Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Applications of AT&T, Inc. and	)	WT Docket No. 11-65
Deutsche Telekom AG	)	
	)	
For Consent to Assign or Transfer	)	
Control of Licenses and Authorizations	)	

REPLY TO OPPOSITION

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SUMMARY

Merger applicants AT&T and T-Mobile (together, Applicants) make very clear at the outset of their June 10th Joint Opposition (Opposition) the ethos that guides the companies' push for this blatantly anticompetitive and unlawful merger. They claim, apparently with a straight face but insufficient modesty, that "[o]ne overarching imperative drives this transaction: *giving* AT&T and T-Mobile USA customers the network capacity they need to enjoy the full promise of the mobile broadband revolution."[1] The use of the word "giving" is no accident. AT&T and T-Mobile ask the Commission, in their earlier submissions in this docket and again in the Opposition, simply to *give* the merged entity more spectrum, subscribers, and market power than all other wireless providers in the United States.

AT&T has customers to serve, you see, and those pesky customers actually want to use the smartphones that AT&T sold to them. Neither proper investment in its network nor fair competition in the free market is a substitute, in AT&T's reckoning, for the slanted playing fields and government largesse it seeks in this transaction. The entire Opposition basically boils down to the proposition that "what's good for AT&T is good for the country." That might sound reasonable if one can ignore the clearly stated preference in this country's laws and rules for competition over habitual monopolists' promises to provide service. But even AT&T's promises are hollow: their attainment is not dependent on this merger, and thus their fulfillment could not offset the harms that the merger would cause to competition and consumers.

For instance, AT&T promises it will provide broadband to 97 percent of the country if – and only if – it gets permission for this merger. The claim is anything but accurate, as AT&T's public statements and internal communications tell a very different story about its ability and

[1] Opposition at 1 (emphasis added.)

willingness to cover this same percentage of the nation with wireless broadband service. AT&T also promises increased investment in the documents it submits to this Commission, all the while signaling to investors that expenditures actually would *decrease* post-merger – leading to increased "synergies" and savings that would allow its revenues to continue climbing. AT&T still speculates in the Opposition that the deal would aid the broader economy from the deployment of a redundant LTE network. Yet AT&T dismisses its history of merger-aided job cuts by hiding the truth about overall growth in its total number of customers in the last decade.

Just like its rural deployment promises, AT&T's claims regarding improved capacity on its already congested networks are either not real, not significant, or not merger-specific. Neither the economic arguments nor the engineering claims it makes about current capacity constraints hold water. The merger's real benefit to AT&T quite obviously is a reduction in the competition it will face – not the surmounting of any technical constraint nor the realization of any sort of cognizable benefit it cannot obtain absent the merger. AT&T and T-Mobile both have several paths forward to improve their network capacity and coverage, and do not need to merge with one another to share resources with one another or with other competitive providers.

In the end, Applicants have failed to carry their burden of demonstrating that grant of their merger would serve the public interest. They have offered insufficient proof that the transaction and resulting concentration will not harm competition and consumers. Failing to make any credible showing regarding the purported price-reducing incentives from the deal, they must rely on flimsy claims that the merger is necessary for both companies to improve network coverage and capacity in the near term. These claims are patently false, and the Commission must deny the merger if its decision is to be based on the data and the facts before it.

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I. Introduction

Applicants have presented a case that hinges on three basic claims: First, that the transaction will lead to rural deployment that would have not otherwise occurred; second, that the transaction will create capacity benefits in urban areas that could not be achieved without the merger; and third, that the transaction and subsequent concentration of the market to duopoly levels will not harm competition. The second claim regarding capacity and network performance benefits relies in large part on arguments regarding supposed spectral efficiencies claimed as merger benefits too. But the evidence presented by the Applicants fails to adequately support any of these claims. And as we discuss below, AT&T's own internal communications reveal truths not divulged in their original application and subsequent Opposition: All of AT&T's claimed benefits are illusory or non-merger specific, and the costs of this merger to competition far outweigh these supposed benefits.

When all the evidence is considered, particularly AT&T's internal communications, the true motives for the proposed transaction become clear. **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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INFORMATION] Instead of working to achieve the efficiencies and benefits it attributes incorrectly to the proposed merger, AT&T chose door number #2. It hopes that its massive political power and regulatory influence will bail it out and save it from having to invest and compete fairly for customers.

II. Applicants' Claimed Benefits for Rural America Are Either Non-Existent or Non-Merger Specific. AT&T Plans to Offer 4G HSPA+ Service to 97 Percent of Americans in 2012, and Will Subsequently Match Verizon's Nationwide 4G LTE Deployment Even if the Merger is Not Approved.

At the heart of the Applicant's case for the benefits of the transaction is AT&T's commitment to deploy LTE to 97 percent of the population by 2018, a deployment commitment that AT&T *claims* exceeds its existing plan to make LTE available to 80 percent of Americans.[2] As we discussed in our Petition to Deny, other publicly available evidence and media reports indicate that AT&T's claim is certainly false, and that it did not intend for its LTE deployment to end at 80 percent without the merger. At the very least, market conditions are such that AT&T would need to match Verizon's plans to deploy LTE to approximately 96-98 percent of the population.[3] Indeed, AT&T freely admits that it will deploy "4G" HSPA+ service throughout its entire footprint by the end of 2012, making the subsequent leap to full-LTE coverage a near certainty.[4]

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[2] Opposition at 75. ("AT&T commits that… it will deploy LTE within six years after closing to over 97 percent of Americans—*55 million* more Americans than AT&T's pre-merger plans.").

[3] *See* Petition to Deny of Free Press at 41-42.

[4] Opposition at 81. As we discuss below, this is a critical point to the merger analysis. Even if we assume that AT&T would stop its LTE build at 80 percent (which we don't **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[END HIGHLY CONFIDENTIAL INFORMATION]), the hypothetical measured benefit in this case is the value of LTE vs. HSPA+ in the period after AT&T's HSPA+ build is complete, to consumers who will likely be served by one or more other LTE providers. It is likely this incremental value is *de minimus*, given that real world speed tests indicate the difference in downstream speed between HSPA+ and LTE are not that big, and vary considerably by location. *See e.g.* "Verizon LTE vs T-Mobile

Internal AT&T communications disclosed through the Commission's *Information Request* shed more light on this question. These tens of thousands of pages of candid AT&T planning documents tell a very clear story – one the Commission cannot ignore as it weighs whether AT&T's claimed benefits are merger-specific and cognizable. This information reveals that **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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HSPA+ vs Sprint WiMAX," *Phone Arena*, Feb. 4, 2011 (showing test results where Verzion's LTE service performed *worse* than T-Mobile's HSPA+ service). AT&T's own internal communications suggest **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[END HIGHLY CONFIDENTIAL INFORMATION] *See* ATTF-TMO-00011886. Thus, all of the letters of support from rural parties claiming that this merger will deliver broadband that would not have otherwise existed miss a fundamental point: If you live in an area that supposedly will benefit from AT&T's new LTE promise, then you *already* live in an area that will have access to AT&T's 4G services in the form of HSPA+ by the end of next year; and you'll also be able to purchase Verizon's LTE service by **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** **[END HIGHLY CONFIDENTIAL INFORMATION]**

[5] *See, e.g.*, ATTF-TMO-00005174; ATTF-TMO-00022971.

[6] *See, e.g.*, ATTF-TMO-00022971; ATTF-TMO-00011889; ATTF-TMO-00003389 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[7] *See, e.g.*, ATTF-TMO-00005173 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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This is stunning. AT&T is now promising the country a merger "benefit" of 97 percent LTE deployment by 2018 for a gross cost of $47 billion,[10] when **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[END HIGHLY CONFIDENTIAL INFORMATION] ATTF-TMO-00005174 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[END HIGHLY CONFIDENTIAL INFORMATION] ATTF-TMO-00011889; ATTF-TMO-00003389 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[8] *See e.g.* ATTF-TMO-00011889 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** **[END HIGHLY CONFIDENTIAL INFORMATION]**

[9] *See e.g.* ATTF-TMO-00011888.

[10] Calculated as the $39 billion merger cost, plus the $8B in incremental capital expenditures AT&T claims it will spend to upgrade the combined network to 97 percent LTE coverage. *See* Opposition at 84. As pointed out in our Petition to Deny, this $8 billion incremental capital expenditure actually represents a $10 billion net decline in future capital expenditures by the combined company, as stated by AT&T in an earlier investor presentation. *See* Petition to Deny of Free Press at 33 & n.75.

[END HIGHLY CONFIDENTIAL INFORMATION] This is unimpeachable evidence that AT&T's rural deployment promise could be fulfilled in the absence of the deal, and thus is non-merger specific (not to mention grossly cynical and misleading). It also proves beyond a shadow of a doubt that AT&T clearly is willing to pay a hefty kill-the-competition premium, choosing to acquire one of its main rivals for a cost that far exceeds the likely price tag for upgrades to its own network.[11]

In its Opposition, AT&T claims that this incremental investment, which is **[BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]** the cost of the merger, was not the only factor behind its now-claimed decision to halt the LTE build at 80 percent. It also states that the merger would gives the company "additional AWS spectrum that can be used for LTE in the incremental build area." But it's clear that the incremental build is a non-merger specific benefit, because according to internal documents, **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[13] **[END HIGHLY CONFIDENTIAL INFORMATION]** And while applicants state in their Opposition

[11] *See* Petition to Deny of Free Press at 32-33 (estimating the merger premium from public AT&T statements regarding deferred capital expenditures). *See also* ATTF-TMO-00011888, showing **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[12] *See, e.g.*, ATTF-TMO-00011899.

[13] *See, e.g.*, ATTF-TMO-00011890.

that in **[BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION]** CMAs with about **[BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION]** people,"[14] AT&T currently does not have 700 MHz or AWS spectrum but will obtain AWS spectrum from T-Mobile USA, the internal communications reveal that **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[END HIGHLY CONFIDENTIAL INFORMATION] But even if AT&T did not have such a clear path to the exact same level of LTE deployment absent the merger, it is clear that the social costs of killing off a competitor and pushing the market into tight duopoly far outweigh the non-merger specific benefit of an AT&T-offered LTE service to **[BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]** Americans living in markets where AT&T will already offer 4G HSPA+ service, and where Verizon and possibly other carriers will offer LTE.

Applicants state in their Opposition that "[a]fter considering the *marketing benefits* of expanded LTE deployment, including *competitive considerations*, as well as the fact that AT&T already will deploy HSPA+ 4G service to 97 percent of the population by the end of 2012, AT&T concluded that an 80 percent [LTE] deployment was as much as could be justified on a

[14] Opposition at 23.

[15] *See* ATTF-TMO-00011890. **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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standalone basis."[16] AT&T's plan to deploy HSPA+ to 97 of the population belies the claim that it needs this merger to deploy wireless broadband to that same percentage of the population, unless AT&T wishes now to concede that HSPA+ is not "broadband." But there is no need for the Commission even to consider whether LTE alone suffices as broadband in AT&T's world, because internal documents show **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[18] **[END HIGHLY CONFIDENTIAL INFORMATION]**

This evidence is clear and indisputable. AT&T absolutely does not need this merger to move its entire network from HSPA+ 4G to LTE 4G, and it is deeply cynical, if not downright deceptive for it to make claims that this merger will bring "broadband" to those who would otherwise lack it.[19] AT&T has made a business decision to outlay $39 billion now to purchase T-

[16] Opposition at 80-81 (emphases added).

[17] *See* ATTF-TMO-00020875 **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[18] *See, e.g.*, ATTF-TMO-00022971; ATTF-TMO-00011889; ATTF-TMO-00003389.

[19] *See* Opposition at 76 ("In this time of severe budget constraints, a privately funded initiative to bring advanced mobile broadband wireless services to tens of millions of Americans who need it most —and who might not otherwise receive it—is an especially significant public interest benefit that weighs heavily in favor of the merger."). This statement is at best patently misleading if not false, as by AT&T's own admission in its Opposition, it will bring 4G HSPA+ to these same "tens of millions of Americans" by the end of 2012, and AT&T itself recognizes that Verizon **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**
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Mobile and then another $8 billion over six years to upgrade its network from HSPA+ 4G to 4G LTE by 2018, rather than to spend **[BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]** to fully deploy LTE by **[BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]** AT&T's decision to pursue the merger quite obviously can be understood only in terms of the transaction's anticompetitive and market power-enhancing effects, not any plan to deploy broadband more rapidly and more efficiently in unserved areas.

III. The Capacity Benefits to Urban America Are Vastly Overstated In Part Because AT&T Could Enter Into Network Sharing Arrangements Instead of Spending $39B to Acquire a Competitor.

The other major benefit Applicants claim is additional capacity for mobile broadband services in urban areas. However, as we detail below, this claimed benefit is non-merger specific and highly speculative, given the myriad of other less-costly methods for increasing local capacity, including the completion of AT&T's currently planned HSPA+ 4G build and the deployment of LTE on AT&T's currently underutilized 700 MHz and AWS spectrum. The *Horizontal Merger Guidelines* state that the "Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects."[20] One such alternative is mutually beneficial network sharing arrangements. In its Opposition, AT&T flatly

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Commission evaluates this claim will be a critical test of its commitment to fact-based decision-making. If it makes the critical error of approving this merger, and it does so because of the claimed benefit of bringing "broadband" to those "who might not otherwise receive it," that decision will be based not on facts but AT&T's word games and politics.

[20] *See* Department of Justice and Federal Trade Commission, "Horizontal Merger Guidelines" at 30 (2010) (*Horizontal Merger Guidelines*).

rejects the suggestion that such arrangements would work,[21] but it is clear that the company believes only that such arrangements would not be as beneficial to AT&T as killing off T-Mobile as a competitor. Internal AT&T communications show that **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[END HIGHLY CONFIDENTIAL INFORMATION] it is clear that network sharing is a viable, non-theoretical alternative to merger. It's also clear that many of the reasons AT&T cites for sharing to be non-viable in its Opposition are immaterial, as **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[26] **[END HIGHLY CONFIDENTIAL INFORMATION]**

IV. T-Mobile is Currently a Viable Competitor to AT&T, and Would Become Even More Viable Over the Next Several Years.

In order to assuage antitrust concerns, AT&T argues that it does not view T-Mobile as a viable competitor and claims that it fears competition from much more spectrally constrained and much smaller regional and pre-paid market carriers, such as MetroPCS. But the facts

[21] *See* Opposition at 72.

[22] *See e.g.* ATTF-TMO-00020665; ATTF-TMO-00020658.

[23] *See e.g.* ATTF-TMO-00020468.

[24] *See e.g.* ATTF-TMO-00048648; ATTF-TMO-00048750.

[25] *See e.g.* ATTF-TMO-00058449; ATTF-TMO-00052030; ATTF-TMO-00052031.

[26] *See, e.g.*, ATTF-TMO-00052031.

contradict this assertion, and reveal that T-Mobile could become an even more viable competitor if regulators refuse to bail out AT&T with this transaction and instead let it and other carriers compete fairly in the free market.

First, while AT&T goes to great lengths to dismiss T-Mobile's role as a viable competitor, AT&T's internal communications **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[27] **[END HIGHLY CONFIDENTIAL INFORMATION]** And while AT&T asserts that it has "not responded to any of T-Mobile USA's significant national consumer pricing and promotions in at least two years,"[28] **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[29] **[END HIGHLY CONFIDENTIAL INFORMATION]**

Central to AT&T's case for approval is its assertion that it faces spectrum exhaust in certain markets, and that this merger will remedy that problem. But it is important to remember this potential exhaust may indeed disadvantage AT&T, but only *relative* to other competitors like T-Mobile, Sprint and Verizon. Such is the nature of the free market. If AT&T is temporarily disadvantaged, it is possible that T-Mobile could use its superior HSPA+ network to capture share from AT&T, in turn lowering overall market concentration and spurring AT&T to compete

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[27] *See* ATTF-TMO-00005195.

[28] Opposition at 136.

[29] *See, e.g.*, ATTF-TMO-00022407. **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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harder through accelerated LTE deployments and 2G migration. As AT&T's internal documents reveal, **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[30] **[END HIGHLY CONFIDENTIAL INFORMATION]** Yet, instead of redoubling its efforts and making up for past sub-optimal business decisions by competing fairly in the free market, AT&T is going to the FCC with its hand out, asking the FCC to play the role of central planner and distort the free market.[31] Instead of picking winners and losers, the FCC should step back and allow the forces of the free market work. If the Commission denies this merger and does allow the market to work, we'll see AT&T compete harder and competition in the overall wireless marketplace improve relative to where it stands currently, and certainly relative to the duopoly market that this merger would create if approved.

AT&T also goes to great lengths to paint T-Mobile as fatally disadvantaged because that company's path to LTE is more uncertain than Verizon or AT&T's. In its Opposition AT&T states that T-Mobile **[BEGIN CONFIDENTIAL INFORMATION]**

[32] **[END CONFIDENTIAL INFORMATION]** But as we discuss above, by its own admission, AT&T's own prospects over

[30] *See, e.g.*, ATTF-TMO-00007171.

[31] *See* Opposition at 36-37, where AT&T states that "the Commission's task…is not to assign blame for or second-guess past choices—with the benefit of 20-20 hindsight—but to act in the best interests of consumers going forward by enabling AT&T to address its spectrum and capacity constraints." This is a stunning endorsement of central planning by an organization that has spent so much time extolling the virtues of the free market. The truth is, it most decidedly is *not* the FCC's job to "enable" AT&T's amassing of market power by protecting it from the effects of free market competition. The FCC's job is to promote the public interest, and in this case that means letting the free market work by allowing T-Mobile and other competitors to compete fairly.

[32] *See* Opposition at 40.

the next 3-4 years may be somewhat cloudy in a few markets due to claimed spectrum exhaust issues. Without the merger, AT&T still could – and, to a near certainty, would – work to upgrade and transition its current networks, competing fairly in the market to overcome any such issues. The government should not ride in to rescue AT&T in this deal from any short-term disadvantage AT&T might encounter, and should instead let competitors that planned and invested better benefit from those decisions. In the near term, T-Mobile's position as a provider of a quality HSPA+ 4G network may be more advantageous relative to AT&T, and offset any temporary disadvantage T-Mobile would face from not having the more advanced LTE technology that Verizon will offer.[33] That may be a problem for AT&T, but it is not a problem for the market. Indeed, that is how the market should work, with the Commission working to remove barriers to entry and growth by competitors – not allowing the most dominant providers to acquire those rivals whose competition might cost the dominant firm some market share.

This is an important point, and the Commission's job here is not to ensure AT&T's success, but rather to quantify any *incremental* public or competitive benefits that 4G LTE will have over the next 3-5 years above 4G HSPA+ service. Indeed, while Verizon's acceleration of its LTE deployment will be beneficial to leading-edge innovation and competition (similar to the manner in which T-Mobile's early deployment of HSPA+ was), it is unclear how quickly and at

[33] And again, letting this market dynamic play out is the right thing to do from a pro-free market standpoint. Verizon bought the Nationwide C Block license at auction and invested a higher relative level of capital than AT&T did in its wireless network in the years following. T-Mobile was priced out of the auction, but lead the market in fiber-to-the-tower deployments in order to establish an early lead on HSPA+. Sprint too was priced out of the 700 MHz auction, but has invested in Clearwire and was the first to market with a 4G service. Of these four national competitors, AT&T was the one that decided to reduce capex while heavily promoting a wildly successful and exclusive handset. AT&T has a viable path to regain any perceived marketing disadvantages, but it is choosing instead to ask the government to distort the free market and enable its path to the top through regulatory favoritism in the form of approval for a blatantly anticompetitive merger.

what level consumers will demand the incremental benefits of LTE. Indeed, AT&T notes in its Opposition that after marketing 3G services for 5 years, only **[BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION]** of its total customers subscribed to this higher capacity service.[34] And it is worth noting that the real world, incremental, consumer-facing capacity benefits of 3G data services in comparison to 2G services are far more pronounced than the improvements of LTE over HSPA+. While LTE no doubt offers consumer-facing benefits, and its spectral efficiencies offer more overall network capacity, it is simply misleading for AT&T to suggest T-Mobile's future is one of failure because it will lag in LTE deployment – especially given T-Mobile's opportunities to capture market share as AT&T grapples with its own approach to its claimed spectrum exhaust issues.

V. The Claimed Expanded Output is Non-Merger Specific and Will Not Lead to Higher Levels of Employment Nor Lower Prices.

Despite Applicants' proclaimed support of labor unions, it is clear that this merger will have a net negative impact on jobs, even if it has a temporary positive impact on union jobs.

First, AT&T's claim that its LTE deployment will have "job-creating ripple effects throughout the economy, particularly in rural areas"[35] is highly dubious, given that AT&T itself will already offer 4G HSPA+ service in these areas *alongside* Verizon's 4G LTE service. There is simply no evidence that, nor any theoretical reason to believe that, there will be positive job externalities from the presence of a *second* LTE network in these areas – not to mention that as we illustrated above, AT&T would have deployed LTE to these areas without this merger.

[34] *See* Opposition at 36.

[35] *See* Opposition at 84.

Second, as AT&T openly highlights to investors, this merger will lead to a *net* decline in capital expenditures to the tune of $10 billion over the next 7-8 years.[36] These declining capital expenditures alongside the decommissioning of **[BEGIN CONFIDENTIAL INFORMATION]**

[37] **[END CONFIDENTIAL INFORMATION]** T-Mobile towers will result in an overall lower level of employment relative to what the two applicants would expend without the merger. This must be the case, unless AT&T is prepared to claim that spending $10 billion *less* than it planned to spend previously will somehow result in more jobs. That the combined company's capital outlay will be *lower*, not higher, was conveniently ignored in the AT&T-touted EPI study that simply looked at the impact of AT&T's stated promise of $8 billion in capital expenditures.[38]

Third, despite Applicants' touting of a narrow and misleading "study" by the industry-funded and intellectually inconsistent Phoenix Center,[39] AT&T does have a clear track record of slashing jobs. As AT&T acknowledges, it alone shed over 100,000 jobs during the last decade as it grew its bottom line through mergers.[40] AT&T's defense against this fact is that it lost 40

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[36] *See* AT&T, "AT&T + T-Mobile: A World-Class Platform for the Future of Mobile Broadband," March 21, 2011, slide 35, available at http://mobilizeeverything.com/investors.php. This slide trumpets more than $10 billion in "Avoided purchases and investments" in "Capital and Spectrum" as one of the benefits of the merger to AT&T shareholders.

[37] *See* Opposition at 67.

[38] *See id.* at 85. Following this study's methodology, it is likely that AT&T's promise to its shareholders of $10 billion in reduced capital outlay alone will result in at least 100,000 *fewer* jobs. This is certainly the case considering that if the merger is not approved, AT&T will **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[39] *See* S. Derek Turner, "Telco-Funded Phoenix Center Flip Flops on Net Neutrality," SavetheInternet.com Blog, Oct. 30, 2009.

[40] *See* Opposition at 91-92.

million wired telephone lines over that period. But this is highly misleading, as it fails to note that the combined company added nearly 60 million wireless lines and more than 15 million DSL lines during that time, in addition to the 3.2 million video subscribers, and numerous enterprise and special access lines.[41] In sum, during a time of tremendous net growth in the total number of lines in its empire, AT&T still dramatically reduced what the Opposition casually refers to as the company's "overall headcount"[42] – conveniently obscuring the fact that these weren't cattle, but individuals who depended on those jobs for their livelihoods.

On the alleged benefits for competition and prices, Applicants' case is also particularly weak. They continually point to BEA data claiming a 50 percent inflation-adjusted decline in prices over the last decade, but fail to highlight that this index tracks per minute voice prices. In a market in which voice alone is becoming more competitive (through the availability of non-carrier VoIP alternatives, on wired and wireless networks) and where carriers' operation costs are rapidly declining, this is not a surprising result. Indeed, it's fair to assume if the market were less concentrated that the per minute price would have dropped further.[43] The more appropriate metric to investigate is a consumer's total monthly bill, since carriers sell voice minutes in bundles and have gradually increased the size (and total price) of the entry-level offerings. Here BLS data indicates that consumer total expenditures on cellular voice services have risen steadily

[41] Based on estimates from AT&T's annual 10-K and quarterly 8-K reports.

[42] Opposition at 91.

[43] It's also worth noting that according to the BEA data, the bulk of the declines in per-minute voice pricing came prior to the massive wireless industry consolidation that occurred over the last half-decade. Indeed, during the last five years, even as technology costs plummeted and total network output (in terms of bits carried per tower) expanded sharply, per minute prices held relatively constant despite the increasing popularity of free VoIP alternatives, suggesting the presence of carrier market power.

over the last decade.[44] And with the shift to data connected networks and the recent trend of forced data plans, consumers' bills are on the rise as carriers focus on earning ever-increasing levels of ARPU. AT&T certainly knows this, and could disclose the historical prices of its entry-level packages and most popular offerings. But it does not, as this would undermine its attempts to hide the negative impacts of increased industry consolidation.

Applicants continue to tout the expanded output that supposedly would follow the transaction as a merger-specific benefit that would "create incentives to…lower prices relative to the levels expected in the absence of the transaction."[45] As we show above, this claim of expanded output is non-merger specific and would occur absent the merger. Furthermore, the incentive to lower prices is weak or non-existent in a market that is not effectively competitive. But setting those problems aside for the moment, it is important to parse exactly the claim AT&T is making here. And it is not that the monthly price paid by consumers will fall, but that the quantity-adjusted price will fall because consumers will use more data. This claim is quite different in the consumer welfare analysis than a claim of declining absolute price. But even *that* claim is dubious. AT&T recently eliminated unlimited service offerings, implementing an effective price increase on a per-MB, quantity-adjusted basis, even as it rolled out the faster and more spectrally efficient HSPA+ technology. And contrary to AT&T's claims that increased capacity leads to increased usage, when combined with the introduction of monthly caps we see that **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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[44] *See* "Spending on Cell Phone Services Has Exceeded Spending on Residential Phone Service," Bureau of Labor Statistics, Jan. 14, 2009.

[45] *See* Opposition at 59.

[46] *See, e.g.*, ATTF-TMO-00022563.

[END HIGHLY CONFIDENTIAL INFORMATION] So contrary to AT&T's claims, the extra capacity when offered under a capped plan actually leads to a higher, not lower, marginal use cost.

AT&T is not expected to market an unlimited tier even as it rolls out LTE, which is critical, because all of AT&T's claimed increased usage benefits are negated if users who would otherwise be on an unlimited plan are subjected to usage caps and overages. But the big-picture point here is that overall monthly prices are not expected to decline when a carrier deploys a higher capacity technology, and AT&T makes no claim otherwise.

And finally, even if it were true that the merger would lead to expanded output above what would have existed otherwise (which is not the case), AT&T still would need to seamlessly accomplish the integration of T-Mobile USA in order for this output expansion to have a tangible benefit. But AT&T's internal communications indicate **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

[47] **[END HIGHLY CONFIDENTIAL INFORMATION]**

[47] *See* ATTF-TMO-00002193.

VI. The Relevant Product Market is the National Post-Paid Smartphone Mobile Service Market, But the Competitive Analysis is Largely Unchanged If the Product Market Is Broadened to Include Prepaid Carriers.

As we argued in our Petition to Deny, the relevant product market for which a hypothetical monopoly provider would be able to profitably impose at least a "small but significant and non-transitory increase in price" (SSNIP) is the national post-paid smartphone mobile service market. Unsurprisingly, Applicants argue that voice- and data-only services should be included in the market, as well as those services offered by pre-paid carriers. We disagree, and believe the available data indicates otherwise, and that a properly conducted SSNIP test will confirm this.

First, it is illogical to suggest that smartphone consumers would find data-only services like those offered by Clearwire as a viable substitute for smartphone services, as they lack a mobile voice component. Second, it is also illogical to suggest that a smartphone user would find a voice-only mobile service as a viable substitute to the data-intensive smartphone product.

As to the question of pre- and post-paid services existing in different markets, evidence in the market affirmatively demonstrates that a SSNIP will not result in a critical level of customers substituting post-paid with pre-paid services. As we noted in our Petition to Deny, the prices of the unlimited talk, text and data plans of the post-paid carriers are *already* nearly twice that of the pre-paid carriers,[48] yet post-paid subscriber gains continue to outpace pre-paid gains in absolute terms.[49] Pre-paid products are not merely differentiated by service or product quality claims.[50] Instead, they represent fundamentally distinct products that most post-paid consumers

[48] *See* Petition to Deny of Free Press at 11n.16.

[49] *See id.* n.17.

[50] *See id.* at 12 n.18, citing *United States v. Gillette Co.*, 828 F. Supp. 78, 81 (D.D.C. 1993), where a district court upheld the DOJ's definition of a separate premium pen market. In so holding, the court recognized that "the determination of what constitutes the relevant product

would not likely view as substitutes when faced with small but significant and non-transitory service price increases.

We believe a SSNIP test will confirm this.[51] However, the market shares and competitive potential of the pre-paid carriers is such that their inclusion in the product market will not change the analysis much at all.[52] While MetroPCS and Leap have much larger reaches than all other regional carriers, they lack the ability to act as "mavericks" and offset coordinated effects. This is because these carriers lack a true facilities-based national footprint (and thus rely heavily on the national carriers for roaming), and they simply lack enough spectrum to deploy adequate 4G (either HSPA+ or LTE) services. Indeed, contrary to Applicants assertions that the pre-paid carriers are in the same product market and are viable competitors, **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

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market hinges on a determination of those products to which consumers will turn given reasonable variations in price. Therefore, the definition must exclude those items to which only a limited number of buyers will turn." *Id.* (internal citation and quotation marks omitted).

[51] AT&T states that **[BEGIN CONFIDENTIAL INFORMATION]**

[END CONFIDENTIAL INFORMATION] Opposition at 134. But this is simply a reflection of AT&T seeing a new market develop, and entering that market, while continuing to put much of its focus on the high ARPU, high revenue growth premium post-paid market. *See* Petition to Deny of Free Press at 9 n.9 (quoting AT&T Mobility CEO Ralph de la Vega). We believe a SSNIP test will reflect this market definition.

[52] While AT&T repeatedly highlights the *number* of competitors available to consumers (notably when they attempt to dispute the notion of a post-merger "duopoly" by giving the most rigid possible dictionary definition of the term, Opposition at 94), it is not the *number* of competitors that matter, but the *share* of the market concentrated between the competitors, the prospect for lesser competitors to gain future share from the merged entity, and the prospect for entry. Indeed, AT&T makes this exact point – which contradicts its own focus on the number of competitors – later in the Opposition while arguing for a local geographic market definition: "The Commission has rightly avoided establishing any categorical minimum number of competitors necessary for effective competition. Instead, the Commission analyzes all factors relevant to the competitive analysis of markets, including not only the number of competitors, but also the current and projected shares of those competitors, prospects for new competitive entry, and the extent of merger-generated efficiencies." *See* Opposition at 138 n.224.

[53] **[END HIGHLY CONFIDENTIAL INFORMATION]**

Similarly, because the product market is so concentrated, it makes little difference if the geographic market is defined at the national or CMA-level. As we discussed in our Petition to Deny, if the market is analyzed at the national level including all pre- and post-paid carriers, the HHI would increase from approximately 2,600 to 3,300 as a result of the merger. But if this same analysis is conducted at the CMA level, the average population-weighted HHI would increase **[BEGIN HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]**

[END HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION] Post-merger, the top two firms in each CMA will have an average population-weighted share of **[BEGIN HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]**

[54] **[END HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]** However, because this merger will have substantial market impacts at the national level, it is critical that the

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[53] *See* ATTF-TMO-00011885.

[54] AT&T claims that each local market is populated with a wide variety of carriers with "widely varying" market shares, and that this precludes coordinated effects. *See* Opposition at 138. However, as we noted in our petition, the four national carriers (AT&T, Verizon Wireless, Sprint, and T-Mobile) have a combined market share of greater than 90 percent in CMAs that encompass **[BEGIN HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]** **[END HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]** of the U.S. population. And we also noted that if the merger is permitted, approximately **[BEGIN HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]** **[END HIGHLY CONFIDENTIAL LNP/NRUF INFORMATION]** percent of the U.S. population will live in CMAs where the top two firms – in most cases AT&T and Verizon – would control more than 70 percent of subscribers.

Commission consider those impacts, especially given the substantial evidence that all the major carriers set pricing without regard to local competition.[55]

VII. A Post-Merger AT&T Would Have Substantially Increased Market Power and Unilateral and Coordinated Effects Would Be Highly Likely.

Applicants fail to offer any convincing evidence that the substantial increase in concentration occasioned by the merger won't further enhance AT&T's already considerable market power. AT&T's case for why consummation of the merger would not produce upward pricing pressure consists of two assertions: that the merger would alleviate capacity constraints and lead to expanded output at lower prices; and that T-Mobile's elimination would have no impact since it is currently not a competitor to AT&T. Both of these assertions are without merit.

First, the supposed capacity constraints are non-existent, given that AT&T has yet to deploy service on any of its 700 MHz or AWS spectrum. Other carriers, most notably Verizon, have not claimed any such network constraints – not because they are in a vastly better spectrum position or have fewer hogs on their networks, but because they deployed their spectrum assets in a more timely fashion. AT&T's entire case for network constraints that could only be relieved by this merger is predicated on a static analysis of today's market that ignores the benefits the company will get once it deploys LTE and a portion of its customers begin to migrate off of legacy spectrum. And as we discussed above, there is no reason to believe that the offer of a faster service or the increase of network capacity will lead to lower prices, certainly not in a market that is more concentrated than today's. Indeed, all major carriers have increased capacity by moving from 3G services to 4G services, and none lowered prices. AT&T eliminated

[55] As the DOJ has recognized, "[t]he existence of local markets does not preclude the possibility of competitive effects in a broader geographic area, such as a regional or national area...." *See United States, State of Alabama, State of California, State of Iowa, State of Kansas, State of Minnesota, State of North Dakota, and State of South Dakota v. Verizon Communications Inc. and Alltel Corp.*, Competitive Impact Statement, Oct. 30, 2008.

unlimited pricing as it deployed HSPA+ (in an effort to reduce overall output) and Sprint initially charged a $10 premium above the cost of its 3G offering for use of its 4G service, despite the increased capacity.[56]

And the second prong of AT&T's case against upward pricing pressure – that T-Mobile is not a competitor – is equally as dubious, as we detail above. Central to AT&T's case against unilateral[57] and coordinated effects is its assertion that elimination of T-Mobile won't matter because the remaining carriers can simply "reposition" their offerings in response to any unilateral AT&T action or coordinated action with Verizon.[58] But again, this ignores the historical evidence that shows *existing* coordinated effects despite numerous attempts by Sprint and others to "reposition" its own offerings.[59]

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[56] *See* Sarah Jacobsson, "HTC EVO 4G Arrives June 4 for $200," *PC World*, May 12, 2010 ("EVO 4G users will pay a minimum of $70 per month (with Sprint's 'Everything Data[']] Plan), as well as an additional $10 per month for 4G coverage (dubbed the 'Premium Data Add-on'). The additional $10/month charge will be mandatory for all EVO 4G users, regardless of whether they live in a 4G coverage area or not.").

[57] While AT&T's answer to the unilateral effects arguments focus almost solely on the issue of upward pricing pressure, increased prices are just one among many possible unilateral harms. These harms include relatively reduced capital investment, reduced innovation, higher prices of certain specific services, and removal of certain products from the market. All of which, as we discussed in our Petition to Deny, are likely outcomes of this merger.

[58] Opposition at 135; *id.* at 140 n.229. AT&T's rebuttal against the evidence of coordination on text messaging prices is particularly misleading. AT&T makes the bizarre claim that text messaging prices have actually decreased, because now a $5 text bundle has more texts in it than before, and most of AT&T's customers buy these bundles. But this is highly misleading, as raising the price of an la carte text in a coordinated fashion is a way to force customers into needless bundles as a method of insurance against text-induced bill shock. AT&T simply has no good explanation for why it and Verizon doubled the per-text price of SMS service mere months apart, and offers no reason why instances of such coordinated behavior won't increase following the concentration of nearly 80 percent of the market in the hands of these two companies were the Commission to approve this transaction.

[59] And despite these efforts by Sprint, AT&T has been able to grow share and reduce churn. AT&T's internal communications reveal that **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**

VIII. Applicants Overstate Their Spectrum Efficiency Claims and Could Achieve Many of the Same Benefits Without Merging.

In the preceding sections, we explained that the Opposition fails to make the case for merger-specific and cognizable benefits in terms of rural deployment, increased urban capacity, and other purported consumer benefits of the transaction. There are no economic barriers to accomplishing what the Applicants promise as benefits of the merger; and in fact, AT&T promises *fewer* capital expenditures as a result of the merger, choosing instead to pay a premium for eliminating one of its rivals and increasing AT&T's already considerable market power. Examining Applicants' spectrum claims more closely, however, the story is no different: just as it fails to make an economic case for benefits that would outweigh the transaction's harms, the Opposition utterly fails to make the technical case that this merger is necessary to alleviate spectrum constraints or deploy LTE.

First, the Opposition offers no new defense of the proposed merger's alleged spectrum efficiency benefits nor does it adequately rebut arguments raised in various petitions to deny. Instead, Applicants offer mere hypotheses that on detailed examination present no real evidence of merger-specific benefit, because they are based on assumptions, simplified models (which are often further distorted by extending their assumed outcomes from phone networks to broadband),

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END HIGHLY CONFIDENTIAL INFORMATION] *See* ATTF-TMO-00005897. This information is very important as regulators consider the potential for coordinated effects, given that AT&T eventually announced its increased ETF mere months after Verizon doubled its own early termination fee.

and arbitrary hypothetical examples.[60] In any event, any suggestion that *current* spectrum constraints justify the proposed merger are premature because AT&T has yet to deploy any networks using its 700 MHz and AWS spectrum licenses.[61]

Second, the alleged benefits of the proposed merger are either not significant or do not depend on the merger. Third, both AT&T and T-Mobile have available to them non-merger, lower-cost alternatives that would be equally as effective at improving network capacity. Furthermore, as discussed above, to the extent that AT&T or T-Mobile face greater constraints than their competitors as a result of their own poor business decisions, granting this merger would constitute Commission intervention to reward a competitor – AT&T – and distort competition. Overall, as explained more fully in the remainder of this Reply, the benefits of consolidated spectrum control that AT&T alleges do not offset the demonstrated harms of the merger.

A. The Alleged Spectrum Efficiency Benefits of the Transaction Are Neither Merger-Specific Nor Significant.

The Opposition and its supporting documents propose five different sources for the alleged spectrum benefits of the transaction: cell splitting, transitioning the use of spectrum for newer technologies, removing control channels, channel pooling, and increases in network utilization efficiency.[62] Each of these purported benefits can be readily accomplished without a

[60] For example, one of AT&T's attached declarations is characterized by another of its own declarations as resting on multiple assumptions and "simplified" analysis. *See* Opposition, Reply Declaration of William Hogg, ¶¶ 28-30 (Hogg Reply) (citing multiple assumptions in the Reply Declaration of Dennis W. Carlton, Allan L. Shampine, and Hal S. Sider, and subsequently referring to the Carlton declaration as being based on "simplified peak capacity calculations" with parameters that "do not reflect the full range of real world considerations").

[61] Petition to Deny of Free Press at 61-62; Sprint Petition to Deny at 95-97.

[62] Opposition, Joint Declaration of Jeffrey H. Reed and Nishith D. Tripathi, "Analysis of Network Efficiencies Associated with the Proposed Acquisition By AT&T, Inc. of T-Mobile USA, Inc.," at 6 (Reed-Tripathi White Paper) ("In particular, the integration of the two networks

merger, provide no significant long-term value, and offer only uncertain and likely minor improvements even in the short term.

1. Cell splitting

According to Applicants, the proposed merger would enable substantial rapid cell splitting, allowing AT&T to improve capacity in the merged network by installing new equipment or repurposing T-Mobile's current equipment.[63] Yet, Applicants could achieve these same efficiencies without resorting to a merger. Their argument runs as follows: post-merger, the new "dense cell grid" would offer many advantages, particularly where the companies' networks are currently congested.[64] Applicants also assert that current T-Mobile sites are particularly well placed to alleviate current AT&T congestion through network integration and effective cell splitting.[65] But that dense cell grid is created by installing *new* equipment in new places to reduce load, practices that can already be performed by AT&T and T-Mobile without merging. Nothing prevents AT&T and T-Mobile from adding new cell sites or sharing current cell sites without a merger. In some locations, the equipment of both providers can be operated on the same site, eliminating the need to find a brand new location for installation. In other locations where a site does not have room for both providers' equipment, data roaming agreements can allow both parties to use the equipment, without merging.[66] Even steps allowing T-Mobile to use AT&T's 850 MHz spectrum, which has better propagation characteristics than T-Mobile's higher-

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is expected to increase network capacity and performance through cell splitting, the elimination of redundant control channels, channel pooling, increases in network utilization efficiency, and the shifting of certain spectrum to newer, more spectrally efficient technologies.").

[63] Opposition at 45-50.

[64] *Id.* at 45-46.

[65] *Id.* at 47-48.

[66] *See* Petition to Deny of Free Press at 62.

bandwidth spectrum, could be accomplished without a merger by way of an agreement between the two independent companies to upgrade and share equipment.

The benefits of cell splitting after a merger are also uncertain. The joint network still would be burdened by the combined number of subscribers on both companies' networks. Meaningful improvements in network capacity require the installation of new equipment in new locations, regardless of whether AT&T and T-Mobile are permitted to merge. Although it is obvious that the total number of shared cell sites available to the combined network would be greater than the number currently serving either network alone,[67] this is not the key question. If each network's spectrum holdings and cell sites are strained, then certainly the combination would need more sites than either individual network. Therefore, the key question is whether the combined network would have *enough* additional cell sites to handle the increased demand, and this is an empirical question that Applicants have not clearly answered even with the Opposition's so-called "simplified example"[68] – the purported benefits of which are (once again) not merger-specific, because each company could engage in such cell splits on its own.

2. Transitioning to more efficient technologies

Most of the purported long-term efficiencies of the proposed transaction appear to result from conversion of spectrum currently used for older technologies, such as GSM and UMTS, to newer and more efficient technologies, particularly LTE[69]; but the benefits of aggressive conversion to LTE can be readily achieved at far lower cost without the proposed merger. Applicants claim that other synergies would permit them to free spectrum to redeploy for more

[67] Hogg Reply ¶ 34.
[68] Opposition at 46.
[69] *Id.* at 43.

efficient service.[70] However, both AT&T and T-Mobile can free significant spectrum for conversion without this merger simply by providing incentives for current GSM users to transition to other networks.[71] Applicants cannot deny that AT&T could transition some of its spectrum holdings currently used for older GSM and UMTS technologies to LTE without the merger.[72] Instead, they contend that the transition to LTE can be achieved "more quickly" as a result of the proposed merger,[73] and that the proposed merger will sufficiently increase capacity in AT&T's GSM and UMTS networks while the LTE transition is underway to avoid degrading service to AT&T's customers.[74]

Neither of these goals is *necessary*, however, to achieve the increased efficiency offered by LTE. What's more, the benefits of a more rapid transition and reduced subscriber disruption are limited and speculative because they depend on the other alleged improvements for AT&T's current GSM and UMTS networks, which are in turn challenged by multiple petitioners and inadequately defended in the Opposition. These inadequacies are discussed at greater length below.

3. Benefits to GSM and UMTS networks – removal of control channels, channel pooling, and utilization efficiencies.

Applicants state that, regardless of disagreements among parties concerning LTE efficiency and cell splitting, the other three sources of spectrum efficiency benefits – the removal

[70] *Id.*

[71] *See, e.g.*, Petition to Deny of Free Press at 61.

[72] In fact, AT&T stated as much in filings in the pending Qualcomm proceeding. *See id.* at 62 n.190.

[73] Opposition at 7 ("Such efficiencies will allow the combined company to shift spectrum more quickly to its UMTS and LTE networks….").

[74] Hogg Reply ¶ 25.

of control channels, channel pooling, and utilization efficiencies – surely cannot be realized without the proposed merger.[75]

First, this assertion is debatable, because commercial arrangements can enable the sharing without a merger of all network resources either in whole or in part, including channels of spectrum. In fact, AT&T's only real response to such arguments is to claim that they are too complicated to bother with.[76]

More importantly, however, the value of these benefits is limited and highly speculative. Many of the benefits appear to accrue primarily to GSM networks and particularly to voice services.[77] And all of the benefits appear to be based on hypothesis and hopes, not facts. Even Applicants' own experts describe the benefits as impossible to identify with certainty.[78] The alleged benefits for Applicants' GSM and UMTS networks hinge on speculations, theories, and assumptions. The theoretical benefits of shared GSM networks under certain assumptions translate into additional capacity for UMTS (under additional assumptions), which together with theoretical "utilization efficiencies" (which are questionable) translate to reduced congestion in UMTS, and possibly also more available spectrum for LTE (though at great cost for transitioning existing T-Mobile customers[79]). If all of these things work exactly as hoped, then together,

[75] Opposition at 63-64.

[76] *See* Hogg Reply ¶ 66 (characterizing network sharing as burdened by "many governance and network-planning issues" such as deciding when to upgrade systems).

[77] *See* Sprint Petition to Deny at 113. Applicants respond to Sprint's allegations by noting that GSM networks also offer (extremely slow) EDGE data connectivity, *see* Reed-Tripathi White Paper at 22, and therefore channel pooling offers some non-voice benefits. However, no direct benefits accrue to the far more widely used HSPA data services.

[78] *See* Reed-Tripathi White Paper at 6-8 ("[I]t is impossible analytically to determine the *exact* gains due to the enormous complexities of real-world wireless networks.").

[79] Petition to Deny of Free Press at 59-60.

Applicants assert "the combined network will far exceed the sum of its parts."[80] More likely, however, the exaggerations of the proposed combination far exceed the sum of any real gains.

a. Removing control channels

Applicants argue that partial overlap in AT&T's and T-Mobile's GSM networks – through their PCS spectrum licenses – would allow the combined network to free up at least 4.8 MHz of spectrum through the elimination of redundant "control channels."[81] But this benefit is of limited utility. These control channels are tiny, scattered chunks of 200 KHz of spectrum, scattered throughout the spectrum band used for the GSM network.[82] Repurposing a meaningful amount of spectrum involves both freeing enough control channels to aggregate a usable amount of spectrum, and rearranging the spectrum in use to align all of the freed spectrum into a contiguous block. If the resulting block is large enough in a cell site to add a UMTS carrier, then some small benefit can be achieved, for that cell site. But how often and where all of these factors will align remains to be determined, particularly when (as AT&T acknowledges) a typical UMTS carrier deployment requires 10 MHz of spectrum,[83] not 4.8.

In the long term, this benefit is indeed short-lived. Applicants insist that, although the benefit accrues solely to GSM networks, it is nevertheless not moot because it frees spectrum for use in newer technologies.[84] However, the ultimate goal of all network providers is and must be to repurpose *all* of the spectrum now used by GSM services for other uses, and to eliminate GSM networks entirely. With this long-term goal in mind, the short-term goal of freeing a portion of

[80] Opposition at 43.
[81] *Id.* at 50.
[82] Reed-Tripathi White Paper at 13-16.
[83] Opposition at 54.
[84] *Id.* at 50.

GSM spectrum will, indeed, be just that – short-term – and will not generate any additional long-term capacity.[85]

b. Channel pooling and network utilization efficiencies

The benefits of channel pooling and network utilization efficiencies are highly speculative. They appear to be based on theoretical models that do not seem likely to match real-world network load conditions. For example, the benefits of both channel pooling and network utilization efficiencies are based on load balancing theory, under which any practical benefits would vary widely depending on the load on the two networks at any given time. When two networks are combined, significant load balancing benefits from the combination would be achieved only if one network were overloaded and the other lightly loaded at a given time. Consequently, if both networks are frequently heavily loaded, or are heavily loaded at the same times, it stands to reason that the benefits of the combination would be greatly limited.[86]

Moreover, Applicants' analysis relies heavily on theoretical models developed for assessing load on phone networks. Applicants specifically assert that two combined networks can "accommodate more subscribers with the same probability of blocking."[87] This discussion of "blocking" appears to be an odd way to characterize greater efficiency in mobile broadband networks – but it is necessary because Applicants' assertions rely heavily on the benefits of load

[85] These GSM control channels will be eliminated anyway when both companies repurpose the spectrum used by their GSM services. Therefore, the total spectrum usable for other services will be the same with or without the merger, contrary to Applicants' arguments. *See id.* at 50 ("[T]he combined company's ability to eliminate redundant control channels is another way in which the transaction will give it substantially more capacity than the sum of the capacities of the standalone companies.").

[86] *See* Petition to Deny of Free Press at 55-56.

[87] Opposition at 52.

balancing in phone networks.[88] Applicants do not attempt to extend these theories to broadband networks, or apply them to the specific networks of AT&T and T-Mobile, much less measure the actual benefits under real world scenarios. Instead, much of the theoretical analysis used by Applicants to illustrate the alleged utilization benefits is based on phone networks, and the reduced call blocking of a combined network under heavy load.[89]

But data services use capacity in very different ways than voice. Even a model of voice traffic based on typical real-world usage patterns, rather than a random distribution, would not support allegations of benefits of load balancing in data networks, because the network loads would be very different.

Unfortunately, these outdated, theoretical, and highly speculative models represent the high-water market of Applicants' analysis. What remains is a hodgepodge of idealistic assumptions and hypothetical examples otherwise used to defend the alleged efficiencies. For example, Applicants reintroduce the "ticket agent" analogy, creating unrealistic scenarios in which one queue (or network) is lightly loaded, and the other is heavily loaded[90] – the ideal scenario for load balancing, but one unlikely to occur often in practice. The also make convenient assumptions about network load,[91] positing one network that might be 80% loaded

[88] *See* Reed-Tripathi White Paper at 18, 30 ("Research (and experience with commercial networks) indicates that there could be more than a 10% gain in voice capacity due to inter-carrier load balancing in the case of 2 carrier frequencies."). The cited source for this conclusion is a paper on load balancing in old CDMA networks, dated 2001. *Id.* at 37 (reference to Tripathi & Sharma IEEE paper).

[89] *See id.* at 17-20 (characterizing the Erlang capacity of a cell in terms of the number of calls that can be completed and the probability that a call will be blocked – all concepts relevant solely to a mobile phone network, not a data network).

[90] Opposition at 51. This metaphor has already been debunked. *E.g.* Petition to Deny of Free Press at 55 (noting the absurdity of supposed efficiencies from channel pooling if Applicants' claims regarding their over-burdened GSM networks are given any credence at all).

[91] *See, e.g.*, Reed-Tripathi White Paper at 28-30 (analyzing an arbitrarily chosen example of two heavy network loads).

while the other is 10% loaded. Such hypotheticals are trotted out again,[92] as they were in the original application materials.[93] Yet, Applicants fail to address the more likely scenario raised in petitions to deny, in which the total average load of the two networks is far greater than what one of the two could handle alone while the merged entity repurposes some spectrum currently in use.[94]

Overall, although there are theoretical benefits from channel pooling and network utilization efficiencies, the Opposition does not – and likely cannot – close the significant gap between that theory and any practical benefits for AT&T's and T-Mobile's mobile broadband networks as a result of this merger.

B. AT&T and T-Mobile Have Many Options to Improve Their Respective Networks Without a Merger.

AT&T and T-Mobile both could improve their networks readily without this merger. AT&T, in particular, has at least five options for doing so, including adding cell sites; deploying unused spectrum; transitioning current users from older to newer technologies; entering into data roaming agreements to improve coverage; and buying additional spectrum in subsequent auctions. AT&T likely can pursue any and all of these options at lower cost than the $39 billion purchase price of T-Mobile, as any of these routes might cost a few billion dollars each at maximum. Unfortunately, Applicants' filing appears contemptuous of these options.[95] Merger opponents do not claim that AT&T and T-Mobile engineers are unaware of the non-merger related possibilities for network investment. Rather, AT&T and T-Mobile may be *actively choosing* not to take the proper engineering steps to alleviate congestion, because doing so would

[92] *Id.* at 25, fig. 6.1.
[93] Application, Hogg Declaration, ¶ 55.
[94] Petition to Deny of Free Press at 57.
[95] *See* Opposition at 63-64.

involve capital investment that is not required in the insufficiently competitive mobile broadband market. Frankly, Applicants appear naïve when they assert, "If AT&T could have eliminated capacity constraints on its network using the alternatives cited by merger opponents, it would have done so."[96]

In fact, if doing so would substantially lessen AT&T's profit margins, AT&T would almost certainly have chosen *not* to invest in such options. AT&T's poor network performance and plummeting customer satisfaction ratings, during a time when it managed to retain share based on its iPhone exclusivity and other factors, bear out this hypothesis.[97] But now that AT&T may face more consequences of its poor decisions and under-investment, it is willing to pony up $39 billion to eliminate a rival and buy that rival's customers rather than competing for their business. The Commission must not confuse AT&T's business decisions with engineering constraints. Both AT&T and T-Mobile can take steps to improve their networks, without Commission approval of the proposed merger.

1. Adding cell sites

Both AT&T and T-Mobile can address the alleged capacity constraints in their current networks by adding new cell sites. Sprint has estimated that AT&T could establish 30,000 new cell sites – more than 60% greater than the total number of cell sites operated by T-Mobile – for a fraction of the cost of this merger.[98] Adding cell sites promotes efficient use of spectrum and significantly increases network capacity.

[96] *Id.* at 63.

[97] *See* Petition to Deny of Free Press at 65-66; *see also* Joint Petition to Deny of Media Access Project *et al.* at 34-35 & n.97.

[98] Sprint Petition to Deny at 108.

Applicants suggest that the only way AT&T can add a cell site without acquiring T-Mobile is by starting from scratch.[99] But this misses the point. If AT&T has the opportunity to accelerate cell site additions by acquiring T-Mobile, then AT&T can enter into separate agreements with T-Mobile or the companies from which T-Mobile leases cell site space in order to achieve the same accelerations by effectively adding those same cell sites. At cell sites where AT&T would not install any new equipment post-merger, but would instead integrate the equipment that T-Mobile has already installed, AT&T customers could gain access to that site and equipment today through a data roaming agreement, without necessitating all the harms that the merger transaction would engender.

Ultimately, Applicants' most defensible argument for the merger is that AT&T could add new cell sites faster if allowed to acquire T-Mobile.[100] This is likely true. However, a slight increase in speed is a far cry from attributing to the proposed merger the entire benefit of new cell sites, and such misattribution is the clear (and misleading) implication of most of Applicants' arguments.

2. Building out unused spectrum

AT&T can achieve significant improvements in its network by deploying its unused 700 MHz and AWS spectrum.[101] As Applicants note, AT&T is in the process of doing so, and soon will have service available in many markets.[102] However, given that this new service is not currently available, AT&T cannot yet improve congestion in its GSM and UMTS networks by transitioning current and new users to this spectrum. The faster these services are deployed, the

[99] *See* Opposition at 65-67; Hogg Reply ¶¶ 57-61.

[100] *See* Hogg Reply ¶ 55 (referring to a "streamlined process" to integrate T-Mobile sites into AT&T's network, versus "difficulties and time" to add new sites without a merger).

[101] Petition to Deny of Free Press at 61-62.

[102] Opposition at 28.

faster AT&T's users can begin switching, and the more quickly AT&T's alleged capacity constraints in GSM and UMTS can be alleviated.

Additionally, in the short term, AT&T could split up its unused spectrum, deploying its AWS spectrum for HSPA+ service in those markets where its UMTS networks are most severely congested (or even nationwide) but leaving its 700 MHz spectrum available for accelerated buildout of LTE. Given that T-Mobile already uses AWS spectrum for HSPA+, many current T-Mobile handsets likely could use the new AT&T spectrum as well (pursuant to sharing and roaming agreements rather than a merger), and the claimed capacity constraints of both carriers could be rapidly reduced without limiting AT&T's ability to deploy LTE on its 700 MHz spectrum. Applicants are entirely wrong in stating that these two solutions are irreconcilable.[103] AT&T has chosen to deploy all of its AWS and 700 MHz holdings together; however, this clearly is not the only possible option. Dividing the holdings could allow part to be used to alleviate UMTS congestion, and part for LTE deployment.

3. Transitioning users to newer technical standards

Both AT&T and T-Mobile can realize substantial benefits by creating incentives for their users to transition to newer, more spectrally efficient technologies. In AT&T's case, the benefits of an aggressive LTE transition would be significant.[104] For T-Mobile, continued development of HSPA+, repurposing of spectrum currently used for GSM to UMTS, and other actions could produce significant returns.[105]

Applicants claim that repurposing AT&T's current cellular and PCS spectrum for use in more spectrally efficient networks, including its LTE network, would be a very difficult process

[103] *Id.* at 7-8.

[104] *See* Sprint Petition to Deny at 101 (noting that LTE is about 860 percent more efficient than GSM).

[105] Petition to Deny of Free Press at 62-63.

and would take years.[106] Applicants insist that the proposed merger is necessary to perform such a transition "without degrading service for GSM and UMTS subscribers."[107] But the challenges are not as grave as Applicants allege. For example, Applicants imply that AT&T's only option to repurpose some spectrum from GSM is to disable GSM service entirely in a geographic region.[108] In reality, after transitioning *some* of its customers away from GSM to UMTS or LTE, AT&T can reduce the amount of spectrum allocated to GSM while still leaving enough for the reduced number of users, thereby freeing some spectrum to be repurposed for more efficient uses. Applicants offer a "simple example" in which each of the two merging networks is only using 10 MHz of spectrum for GSM, all of which would need to be freed to clear enough for a single UMTS carrier.[109] But in another and far more realistic "simple example" in which AT&T's network is using far more than 10 MHz of spectrum for GSM, transitioning some GSM customers to other networks could allow AT&T to *reduce* its GSM allocation by 10 MHz to support a new UMTS carrier, without needing to eliminate GSM service entirely.

Despite the alleged challenges of transitioning AT&T's users, Applicants appear to contemplate transitioning *T-Mobile* users to achieve their proposed efficiency gains.[110] Without transitioning T-Mobile users, no utilization efficiencies for UMTS can be achieved, as AT&T and T-Mobile operate incompatible UMTS networks.[111] Additionally, without transitioning

[106] Opposition at 32-33.

[107] Hogg Reply ¶ 17.

[108] Opposition at 35; Hogg Reply ¶ 23 ("[E]ven if AT&T could completely transition all of its customers in a particular market from GSM to UMTS…AT&T could not turn down its GSM network in that market because the rest of AT&T's GSM customer base will need to use that network when they travel to the 'turned-down' area.").

[109] Opposition at 54.

[110] *See id.* at 81 (characterizing the ability to use T-Mobile's occupied AWS for LTE as a "key benefit" of the proposed merger, even though such usage would require transitioning all of T-Mobile's current HSPA+ subscribers).

[111] Petition to Deny of Free Press at 57-58.

current T-Mobile users, AT&T cannot clear and repurpose T-Mobile's AWS spectrum to expand the reach of its LTE network – an alleged "key benefit" of this transaction.[112] Clearly, AT&T is less concerned about the challenges of transitioning T-Mobile's current customers than its own current customers. Yet, Applicants also misleadingly assert that "[T-Mobile] customers will not have to make any changes to their T-Mobile USA services or devices upon the close of this transaction."[113] This statement is true only as of the close of the transaction, however, as realizing its supposed benefits will require forcing every T-Mobile user to change services and devices – likely being forced in the bargain to pay more for AT&T rate plans when the T-Mobile-specific plans and services are discontinued.[114]

Perhaps Applicants will assert that T-Mobile users are easier to move simply because there are fewer of them.[115] If so, this is not a defensible argument, because T-Mobile's users have no less right to be saved from disruption than AT&T users. More importantly, though, the fault for having too many subscribers to move lies with AT&T for not deploying LTE more rapidly. Earlier LTE deployment would have reduced the number of new UMTS subscribers and allowed some to transition over time, reducing the number of subscribers that need to be transitioned with extra incentives all at once to unused spectrum. Instead, AT&T has aggressively added more HSPA+ users, and signed many of them to lengthy contracts backed by

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[112] Opposition at 81.

[113] *Id.* at 62. In a footnote attached to this text, Applicants concede this fact, but dismiss it as happening only "over time" and "in certain markets." *Id.* at 62 n.70.

[114] In fact, it may well be this distinction that makes the cost of transition incentives worthwhile for Applicants as a short-term business calculation. Whereas AT&T users presumably would receive transition incentives for free, T-Mobile users would pay more for their monthly service after a transition, possibly outweighing the up-front cost of the incentives.

[115] Hogg Reply ¶ 20 ("*With this many subscribers to transition*, it simply will take a significant number of years to transition the customers to UMTS or LTE, regardless of how aggressive AT&T is in promoting that migration.") (emphasis added).

early termination fees, locking millions more subscribers into two-year UMTS windows, and increasing the difficulty of transitioning to LTE.

Ultimately, however, as illustrated above in this Reply, Applicants have already contradicted the alleged difficulties of repurposing spectrum in their current network for more efficient purposes by stating that such a transition is possible.[116] As a transition to LTE is readily possible without the proposed merger, the transaction's purported advantages are not derived from engineering efficiencies, but rather from a business judgment that the merger will help the company "absorb the capital investment and lower returns associated with building out to over 97 percent of the population."[117] As we have shown, AT&T apparently has no trouble justifying these reduced returns if it can take out a rival and increase its own market power – even if it must pay a large premium to do so.

4. Data roaming

AT&T and T-Mobile can expand their network coverage and increase their effective capacity through the judicious use of data roaming.[118] Applicants are critical of the benefits of data roaming[119] but their supposed competitors rely on it heavily for coverage.[120] In practice, data roaming on other companies' LTE networks (if coupled with Commission action to promote interoperability) could help AT&T expand its coverage area significantly, in particular by

[116] *See* Petition to Deny of Free Press at 62 (referencing statements made by AT&T, and specifically the Rinne Declaration, in the context of its application to acquire Qualcomm spectrum).

[117] Hogg Reply ¶¶ 45-47.

[118] Petition to Deny of Free Press at 62.

[119] Opposition at 72.

[120] *See* Petition to Deny of Free Press at 62 (citing the six places in the original joint application where the data roaming agreements of other carriers are cited positively to show their competitiveness).

allowing the company to access the nationwide LTE service Verizon Wireless is currently deploying.[121]

5. Buying more spectrum

Both AT&T and T-Mobile have the option of expanding their network capacity by purchasing additional spectrum licenses as they become available. In fact, in a number of other pending transactions, AT&T proposes to buy regional 700 MHz licenses to complement its current holdings.[122] The Commission's National Broadband Plan established an objective of making 500 MHz of additional spectrum available for mobile broadband use.[123] In the Commission's plan, as much as 120 MHz of spectrum would come from reallocation in the current TV bands.[124] Whatever the near term results for that spectrum, it is a certainty that the Commission will conduct additional auctions in the next several years. AT&T and T-Mobile can bid to acquire more spectrum, and thus more potential capacity, in any of these forthcoming

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[121] *Id.*

[122] *See* Joint Motion to Consolidate of Cincinnati Bell Wireless, LLC, MetroPCS Communications, Inc., NTELOS, Rural Cellular Association, Rural Telecommunications Group, and Sprint Nextel Corporation, *Applications of AT&T Inc. and Deutsche Telekom AG for Consent to Assign or Transfer Control of Licenses and Authorizations, Application for Assignment of Lower 700 MHz Band Licenses from Qualcomm Incorporated to AT&T Mobility Spectrum LLC, Applications for Assignment of Licenses from Whidbey Telephone Company to AT&T Mobility Spectrum LLC, Application for Assignment of License from 700 MHz, LLC to AT&T Mobility Spectrum LLC, Application for Assignment of License from Knology of Kansas, Inc. to AT&T Mobility Spectrum LLC, Application for Transfer of Control of Redwood Wireless Corp. to AT&T Inc., Application for Assignment of License from Windstream Lakedale, Inc. to AT&T Mobility Spectrum LLC, Application for Assignment of Licenses from Windstream Iowa Communications, Inc. to AT&T Mobility Spectrum LLC, Application for Assignment of License from Maxima International, LLC to AT&T Mobility Spectrum LLC, Application for Assignment of Licenses from D&E Investments, Inc. to New Cingular Wireless PCS, LLC*, WT Docket Nos. 11-65, 11-18 (June 9, 2011).

[123] Federal Communications Commission, Connecting America: The National Broadband Plan, at 75 (2010), http://download.broadband.gov/plan/national-broadband-plan.pdf.

[124] *Id.* at 76.

auctions. In fact, they would have more reason to bid if this merger were denied, but less incentive to participate in and contribute to a successful auction if this deal were to be approved.

IX. Approving The Proposed Merger Would Unfairly Reward AT&T and T-Mobile While Punishing Their Competitors.

Even if the Commission assumes the alleged spectrum benefits of the proposed merger to be true – contrary to the wealth of opposing evidence – the Commission still must not approve this merger. AT&T and T-Mobile are not entitled to merge; instead, under the Commission's rules, they must show that a merger would benefit the public interest. Such a showing is impossible, because approving this merger would harm competition while rewarding two competitors – AT&T and T-Mobile – for their own mistakes. As discussed in greater detail above, Applicants in this merger are effectively asking for a government bail-out for AT&T. As Applicants themselves conceded, the "Commission's statutory responsibility is to protect competition, not competitors."[125]

Having discussed earlier in this Reply the breathtaking nature of AT&T's anti-free market contentions, we pause here only to emphasize that this merger would create one company with massive spectrum holdings far in excess of its competitors.[126] Applicants assert that "the combined company's spectrum holdings will fall far short of levels that could support any reasonable concern about spectrum aggregation,"[127] but bases this statement on its belief that the Commission should greatly expand the contours of its current spectrum screen, in part by adding spectrum bands that have not yet been made available for mobile broadband use.[128] With respect to the current spectrum screen, Applicants allege that on average the combined company would

[125] Opposition at 98-99, 181.
[126] Petition to Deny of Free Press at 47-50.
[127] Opposition at 185.
[128] *Id.* at 186.

hold 134 MHz of spectrum, which is less than one third of the 424.5 MHz that AT&T calculates to be the total available for mobile broadband.[129] But that estimate explicitly excludes in the numerator the Qualcomm spectrum as well as other 700 MHz licenses that AT&T also has sought permission to acquire. Together, if all of these transactions were to be approved, the combined company would hold on average well over one third of all spectrum currently considered by the Commission to be suitable for mobile broadband deployment.[130] And that's just the average. In many individual markets, the combined company would hold far more – as much as 200 MHz or more, as Applicants do not deny.[131]

Applicants attempt to defuse these arguments by insisting that the Commission should not care how much spectrum a company has, but instead should ask "whether the amount of spectrum a provider holds in a particular area is sufficient to handle bandwidth demands generated by its subscribers in that area."[132] This is incorrect, and such a self-serving formula would sound the death knell for wireless competition policy. The most important question facing the Commission is whether allowing this company to acquire massively more spectrum serves the public interest. Here, given that AT&T in particular already has massive spectrum holdings and that the companies' need for more spectrum arises from their own mistakes, the answer to that question must be "no."

These companies have both made mistakes. Both companies had opportunities in 2008 to purchase more spectrum. And yet both companies today still have options at their disposal to

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[129] *Id.* at 188.

[130] *See* Petition to Deny of Free Press at 47-50.

[131] *See id.* Applicants disregard these demonstrations, on the grounds that they are slightly overinclusive in counting the debated WCS spectrum licenses. *See* Opposition at 188. However, even without counting AT&T's WCS spectrum, AT&T would have nearly 200 MHz of spectrum in many areas throughout the country, and more than 200 MHz in some.

[132] Opposition at 17.

improve their network capacity and increase their geographic coverage, options which they slow-roll or choose not to employ. AT&T has a demonstrated history of underinvestment in its network – and contrary to Applicants' claims,[133] this history is well documented.[134] At the same time, there can be no doubt that AT&T would have experienced fewer capacity problems with its network if it had not enjoyed an exclusive deal for the iPhone,[135] regardless of any other alleged benefits of the deal.[136]

Meanwhile, according to Applicants, competing carriers do not face the same constraints as AT&T and T-Mobile. Applicants repeatedly assert that the constraints facing AT&T and T-Mobile are unique, and that their competitors are well positioned to flourish.[137] In their original application, Applicants reference positive statements from Verizon Wireless, Sprint, Leap, and MetroPCS indicating that all four companies have comfortable network capacity for the immediate future.[138] Even if the alleged benefits of this merger were true, Commission approval would constitute a handout to the worst industry performers, at the expense of competition and more successful providers.

X. Conclusion

This merger's concentration of so much market power in the hands of two legacy Bell monopolists would reduce the forces of competition, reduce innovation and investment, lead to

[133] *Id.* at 37 ("[T]he claim that AT&T has underinvested in its network is factually untenable.").

[134] *See, e.g.*, Petition to Deny of Free Press at 69-70; Sprint Petition to Deny at 85-87.

[135] Petition to Deny of Free Press at 66.

[136] Opposition at 38-39 (praising the "unqualified boon" of the exclusive deal, without denying that it contributed substantially to AT&T's network problems).

[137] *See, e.g.*, *id.* at 19, 22, 180 (stating that "both AT&T and T-Mobile USA confront growing spectrum and capacity constraints," that "other carriers have publicly stated, even since this transaction was announced, that they do not face short-term capacity constraints," and that "AT&T faces uniquely serious and urgent capacity constraints").

[138] Application at 26 n.36.

higher effective prices, and kill tens of thousands of jobs. The prospects for competitive entry or competitive responses by remaining carriers are non-existent, and the claimed benefits are speculative and non-merger specific. There is simply no good reason, from either an antitrust or public interest perspective, to approve this duopoly-forming transaction.

Respectfully submitted,

_____/s/_____

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