the customers who place the calls, the charges are distributed among all long-distance customers.

These hidden subsidies provide significant incentives for LECs to generate increased demand for calls to their networks so as to maximize net revenue (i.e., the difference between the regulated interconnection rate and the incremental cost of switching or terminating the calls). Some LECs have responded to these incentives created by the regulatory regime by unreasonably generating increased demand for calls to their networks. This type of stimulation is socially wasteful for two reasons. First, it induces the owners of calling services to locate their equipment in the LEC's service area solely in order to collect high access charges even if it would be more efficient for these services to be located somewhere else. Second, it artificially inflates all long-distance users' rates by distributing the regulated cost of the calls to all long-distance customers instead of to the callers who actually made the calls.

The Commission should ensure that total access charges collect no more revenue than necessary to achieve the Commission's public interest objectives, because access charges on long-distance calls generate substantial costs to society, over and above the revenues they extract from consumers. Consumer demand for long-distance service is very responsive to price.[16] Thus, access charge regulations that inflate the price of long-distance service cause consumers to consume less long-distance service and generate significant reductions in consumer welfare.[17]

A 2000 Brookings Institution study, using 1996 data, found that eliminating the subsidization of local phone service by long distance access charges would increase consumer welfare by between $1.0-3.7 billion annually.[18] Long-distance companies would gain an additional $1.6-3.4 billion annually, yielding a total increase in economic welfare of between $2.5-7.0 billion.[19] A similar estimate using 2002 data found that each

[12] *See AT&T Corp. v. Virgin Islands Tel. Corp.*, Memorandum Opinion and Order, 19 FCC Red 15978, 15979, para. 3 (2004). This rate of return is intended to allow the carrier "to earn a return that is high enough to maintain the financial integrity of the company and to attract new capital to the business."
[13] *See Reply Comments of the Intercarrier Compensation Forum in the Matter of Developing a Unified Intercarrier Compensation Regime* , CC Docket No. 01-92, Attachment A at 7.
[14] *See, e.g.,* Billy Jack Gregg, "A Survey of Unbundled Network Element Prices in the United States," National Regulatory Research Institute (Aug. 2004).
[15] *See Ellig,* note 4, *supra*, at 2.
[16] *See* Jerry Ellig, *Costs and Consequences of Federal Telecommunications Regulations*, 58 Fed. Comm. L. Journal (Jan. 2006) at 52.
[17] *Id*.
[18] *See* Robert W. Crandall & Leonard Waverman, *Who Pays for Universal Service? When Telephone Subsidies Become Transparent* (2000) at 112.
[19] *Id*.

$0.01 interstate access charge reduced consumer welfare by $300 million and producer welfare by about $1.2 billion, reducing overall economic welfare by $1.5 billion.[20]

In addition to the price distortions that cause telecommunications users to change their behavior, the system of intercarrier compensation and regulated access charges causes waste and inefficiency.[21] When wealth transfers are available, firms will expend vast resources to capture the transfer through the use of lobbying, litigation, and other activities designed to influence policy and legal processes.[22] These activities are often considered wasteful from a social perspective because they add no new value to society.[23] The evidence is unclear as to the total amount of money wasted on these rent-seeking activities for intercarrier compensation.[24] However, research on other telecommunications regulations suggests that the money wasted on these activities could be substantial.[25] Access stimulation is one example of such waste.

In its Notice of Proposed Rulemaking, the Commission notes that some LECs are stimulating access demand by the deployment of chat lines, conference bridges, and other high call volume operations.[26] LECs are providing space in their central offices and facilities for the call operators' equipment and may provide telephone numbers for the call service operators.[27] The chat lines and conference services are generally advertised over the Internet as free or as limited to the cost of the long-distance call.[28] Third-party entrepreneurs contract with small LECs to provide these services and split the revenues created by the increased call traffic. The rates of return for these small carriers are based on historically low levels of cost and call volume, so the rates are set at relatively high levels per minute of access.[29] When the access stimulation results in significantly higher call traffic, the small LECs are able to extract huge payments from the long-distance companies, which must average these costs across all customers.[30] These payments are then split with the third-party application providers through private contractual arrangements.

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[20] *See* Ellig, note 16, *supra* at 54. For data source, see Jim Lande & Kenneth Lynch, FCC Indus. Analysis & Tech. Div., *Telecommunications Revenues 2002* (2004) at 30-31.
[21] *See* Ellig, note 24, *supra* at 14.
[22] *See* Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft." *Western Economic Journal* (1967) at 224-232.
[23] *Id*.
[24] *See* Ellig, note 4, *supra* at 14.
[25] *See, e.g.,* Jerry Ellig and James N. Taylor, "The Opportunity Costs of Unbundled Network Element Regulation," Mercatus Center Working Paper (Nov. 2004), available at http://www.mercatus.org/publications/pubid.1175/pub_detail.asp, (finding that unbundled network element platform regulation transferred approximately $3.1 billion from incumbent phone companies to competitive local exchange carriers in 2003, and customers of the competitors received only a fraction of the wealth transfer).
[26] *See* Notice of Proposed Rulemaking, note 10, *supra*, at 6-7.
[27] *Id*. at 7.
[28] *Id*.
[29] *Id*.
[30] *Id*.

The *Wall Street Journal* detailed one example of this regulatory arbitrage that took place when David Erickson, who ran an Internet-based conference calling business in Long Beach, California, partnered with Ron Laudner, who ran a LEC in Riceville, Iowa.[31] They routed millions of minutes of Erickson's conference calls through the switches of Laudner's LEC.[32] Laudner filed a tariff with the Commission to justify his 5.3 cents-a-minute rate using evidence of past history of handling very little call volume.[33] In one month alone, Laudner's LEC handled 27.4 million minutes of calls, more than double the number the company had handled in the previous year.[34] Laudner and Erickson split hundreds of thousands of dollars in profits generated from this regulatory arbitrage.[35] Services routing calls through rural Iowa LECs included hotlivesexchat.com, allfreecalls.net, and freecalls2theworld.com.[36]

The Commission has tentatively concluded that this type of access stimulation is an unreasonable practice that violates section 201(b) of the Telecommunications Act.[37] In order to ensure that just and reasonable rates are maintained, the Commission has proposed a requirement that LECs must file a revised tariff if a specified increase in traffic occurs over a certain time period.[38] The Commission has suggested that the revised tariff should be required to include language similar to the following:

> If the monthly local switching minutes of the issuing carrier exceeds [__] percent of the local switching demand of the same month of the preceding year, the issuing carrier will file revised local switching and transport tariff rates to reflect this increased demand within [__] days of the end of that month.[39]

The Commission seeks comment on whether this conceptual approach and language is adequate to address the problems identified or whether another approach would be more effective.[40] Further, it seeks comment on the level of demand that should trigger any such filing and when that filing should be made.[41]

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[31] *See* Dionne Searcey. "Calling Riceville: How 2 Guys' Iowa Connection Took Big Telecoms for a Ride." *Wall Street Journal*, Oct. 4, 2007, Page A1.
[32] *Id*.
[33] *Id*.
[34] *Id*.
[35] *Id*.
[36] *Id*.
[37] *See* Notice of Proposed Rulemaking, note 10, *supra*, at 9.
[38] *Id*. at 10.
[39] *Id*.
[40] *Id*.
[41] *Id*.

III. Does the Current Intercarrier Compensation System Address a Market Failure?

Regulation has the potential to increase consumer welfare when it corrects for a market failure.[42] However, regulation can often have unintended consequences and lead to regulatory arbitrage schemes such as access stimulation. Regulation of interconnection charges and intercarrier compensation could address three potential market failures: network effects, call externalities, and the terminating access monopoly.[43] The kind of demand stimulation considered in this proceeding, however, represents an abuse of the regulatory system that does nothing to remedy these potential market failures.

The intercarrier compensation system is designed to promote increased access to phone networks so as to increase the positive externalities from network effects. These effects occur when the value of telephone service to each customer rises as each additional customer joins the network.[44] Two additional conditions must be in place for network effects to justify regulation: the increase in value from the network effect must be large enough that current subscribers would be willing to subsidize new subscribers[45] and individuals fail to take this increased value into account when they decide whether to subscribe to the network.[46]

The near universality of telephone service in the United States makes it very doubtful that any additional externalities from network effects could be captured through regulation.[47] Even if there were some external benefits from increased network access still available, subsidization through regulation is likely unnecessary because the owner of the network has a strong incentive to maximize the value of the network. For example, in less regulated communications markets, like wireless communications, network owners frequently offer inducements for signing up and committing to using the network.[48]

Not only is regulation unnecessary to capture any available positive externalities from network effects, it is also unlikely to achieve this outcome. Evidence suggests that the subsidization of local service by long-distance users generates very little increase in new telephone subscriptions.[49] This is due to the relatively low price elasticity of demand for local telephone service.[50] In other words, the decision to subscribe to local telephone service is not very sensitive to the price of the monthly charge.

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[42] *See* Jerry Ellig, *Intercarrier Compensation and Consumer Welfare*. 1 Univ. Ill. J. Law, Tech., & Policy (2005) at 100.
[43] *Id*.
[44] A.H. Barnett & David L. Kaserman, *The Simple Welfare Economics of Network Externalities and the Uneasy Case for Subscribership Subsidies*, 13 J. Reg. Econ. 245 (1999).
[45] *Id*.
[46] *Id*.
[47] *See* Ellig, note 42, *supra*, at 100.
[48] *See* Jay M. Atkinson & Christopher C. Barnekov, *A Competitively Neutral Approach to Network Interconnection* 21 (FCC, Working Paper No. 34, 2000).
[49] *Id*. at 252-53.
[50] *See, e.g.,* Michael H. Riordan, *Universal Residential Telephone Service*, 1 Handbook of Telecommunications Economics 423 (2002).

Another market failure that the current system of interconnection charges may try to address is call externalities.[51] This alleged market failure is offered to justify the regulatory requirement that requires the calling party's network (rather than the called party's network) to pay for the interconnection of the call.[52] The rationale for this requirement is to force the calling party to internalize the cost of the phone call. The reasoning is that the calling party causes the costs associated with the call but may not bear the full costs because the individual may not be a customer of the called party's network. The called party (and the called party's network) has little or no recourse to prevent the costs from occurring other than simply refusing to answer the phone. The caller thus creates costs for other parties that the caller does not bear, but there is no guarantee that the called party will receive a benefit commensurate with the cost. To make the caller take these costs into account, the called party's network charges the caller's network for completing the call. The rates the caller pays his or her own phone company will roughly reflect these costs, thus more or less internalizing the externality.[53]

The final market failure that the current system of interconnection charges may try to address is the "terminating access monopoly."[54] This monopoly power accrues to the carrier because the carrier that connects the individual subscriber to the network has a monopoly over access to that subscriber at any particular time.[55] Theoretically, an unregulated monopolist could charge all other carriers high rates to connect calls to the individual subscriber and earn monopoly rents.[56] This problem results from excessive access charges.[57] The economic models that identify this potentially harmful effect find that the socially optimal access charge is equal to the marginal or incremental cost of providing access or even lower.[58] Thus, this potential market failure does not justify the subsidies created by the current regulatory regime for interconnection charges, and it certainly does not justify abusive demand-stimulation schemes that are designed to let LECs collect even more in access charges than the Commission believes is reasonable.

The terminating-access monopoly problem is only exacerbated by the current regulatory regime. For example, the mandatory interconnection requirement prevents an incumbent from refusing to interconnect.[59] However, it forces the calling party's network to pay the terminating access monopolist the inflated access charge.

In addition, laws and regulations that prevent a long-distance carrier from passing termination charges on to the caller also exacerbate the terminating-access monopoly problem. Federal laws and regulations require that long-distance carriers average charges

[51] *See* Ellig, note 42, *supra* at 102.
[52] *Id*.
[53] *Id*.
[54] *See* Ellig, note 42, *supra* at 103.
[55] *Id*.
[56] *Id*.
[57] *Id*.
[58] *See* Jean-Jacques Laffont, Patrick Rey & Jean Tirole, *Competition Between Telecommunications Operators*, 41 Eur. Econ. Rev. at 708.
[59] *See* Ellig, note 42, *supra* at 104.

over all customers in order to ensure that the same rates are offered to rural customers and urban customers.[60] This encourages unreasonable demand stimulation by giving concentrated benefits to LECs and their wily business partners while spreading the costs between all long-distance consumers. If the Commission forbears from enforcing this requirement when access-demand stimulation occurs, the long-distance carrier could pass high termination fees on to the individual customer who placed each call.[61]

IV. Conclusions and Recommendations

The current system of intercarrier compensation imposes significant costs on consumers and creates incentives for regulatory arbitrage like access stimulation. The Commission has tentatively concluded that access stimulation is an unreasonable practice that violates section 201(b) of the Telecommunications Act.[62] It is clear that this conclusion is justified by the available evidence. The practice of access stimulation merely transfers wealth from all long-distance users of a network to the LEC who handles a subset of calls from that network. Evidence suggests that the rates charged by the LECs that engage in this process are clearly unjust and unreasonable.

The Commission should be commended for identifying this problem and working to prevent it from occurring in the future. However, the Commission's proposed solution to the access stimulation problem is flawed, and alternative solutions would be much more effective in solving the problem. In order to ensure that just and reasonable rates are maintained, the Commission proposes a requirement that LECs must file a revised tariff if a specified increase in traffic occurs over a certain time period, and the Commission seeks comment on when the tariff should be filed and what increase in access demand should trigger the filing.[63] It also seeks comment on whether this regulatory approach is adequate.[64]

One could suggest a relatively simple set of criteria for filing a revised tariff, such as triggering the requirement when access demand increased by 100% over one month. This seems reasonable given that call volume is rarely likely to increase by this magnitude for a LEC without unreasonable stimulation and this increase would result in significantly increased profits based on the tariff in place for the preceding month. However, this suggested criterion is arbitrary.

The only non-arbitrary criterion is how much wealth transfer would the Commission like to allow before reviewing the tariff, balanced against the desire to avoid requiring LECs to comply with this regulatory burden every time demand increases by some minimal amount. If the Commission decides to move forward with this difficult and complicated

[60] *Id*.
[61] *Id*.
[62] *See* Notice of Proposed Rulemaking, note 10, *supra* at 9.
[63] *Id*.
[64] *Id*.

regulatory approach, it should try to identify the level of demand that minimizes the sum of costs that occur from the wealth transfer and from the regulatory compliance.

There are alternative approaches that would be much more effective than this difficult regulatory initiative. The Commission could choose one of two alternative approaches that would end the practice of access stimulation, avoid the need to monitor and enforce the revised tariff requirement, and decrease the amount of wealth transferred in intercarrier compensation.

The Commission should forbear from enforcing the mandatory interconnection rules when a long-distance carrier has evidence that access stimulation is occurring.[65] If the Commission did not enforce the mandatory interconnection rules in this circumstance, the long-distance carrier could simply refuse to connect its customers with the LEC that is engaging in the practice. This forbearance would end the practice of access stimulation almost immediately, because long-distance companies would have a market incentive to quickly identify and cut off calls to LECs engaging in this practice in order to stop the payment of access charges.

The long-distance carrier would be constrained from improperly cutting off calls to customers of LECs not engaging in the practice of access stimulation because the long-distance carrier would risk losing customers to other long-distance carriers who allow access to customers of the LECs in question. Since access charges would still be regulated, forbearance by the Commission would not give long-distance carriers the opportunity to cut off calls simply as a ploy to negotiate lower access charges across the board.

The LECs themselves would have an immediate incentive to stop the practice of access stimulation since they could lose customers to competing local carriers who offer access to other customers on other networks. Even if a LEC faces little competition from wireless, satellite, Voice over Internet Protocol, and other wireline providers, the LEC would still have an incentive to stop the practice of access stimulation because the alternative would be to lose all long-distance revenue.

Another solution to the problem of access stimulation would be for the Commission to forbear, in situations where access stimulation occurs, from enforcing the rules that prevent long-distance carriers from passing termination and interconnection charges through directly to the customers who made the calls. If the long-distance company passes the charge back to the customer placing the call, it creates an incentive for the caller to take into account the total cost of the call. Faced with a significant surcharge due to the access charge, customers of chat lines and conference services would likely switch to service providers that do not generate these surcharges. This would remove the profit incentive for service providers to team up with LECs that impose high access charges, effectively eliminating the incentive for demand stimulation.

[65] The Commission would have to define the level of increased demand that would trigger the ability of the long-distance carrier to cut off the connection.

This alternative solution would end the practice of access stimulation almost immediately. It would create a market incentive for the long-distance customer to avoid services that incur unreasonable access charges. It would also provide an incentive for the third party provider of the services that increase access demand to fund the services through means other than access charges.

The rules that prevent itemized pass through of access charges are intended to subsidize rural customers at the expense of urban customers by forcing the long-distance carrier to average charges across all customers.[66] However, access stimulation does not reduce rates paid by rural phone customers. Rather, it merely transfers wealth to the LECs, third party service providers, and (possibly) the users of the services. The subsidization of another customer's use of chat lines, conference services, and other services that are traditionally used to stimulate access demand does not contribute to the policy's goals.

If the Commission were to choose either solution to address the problem of access stimulation, this unreasonable and wasteful practice would end. If the Commission forbears from enforcing the mandatory interconnection rules when a long-distance carrier has evidence that access stimulation is occurring, the long-distance companies would have a market incentive to quickly identify and cut off calls to LECs engaging in this practice in order to stop the payment of access charges. Alternatively, if the Commission forbears, in situations where access stimulation occurs, from enforcing the rules that prevent long-distance carriers from passing interconnection charges through directly to the customers who made the calls, the long-distance customer would have a powerful market incentive to avoid services that incur unreasonable access charges.

These incentive effects would solve the problem of access stimulation and thus enable existing and proposed tariffs to be evaluated based on historical levels of access demand. This would satisfy the Telecommunication's Act requirement that rates remain "just and reasonable" and avoid the complicated and arbitrary setting of criteria to file revised tariffs.

[66] The Commission has acknowledged that a primary goal of the system of intercarrier compensation is to preserve universal service by subsidizing the high costs of serving rural areas. *See* Federal Communications Commission, *In the Matter of Developing a Unified Intercarrier Compensation Regime*, Further Notice of Proposed Rulemaking, CC Docket No. 01-92 (Adopted February 10, 2005; Released March 3, 2005) at 18.