

**BEFORE THE WASHINGTON UTILITIES  
AND TRANSPORTATION COMMISSION**

**AT&T COMMUNICATIONS OF THE )**  
**PACIFIC NORTHWEST, INC., )** **Docket No. UT-003120**  
)  
**Complainant, )**  
**v. )**  
)  
**QWEST CORPORATION, )**  
)  
**Respondent. )**  
)

**TESTIMONY OF**  
**DANIEL C. KEATING, III**  
**ON BEHALF OF**  
**AT&T COMMUNICATIONS**  
**OF THE PACIFIC NORTHWEST, INC.**

**MARCH 19, 2001**

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS**

2 A. Daniel C. Keating, III, P.O. Box 752, Bedminster, NJ 07921.

3 **Q. WHAT IS YOUR POSITION AT AT&T?**

4 A.. I am a District Manager-Network Implementation and Project Management with  
5 AT&T Corp. focusing on the area of Multiple Dwelling Unit infrastructure.

6 **Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

7 A. I received a Bachelor of Science degree from Rensselaer Polytechnic Institute in  
8 1983. Following summer employment as a lineman for Southern New England  
9 Telephone (SNET), I was hired by SNET's outside plant Construction Methods  
10 Organization in 1983. In that capacity, I was responsible for outside plant product  
11 approvals, vendor selection, and the development of standard practices and  
12 procedures for the construction of SNET's outside plant network. In 1984, I  
13 became SNET's Outside Plant Planning Engineer for the Manchester, CT area. In  
14 1985, I joined AT&T as an Account Executive – Outside Plant Products. From  
15 there I became Sales Staff Manager – Transmission and Outside Plant Products  
16 for the NYNEX, Bell Atlantic, BellSouth, SNET, and Ameritech accounts, until  
17 1991 when I assumed the position of Account Executive – Transmission and  
18 Outside Plant Products. In 1994, I assumed the position of Offer Manager –  
19 Consumer Broadband Networks at AT&T. In 1995, I became District Manager  
20 with responsibilities that included engineering, construction, right-of-way, route  
21 planning and franchising for the Southwest Region. I then was a project manager  
22 for Local Number Portability from 1996 to 1998. I then managed the Information

1 Technology systems development work for AT&T's long distance network from  
2 1998-2000. Since October 2000, I have been a project manager for AT&T's  
3 deployment of MDU infrastructure, providing network connectivity from  
4 AT&T's local switches to various MDUs across the U.S. Throughout my tenure,  
5 I have had extensive technical experience with devices used in providing network  
6 connectivity to MDUs and other network terminating locations.

7 **Q. PLEASE DESCRIBE THE NATURE OF YOUR TESTIMONY.**

8 A. It is my understanding that Qwest has been blocking AT&T's access to certain  
9 Minimum Point of Entry Terminals/Network Interface Devices ("MPOE  
10 Terminals/NIDs") in Bellingham, Washington. I have been told that Qwest has  
11 been padlocking those MPOE Terminals/NIDs, as well as pulling out AT&T  
12 wiring and conduit that is contained in those MPOE Terminals/NIDs. My  
13 testimony will focus on why AT&T needs access to the MPOE Terminals/NIDs in  
14 order to fulfill its goals of bringing competitive local service to Washington  
15 consumers. After explaining how AT&T accesses the MPOE Terminals/NIDs  
16 and connects to the internal customer premises wiring, my testimony will focus  
17 on the technical feasibility of AT&T's connections through the MPOE  
18 Terminals/NIDs.

19 **Q. IS THERE ANY TECHNICAL DIFFERENCE BETWEEN AN MPOE**  
20 **TERMINAL/NID IN WHICH QWEST OWNS THE INTERNAL**  
21 **CUSTOMER PREMISES WIRE AND AN MPOE TERMINAL/NID IN**

1           **WHICH THE BUILDING OWNER OWNS THE INTERNAL CUSTOMER**  
2           **PREMISES WIRE?**

3    A.    No. The technology is identical; the owner merely differs.

4    **Q.    BECAUSE QWEST APPARENTLY DEFINES THE MPOE**  
5           **TERMINAL/NID DIFFERENTLY THAN BOTH THE FEDERAL**  
6           **COMMUNICATIONS COMMISSION AND AT&T, PLEASE DESCRIBE**  
7           **WHAT AT&T IS ATTEMPTING TO ACCESS.**

8    A.    AT&T is attempting to access the facility utilized to connect Qwest's loop plant  
9           to the internal customer premises wiring. Consistent with FCC mandate, AT&T  
10          calls that facility the MPOE Terminal/NID. As the FCC acknowledges, MPOE  
11          Terminals/NIDs usually come in many shapes and forms. However, they are  
12          usually either "open" -- e.g., in a utility closet, *see* Exhibit DCK-2 or "closed" --  
13          e.g., in some kind of metal or plastic enclosure. *See* Exhibit DCK-3. Qwest has  
14          primarily been disconnecting AT&T wiring and conduit from, as well as locking,  
15          the closed boxes found at smaller residential campus style MTEs. My discussion  
16          will focus on the mechanics and technical feasibility of connecting to those type  
17          of boxes. In a closed MPOE Terminal/NID, the internal customer premises  
18          wiring is usually connected to the Qwest loop plant wiring in a "punch down"  
19          block (a wire terminating device which provides spaces to connect wires). There  
20          is also a separate "network" side of the MPOE Terminal/NID which AT&T does  
21          not touch, because the internal customer premises wiring is not contained on that  
22          side of the MPOE Terminal/NID.

1 **Q. WHY DOES AT&T NEED TO ACCESS THE INTERNAL CUSTOMER**  
2 **PREMISES WIRING AT THE MPOE TERMINAL/NID?**

3 A. The MPOE Terminal/NID is the farthest possible point practical that AT&T can  
4 run its own network. At the end of AT&T's network, there is usually an AT&T  
5 Network Interface Unit ("NIU") which runs to a "cross connect." That cross-  
6 connect represents the ending point of the AT&T network wire and is the place  
7 where AT&T connects with the internal customer premises wiring. See Exhibit  
8 DCK-4. AT&T needs to access the internal customer premises wiring to attach  
9 that wiring to AT&T's cross-connect in order to establish AT&T service for a  
10 customer located in an MTE. Because the internal customer premises wiring is  
11 contained in the Qwest MPOE Terminal/NID where Qwest is the incumbent  
12 telephony provider, AT&T must access the MPOE Terminal/NID. AT&T also  
13 seeks access at the MPOE Terminal/NID because it offers a technically feasible  
14 way for the incumbent LEC (Qwest in this instance) to regain the customer's  
15 internal wiring if Qwest recaptures that customer or for other CLECs to obtain the  
16 internal wiring if they win over the customer.

17 **Q. WHAT IS AT&T'S PROCESS FOR ACCESSING THE MPOE**  
18 **TERMINAL/NID?**

19 A. In closed MPOE Terminals/NIDs, AT&T utilizes a two-step process to access the  
20 internal customer premises wiring in the MPOE Terminal/NID. Before AT&T  
21 markets a building to potential customers, it prepares the building by running a  
22 one inch weather proof conduit from its cross connect box to the Qwest MPOE  
23 Terminal/NID. It usually utilizes a pre-serrated knock out on the MPOE

1 Terminal/NID or other contemplated access point on which to connect the conduit  
2 between Qwest's MPOE Terminal/NID and the AT&T cross-connect. Then when  
3 AT&T captures a customer, it seeks access to the internal customer premises  
4 wiring located in the MPOE Terminal/NID and makes its connection to that  
5 wiring.

6 **Q. WHAT DOES THE INTERNAL CUSTOMER PREMISES WIRING LOOK**  
7 **LIKE AND WHERE IS IT RUN?**

8 A. Internal customer premises wiring usually consists of individual wires or groups  
9 of twisted pair copper wire which run from the MPOE Terminal/NID to the  
10 individual building units. The internal customer premises wiring is usually run  
11 through the infrastructure of the multi-tenant environment (e.g. behind walls,  
12 under stairs) at the time the building is constructed.

13 **Q. IN ACCESSING QWEST'S MPOE TERMINAL/NID, IS AT&T AT ALL**  
14 **UTILIZING THAT MPOE TERMINAL/NID?**

15 A. Not really. There is a punch down block (a block in which various wires are tied  
16 down) in the MPOE/NID where the internal customer premises wiring is  
17 connected to the wiring from the Qwest outside network. AT&T does not use this  
18 block except to take the existing internal customer premises wiring off of it. Once  
19 AT&T removes the wire, the AT&T technician then connects the internal  
20 customer premises wiring to AT&T's own wiring using a Scotchlok process  
21 described below. This has the effect of extending the internal customer premises  
22 wiring so that AT&T can run it from the Qwest MPOE Terminal/NID to AT&T's

1 cross connect to make a connection with AT&T's network wiring. AT&T runs  
2 the wiring through the weatherproof conduit that AT&T had previously placed  
3 between its cross-connect and the Qwest MPOE Terminal/NID. Accordingly,  
4 AT&T only uses the existing MPOE Terminal/NID as a connection location to  
5 extend the internal customer premises wiring so that it can reach the AT&T cross-  
6 connect where its network wiring is housed.

7 **Q. WHAT DOES AT&T USE TO CONNECT THE INTERNAL CUSTOMER**  
8 **PREMISES WIRING TO ITS OWN NETWORK WIRING?**

9 A. Where AT&T needs to access a unit's internal customer premises wiring, AT&T  
10 has been utilizing a Scotchlok brand insulated gel filled "buttsplice" seamless  
11 connector with a polyolefin insulator. This material is impervious to water,  
12 corrosion, or serious modifications in temperature. *See* Exhibit DCK-5. The  
13 effect is that there is both a mechanical and electrical seal causing a permanent  
14 connection between the two wires placed in the Scotchlok. The Scotchlok  
15 basically creates a seal that seams the two wires together. This concept of  
16 splicing wires has existed for some time and is readily performed in the industry.  
17 There are a number of similar products such as Lucent's 709 *QUICK SNAP*  
18 Connectors. *See* Exhibit DCK-6.

19 **Q. ARE THERE OTHER METHODS OF CONNECTING TO THE**  
20 **INTERNAL CUSTOMER PREMISES WIRING?**

21 A. Sure. AT&T could place its own "punch down" block in the Qwest NID so that  
22 we could cross-connect the internal customer premises wiring with our network

1 wire that we would run from the cross-connect. However, to set the block, we  
2 would actually be placing our equipment in the Qwest box.

3 **Q. COULD AT&T PLACE ITS OWN PUNCH DOWN BLOCK IN A BOX**  
4 **OUTSIDE THE QWEST MPOE TERMINAL/NID?**

5 A. That is what AT&T is doing already. To reiterate what AT&T is doing in the  
6 MPOE Terminal/NID, it is merely running an extension of the internal customer  
7 premises wiring from the MPOE Terminal/NID through weatherproof conduit to  
8 its own cross-connect box to connect its network wire to the internal customer  
9 premises wire.

10 **Q. IF AT&T IS USING ITS OWN CROSS-CONNECT BOX, WHY DOES IT**  
11 **NEED TO UTILIZE THE SCOTCHLOK PROCESS?**

12 A. Because the internal customer premises wiring is usually only long enough to  
13 extend to Qwest's MPOE Terminal/NID, and not beyond. Especially in  
14 construction before 1996, neither building owners nor the ILEC anticipated local  
15 telephony competition. Accordingly, installers and/or contractors only ran  
16 enough wire into the ILEC's MPOE Terminal/NID to attach to the ILEC's block.  
17 Because AT&T needs to expand the internal customer premises wiring to its own  
18 cross-connect box, it must increase the size of the internal customer premises  
19 wiring by Scotchlocking additional wiring to the original wiring.

20 **Q. WHAT ABOUT QWEST'S SUGGESTION THAT IT PLACE A FIELD**  
21 **CONNECTION POINT NEAR THE CURRENT MPOE TERMINAL/NID**



1           **WHERE AT&T CAN ACCESS THE INTERNAL CUSTOMER PREMISES**  
2           **WIRING?**

3    A.     It seems rather silly to have another cross-connect point where one already exists  
4           at the AT&T cross-connect.  However, in certain circumstances, e.g., once AT&T  
5           acquires numerous customers in a certain MTE, as long as the cost is reasonable  
6           and provisioning would not delay AT&T's attempts to provide competitive local  
7           service (e.g., a day or two), there is no harm if both parties agree to put in a new  
8           cross-connect.  On the flip side, the Qwest MPOE Terminal/NID already  
9           provides the internal customer premises wiring that AT&T needs to access.  At a  
10          Field Connection Point, AT&T would do the same thing that it is doing at the  
11          MPOE Terminal/NID: disconnect the internal customer premises wiring from the  
12          Qwest network wire.  Accordingly, I do not see any reason that Qwest should  
13          mandate a Field Connection Point except to add cost, complicate the  
14          interconnection, and make it more difficult for the CLEC to access the internal  
15          customer premises wiring.

16          In addition, Qwest would apparently require a "dual truck roll" if a Field  
17          Connection Point were used.  This would mean that every time AT&T wishes to  
18          access the internal customer premises wiring, Qwest would also dispatch a  
19          technician to move the extended internal customer premises wire from the MPOE  
20          Terminal to the Field Connection Point, or common box.  Again, there is  
21          absolutely no technical reason to have Qwest move the internal wiring from its  
22          NID to a common box or "Field Connection Point"; all it would accomplish  
23          would be to frustrate AT&T's efforts to provide competitive services.

1 **Q. WHAT WOULD HAPPEN IF AT&T WERE NOT ALLOWED TO**  
2 **UTILIZE THE MPOE TERMINAL/NID?**

3 A. If AT&T were not allowed to enter Qwest's enclosure, AT&T would be required  
4 to access the internal customer premises wiring through another means. In most  
5 cases, this would entail AT&T placing its own internal customer premises wiring  
6 inside the MTE. This effort would be expensive, time consuming and  
7 unnecessary because it is redundant wiring. AT&T would have to run this  
8 redundant wiring behind walls and under stairs. This would certainly not  
9 motivate any building owner to allow AT&T to provide competitive local service.  
10 Also, because AT&T would have to expend substantial funds for construction of  
11 such wiring, it would not be able to economically compete with Qwest.

12 **Q. WHERE COULD AT&T ACCESS THE INTERNAL CUSTOMER**  
13 **PREMISES WIRING IF IT DID NOT ACCESS IT AT THE MPOE**  
14 **TERMINAL/NID?**

15 A. In most small to medium sized residential MTEs, once the building construction  
16 has been completed there is no access point to customer premises wiring except  
17 for the MPOE/NID on the outside of the building and the RJ-11 jack (the phone  
18 jack found at the individual MDU unit). Usually there is "home run wiring"  
19 meaning there is no connection point from the MPOE/NID to the RJ-11 jack.  
20 Accordingly, to gain access would involve breaking holes in the interior walls to  
21 "fish out" the internal customer premises wiring. Then AT&T would have to run  
22 its own wiring and make a splice to the existing wiring.

1 **Q. HOW DOES AT&T KNOW IT IS ACCESSING THE CORRECT**  
2 **INTERNAL CUSTOMER PREMISES WIRE IN THE MPOE**  
3 **TERMINAL/NID?**

4 A. When the technician performs the installation at the customer premises, the  
5 technician first verifies the location of the telephone connection in the customer's  
6 unit. Then, the technician places a tone at the customer's jack. The technician  
7 then moves to the MPOE Terminal/NID and, utilizing the tone, verifies that they  
8 have the correct internal customer premises wiring. Many times the internal  
9 customer premises wiring is also labeled. After the technician performs the  
10 connection to the AT&T network, the AT&T installer then goes back to the  
11 customer suite and performs functional and service assurance tests including  
12 drawing dial tone, automatic number identification, dialing a number and  
13 establishing voice communication, testing for incoming calls and testing customer  
14 ordered features to assure the correctness of the connection.

15 **Q. IS THERE ANY OTHER WAY TO ACCESS THE INTERNAL**  
16 **CUSTOMER PREMISES WIRING BESIDES THE METHODS YOU**  
17 **HAVE DISCUSSED ABOVE?**

18 A. No, besides the methods discussed above (drilling into walls and fishing for the  
19 internal customer premises wire or accessing the MPOE Terminal/NID), there is  
20 no other way for AT&T to access the internal customer premises wiring that I  
21 know of.

1 **Q. QWEST HAS ASSERTED THAT AT&T'S METHOD OF ACCESS**  
2 **WOULD DAMAGE QWEST'S NETWORK, PUT CUSTOMERS OUT OF**  
3 **SERVICE AND OPERATE TO DENY ACCESS TO OTHER CARRIERS.**  
4 **COULD YOU ADDRESS THESE ALLEGATIONS?**

5 A. Sure. As AT&T is merely attempting to access the internal customer premises  
6 wiring, it is not touching the electrical side of the MPOE Terminal/NID where  
7 Qwest's network is located. Accordingly, I do not see how the AT&T protocol  
8 could "damage Qwest's networks."

9 As to putting customers out of service, if AT&T technicians followed the proper  
10 protocol of insuring that they are connecting the correct customer to AT&T's  
11 network, there is no way for AT&T to place customers out of service, except  
12 briefly and consensually for the customer who the AT&T technician is switching  
13 from Qwest to AT&T. Furthermore, if AT&T technicians follow proper protocol,  
14 there is no reason that AT&T would "deny access to other carriers." All another  
15 carrier would have to do is disconnect the AT&T connection and connect to its  
16 own network wire or cross-connect. In the case of Qwest recapturing a customer,  
17 all Qwest would have to do is remove the internal customer premises wiring and  
18 re-punch it down on the MPOE Terminal/NID block with its network wire. In  
19 sum, in accessing the internal customer premises wiring, AT&T is not damaging  
20 Qwest's network, putting customers out of service, nor operating to deny access  
21 to other carriers, unless the technician is not utilizing proper protocol.

1 **Q. IS IT TECHNICALLY POSSIBLE FOR AT&T TO CAUSE CUSTOMER**  
2 **OUTAGE UNDER THE TONE TESTING TECHNICAL PROTOCOL**  
3 **YOU DESCRIBED ABOVE?**

4 A. No.

5 **Q. IS THE METHOD AT&T UTILIZES TO ACCESS INTERNAL**  
6 **CUSTOMER PREMISES WIRING WATER TIGHT?**

7 A. Yes, AT&T has been using conduit that insulates any wiring from outside  
8 elements including water and weatherproofs the connection, as well as the  
9 appropriate connectors. Both are rated for exterior use and, when installed  
10 correctly, should be weather tight.

11 **Q. IS AT&T USING THE METHOD OF DIRECTLY CONNECTING AT THE**  
12 **MPOE TERMINAL/NID IN OTHER PARTS OF THE COUNTRY?**

13 A. Yes, AT&T is successfully utilizing the direct connect method of accessing  
14 enclosure housing in the MPOE Terminal/NID in other ILEC regions such as  
15 Verizon and SBC regions.

16 **Q. IN MTEs WHERE AT&T OWNS THE MPOE TERMINAL/NID, DOES**  
17 **AT&T ALLOW ACCESS TO THE MPOE TERMINAL/NID FOR OTHER**  
18 **CARRIERS?**

19 A. Yes. In Washington, AT&T allows Qwest and other competitive carriers to  
20 access MPOE Terminals/NIDs by any technically feasible method including using

1 a pre-serrated knockout to install wiring. AT&T also supplies a connecting block  
2 assignment for a competitor's wiring at that competitor's request.

3 **Q. TO YOUR KNOWLEDGE, HAS AT&T EVER INSTALLED LOCKS ON**  
4 **AN MPOE TERMINAL/NID?**

5 A. Not to my knowledge.

6 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

7 A. There is no reason why it is technically infeasible for AT&T to directly access  
8 internal customer premises wiring at MTEs. The concerns of Qwest, such as  
9 network integrity, are greatly overstated by Qwest, and certainly will not occur if  
10 both AT&T and Qwest technicians utilize and adhere to proper technical protocol.

11 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY AT THIS TIME?**

12 A. Yes.