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Wednesday, April 07, 1999

**VIA Federal Express**

Ms Blanca Bayo, Director  
Divisions of Records and Reporting  
Room 110, Easley Building  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, Florida 32399-0850

99 APR -8 AM 8:47  
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COMMUNICATIONS

RE: Docket Nos. 980946-TL, 980947-TL, 980948-TL, 981011-TL, 981012-TL and 981250-TL

Dear Ms Bayo:

Enclosed for filing is a single original of the direct testimony of Thomas J. Regan on behalf of Covad Communications Company.

This filing is made pursuant to a request for confidentiality by BellSouth, specifically, BellSouth's Motion for Permanent Protective Order in the referenced dockets filed on April 2, 1999. Since the enclosed testimony may contain information BellSouth believes to be confidential, service is made on only the limited number of parties as indicated in the attached Certificate of Service.

Please do not hesitate to contact me if you have any questions concerning this matter. Thank you for your assistance.

Sincerely,

James D. Earl

Enclosure

cc: Attached Service List

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DOCUMENT NUMBER-DATE

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## CERTIFICATE OF SERVICE

I certify that a copy of the foregoing testimony of Thomas J. Regan was served on the following parties on this 7<sup>th</sup> day of April in the manner indicated:

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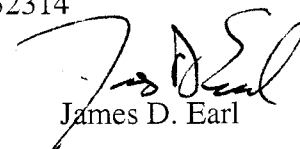
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per PN 06056-99  
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1 DIRECT TESTIMONY OF THOMAS J. REGAN  
2 ON BEHALF OF  
3 COVAD COMMUNICATIONS COMPANY  
4

5 **Q. What is your name and occupation?**

6 A. Thomas J. Regan, Director of Collocation, Covad Communications Company  
7 ("Covad"), 2330 Central Expressway, Santa Clara, CA 95050. My business  
8 telephone number is (408) 844-7523. I have been the Director of Collocation  
9 for Covad Communications Company, since March 31, 1997. I am currently  
10 responsible for all of Covad's collocation arrangements, and report to the Vice  
11 President of Network Deployment. I have also worked extensively during the  
12 past year on Covad's key collocation activities, which must be completed  
13 before Covad can earn any service revenues in any market it enters.  
14

15 **Q. What experience did you have in collocation matters before coming to  
16 Covad?**

17 A. Prior to joining Covad, I was employed at Pacific Bell for 27 years. At  
18 Pacific Bell, my most recent position was Expanded Interconnection Service  
19 Product Manager, reporting to the Executive Director. In this capacity, I  
20 managed a 300% increase in collocation requests in 1996. I was responsible  
21 for the California statewide management of Pacific Bell's offering and  
22 implementation of physical collocation by Competitive Local Exchange  
23 Carriers (CLEC's) of their own CLEC equipment in Pacific Bell's Central  
24 offices.  
25

1 I directed Pacific Bell's collocation teams involving personnel from Pacific  
2 Bell's Operation, Engineering, Real Estate and Security departments with  
3 respect to the construction of more than 120 collocation cages in  
4 approximately 70 central offices ("CO").  
5

6 I prepared Pacific Bell's complete market financial package for the FCC's and  
7 California Public Utility's regulatory approvals on each new request for  
8 physical collocation in a non-tariffed CO (that is, a CO that previously had no  
9 collocators and had not been configured for physical collocation). I also led  
10 Pacific Bell's team in the preparation and costing of new cross-connect  
11 products for physical collocators, as well as related tariffs. In addition, I  
12 managed Pacific Bell's collocation and billing and account crediting process  
13 for collocating CLECS.  
14

15 Over the past year, I have been responsible for obtaining physical collocation  
16 arrangements with Pacific Bell, GTE, Ameritech, Bell Atlantic, BellSouth,  
17 SBC and US WEST. Covad currently has several hundred collocation  
18 requests in varying stages of process by incumbent LECs.  
19  
20

21 **Q. When Covad introduces service in a region, what are its collocation**  
22 **requirements?**

23 A. When Covad decides to enter a market, it undertakes a "blanket" physical  
24 collocation strategy. We have two sets of customers: corporations wanting to  
25 connect their workers at home, and ISPs wanting to connect their small

1 business and high-speed residential end users. Corporations do not control  
2 where their employees and teleworkers live; ISPs want to serve as broad a  
3 geographical area of their customers as possible. As a result, Covad has to  
4 cover a broad geographic area at the time of launch.

5  
6 **Q. What are Covad's space requirements in a central office?**

7 A. The equipment Covad and, presumably, other CLECs focused upon DSL  
8 services, collocate in an ILEC central office does not take an inordinate  
9 amount of space or power. Covad physically collocates DSLAMs ("Digital  
10 Subscriber Line Access Multiplexers") and other cabling and equipment  
11 which it uses to access and interconnect with unbundled network elements  
12 such as local loops and dedicated transport and manage its services over loops  
13 and transmission facilities. Covad's equipment is rack-mountable. Covad  
14 typically occupies two bays in a central office at start-up. A bay of equipment  
15 is 23 inches wide and approximately one foot deep. Each year, technological  
16 improvements allow carriers like Covad to serve more customers with less  
17 bulky equipment. The actual footprint of a bay is two square feet. However,  
18 a certain amount of space around a bay is required for access. There can be  
19 some difference of views as to how much access space is appropriate.  
20 However, in my experience, it is most reasonable to plan on the basis of  
21 attributing 18 square feet of floor space to a single bay for its placement and  
22 use. So, Covad's standard central office configuration upon the introduction  
23 of service would occupy 36 square feet. Typically, in a metropolitan build-  
24 out, Covad also has one or more non-standard installations that involve the

1 placement of additional equipment in a collocation space. Covad uses 100  
2 square feet of collocation space for these non-standard hubbing collocations

3  
4 **Q. Are there strategies that, if implemented, would result in the collocation**  
5 **of more CLEC equipment -- and therefore more competitors -- in a**  
6 **central office?**

7 A. Today, ILECs generally require CLECs to collocate equipment in a  
8 segregated collocation room or area, even though construction of these  
9 segregated collocation rooms is very costly, time-consuming, and prevent  
10 CLECs from collocating in a number of central offices because of ostensible  
11 space considerations. Covad's agreement with U S WEST in the State of  
12 Washington is, I believe, the first time that an ILEC has agreed to provide a  
13 CLEC with the ability to physically collocate individual bays of equipment in  
14 the ILEC's central office without resort to construction of a caged area or of a  
15 segregated collocation room.

16  
17 **Q. What are the benefits of cageless physical collocation as pioneered by**  
18 **Covad?**

19 A. Cageless physical collocation is a form of physical collocation in which a  
20 requesting telecommunications carrier has the ability to place at least one bay  
21 of its own equipment used for interconnection or access to unbundled network  
22 elements within or upon already-conditioned floor space in an incumbent  
23 ILEC's premises. Under this arrangement, requesting carriers may obtain  
24 single-bay increments of already-conditioned floor space in the ILEC  
25 premises, use all the features, functions and capabilities of collocated

1 equipment, and enter the ILEC premises (subject to reasonable security terms  
2 and conditions) to install, maintain and repair such equipment. Cages or  
3 segregated rooms or areas would not be built, unless requested by the CLEC.  
4 Reasonable security measures would be undertaken at the expense of the party  
5 desiring those security measures. In the event that insufficient already-  
6 conditioned floor space does not exist in the office (which would be rare, in  
7 my opinion), the incumbent LEC is required to condition sufficient floor space  
8 to accommodate the CLEC's request but may only charge the CLEC the pro-  
9 rata share of those conditioning charges. Therefore, if the ILEC feels  
10 necessary to condition 300 square feet to accommodate a CLEC's request for  
11 30 square feet of floor space, it should only be permitted to charge the CLEC  
12 10% (30/300) of those conditioning costs.

13  
14 **Q. What has been your experience to date with physical collocation requests**  
15 **from BellSouth in the area in and around Miami.**

16 A. Covad has requested physical collocation in 18 central offices in the Miami  
17 area as of April 1, 1999. BellSouth has told us that there is no space for  
18 physical collocation in three of them.

19  
20 **Q. Did you participated in the "walk throughs" arranged as part of this**  
21 **collocation workshop?**

22 A. Yes, I attended the Bell South and Florida PUC collocation inspection walk  
23 through of three central offices designated as "No Space" on February 11, and  
24 12, 1999.



1 The first central office was Miami Palmetto (MIAMFLPL) on February 11,  
2 1999.

3  
4 **Q. Drawing on your years of collocation experience, how would you**  
5 **summarize what you saw.**

6 A. There are many areas in this office that could be designated for collocation.  
7 This office did not have efficient space utilization for various functions and  
8 departments. There were areas being used for storage of files. Filing cabinets  
9 were half filled with documents. The file storage could be condensed or,  
10 better yet removed entirely. Some filing cabinets contained what appeared to  
11 be outdated parts and equipment. Using central office space for these storage  
12 purposes is a waste.

13  
14 There is an area set aside for OCC Administration that would make room for  
15 400 to 600 square ft of physical collocation space. There is another area, 1959  
16 square ft of space set aside for future switch growth. This area could easily  
17 support 400 to 600 square ft of collocation space while simultaneously  
18 accommodating installation of a future switch. This is because switch  
19 expansion typically occurs on a modular basis with each expansion module  
20 occupying roughly 300 to 400 feet of floor space. The rate of modular  
21 expansion and the issue of when a new switch should be installed rather than  
22 adding expansion modules to the existing switch are not matters that can be  
23 determined solely by a walk-through. Rather, these decisions are made on the  
24 basis of analysis of forecasted rates of growth and making reasonable  
25 assumptions about future switch design and size. However, based on my

1 experience in central office planning, and making reasonable assumptions  
2 about growth in light of existing facilities, I believe 400 to 600 square feet  
3 could be made available for many years before needed for switch expansion  
4 based on existing switch technology. Continued innovation in circuit switch  
5 technologies may mean that this collocation space would never have to be  
6 occupied by circuit switch technology equipment. Adjacent to this is another  
7 space at the end of the frames. Approximately 200 square ft of space could be  
8 made available in this area.

9  
10 My overall impression was that BellSouth had been assigning space on an ad  
11 hoc basis without continuing regard for efficient space utilization, let alone  
12 efficient use in a competitive environment. A good space planner would be  
13 able to free up even more space by paying attention to the functions of  
14 equipment and by rearranging it for the best utilization of entire central office  
15 space.

16  
17 **Q. What is your analysis of the second central office you visited?**

18  
19 A. The second central office was North Dade Golden Glades (NDADFLGG).  
20 We visited on February 11,1999.

21  
22 This central office has limited space, but it does have several areas that would  
23 accommodate physical collocation space. The first floor has approximately  
24 150 square feet of space in the toll equipment area, located at the end of the

1 frames on the first floor, that could be made available. With efficient space  
2 utilization, this could be done.

3  
4 The second location is on the second floor. The MAP (Maintenance and  
5 Provisioning) room could easily be consolidated to make 150 square ft of  
6 space for collocation accommodating approximately 9 bays of equipment.

7  
8 So, this central office has space to accommodate about 18 bays of equipment.  
9 With a building addition, the walk way on the roof could also provide  
10 additional space.

11

12 **Q. What is your analysis of the third office you visited?**

13 A. The third central office was BOCA RATON - BOCA TEECA

14

15 This is a two story central office. The entire second floor is used by BellSouth  
16 for administration and office space.

17

18 The key point is that this building is the only building that can provide access  
19 to unbundled network elements in its service area. Office blue prints show the  
20 administration space to occupy 12946 square feet. That space has all of the  
21 accommodations to support telecom equipment. As a long-time administrator  
22 of central office space, I find it unacceptable for Covad, or indeed any CLEC,  
23 to be denied space (and entrance into the market) by an ILEC decision to use  
24 prime collocation space for administrative purposes.

25

1 Administrative personnel could and should be relocated incrementally. Just  
2 10% of the present administration space would provide accommodation for  
3 many collocating CLECs.

4  
5 In addition to the entire second floor, there is also space available on the first  
6 floor of this central office. The first floor also has a MAP room that could be  
7 consolidated to provide 100 square feet of space. Also, there is another  
8 location at the end of the frames that could provide 150 square feet of space,  
9 and another future switch growth area that could provide 400sq ft of space. It  
10 is reasonable to assume gradual modular switch expansion in this area. There  
11 is also considerable question in my mind as to whether the original attribution  
12 of space to switch growth still applies in light of the decreasing physical size  
13 of circuit switches for a given level of functionality

14  
15 **Q. Would you relate what you saw in these three BellSouth central offices to**  
16 **your earlier description of cageless physical collocation?**

17 A. Fundamentally, cageless physical collocation offers CLECs true parity of  
18 opportunity to place equipment in a CO. When the ILEC installs new  
19 equipment in a CO, such as its own xDSL equipment, it simply places its  
20 equipment in any available space in the CO that has been pre-conditioned  
21 (i.e., has the necessary infrastructure) and that can accommodate the  
22 equipment.

23  
24 Such vacancies typically exist in scattered parts of the CO within a large,  
25 previously conditioned section of the CO. Even in the North Dade Golden

1 Glades Central office there is space for CLECs to physically collocate on a  
2 cageless basis.

3  
4 Because cageless physical collocation is far more space efficient (in addition  
5 to being less costly for all, and less time-consuming for all), the Miami  
6 Palmetto central office can not reasonably be considered to be space  
7 constrained.

8  
9 Lastly, I am can not express strongly enough my sense of suppressed outrage  
10 that the BOCA RATON - BOCA TEECA central office has been represented  
11 as having "no space" for physical collocation. That building is built to old  
12 AT&T construction standards that far exceed the design standards for modern  
13 office buildings. It is unique from a construction standpoint. It is also unique  
14 in that it is the only building in its service area where unbundled network  
15 elements can be accessed. Yet only half of the building is being used for its  
16 intended purpose. Use of central office space for administrative and storage  
17 functions is a waste. These are not buildings that substitute for office  
18 buildings. They are very special and should be used to maximum efficiency  
19 for the competitive benefit of the consumers they serve.

20

21 **Q. Does this conclude your testimony?**

22 **A.** Yes it does.