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4 March 2009

Is More Special Access Regulation Needed? Reactions to the NRRI Report on Special Access Competition

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Summary

On 21 January 2009, the National Regulatory Research Institute (NRRI) released a report, *Competitive Issues in Special Access Markets*, which "addresses whether ILECs have market power over wholesale special access services in some … areas, and if they do, whether market power harms customers or competition."[1] In this paper, we present our initial evaluation of that report.[2] The authors of the NRRI Report, Peter Bluhm and Robert Loube, acknowledge that their data are incomplete; however, they conclude that the major incumbent local exchange carriers (ILECs) retain substantial market power over special access prices and terms and conditions of sale, and recommend that the Federal Communications Commission (FCC) consider reestablishing price caps while it conducts a contested regulatory case to reset wholesale special access prices. Our review of the NRRI Report indicates that the findings on market power on which the authors base their policy recommendations rest on incomplete, inconclusive, and/or conceptually flawed data analyses. Thus, the dramatic policy changes recommended are likely to generate substantial unwarranted costs—notably a retrograde regulatory approach that seriously undermines investment incentives—and little, if any, benefits.

Overview of the NRRI Report's Major Conclusions

The authors of the NRRI Report find that, while "the evidence does not support a simple 'thumbs-up' or 'thumbs-down,' …. ILECs still have strong market power in most geographic areas, particularly for channel terminations and DS-1 services," beyond "relatively compact downtown areas that generate the largest volume of special access business." Consequently, they recommend

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that the FCC initiate "a contested case … to reset the special access rates of AT&T, Qwest and Verizon." As an "interim measure, [they] recommend that the FCC consider reestablishing price caps for DS-1 and DS-3 channel terminations sold by these three carriers." The study also recommends reducing intrastate special access rates to comparable interstate levels.

The NRRI's Assessment of Market Structure Rests on Incomplete and Incorrect Data

Our preliminary review of the data used in the NRRI Report indicates that the data are incomplete and at times even incorrect. Specifically, the "high continuing market concentration" cited as evidence of market power is based on an incomplete sample of purchase data submitted by five companies only, all of which are seeking lower special access rates. It appears that the authors relied exclusively on data provided by Covad, Sprint, T-Mobile, Time Warner Telecom, and XO Communications on their special access purchases to compute the Herfindahl-Hirschman Indices (HHIs) for 50 Metropolitan Statistical Areas (MSAs).[3] This approach limits the usefulness of the report because it omits purchase data for the vast majority of special access customers. More specifically, the NRRI Report seems to include special access purchases from only two mobile wireless carriers and only four other competitors.[4] This is in stark contrast with recent FCC data showing that there are four nationwide wireless carriers, several large regional wireless carriers, many smaller regional wireless carriers, and over 400 competitive local exchange carriers (CLECs). We also note that neither AT&T nor Verizon Business (the former MCI), which have major CLEC operations outside of the areas they serve as ILECs, submitted data on purchases or sales of special access out of region. Hence, the market structure data upon which Mr. Bluhm and Dr. Loube build their case for special access regulation relies on a non-representative sample.

Furthermore, the NRRI study omits data for cable and fixed wireless providers, as neither type of provider responded to the NRRI surveys.[5] In addition, as stated in the NRRI Report, Verizon presented substantial information regarding many competitors' (CLEC, regional and local fiber, and fixed wireless) networks that compete with ILEC special access, but did not respond to the NRRI survey. Thus, the authors of the NRRI Report recognize that, "Absence of seller data from competitive fiber providers, from broadband wireless providers and from cable TV providers limited our ability to verify market concentrations…."

The market structure analysis of the NRRI Report is also conceptually flawed: it ignores that capacity data provide a better measure of market presence. That is, in a market characterized by recent competitive entry, capacity is typically a superior measure of market presence to measures estimated using data on current purchases or sales volumes. Moreover, although the authors of the NRRI Report correctly point out that cable companies and fixed wireless companies could expand the reach of their networks at low incremental costs, they do not attempt to calculate how much capacity these competitors could provide in response to ILEC efforts to raise rates above reasonable levels. The Department of Justice has found that firms able to expand into a market quickly (e.g., in less than a year) at low incremental costs should be treated as participants in the market. Thus, the contemporaneous revenue shares presented in the NRRI Report clearly overstate concentration.

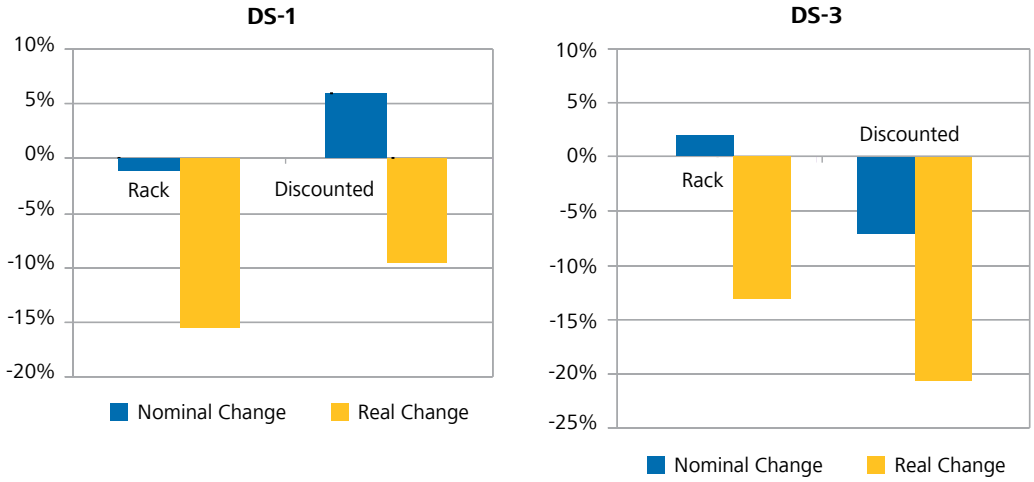
Mr. Bluhm and Dr. Loube downplay the significance of cable and fixed wireless even though they recognize that these competitors: "…have low entry and exit costs where their networks are currently established, and each can provide substitutable dedicated services to many customers.….[and] may be poised to become major competitors and are increasingly constraining ILEC behavior…." Since cable companies have already spent tens of billions of dollars to upgrade their networks to provide advanced broadband services throughout the country, they should not be dismissed as "fringe" players. Similarly, fixed wireless networks are already very widespread in the US, as we discuss above, and they are making major strides to expand the reach of their networks. In such a dynamic setting, static market structure measures (such as HHIs or market shares) are inappropriate.

Pricing Trends Do Not Indicate Market Power

Mr. Bluhm and Dr. Loube present nominal price trends they estimated using 2001 to 2007 data from Verizon and Embarq, and recent (2006 and 2007) "buyers" prices from their small sample of respondents. Without having the underlying data to review, our findings are of necessity preliminary; however, their published results do not appear to support their conclusions on price trends.

The NRRI Report states that their "analysis of pricing trends gave inconclusive results." They found that buyer data suggested prices had *declined* between 2006 and 2007.[6] They point out, however, that such a short term change is too short to interpret as a trend and that they "lack confirmation from comprehensive seller data."[7] However, when correctly assessed—using inflation-adjusted prices instead of nominal prices—the "seller data" provided by Verizon and Embarq show declining prices from 2001 to 2007. This is the case even though Mr. Bluhm and Dr. Loube conclude, based on nominal price changes, that "[s]eller data suggested stable or rising prices." Their conclusion is not warranted because nominal price trends over a six-year period from 2001 to 2007 ignore overall inflation in the economy. Inflation—calculated using either the CPI or the PPI—came to more than 17 percent, a rate that more than offsets the nominal changes shown by Mr. Bluhm and Dr. Loube in Tables 8 and 9 of their report. For example, Figure 1 below shows the effects of adjusting Verizon's special access prices from Table 8 of the NRRI Report to account for inflation. It shows that DS-1 and DS-3 discounted rates and list prices or "rack" rates both declined in real terms, even thought the NRRI Report appears to show mixed results—i.e., either small increases or smaller decreases—than indicated when we correct for inflation.

Figure 1: **Change in Verizon Rates for "Standard Circuits" (2001 – 2007)**



In addition, the NRRI's statement that "seller data suggested stable or rising prices" is wrong for the very rates over which Mr. Bluhm and Dr. Loube argue ILECs have the most market power. DS-1 and DS-3 channel terminations rates—including both "rack" rates and discounted rates—declined from 2001 to 2007. As shown in Table 1, nominal rates declined by between 3 percent and 10 percent and real prices for channel terminations declined by between 17 percent and 23 percent over that period.

Table 1: **Change in Verizon Channel Termination Rates 2001 - 2007**

		Nominal Change	*Real Change*
DS-1	Rack	-5%	-19%
DS-1	Discounted	-3%	-17%
DS-3	Rack	-10%	-23%
DS-3	Discounted	-10%	-23%

Source: Verizon Rates from NRRI Report, Table 8; and CPI from United States Bureau of Labor Statistics

Price and FCC Regulation

Mr. Bluhm and Dr. Loube argue that the evidence "suggests … that sellers are using market power in Phase II areas to raise prices to their larger wholesale customers." To the contrary, the evidence they present rests on a conceptually flawed premise and, in any case, does not support their conclusion.

The NRRI's working hypothesis, "if competition is limiting price in Phase II areas, we would find significantly lower prices in Phase II areas, both for rack and discounted prices," is conceptually incorrect. Even if they had found statistically significantly higher rates or rate increases in Phase II areas (i.e., area with greater pricing flexibility) compared to Phase I (price cap) areas, such price differences would be consistent with effective competition.

Where ILECs have Phase I pricing flexibility, they can selectively reduce prices by means of contract tariffs and responses to RFPs. Thus, all else equal, granting Phase I pricing flexibility should result in rates that are either unchanged or lower, because no additional regulatory flexibility was granted in those areas to raise rates.

In contrast, for Phase II pricing flexibility, the additional flexibility granted (above that in Phase I areas) was the ability to raise prices. Again, all else equal, one would expect the effect *of the regulatory reclassification* would necessarily be to increase rates. The regulated firm was able to reduce rates before the reclassification, and the only effective change from reclassification to Phase II pricing flexibility is the ability to raise prices that would otherwise (under price caps or Phase I pricing flexibility) be forbidden. The fact that the MSAs subject to pricing flexibility are more competitive than other MSAs does not imply that prices would be more likely to fall in those MSAs. That belief requires the further assumption that initial regulated special access prices exceeded competitive market levels, and there is no reason to believe that this is the case.

Moreover, all else is never equal. At the same time as MSAs are reclassified as eligible for Type I or Type II pricing flexibility, ILECs are offering discount contract tariffs, and customers are shifting demand toward those contracts. The result of this shift in demand has been a reduction in the prices customers actually pay, even though the month-to-month or any individual contract tariff price may have stayed the same or increased. And, since the *additional* flexibility provided by Phase II pricing flexibility is the ability to increase rates, one should not ascribe any of the reduction in average prices paid by customers to the reclassification as Phase II. Nonetheless, the same underlying competitive conditions that cause an MSA to be reclassified as Type II also underlie each ILEC's decision to offer discount plans voluntarily. If there were no competition in these MSAs, it is unlikely that reducing prices through contract tariffs would be a profitable pricing strategy.

It is also important to note that the NRRI data do not confirm their conclusion that prices are higher in Phase II areas. Their own analysis of "[m]ean buyer's prices for channel terminations, by regulatory status" (Table 12, p. 65) shows only three statistically significant results:

- DS-1 undiscounted "rack" rates—presumably offered to lower-volume customers—are actually 9 percent *lower* in Phase II areas than in Phase I areas in 2006.
- DS-1 rack rates were 14 percent lower in 2007 in Phase II areas (indeed they had declined compared to 2006).
- Discounted DS-1 rates were 9 percent higher in Phase II areas in 2006.

Thus, their statistically significant results show that smaller customers (who are more likely than larger customers to buy at rack rates) *are* protected by competition in Phase II areas.

The NRRI's limited results for discounted special services are inconclusive at best. First, the only statistically significant finding consistent with their conclusion provides little evidence regarding the effects of deregulation on large wholesale customers' discounted rates. They do not report any statistically significant results for DS-3 channel terminations and they do not report any comparative data for transport. Second, if ILECs actually had market power in Phase II areas, why are their undiscounted rates lower in these areas than they are in Phase I areas? Finally, as we discuss above, the data that they report are for a very small sample of buyers. In addition, the pricing data may have covered different MSAs for different companies; thus, the comparisons across Phase II and Phase I areas could be among different companies. And, although they asked for data on 50 MSAs, some of the buyers' data cover very few of them.[8] These factors make it difficult to draw any conclusions about the comparisons across types of areas.

ARMIS Data Do Not (and Cannot) Provide Meaningful Information on ILEC Special Access Rates of Return

As Mr. Bluhm and Dr. Loube admit, ARMIS data do not provide meaningful rates of return. ARMIS data were not designed or intended for use in assessing prices or profits for individual special access services. ARMIS costs and investments are derived from part 32 of the Uniform System of Accounts using an indirect, multi-tiered accounting process that allocates costs and investments between regulated and non-regulated services, between regulated interstate and intrastate services, and among regulated interstate services and access rate elements. Thus, accounting profits generated from these data bear no relationship with economic profits and cannot serve any useful purpose in determining whether pricing flexibility has generated excessive rates of return.

Notwithstanding this fatal flaw, Mr. Bluhm and Dr. Loube make an adjustment that is as arbitrary as the ARMIS data they adjust. To "reflect special access sales growth since 2000," they adjust special access plant in service using revenue data so that the proportion of investment assigned to special access is equivalent to the proportion of total revenues obtained from that service. Revenue data are only loosely related to investment—for example, output is more directly related to cost. And, the number of special access lines grew more than three times faster than did BOC special access revenues from 1999 to 2007. We do not believe that lines should necessarily be used for the adjustment either; we mention these data only to show how such allocations and adjustments can produce wildly different results depending on what factors are used. This is why economists and regulators have long rejected use of cost allocations such as those in the ARMIS data.[9] It is also why the NRRI conclusions regarding profits for special access should be summarily rejected.

Special Access Does Not Need Additional Regulation

Mr. Bluhm and Dr. Loube recommend that the FCC and the states embark on a review of special access market structure, rates, and profits—including what amounts to a rate of return proceeding. Following their recommendations would generate substantial costs and the associated uncertainty would distort investment incentives of both ILECs and competitors. The direct costs of the proceeding(s) are likely to be quite substantial. First, as Mr. Bluhm and Dr. Loube recognize, the publicly available data on CLEC facilities are limited, and it has proven difficult to extract detailed data from CLECs and other access providers. Second, the hearing process and detailed data requirements discussed in the NRRI Report would be far more costly (and time consuming) than the usual approach followed by the FCC. The indirect costs of this process are apt to be even larger because of the uncertainty introduced into the market and the possibility that uneconomic costing and accounting procedures will be resurrected.

In contrast, the potential benefits from reduced market power are likely to be small because the alleged evidence of market power is flawed. First, as explained above, the analyses of market concentration, price trends, and rate of return estimates on which the NRRI bases its policy recommendations each has serious flaws.

Second, the NRRI's *application* of their findings regarding market power is also flawed. In their conclusion, Mr. Bluhm and Dr. Loube support their policy recommendations by arguing that:

> …ILECs still have strong market power in most geographic areas, particularly for channel terminations, and particularly for DS-1 services.
>
> The main exception is relatively compact downtown areas that generate the largest volume of special access business….competition is limited to areas that are overbuilt with fiber and, to a lesser extent, areas that are served by high-quality cable television systems or fixed wireless systems. In surrounding areas, which can be …the majority of an MSA, … ILECs retain strong market power, particularly for channel terminations.
>
> … Seller data show stable prices. (NRRI Report, p. 79)

These statements overlook the following:

- Even if "surrounding areas" constitute the majority of an MSA's geographic area, recognition that competition is present in "relatively compact downtown areas" is crucial. It implies that wholesale customers can negotiate favorable multi-location contracts that include discounted rates beyond "downtown areas." For example, a firm that relies on special access in remote areas may have considerable leverage over the prices it pays in those areas because it can threaten to use competitive alternatives in downtown areas, which the NRRI admits "generate the largest volume of special access…."

- As discussed above, advanced cable and fixed wireless networks are quite widespread, and have the potential to rapidly expand at low incremental costs to serve the customer locations beyond the downtown areas. Thus, we do not believe that the authors of the NRRI Report have given enough weight to the presence and potential entry of these competitors.

- As we explain above, their reliance on a small sample of sellers' purchases of special access as the basis for their market structure analysis overlooks the extensive evidence of fiber network as well as the desirability of using capacity measures to assess market presence.

- Data presented by Mr. Bluhm and Dr. Loube on channel termination rates—the very rates over which Mr. Bluhm and Dr. Loube argue ILECs have the most market power—show that these rates are not "stable." Data they present show that DS-1 and DS-3 channel terminations rates declined from 2001 to 2007. See Table 1. More generally, as shown in Figure 1, overall special access circuit prices declined over this period when adjusted for inflation.

Given the potentially large costs and limited benefits of greater regulation, the FCC should not follow the NRRI's recommendations.

End Notes

1. NRRI Report, p. iii. The National Association of Regulatory Utility Commissioners (NARUC) commissioned the NRRI Report to investigate.
2. This working paper was not commissioned by any party. We have formed our opinions based on publicly available data. We reserve the right to amend our opinions and conclusions should further information become available.
3. See the NRRI Report, Section VIII and p. 40. Of these companies, only TW Telecom provided data on their sales of special access. Embarq and Verizon submitted data on their sales of (ILEC) special access services. AT&T, Qwest, and Windstream did not.
4. Although the NRRI Report appears to use purchase data for five companies, Sprint provided separate data for both its wireless and wireline operations. See NRRI Report, footnote 143.
5. Although XO responded to the NRRI survey, it evidently did not include data for its fixed wireless subsidiary, Nextlink. This is a significant omission because according to Nextlink, its "… carrier-grade broadband wireless services is now available in over 80 metropolitan markets." And it provides "[l]ast mile broadband wireless network access solutions for wireline telecommunications service providers to extend the reach of their fiber networks or as an alternative to higher cost, leased lines from the local telephone companies; and … middle mile backhaul solutions for … wireless service providers to more cost-effectively support next generation mobile applications…across their networks." See "Nextlink Launches Broadband Wireless Services in the New York City Metro Area Addition of NYC Ensures that a Cost-Effective Solution to Meet Increasing Bandwidth Needs are now Available in over 80 US Markets" http://www.nextlink.com/nextlink-launches-new-york.html
6. NRRI Report, p. 80.
7. NRRI Report, p. 59.
8. "T-Mobile submitted item counts and pricing for the 10 largest MSAs…." "TW Telecom's pricing data was limited to footnoted statements about the discount percentages from rack prices… and, in one case, a statement about the term of a TW Telecom discount plan." NRRI Report, Footnotes 144 and 145.
9. The FCC earlier concluded that "high or increasing rates of return calculated using regulatory cost assignments for special access services do not in themselves indicate the exercise of monopoly power," *In the Matter of Special Access Rates for Price Cap Local Exchange Carriers and AT&T Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, WC Docket No. 05-25 and RM-10593, Order and Notice of Proposed Rulemaking, released January 31, 2005, ¶ 129, citing Franklin M. Fisher & John J. McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits," 73 *American Economic Review* (1983), p. 83.

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