ATTACHMENT A

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

In the Matter of	)	
	)	
Special Access Rates for Price Caps	)	
Local Exchange Carriers	)	WC Docket No. 05-25
AT&T Corp. Petition for Rulemaking to Reform	)	
Regulation of Incumbent Local Exchange Carrier	)	RM No.10593
Rates for Interstate Special Access Services	)	

DECLARATION OF

LEE L. SELWYN

on behalf of the

AD HOC TELECOMMUNICATIONS USERS COMMITTEE

January 19, 2010

DECLARATION OF LEE L. SELWYN

Introduction

I, Lee L. Selwyn, of lawful age, declare as follows:

1. My name is Lee L. Selwyn; my business address is One Washington Mall, 15th Floor, Boston, Massachusetts 02108. I am President of Economics and Technology, Inc., a research and consulting firm specializing in telecommunications economics, regulation and public policy. My Statement of Qualifications is annexed hereto as Attachment 1 and is made a part hereof. I have previously submitted expert declarations before this Commission in a number of proceedings.

2. In analyzing competitive conditions in the special access market it is important to recognize that while the geographic market for special access services is appropriately described as the route connecting the two points that a prospective purchaser seeks to link (i.e., building-by-building) adherence to that definition alone ignores the fundamental purpose of telecommunications services – which is to provide connectivity between and among *all* of the locations at which the customer has business interests. As the discussion that follows will illustrate, in telecommunications, a providers overall market power is influenced not just by the conditions in an individual geographic market – but by the total number of specific 'geographic markets' (buildings) to which it connects. In the case of the ILEC – the only provider that is in the position of being the sole

service provider in a large number of individual geographic markets – this particular characteristic of telecommunications markets confers significant market power.

3. Telecommunications differs fundamentally from other types of services and commodities because its purpose is to provide connectivity among multiple locations (*i.e.,* a network). With other distribution services such as water, natural gas, or electricity, a customer is only concerned about getting the service at a particular location; the fact that the same utility also serves other nearby or even distant locations is of no real importance from the customer's perspective. But in the case of telecom, the value of the service arises from its ability to connect to other locations. If a customer needs facilities at twenty locations and the CLEC has facilities at only four of them, it will not be able to compete for that customer's business even at those four locations unless it can utilize the ILEC's network to serve the remaining sixteen locations. Thus, the more extensive a carrier's network, the greater the likelihood that the carrier will, in fact, have facilities available at both endpoints of any point-to-point connection that is requested by a prospective customer.

4. Moreover, as shown in the diagrams in Figure 1 below, the number of potential point-to-point connections that can be created on a network increases exponentially with the number of individual "nodes" on the network. For example, only one possible point-to-point connection can be created on a network serving only two nodes (A-B). A network with three nodes can support three different

point-to-point connections (A-B, A-C and B-C); one with four nodes can support six different point-to-point connections (A-B, A-C, A-D, B-C, B-D and C-D), and so on. This relationship between the number of point-to-point connections (C) and the number of locations served by the network (n) can be stated as:

$$C = n(n-1) / 2$$

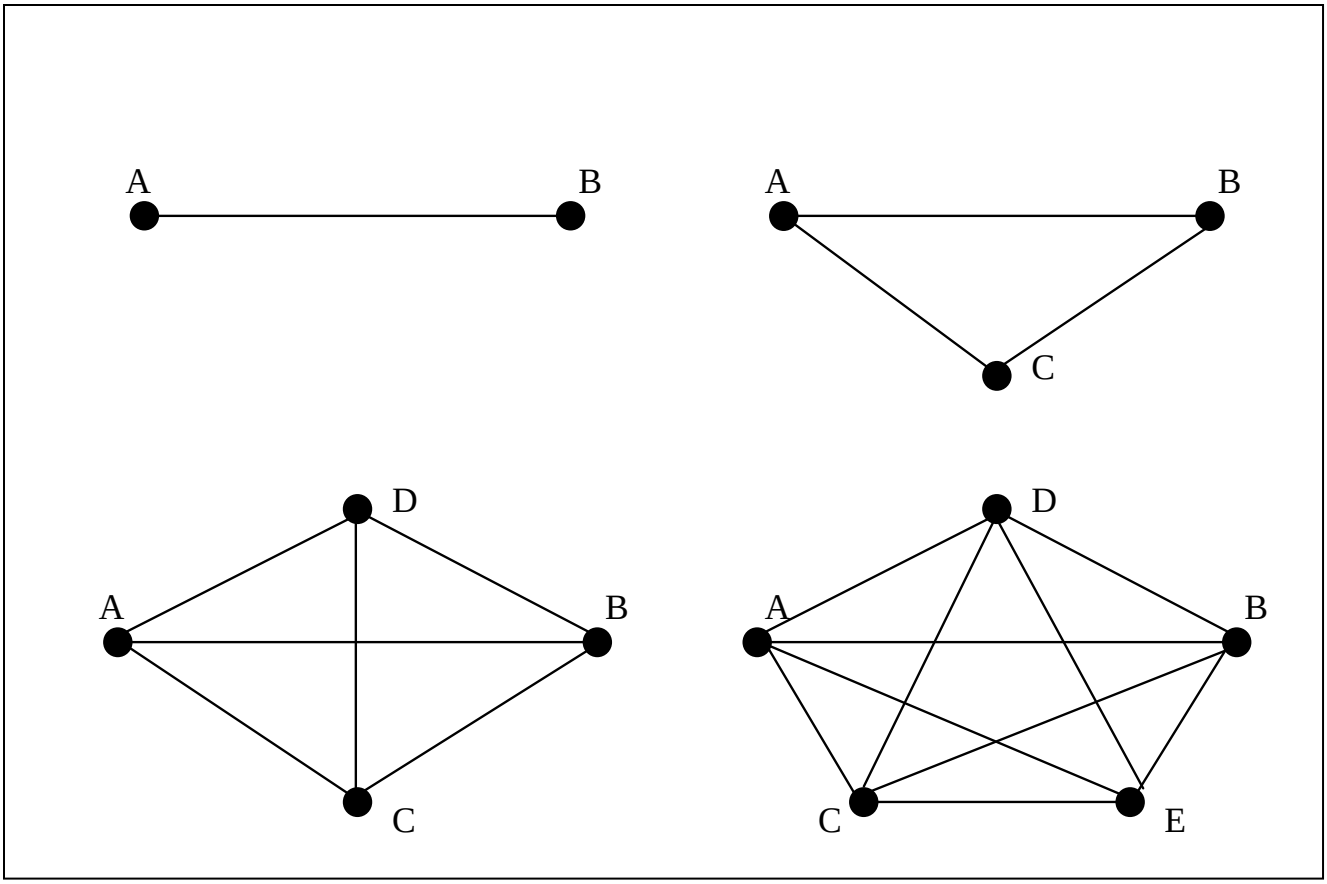

Figure 1. The number of potential point-to-point connections that can be created on a network increases exponentially with the number of individual "nodes" on the network.

5. Thus, the physical presence of a competing carrier in a given building presents a competitive challenge to the incumbent only to the extent that the entrant is able to provide customers in that building with the connectivity they

require between that building and other sites. Incumbent carriers with ubiquitous networks can almost always provide the required connectivity precisely because they serve virtually every building within their overall footprint. Where a carrier owns facilities to only a small fraction of the potential locations at which such connectivity might be required, it can compete with the ubiquitous incumbent only to the extent that it can obtain access to those locations where it does not have its own facilities deployed. The table below illustrates the importance of network extensiveness to competitive viability in the absence of assured access to wholesale facilities of the incumbent:

Table 1

Network Externalities Grow Exponentially as the Number of On-Net Nodes Increases

Number of On-net buildings (n)	Possible Point-to-Point Connections (n(n–1)/2
2	1
3	2
4	6
5	10
10	45
100	4,950
1,000	499,500
10,000	49,995,000

6. This point is frequently overlooked in the analysis of network-based industries. To illustrate the point, suppose that we are analyzing the market for coffee shops, such as Starbucks. Each individual shop serves a limited geographic market defined, for example, by how far a person will walk in order to get a cup of coffee. But as to the specific shop that serves each customer's

relevant geographic market, from the customer's perspective the number and locations of other shops is largely unimportant. By contrast, in order for the presence of a CLEC in a particular building to matter to potential customers in that building, the CLEC must also have a presence in (or be capable of providing connectivity to) the other locations to which that customer requires connectivity.

7. These "network externalities" are a key source of market power and, in fact, are often created by companies with multiple service locations in order to increase their market power. Loyalty programs (e.g., airline mileage programs) are a good example, because they reward customers for staying within the same carrier across a large geographic area, such as the whole country. Pharmacy chains that provide computer networks enabling a customer to refill a prescription at any of their locations are another good example. In each of these cases, the more locations that an airline serves or the more stores the pharmacy chain operates, the more valuable its loyalty marketing program becomes.

8. In the case of telecommunications, these network externalities make the incumbent's wholesale services "essential facilities" from a new entrant's standpoint. In order for a new entrant to compete with the incumbent, it must be capable of offering comparable connectivity. Thus, to whatever extent a new entrant's facilities-based network has less coverage than the incumbent's ubiquitous network, that portion of the incumbent's network that is not redundant of the entrant's network is an essential facility that, by virtue of the incumbent's control of that facility, would provide the incumbent "with the power to lessen or

prevent competition in a relevant downstream market," *i.e.,* the retail market being served by the entrant.

The foregoing statements are true and correct to the best of my knowledge, information and belief.

Lee L. Selwyn