PUBLIC VERSION

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department of Telecommunications and Energy upon its own motion pursuant to Section 271 of the Telecommunications Act of 1996 into the Compliance Filing of New England Telephone and Telegraph d/b/a Bell Atlantic – Massachusetts as part of its application to the Federal Communications Commission for entry into the in-region interLATA (long distance) telephone market	)	D.T.E. 99-271

BELL ATLANTIC–MASSACHUSETTS

SUPPLEMENTAL COMMENTS

NEW ENGLAND TELEPHONE
AND TELEGRAPH COMPANY,
d/b/a Bell Atlantic-Massachusetts

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I. INTRODUCTION

On December 22, 1999, the Federal Communications Commission ("FCC") ruled that Bell Atlantic-New York ("BA-NY") met the requirements of the "competitive checklist" set forth in Section 271(c)(2)(B) of the Telecommunications Act of 1996 ("Act") and permitted Bell Atlantic's entry into the long distance market in New York.[1] The FCC indicated that its approval of BA-NY's Section 271 application was a model for future applicants to follow in preparing their applications. (*FCC Approval Order* ¶ 5, fn. 6) On January 26, 2000, the Department requested that Bell Atlantic-Massachusetts ("BA-MA") and other participants in this proceeding "explain, in detail, whether [BA-MA] meets the requirements and standards set forth in the [*FCC Approval Order*.]"[2]

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[1] *In the Matter of Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide Region, InterLATA Service in the State of New York*, CC Docket 99-295, Memorandum Opinion and Order, FCC 99-404, rel. December 22, 1999 ("*FCC Approval Order*").

[2] *Hearing Officer Rulings on Scheduling Announcements and Decisions on Motions for Confidential Treatment*, issued January 26, 2000 ("Department Scheduling Ruling").

These Supplemental Comments provide the analysis requested by the Department based on the *FCC Approval Order*. There are three Affidavits associated with these Supplemental Comments, addressing respectively: (1) the access BA-MA provides to its Operating Support Systems, or OSS, pursuant to Section 271 (c)(B)(ii) of the Act ("OSS Affidavit"); (2) BA-MA's satisfaction of its other "competitive checklist" requirements ("Checklist Affidavit"); and (3) the measurements of BA-MA's operating performance ("Measurements Affidavit"). As directed by the Department, these Affidavits, where appropriate, update the factual record already established in BA-MA's previous affidavits, BA-MA's responses to information requests and Record Requests, and testimony at the Technical Sessions. In addition, they respond to the claims made by CLECs in written comments, testimony at the Technical Sessions, and responses to Record Requests. (*Department Scheduling Ruling* at 2) The analysis demonstrates that BA-MA meets the criteria of the *FCC Approval Order*.

In addition to detailing the "model" evidence required of a Section 271 applicant, the *FCC Approval Order* provides valuable insight into how the record is to be evaluated. Specifically, the FCC stated that, in evaluating a Section 271 application, it must determine:

> whether the BOC [Bell Operating Company] is providing service to competitors at parity with its retail offerings or, when there is no analogous retail activity, whether the BOC's performance would allow an efficient competitor a meaningful opportunity to compete. Based on our growing experience in addressing issues involving the development of local competition, we also apply these standards in a pragmatic fashion, thus building on our prior decisions. For example, *we consider the overall picture presented by the record, rather than focusing on any one aspect of performance.* (Emphasis added) (*FCC Approval Order* ¶ 5)

The FCC also noted that "the BOC needs only to prove each element by 'a preponderance of the evidence,' which generally means the greater weight of evidence, evidence which is more convincing

than the evidence which is offered in opposition to it." (*FCC Approval Order* ¶ 48) As to opposing commenters' filings, the FCC said:

> we look for evidence that the BOC's policies, procedures, or capabilities preclude it from satisfying the requirements of the checklist item. *Mere unsupported evidence in opposition will not suffice*. Although anecdotal evidence may be indicative of systematic failures, isolated incidents may not be sufficient for a commenter to overcome the BOC's *prima facie* case. Moreover, a BOC may overcome such anecdotal evidence by, for example, providing objective performance data that demonstrate that it satisfies the statutory nondiscrimination requirement. (Emphasis added) (*FCC Approval Order* ¶ 50)

As discussed below, BA-MA's proof goes substantially beyond the "preponderance of the evidence" that it must produce. At best, opposing CLECs have offered only contrary anecdotal allegations and, in numerous instances, they have failed entirely to produce any support for the claims that they made in their initial comments or at the Technical Sessions. The record in this proceeding shows that BA-MA has satisfied its checklist obligations consistent with the *FCC Approval Order*.

II. BA-MA SATISFIES THE COMPETITIVE CHECKLIST CRITERIA

A. Interconnection (Checklist Item 1)

Section 271(c)(2)(B)(1) of the Act requires a section 271 applicant to provide "[i]nterconnection in accordance with the requirements of sections 251(c)(2) and 252(d)(1)." Section 251(c)(2) imposes a duty on incumbent LECs "to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network . . . for the transmission and routing of telephone exchange service and exchange access." The FCC further indicated that interconnection referred "only to the physical linking of two networks for the mutual exchange of traffic." (*FCC Approval Order* ¶ 63) In the *FCC Approval Order*, the FCC also stated that Section 251 requires that the incumbent LEC must provide interconnection: (a) at any technically feasible point within the carrier's network; (b) that is at least equal in quality to that provided by the

local exchange carrier to itself; and (c) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms of agreements and the requirements of section 251 and section 252. (*Id.*)

BA-MA provides for interconnection, including interconnection trunking and collocation, consistent with the *FCC Approval Order*, as discussed below. There were few CLEC claims to the contrary at the Technical Sessions apart from the broadside attacks of AT&T, and none at all relating to interconnection generally. These few CLEC comments – and the claims made by AT&T – are addressed in the Joint Checklist Affidavit.

1. Interconnection Generally

The FCC concluded that BA-NY "provides interconnection at all technically feasible points, as required by our rules, and therefore demonstrates checklist compliance." (*FCC Approval Order* ¶ 76) In doing so, the FCC specifically pointed to the availability of trunk-side interconnection at BA-NY end offices and access tandems and line-side interconnection at BA-NY's end offices. The FCC continued by noting that "Bell Atlantic has an approved-state tariff that spells out readily available points of interconnection, and provides a process for requesting interconnection at additional, technically-feasible points. *(Id.*)

Bell Atlantic meets its general interconnection obligations in Massachusetts in the same way that it met those obligations in New York. BA-MA has previously shown that it provides local interconnection for the transmission and routing of telephone exchange traffic, telephone exchange access traffic, or both. (Howard Aff. ¶11-20) Upon request, BA-MA makes each type of local interconnection specified by the FCC available at technically feasible points, under interconnection

agreements or in its Wholesale Tariff, DTE MA No. 17.[3] These local interconnections are primarily trunk-side interconnections at BA-MA end offices and access tandems.[4] Line-side interconnection at BA-MA end offices is also available. Although Bell Atlantic has not had a CLEC request this type of interconnection in either New York or Massachusetts, Bell Atlantic provides a similar type of line-side interconnection for wireless carriers in both states and could do so for CLECs as well. (Tr. 899) Like BA-NY, BA-MA will also accept requests from CLECs for interconnection at other technically feasible points using the Bona Fide Request ("BFR") process that is provided for in interconnection agreements and in BA-MA's Wholesale Tariff, DTE MA No. 17. (Howard Aff. ¶¶ 8-9)

No CLEC has challenged BA-MA's provision of interconnection generally. The record shows that BA-MA meets its general requirements for interconnection as set forth in the *FCC Approval Order*.

2. Interconnection Trunking

The FCC rules on interconnection trunking require an incumbent LEC to design and operate its interconnection facilities to meet "the same technical criteria and service standards" that are used for the interoffice trunks within the incumbent LEC's network to satisfy the equal-in-quality requirements of Section 251. (*FCC Approval Order* ¶ 64) Pursuant to this requirement, the FCC reviewed BA-NY's performance relating to trunk group blockage and transmission standards. *(Id.*) The FCC also re-iterated its previous conclusions that the requirement to provide interconnection on terms and conditions that are "just, reasonable, and nondiscriminatory" means that an incumbent LEC must provide

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[3] The Department's decision on BA-MA's proposed DTE MA No.17 tariff was issued March 24, 2000 and a compliance tariff was filed on April 21, 2000.

[4] Interconnection to BA-MA's signaling network is addressed more fully in the discussion of Databases and Signaling Systems (Checklist item 10) following.

interconnection to a competitor in a manner no less efficient than the way in which the incumbent LEC provides the comparable function to its own retail operations. (*FCC Approval Order* ¶ 65) This obligation led the FCC to review BA-NY's installation-time for interconnection service and the availability of two-way trunking arrangements, as well as repair times involved for its resolution of troubles affecting interconnection trunks. *(Id.*)

In the *FCC Approval Order*, the FCC determined that BA-NY met its burden of proof because it designs its interconnection facilities to meet "the same technical criteria and service standards" that are used for the interoffice trunks within its own network in New York. (*FCC Approval Order* ¶ 67) The FCC also found that BA-NY provides competing carriers with interconnection trunking in New York that is equal-in-quality to the interconnection Bell Atlantic provides to its own retail operations, and on terms and conditions that are just, reasonable, and nondiscriminatory, via interconnection agreements and through a state approved tariff. (*FCC Approval Order* ¶ 68) In addition, the FCC observed that Bell Atlantic receives orders for interconnection trunks in New York through the Access Service Request ("ASR") process, and accepts ASRs through electronic Direct:Connect (previously referred to as Network Data Mover or "NDM") transmittal, or by facsimile. Finally, the FCC relied upon the performance data that BA-NY provided concerning ordering, provisioning, and maintenance and repair service as proof of the quality of interconnection service provided to competing carriers in New York. (*FCC Approval Order* ¶¶ 68-72)

BA-MA's interconnection trunking processes and service offerings are similar to those reviewed and found Section 271-compliant by the FCC in New York. BA-MA designs its interconnection facilities to meet the same technical criteria and service standards. (Howard Aff. ¶ 25; Tr. 903) BA-MA provides CLECs with interconnection that is equal-in-quality through interconnection

agreements and DTE MA No. 17. (Howard Aff. ¶ 11) And, as discussed below, BA-MA's performance data shows that it is meeting its checklist obligations.

(a) Growth of Interconnection Trunking

The commercial volume of interconnection trunking that BA-MA is providing for CLECs also shows that BA-MA is meeting its interconnection obligations. At the end of February 2000, BA-MA had approximately 218,000 local interconnection trunks in place with 25 CLECs. (Checklist Aff. ¶ 21) CLECs have substantially more than one-half as many interconnection trunks already in service as BA-MA has in its entire local interoffice network (392,000 interoffice trunks). (*Id.*) BA-MA has also been able to accommodate extraordinary CLEC growth. During 1999, BA-MA increased by over 90,000 the number of interconnection trunks in service between BA-MA's network and the networks of CLECs – a greater than 90% increase over the number of interconnection trunks in service in 1998. (Checklist Aff. ¶ 22)

Another measure of interconnection growth, as well as the extent of local competition generally, can be found in the number of minutes of use BA-MA exchanges with CLECs. In 1999, BA-MA's local interconnection trunks carried over 1.35 billion minutes of traffic each month. (Checklist Aff. ¶ 23) Between 1998 and 1999, the volume of interconnection traffic exchanged between BA-MA and CLECs grew by an extraordinary 159%. (*Id*.) In the first quarter of 2000, the volumes increased to 1.9 billion minutes of traffic per month. (*Id.*)

(b) Trunk Provisioning

Under the supervision of the New York Public Service Commission ("New York PSC"), Bell Atlantic and the CLECs developed a process to forecast total CLEC demand for local interconnection trunking. This process is now in place in Massachusetts. In connection with this forecasting process,

BA-MA offers trunk-order intervals using a "five category approach." (Checklist Aff. ¶ 27) As in New York, each category of trunk orders has its own provisioning interval. These intervals are based on whether the request is associated with a forecast as well as the size and complexity of the trunk request. (Checklist Aff. ¶ 28)

BA-MA is consistently meeting or exceeding its committed provisioning intervals for interconnection trunks in each of the five categories. (Checklist Aff. ¶ 27 and Exhibit B) These intervals also compare favorably to the intervals that BA-MA provides to interexchange carriers for Feature Group D switched access trunks. (Checklist Aff. ¶ 30) During the last seven months (August 1999 - February 2000), BA-MA met over 99% of the due dates for CLEC interconnection trunks. (Measurement Aff. Exhibit B1)

Among the interconnection trunks BA-MA provides to CLECs are special trunks used for E911 and Operator Services/Directory Assistance ("OS/DA") services. Frequently, these are built with the establishment of a new CLEC network or switch, but they can also be provided as a trunk augment. In either case, they are provided in the applicable "five category" trunk interval. (Checklist Aff. ¶ 26)

The majority of the trunks which BA-MA uses itself and provides to CLECs are traditional 56 kilobits per second ("Kbps") interconnection trunks. However, BA-MA also provides CLECs with 64 Kbps "Clear Channel" interconnection trunks which use a signaling format that makes available an additional 8 Kbps of bandwidth for Integrated Services Digital Network ("ISDN") transmission, rather

than using that bandwidth for communications between the switches at either end of the trunk. (Checklist Aff. ¶ 25) These trunks are available from BA-MA end offices and access tandems. (*Id.*)[5]

BA-MA also makes two-way measured use trunks available to CLECs in the same manner as BA-NY. (Checklist Aff. ¶ 24) The facilities necessary to provide these trunks have been installed and tested in Massachusetts, and initial installations are underway. (*Id.*) These trunks may be ordered pursuant to DTE MA No. 17 or an interconnection agreement.

(c) Trunk Ordering

CLECs order interconnection trunks using the industry standard Access Service Request ("ASRs") that interexchange carriers have used for years. (Tr. 931-32, 989) These requests can be transmitted to BA-MA electronically using NDM, or by facsimile, if the CLEC has not yet implemented electronic systems. BA-MA is providing Firm Order Confirmations ("FOCs") for trunk orders in a timely fashion. From August 1999 through February 2000, BA-MA provided FOCs for Category 1 trunk orders in an average of 2.3 days, compared to the Category 1 FOC delivery standard of 10 business days. (Checklist Aff. ¶ 29 and associated Exhibit B) For Category 2 through Category 5 type trunk orders, BA-MA provides the FOC (which formally conveys the committed BA-MA due date) sufficiently in advance of the date due to enable CLECs to complete the trunk provisioning on-time. (*Id.*) For these types of trunk orders, the necessary provisioning information has generally already been communicated between the CLECs and BA-MA to synchronize broader joint BA-MA and CLEC work efforts. (*Id.***)**

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[5] BA-MA reached the physical capacity limitation of the Cambridge 4ESS for 64 Kbps Clear Channel trunks in July 1999, and consequently was required to allocate 64 KBPS trunks in this tandem pending the installation of a new access tandem at Newton. Trunk capacity for additional 56 Kbps trunks, however, remained available. (Checklist Aff. ¶ 25) Traffic rearrangements into the new tandem at Newton are projected to complete later this year, at which point Cambridge 64 Kbps Clear Channel trunk allocations will no longer be needed. (*Id*.)

Only AT&T of the 25 CLECs provided with interconnection trunks complained at the Technical Sessions about the general handling of orders and provisioning of trunks by BA-MA. However, an analysis of AT&T's response to Record Request No. 234 shows that there is no basis for its claims. AT&T admitted that it does not know whether the orders at issue were forecasted or not forecasted, whether they were changed by AT&T after submission to BA-MA ("supplemented" with later changes), or whether AT&T was itself ready for the completion of the order when BA-MA completed its work. (Record Request No. 234) These are significant omissions because AT&T's changes to orders and failure to be ready to complete orders on schedule both substantially extend the overall provisioning intervals, but do not relate to BA-MA's performance. (Checklist Aff. ¶¶ 47-49 and associated Exhibit D)

BA-MA's further review of AT&T claims shows that only 22 of AT&T's 113 listed purchase order numbers ("PONs") were even submitted to BA-MA. (Checklist Aff. ¶ 47) Further, of these 22, five were for special service circuits that the FCC has already ruled are irrelevant to its Section 271 review. (*FCC Approval Order* ¶ 340) When corrected for these errors, the information shows that BA-MA provided timely FOCs, reasonable intervals, and was ready to complete these orders on or near the committed due dates (although in many cases AT&T itself was not ready). (Checklist Aff. ¶ 50 and associated Exhibit D) In the face of the overwhelming objective evidence that BA-MA is meeting its interconnection trunking obligations, AT&T's highly suspect anecdotes do not raise a credible checklist concern. (*FCC Approval Order* ¶ 50)

(d) Maintenance and Repair

The interconnection BA-MA provides to CLECs is technically identical to the interconnection BA-MA provides between the switches within BA-MA's local network. (Howard Aff. ¶ 25; Tr. 903)

BA-MA uses the same equipment and, in the case of common trunks, shares exactly the same facilities for CLEC and BA-MA local traffic. *(Id.*) BA-MA also maintains and repairs interconnection trunks in a non-discriminatory manner by using the same equipment and personnel for CLEC and BA-MA trunks. (Checklist Aff. ¶ 34)

This non-discriminatory treatment is confirmed by BA-MA's maintenance performance. From July 1999 through February 2000, the trouble report rate for interconnection trunks was virtually nonexistent. (Measurements Aff. Exhibit B1) Other performance measures for interconnection trunking during this same period, such as Mean Time To Repair, % Cleared (all troubles) within 24 hours, and % Repeat Reports within 30 days, show comparable performance overall between CLEC interconnection trunks and BA-MA's Feature Group D trunks for interexchange carriers. (Checklist Aff. ¶ 34) For some months a measure is more favorable for CLEC trunks and other months the measure is more favorable for IXC trunks. However, month-to-month variations should be expected to occur in BA-MA's carrier-neutral repair processes. *(Id.*)

(e) Trunk Blocking

In following the same engineering practices as those used by BA-NY, BA-MA designs interconnection trunks to CLECs using the same technical criteria it uses to design its own facilities. (Checklist Aff. ¶ 35) Using the same blocking criteria as its own network deployment, BA-MA installs direct-end-office interconnection trunks to CLECs where traffic volumes justify it, and routes traffic on an overflow basis through the tandem in the event that the direct-end office trunks are all busy. *(Id.*) These measures help to minimize the blocking occurring on calls made to CLEC customers.

BA-MA is currently providing CLECs as a whole with a higher grade of service for calls from BA-MA subscribers to CLEC end users than it does for calls from BA-MA subscribers to its own end

users. Traffic studies conducted from August 1999 through February 2000 show that the degree of trunk utilization for CLECs was lower every month than it was for "retail services." (Checklist Aff. ¶ 43) These studies, which include all dedicated final trunk groups from BA-MA to CLECs, show that the utilization ratios of "trunks required" to "trunks in service" over this period was 45.5 % for CLECs, while the retail percent for BA-MA was 70.4 %.[6]

The significantly and consistently lower levels of trunk utilization for CLEC-dedicated final trunk groups also show that BA-MA is providing a better grade of service for CLEC-dedicated final trunk groups in aggregate than what is needed to operate at the designed level (B.005) of blocking. The same result holds true for CLECs individually. Over the same time frame, better than 80% of the 21 - 25 CLECs active in Massachusetts in this period have enjoyed a better blocking rate each month than has BA-MA. (Checklist Aff. ¶ 38 and associated Exhibit C)[7]

In any event, BA-MA promptly remedies the few transient blocking issues that do arise. Over the past four months (November 1999 to February 2000), BA-MA has had no CLEC-dedicated final trunk groups operating over their B.005 design for three consecutive months, and had only one trunk group (out of 161 total groups in August growing to 209 in February) over the B.005 design for three months during each of the prior three months (August-October 1999). (Checklist Aff. ¶ 44; Measurement Aff. Exhibit B1)

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[6] For a specific trunk group, "trunks required" is the calculation of the number of trunks needed to provide service at the standard engineering design level (B.005), based on the actual traffic loads carried by the trunk group during the study period. "Trunks in service" is the number of trunks in operation during that period.

[7] RCN addressed trunk group blocking at the Technical Sessions, but referred only to a specific 24-trunk group. However, RCN acknowledged that this was an interexchange trunk group that did not involve local BA-MA traffic. In fact, RCN has over ** 10,000 *** local service trunks in service and none of the dedicated final trunk groups from BA-MA to RCN exceeded their engineering blocking design. (Checklist Aff. ¶ 51)

(f) Miscellaneous Trunking Issues

Two CLECs (Network Plus and Teligent) complained at the Technical Sessions about the timeliness of specific entrance facility construction projects last year, and one (Media One) complained about an interconnection mid-span meet. None of these complaints presents a checklist compliance issue. Entrance facilities are fiber optic transport systems that carry a number of different services (*e.g.*, interconnection trunks, special access, and switched access) from a BA-MA central office to a carrier's premises. BA-MA has constructed entrance facility arrangements for interexchange carriers since the mid-1980's. (Checklist Aff. ¶ 53)

The obstacles presented in either constructing new entrance facilities, or expanding existing facilities, vary from job-to-job. Some projects require BA-MA to obtain rights-of-way, place and splice fiber optic cable, secure building space and power (on the carrier's premises), and engineer, order and install new fiber optic electronics. *(Id.*) In other cases, where adequate fiber optic cabling already exists, BA-MA must still engineer, order and install additional fiber optic electronics. *(Id.*) As a result, construction schedules for entrance facilities are negotiated on a case-by-case basis. In BA-MA's access tariffs, intervals can be up to six months long. *(Id.*)

CLECs themselves have significant responsibilities affecting the overall efficient planning, management, and relief timing for BA-MA's entrance facilities to their premises. CLECs must provide accurate and timely forecasts so that the size of fiber optic systems (fiber optic electronics) can be engineered to meet future demand for a minimum period of several years. (Checklist Aff. ¶ 54) Since entrance facilities are used to transport a number of different BA-MA provided services (interconnection trunks, special access, switched access), the CLEC's forecast is unique to the specific CLEC premise, and is different than the forecasts provided for interconnection trunking. BA-MA has

had experiences with CLECs substantially under-forecasting their entrance facility transport requirements and/or suddenly changing their business plans.

Unfortunately, the service requests referred to by Network Plus and Teligent were adversely affected by these factors. BA-MA completed its first entrance facility for Network Plus (** ***) in April 1999. (Checklist Aff. ¶ 55) However, during the project planning stages (January 1999), BA-MA informed Network Plus that ** *** was probably not going to contain sufficient capacity, based upon BA-MA's experience with other CLECs. Nevertheless, Network Plus believed that ** *** would be sufficient since it intended to use it only for interconnection – requiring about one-third the capacity **

*** through the end of 2000. A little over six months later (October 1999), however, Network Plus advised BA-MA that it required an expedited addition to the entrance facility arrangement – more than 14 months earlier than Network Plus anticipated. To meet Network Plus's unforecasted needs, BA-MA successfully expedited many aspects of this project and completed construction and turn-up of the new fiber optic system in the middle of January 2000. (Checklist Aff. ¶ 56) Far from failing to serve Network Plus properly, BA-MA actually provided the additional facilities in roughly half of the six month tariffed interval. *(Id.)*

Poor CLEC forecasting similarly underlies the situation noted by Teligent. BA-MA completed its first entrance facility for Teligent (** ***) in October 1998, based on Teligent's September 1998 forecast indicating that only one-quarter of the capacity of ** *** was needed to provide service over the next 18 months. (Checklist Aff. ¶ 57) One month later, Teligent informed BA-MA that capacity **

*** was exhausted, and that an additional, larger capacity ** *** was required. Specifically, Teligent's new November 1998 forecast showed that **

*** would be needed through the end of 2000. Based on Teligent's forecast, the project was planned to initially equip ** *** fiber optic system providing a total capacity ** *** to Teligent's premises. (Checklist Aff. ¶ 58) Although over the next five months BA-MA made numerous attempts to expedite completion of this second entrance facility project, the time needed to obtain rights-of-way for fiber optic cabling and building access to pull new entrance fiber, slowed completion of this project until mid-May 1999. (*Id.*) Thereafter, in September 1999, when Teligent again approached exhaustion of its installed capacity, BA-MA expedited engineering, ordering and installation of **

.*** This project was completed in mid-November 1999.

MediaOne complained that it took BA-MA more than a year to complete a second mid-span meet ("MSM") with it in Eastern Massachusetts. (Checklist Aff. ¶ 60) In fact, although MediaOne began its timeline in November 1998, it was actually March 1999 – five months later – when MediaOne proposed a specific design and location (Brockton) for the MSM to BA-MA. Regrettably, this network proposal then became involved with an active controversy over the parties' respective responsibilities for the costs of terminating traffic. That issue was then pending in an arbitration proceeding before the Department. (Checklist Aff. ¶ 61) To break the continuing impasse, BA-MA offered to proceed with the project and let the outcome of the arbitration govern the parties' cost responsibilities that was at the center of the arbitration. MediaOne declined the offer. *(Id.*)

Following the conclusion of the arbitration, when both parties were prepared to proceed in early August, MediaOne informed BA-MA that it wanted to change the design of the arrangement – to use

different vendors for the fiber optic multiplexing equipment, and to use a MediaOne headend of Needham instead of Brockton. (Checklist Aff. ¶ 62) These changes constituted nearly a complete revision of the requested interconnection. Then, one month later, MediaOne asked BA-MA to return to the original design arrangements. At this point, work with constructing the mid-span meet arrangement in Brockton moved forward and was completed in mid-December. *(Id.)* Certainly both companies could have done better, but it is simply wrong for MediaOne to charge BA-MA with delaying this job.

When all of the facts are considered, these claims indicate the need for better CLEC planning and inter-company coordination, but they do not detract from the strong performance record BA-MA has established in providing interconnection trunking.

3. Collocation

The FCC found that BA-NY demonstrated that "its collocation offering in New York satisfies the requirements of sections 271 and 251 of the Act." (*FCC Approval Order* ¶ 73) Specifically, the FCC pointed to the fact that multiple collocation options are available in New York, and that BA-NY had taken other steps to implement the collocation requirements contained in the FCC's *Advanced Services Order*.[8] The FCC also found that BA-NY responds to applications for collocation space in a timely manner and that 95% of the time it provisions collocation on-time in New York. (*FCC Approval Order* ¶ 75) Further, the FCC found that BA-NY "has deployed methods and procedures designed to ensure that its business units implement the Commission's collocation rules, including the designation of employees dedicated to providing collocation to competitive LECs, standard operating

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[8] *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability, and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* (*"Advanced Services Order"*), Third Report and Order in CC Docket No. 98-147, and Fourth Report and Order in CC Docket

procedures related to collocation, and its CLEC Handbook, which informs collocators of their rights and responsibilities." *(Id.)*[9]

BA-MA provides collocation arrangements in the same manner as the FCC approved for BA-NY. (Checklist Aff. ¶ 63) Only two CLECs presented witnesses contesting BA-MA's provision of collocation in accordance with its checklist responsibilities at the Technical Sessions. The vast majority of the issues raised related either to BA-MA's alleged non-compliance with then recently issued new requirements established by the FCC in the *Advanced Services Order* and *UNE Remand Order*[10] or to AT&T's litany of complaints about BA-MA's collocation procedures. BA-MA's compliance with the FCC's requirements has now been addressed by the Department in D.T.E. 98-57. AT&T's unique process complaints are simply ill-informed and are addressed in detail in the Checklist Affidavit.

(a) Collocation Alternatives

The record in this proceeding shows that BA-MA makes multiple collocation alternatives available to CLECs in Massachusetts. Specifically, this includes traditional (caged) physical collocation arrangements of various sizes, and Secured Collocation Open Physical Environment ("SCOPE"). It also includes virtual collocation (where BA-MA maintains the operating equipment for the exclusive use and at the direction of a CLEC), and Cageless Collocation Open Environment ("CCOE") (Checklist Aff. ¶¶ 65-68; Tr. 1020-22) More than a thousand of these collocation arrangements are in place

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No. 96-98, rel. December 9, 1999.

9 As indicated in the *FCC Approval Order*, Bell Atlantic provides a copy of its CLEC Handbook on its collocation website. The CLEC Handbook is published in three volumes. Volume Three provides CLECs with information on unbundled network elements and the business rules / procedures that guide the CLEC's various relationships with BA-MA. Detailed among these relationships are "Collocation Arrangements" in Section 4. (Checklist Aff. ¶¶ 130)

10 *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* ("*UNE Remand Order*"), Third Report and Order And Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, rel. November 5, 1999.

today. Through March 2000, BA-MA had 650 traditional physical collocation arrangements in place and 119 pending arrangements, and 472 SCOPE arrangements in place and 248 pending arrangements. (Checklist Aff. ¶¶ 65-66) BA-MA also had 71 cageless arrangements in place and 74 pending arrangements, and 3 virtual collocation arrangements in place and 7 pending arrangements. (Checklist Aff. ¶¶ 67-68) BA-MA had 198 collocation arrangement augments in place and 219 pending augments. (Checklist Aff. ¶ 73)

BA-MA also offers shared cage collocation arrangements, under which CLECs can share their collocation space with other CLECs. (Checklist Aff. ¶ 69; Tr. 1021) A list of CLECs that offer or are interested in shared collocation can be found on BA-MA's collocation website. (Checklist Aff. ¶ 69)

In addition, BA-MA provides CLECs with the option to construct or procure a controlled environment vault or similar structure adjacent to a central office in the event that physical collocation space is exhausted in an office. To date, BA-MA has not received any formal requests for adjacent structure collocation in offices without existing space. (Checklist Aff. ¶ 70)

Going forward, BA-MA will also provide Collocation at Remote Terminal Equipment Enclosures ("CRTEE") effective with the Department's approval of revisions to BA-MA's DTE MA No. 17 tariff, which were filed May 17, 2000. CRTEE will provide for collocation of CLEC equipment in BA-MA's remote terminal equipment enclosures where technically feasible and subject to the availability of space and conduit. (Checklist Aff. ¶ 74) Remote terminal equipment enclosures include environmental vaults, huts, cabinets and leased space in buildings that BA-MA does not own. Until the Department approves the CRTEE tariff, BA-MA will provide the arrangement under the terms of the proposed tariff.

BA-MA also has two offerings that enable multiple CLECs to establish interconnection between their collocation arrangements within a BA-MA central office. The options are Dedicated Transit Service ("DTS") and Dedicated Cable Support ("DCS"). DTS allows a CLEC to order a dedicated circuit between two collocation arrangements of the same CLEC or two different CLECs in the same BA-MA central office using distribution facilities provided by BA-MA. DCS allows CLECs collocated in the same BA-MA wire center to connect facilities directly between their own physical collocation arrangements, or those belonging to other CLECs, by constructing cable support between the two arrangements and providing their own distribution facilities. (Checklist Aff. ¶ 71) BA-MA also permits CLECs to bring their fiber facilities into a BA-MA central office and terminate the facilities near a BA-MA cable vault via Competitive Alternate Transport Terminal ("CATT") service. (Checklist Aff. ¶ 72; Tr. 1022) CATT service enables CLECs to provide competitive interoffice transport facilities to other carriers that are physically or virtually collocated in a BA-MA central office, without establishing physical collocation arrangements of their own in a BA-MA central office. Through March 2000, BA-MA had 33 CATT arrangements in place and five pending arrangements. (Checklist Aff. ¶ 72)

BA-MA's collocation alternatives have been reviewed by the Department in various proceedings. In D.T.E. 98-58, the Department established specific requirements relating to the processing of collocation applications, including site visits. The Department has also approved a comprehensive collocation tariff in D.T.E. 98-57, which contains all terms, conditions, and rates for the full range of collocation arrangements, including those required by the FCC's *Advanced Services Order*.

BA-MA's provision of these collocation arrangements and ancillary services in Massachusetts provide an efficient means through which CLECs can interconnect their network to BA-MA's network

for the seamless exchange of traffic and/or for access to BA-MA's unbundled network elements. (Stern Aff. ¶ 4) They also offer CLECs a variety of choices concerning the degree to which they may wish to secure their equipment from interference. Some, like AT&T, always prefer "caged" physical collocation. (Tr. 2976) Others, like Covad, appear comfortable with "cageless" collocation. (Tr. 2977) BA-MA itself has implemented reasonable security measures to protect its network when CLECs install cageless collocation arrangements. (Checklist Aff. ¶ 93) BA-MA's reasonable security measures include "Safe Time" procedures, which limit non-critical access by BA-MA's employees and contractors to central office equipment located in close proximity to operating equipment. (Checklist Aff. ¶ 94)

These procedures are designed with one purpose in mind – to reduce the possibility of accidents and mistakes that could result in service interruptions or outages. AT&T itself told the Hearing Examiner that the physical security of its equipment – a far greater level of separation – was a significant area of operational concern. (Tr. 2976) Here, AT&T tries to deny BA-MA even a lesser degree of network security. (Checklist Aff. ¶ 95)

The success of BA-MA's provision of collocation is clear. At the end of March 2000, CLECs had complete and pending collocation arrangements and augments in 215 central offices. (Checklist Aff. ¶ 78) From these arrangements, CLECs have access to 95% of BA-MA's business access lines and 92% of BA-MA's residential access lines. (*Id*.)

(b) Managing Space Availability

BA-MA has made collocation broadly available through its disciplined management of central office space. For example, BA-MA has successfully managed the use of its central office space for collocation by reconfiguring its own equipment space, relocating administrative personnel and functions,

removing unused equipment, and establishing SCOPE arrangements. (Checklist Aff. ¶ 89) In an effort to manage collocation space in its central offices, BA-MA offers SCOPE, which allows a greater number of CLECs to collocate in a central office than does BA-MA's traditional physical collocation (cage) offering. (Checklist Aff. ¶ 86) BA-MA prefers to set aside remaining physical collocation space for "SCOPE-only" space to provide physical collocation to as many CLECs as possible in central offices where space is limited. Typically, BA-MA will set aside space for SCOPE-only arrangements in single-story offices where physical collocation space amounts to 1,000 square feet or less, and in multi-story offices where physical collocation space amounts to 2,000 square feet or less. (Checklist Aff. ¶ 87)

As a result of BA-MA's ongoing efforts to manage space, it has been able consistently to accommodate collocation requests. As an example, of the 83 requests referenced by Covad in its response to Record Request No. 165, BA-MA initially could not accommodate Covad's physical collocation requests in only two central offices. However, BA-MA subsequently was able to provide Covad with virtual collocation in one office and a cageless form of physical collocation in the other office. (Checklist Aff. ¶ 75) Similarly, of the 77 requests noted by AT&T in its response to Record Request No. 166, BA-MA provided some form of physical collocation for all but one of the arrangements noted in the response. The only exception occurred in an office in which BA-MA provided virtual collocation because space for physical collocation was exhausted. (Checklist Aff. ¶ 76)

To date, BA-MA has filed physical collocation space-exhaustion notifications for only four of BA-MA's central offices. (Checklist Aff. ¶ 100) During the November 15, 1999 Technical Sessions, BA-MA's witness stated that BA-MA had exhausted physical collocation space in six central offices,

which was an error. (Tr. 1043-44) The fact is that space had been exhausted in only four – not six – central offices. The four offices are Westboro, Middleton, Tyngsboro and Auburn. (Checklist Aff. ¶ 100) Space exhaustion notifications were filed with the Department on October 29, 1999, for the Westboro, Middleton and Tyngsboro offices, and on November 4, 1999, for the Auburn office. (*Id*.)

BA-MA files space-exhaustion notifications within 15 business days of determining that physical collocation space is not available, in accordance with the Department's order in D.T.E. 98-58. BA-MA's notifications contain more detailed information than the FCC's required central office floor plans or diagrams. (Checklist Aff. ¶ 101) BA-MA's space-exhaustion notifications include information on whether BA-MA is reserving space for itself, any affiliate or subsidiary and the total amount of space reserved. BA-MA's notifications also contain information on the number of CLECs with collocation space in the office, amount of space provided to each CLEC and the date BA-MA provided the space to a CLEC. Finally, BA-MA's notifications include information on whether a CLEC has constructed cages in its space, placed equipment in the space and activated equipment in its cage; future plans for space reclamation; plans for building expansion; and certification that no original or additional administrative space could be reduced. (*Id*.) This information is provided in accordance with the Department's order in D.T.E. 98-58.

BA-MA will continue to expand space for collocation through central office building modifications and additions when expanding to accommodate its own growth and when feasible to do so. BA-MA has modified the structure of at least six central offices, including the installation of new doorways and removal of interior walls, and is in various stages of expanding 10 central offices to accommodate BA-MA's growth and provide additional space for collocation. (Checklist Aff. ¶ 90) In compliance with the Department's order in D.T.E. 98-57, BA-MA will pro-actively remove obsolete

unused equipment in central offices experiencing space constraints, and in central offices where CLECs are collocated or where BA-MA has received collocation applications. (Checklist Aff. ¶ 89) BA-MA also will remove obsolete unused equipment "upon reasonable request by a competitor" or the Department, in accordance with the FCC's *Advanced Services Order*.[11]

BA-MA provides CLECs with information on the availability of collocation space in its central offices for their planning purposes. BA-MA's collocation website identifies every central office where CLECs have requested physical collocation, as well as the types of collocation that are present and available in each of these offices. (Checklist Aff. ¶ 96) BA-MA revises this information on the average of twice a month and updates the website with information on space limitations within 10 business days after determining that physical collocation space is not available in an office. These updates are made consistent with the FCC's *Advanced Services Order* and the Department's Order in D.T.E. 98-58. As of the end of March 2000, the BA-MA collocation website showed that space for some form of physical collocation is available in 269 central offices. *(Id.*)

BA-MA's collocation website also provides the amount of space (*i.e.*, square footage) it estimates is available for physical collocation in offices where it has received at least one request for physical collocation. (Checklist Aff. ¶ 97) In offices where BA-MA has no collocation arrangements or has not received a physical collocation application, BA-MA updates its website with information on physical collocation availability no later than 10 business days after receipt of the first application. *(Id.*) These updates are being made in accordance with the Department's Order in D.T.E. 98-58.

(c) Timely Collocation

BA-MA has demonstrated its ability to satisfy CLEC requests for collocation. In 1998, BA-

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[11] *Advanced Services Order* at ¶ 60.

MA provided 10 carriers with 187 physical collocation arrangements in 68 central offices. (Checklist Aff. ¶ 77) By comparison, BA-MA provided 25 carriers with 679 physical collocation arrangements in 150 central offices in 1999. In the first three months of 2000, BA-MA provided 27 carriers with 222 physical collocation arrangements in 99 central offices. (*Id*.) BA-MA also has the ability to handle peaks in demand for collocation arrangements. In October 1999 alone, BA-MA completed 124 physical collocation arrangements without experiencing a backlog in collocation orders. (*Id*.)

As the volume of requests has increased in recent years, Bell Atlantic has ensured that the necessary resources are in place to meet the growing demand for collocation and will continue to expand its capacity to meet future increases. In 1999, the Wholesale Network Services organization added more than 50 employees to manage collocation applications and billing processes for the region. (*Id*.) Additional organizations throughout Bell Atlantic have augmented their staffs in support of Bell Atlantic's collocation effort. Among others, these include Customer Network Engineering, Real Estate, Power Space and Frame, Central Office Engineering and Equipment Installation. (*Id*.) In this way, BA-MA was able to provide on a timely basis nearly four times the number of physical collocation arrangements in 1999 than it did in 1998. Of the 197 physical cage collocation arrangements BA-MA provided to CLECs from July 1999 through March 2000, 162 arrangements (82%) were completed within 76 business days. (Checklist Aff. ¶ 79) More importantly, however, 189 arrangements (96%) were completed by the due date, showing that BA-MA delivers physical collocation when it says it will, even if it occasionally requires additional time to address special or extraordinary conditions before it can start and complete an arrangement. (*Id*.)

This record of success is mirrored in the provisioning of other arrangements. Of the 350 SCOPE arrangements BA-MA provided to CLECs from July 1999 through March 2000, 344

arrangements (98.29%) were provided on or before the due date of the arrangement. (Checklist Aff. ¶ 80) Of the 67 cageless collocation arrangements BA-MA provided to CLECs from July 1999 through March 2000, 65 arrangements (97.01%) were provided on or before the due date of the arrangement. (Checklist Aff. ¶ 81)

AT&T challenged the timeliness of BA-MA's provisioning of physical collocation arrangements at the Technical Sessions. However, a review of AT&T's specific claims show that BA-MA completed AT&T's collocation arrangements on or before the due date for 71 of the 72 1999 arrangements detailed in the attachment. (Checklist Aff. ¶¶ 83-85)

To date, BA-MA has provided the few virtual collocation requests received within the same timeframe used by BA-NY and approved in the *FCC Approval Order*. BA-MA constructs virtual collocation arrangements and arranges to install equipment delivered by CLECs within a 105-day standard interval after receiving a completed application from CLECs. (Stern Aff. ¶ 27; Checklist Aff. ¶ 82) In this interval, BA-MA readies central office space for virtual collocation (as it also does for physical collocation) and then installs CLECs' equipment. In the case of physical collocation, CLECs receive readied space from BA-MA in 76 business days and then they install their own equipment. CLECs must complete several tasks to ensure timely completion of their virtual collocation arrangements. These tasks include ordering and scheduling the delivery of the equipment to be collocated, supplying engineering data to BA-MA and providing training to BA-MA employees on equipment that is not ordinarily used in BA-MA's network. Both of the two virtual collocation arrangements BA-MA provided to CLECs between July 1999 and March 2000 were provided within a 105-business-day interval. (*Id*.) BA-MA is in the process of modifying its virtual collocation provisioning interval to 76

business days, which includes a "stopped clock" component, in accordance with the Department's Order in D.T.E. 98-57. *(Id.*)

(d) Collocation Delivery Processes

The same methods and procedures that are used in New York, and which were approved as consistent with Section 271 responsibilities in the *FCC Approval Order*, are being used in Massachusetts. Of the 36 CLECs that received collocation arrangements from BA-MA through March 2000, only one – AT&T – has complained about BA-MA's collocation procedures. Contrary to AT&T's claims, BA-MA's collocation procedures are reasonable and meet the checklist requirements.

BA-MA's collocation application, which is the same one used across the Bell Atlantic region, enables CLECs to select the types of physical collocation they want, in order of preference, as well as virtual collocation. (Checklist Aff. ¶ 119) This process helps BA-MA to serve CLEC needs by not only providing a CLEC with its first choice of collocation alternatives, when feasible, but also by providing it with its next choice of available alternatives should the first choice not be available. Many CLECs choose to list their preferences because it facilitates the processing of their applications without requiring BA-MA to delay the application process by contacting them again about other acceptable choices if BA-MA could not accommodate their initial choice. (*Id*.) AT&T objects to this procedure. However, if AT&T does not want to use this opportunity, as other CLECs do, it may choose not to do so.

BA-MA responds to collocation applications with an acknowledgement letter back to the CLEC within five business days after receiving an application to inform the CLEC that the application has been received. (Checklist Aff. ¶ 122) The letter, which is sent via e-mail and is in the same format as the one used across the Bell Atlantic region, notifies the CLEC that its application either is complete and will be

processed or is incomplete and cannot be processed until the applicant provides the information BA-MA needs to process the application. This letter is sent to CLECs in accordance with the Department's Order in D.T.E. 98-58. Of the 759 acknowledgment letters that BA-MA sent to CLECs from June 1999 through December 1999, all were sent to CLECs within five business days after receiving the applications. Of the 667 acknowledgment letters that BA-MA sent to CLECs in the first three months of 2000, 666 letters (99.85%) percent were sent to CLECs within five business days after receiving the applications. (Checklist Aff. ¶ 123)

Within ten business days of receiving a completed application, BA-MA informs the CLECs in writing, via a schedule letter, of the interval or due date by which it will provide a physical collocation arrangement. This letter, which is in the same format as the one used across the Bell Atlantic region, is also sent via e-mail. BA-MA's schedule letter formally notifies the CLEC about the collocation arrangement BA-MA will provide based on the type of collocation the CLEC requested, the specific date by which BA-MA will complete the collocation arrangement, and a cost estimate. (Checklist Aff. ¶ 125) Of the 601 schedule letters that BA-MA sent to CLECs from July 1999 to December 1999, all were sent to CLECs within the applicable interval.[12] (Checklist Aff. ¶ 126) Of the 649 response letters BA-MA sent to CLECs the first three months of 2000, all were sent to CLECs within 10 business days after receiving completed application forms. *(Id.*) AT&T's contrary claims, shown in the attachment to its response to Record Request No. 166, are based on inaccurate information regarding BA-MA's provisioning of collocation schedule letters between July 1999 and December 1999. These inaccurate

[12] Prior to the Department's Department's July 30, 1999 Order in D.T.E 98-58, the applicable interval for this letter was 14 business days.

claims are based on a miscalculation of application receipt dates or the applicable intervals. (Checklist Aff. ¶ 127-28)

If BA-MA determines that it cannot accommodate a request for physical collocation, BA-MA provides the CLEC with an opportunity to tour a central office upon request and at a mutually agreed upon-time, but no later than 10 business days after BA-MA determines that it cannot accommodate a request for physical collocation, unless both parties agree to a later date. BA-MA provides these tours in accordance with FCC rules and the Department's Order in DTE 98-58. These tours enable BA-MA to demonstrate to CLECs the reason or reasons why BA-MA could not satisfy their physical collocation request. Contrary to AT&T's claim, BA-MA has not denied any CLEC request for a central office tour. Moreover, BA-MA is not aware of any central office tours that AT&T has requested in Massachusetts, although it has joined in tours requested by other CLECs. (Checklist Aff. ¶¶ 98-99)

As to AT&T's other claims regarding the collocation process, these are similarly without merit. BA-MA has worked with AT&T, both before and after the Technical Sessions, to explain its current application procedures. (Checklist Aff. ¶ 120-21) Further, BA-MA has made several changes to the application as desired by AT&T and other CLECs for their convenience. *(Id.*)

(e) Collocation Arrangement Quality and Ancillary Services

BA-MA has developed and implemented comprehensive methods and procedures to ensure that it provides CLECs with quality collocation arrangements. These procedures include comprehensive internal quality inspections of collocation arrangements before they are turned over to CLECs and voluntary joint testing of facilities with CLECs after they have installed equipment in their physical collocation arrangements. The procedures also include coordination of Collocation Acceptance

Meetings with CLECs when collocation arrangements are turned over to them for installation of their equipment and delivery of Special Billing Number and Connecting Facility Assignment information to CLECs.

BA-MA conducts quality inspections of its collocation arrangements approximately two weeks prior to turning over arrangements to CLECs for installation of their equipment, as noted in BA-MA's response to Record Request No. 41S. BA-MA inspects collocation arrangements using the same internal Pre-Acceptance Checklist that is used in New York to verify that each arrangement meets BA-MA's installation specifications and to address those items that may not be complete or correct at the time a collocation arrangement is inspected. (Checklist Aff. ¶ 103) The checklist covers areas such as AC and DC power, fiber structure, cable racking, total number of circuits, and lighting. Many items are minor or cosmetic in nature (*e.g.*, floor stenciling) and most could, if necessary, be finished after the CLEC has begun installation of its equipment. Only a limited few of the checklist items have even the potential to affect a CLEC's ability to install and activate its equipment if not "remedied" prior to turning over an arrangement to a CLEC. Significantly, if a CLEC refuses to accept an arrangement at a Collocation Acceptance Meeting (CAM) due to a checklist item that prevents the CLEC from installing or activating equipment, BA-MA notes the reasons during the CAM and the arrangement will not be considered complete. (Checklist Aff. ¶ 104)

BA-MA performs comprehensive testing of its cross connects upon completion of a collocation arrangement to ensure continuity between BA-MA's distribution frame(s) and Point of Termination ("POT") bays. (Checklist Aff. ¶ 107) BA-MA's quality inspection process ensures that installation of BA-MA-provided cabling is accurate, that assignments are stenciled properly, and that BA-MA's inventory systems correctly reflect the assignments upon completion of a physical collocation

arrangement. AT&T's earlier complaints about BA-MA's testing procedures were vague and confusing. If AT&T was referring to the testing of BA-MA's equipment, its comments failed to recognize the comprehensive tests that BA-MA routinely conducts on its own equipment, as noted above. If AT&T was referring to the testing of its equipment, its comments failed to realize that BA-MA does not own or operate equipment installed by AT&T and has no obligation or ability to test the equipment after it is installed in a physical collocation arrangement. (*Id*.)

BA-MA has performed voluntary cooperative quality testing of physical collocation arrangements for AT&T and will perform similar tests with other CLECs upon request. (Checklist Aff. ¶ 110) These tests include "head-to-head" testing of facilities by BA-MA and CLEC technicians from the CLEC's equipment to BA-MA's distribution frames to ensure proper continuity. *(Id.)* BA-MA technicians conducted cooperative tests in 35 central offices in 1999. In the first three months of 2000, BA-MA's technicians conducted cooperative tests in five central offices. *(Id.)*

BA-MA also notifies CLECs about Collocation Acceptance Meetings prior to the due date of an arrangement. These meetings are arranged and conducted by BA-MA with CLECs to obtain their acceptance of a collocation arrangement. (Checklist Aff. ¶ 113) Prior to November 1999, BA-MA's Local Collocation Coordinators called representatives of AT&T and other CLECs to arrange meetings at which they could accept collocation arrangements provided by BA-MA. Only AT&T complained that the completion process relied too much on telephone contacts. Nevertheless, in November 1999, at the request of AT&T, BA-MA implemented a new procedure to notify CLECs formally about, and to arrange for, acceptance meetings. With this modification, BA-MA's Collocation Applications group sends a standard e-mail letter to CLECs prior to the time that their collocation arrangement is due to complete. The letter notifies CLECs that they must contact their BA-MA Coordinator when they are

ready to inspect their collocation arrangement and confirm that BA-MA's work is complete. Since the CAM notification process was modified, 64% of CAM letters were sent one week prior to the due date of an arrangement. In March 2000, 89% of CAM letters were sent one week prior to the due date of an arrangement. (Checklist Aff. ¶ 114)

BA-MA provides timely and accurate Special Billing Number ("SBN") and Connecting Facility Assignment ("CFA") information to CLECs. AT&T complained at the Technical Sessions that BA-MA has "considerable problems" providing SBNs and CFAs, and that BA-MA's collocation application "offers little in the way of information regarding the selection of SBNs …." (AT&T Aff. ¶¶ 21-23) AT&T apparently failed to recognize that BA-MA's collocation application form was modified in September 1999 to include a separate section entitled "Request for Special Billing Number (SBN)". This section enables CLECs to specify the SBNs they need from BA-MA for the services they intend to provide from a collocation arrangement. (Checklist Aff. ¶ 115) In the event AT&T and other CLECs have questions about their application or SBNs, they can contact their BA-MA Collocation Project Manager. In contrast to AT&T's claim, Covad acknowledged at the Technical Session that SBNs "are not an issue." (Tr. 3081) Although Covad noted that there were some issues initially, it reported that they had been resolved. Indeed, BA-MA's on-time provisioning of SBNs has improved since the application form was modified. Since October 1999, BA-MA has provided SBNs to AT&T and other CLECs two weeks prior to the due date of collocation arrangements more than 98% of the time, and BA-MA attempts to provide SBNs as early as one month prior to the due date of an arrangement. (Checklist Aff. ¶ 116)

BA-MA also has assigned personnel in its collocation group to verify that connecting facilities are correctly installed prior to turning over collocation arrangements to CLECs. (Checklist Aff. ¶ 117)

BA-MA itself ensures that BA-MA-provided cabling is accurate, that assignments are stenciled properly, and that BA-MA's inventory systems accurately reflect these assignments. However, CLECs are responsible for making sure that the cables between a POT Bay and their collocation arrangement are installed correctly and stenciled accurately. CLECs also are responsible for keeping accurate records for the assignments on which they have, or do not have, service. BA-MA has assisted CLECs in reconciling their assignment records on numerous occasions without charge, notwithstanding the resources required to undertake this task. BA-MA has provided this assistance to AT&T and other CLECs. (Checklist Aff. ¶ 111)

BA-MA provides CFA information to CLECs in the letter it sends to CLECs notifying them about CAMs or in a separate notice. (Checklist Aff. ¶ 117) Since November 1999, when BA-MA began providing CFA information at the time it sends the CAM notification letters, 80% of CFA notifications have been sent to CLECs one week prior to the due date of an arrangement. In March 2000, 90% of CFA notifications were sent one week prior to the due date of an arrangement. *(Id.*)

In short, BA-MA has been following reasonable and detailed procedures for the delivery of collocation arrangements – procedures that have resulted in the timely establishment of more than one thousand such arrangements for CLECs in Massachusetts.

B. ACCESS TO UNEs (Checklist Item 2)

Section 271(c)(2)(B)(ii) of the Act requires that BOCs provide "nondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)."[13] The FCC concluded that Bell Atlantic in New York "provides to competitors combinations of network elements that are already pre-assembled in their network, as well as nondiscriminatory access to

[13] To the extent that satisfaction of this checklist item involves CLEC access to BA-MA's OSS, that subject is

unbundled network elements, in a manner that allows competing carriers to combine those elements themselves." *(FCC Approval Order* ¶ 231)[14]

The record demonstrates that BA-MA also provides non-discriminatory access to network elements, both separately or in combined form. BA-MA provides CLECs with access to UNEs in the same manner and of the same type provided by Bell Atlantic in New York and approved by the FCC. (Checklist Aff. ¶ 132) Earlier CLEC comments focused on issues of compliance with FCC orders that have now been or are now being addressed in D.T.E. 98-57, the Department's investigation of BA-MA's tariff offerings.

1. Access to UNEs

BA-MA provides CLECs with access to unbundled network elements including loops, dedicated local transport, and dedicated local and tandem switching ports on a stand-alone basis at the CLECs' physical or virtual collocation arrangements in a BA-MA central office. (Checklist Aff. ¶ 133) CLECs obtain access to these elements through cross-connect jumper wires at the CLECs' collocation arrangements, and can combine these network elements at their physical collocation arrangements by simply connecting these jumper wires. This means that a CLEC does not need to have any of its own transmission equipment in BA-MA's central offices in order for it to combine network elements and provide telecommunications services. (*Id*.)

The variety of alternative collocation arrangements BA-MA provides – such as smaller physical collocation cages, shared collocation cages and cageless collocation arrangements – can also be used

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addressed in Section III, below.

[14] The FCC also determined that BA-NY's pricing of unbundled network elements complies with the statutory requirements. As they were in New York, UNE pricing issues have been addressed by the Department in separate proceedings.

by CLECs to combine individual network elements. BA-MA offers each of these alternatives pursuant to its interconnection agreements and in DTE MA No. 17. (Checklist Aff. ¶ 134; Tr. 1021)

In its *UNE Remand Order*, the FCC concluded that incumbent LECs must provide unbundled access to sub-loops, where technically feasible (*UNE Remand Order* ¶ 205). BA-MA has developed an offering to satisfy CLEC requests for 2-wire or 4-wire metallic distribution sub-loops to provide connectivity between the Feeder Distribution Interface ("FDI") and the end-user's Network Interface Device ("NID"). Through this offering, a CLEC can access the copper distribution portion of a loop and bypass the Digital Loop Carrier ("DLC") feeder portion of the loop, which is generally incompatible with wideband DSL services. On May 25, 2000, BA-MA filed terms and conditions for Unbundled Sub-loop Arrangements ("USLA") to make this capability available in D.T.E. MA No.17. Under USLA, the CLEC can access the BA-MA distribution pairs by establishing an Interconnect Cabinet near the BA-MA FDI and arranging for BA-MA to place a cable to connect the two sites. On May 17, 2000, BA-MA filed additional terms and conditions with the Department to enable a CLEC, where space and right-of-way permit, to collocate its associated electronics in BA-MA remote terminal equipment enclosure ("CRTEE") locations. BA-MA also provides USLA and CRTEE under interconnection agreements and has posted on its web-site proposed terms and conditions to facilitate the process of negotiating amendments to interconnection agreements. (Checklist Aff. ¶ 142)

Like BA-NY, BA-MA will provide CLECs interconnection at other technically feasible points through the BFR process set out in interconnection agreements and in DTE MA No. 17. In its Order of March 24, 2000, in D.T.E. 98-57, the Department approved BA-MA's BFR process for addressing requests for network elements and services not offered either by tariff or through approved interconnection agreements. Specifically, the Department approved the intervals and cost recovery

mechanism set forth in BA-MA's tariff but directed BA-MA to modify its tariff language to make clear that: (1) BA-MA's acknowledgement of a BFR will be in writing; and (2) the BFR process applies whenever BA-MA receives requests for network elements and services not offered either by tariff or through its approved interconnection agreements. On April 21, 2000, BA-MA filed those revisions in its compliance filing in D.T.E. 98.57.

2. BA-MA Provided UNE Combinations

In addition to providing numerous methods for CLECs to combine individual network elements, BA-MA also provides unbundled network elements in an already combined form. Specifically, BA-MA is providing to CLECs the complete platform of network elements known as "UNE-P" in accordance with the requirements of the FCC and the Department. This UNE-P offering is available under interconnection agreements or DTE MA No. 17. (Checklist Aff. ¶ 136) As of the end of February 2000, nine CLECs were using the UNE-P platform to provide telecommunications services to their end user customers. (Checklist Aff. ¶ 138)[15]

BA-MA also offers an unbundled network element combination called "Switch Sub-Platform", which may best be described as a "loopless" UNE-P arrangement. (Checklist Aff. ¶ 139) This unbundled network element arrangement combines unbundled local switching with other unbundled network elements, including either shared or dedicated interoffice transport, shared tandem switching, SS7 signaling, and access to E911. Operator Services and Directory Assistance service are available on an optional basis. Under switch sub-platform common interoffice transport, BA-MA will provide common interoffice transport in conjunction with a shared trunk port. Under switch sub-platform

[15] The UNE-P offering is discussed below in more detail in the sections dealing individually with the UNE-loops and UNE-Switching combined in UNE-P.

dedicated interoffice transport, BA-MA will provide dedicated interoffice transport in conjunction with a dedicated trunk port. There is no collocation requirement under this option. The switch sub-platform offering is available in DTE MA No. 17. *(Id.*) All UNE-P lines currently in service use the Switch Sub-Platform.

BA-MA also provides loop and transport combinations for use by CLECs in their provision of switched local exchange and associated switched exchange access services in accordance with the Department's requirements and the FCC's *UNE Remand* and Supplemental Orders. The Enhanced Extended Loop combination ("EEL") provides a CLEC with access to unbundled loops without the need to collocate in the central office in which those loops terminate. (Checklist Aff. ¶ 140) In the EEL, BA-MA combines the UNE loop with appropriate UNE-transport. The CLEC may also obtain multiplexing as part of an EEL arrangement. *(Id.)* EEL arrangements are available under interconnection agreements and DTE MA No. 17.[16]

C. ACCESS TO POLES, DUCTS, CONDUITS AND RIGHT-OF-WAY (Checklist Item 3)

Section 271(c)(2)(B)(iii) of the Act requires that BOCs provide "nondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of section 224." BA-MA has provided access to its poles, ducts, conduits, and rights of way in Massachusetts since the 1960s pursuant to standard licensing agreements.[17] In response to the Act, BA-MA amended its standard agreements to conform its terms

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[16] Following the Department's March 24, 2000 Order in D.T.E. 98-57, BA-MA filed a Motion for Reconsideration and Clarification of various aspects of the Department's order as it relates to BA-MA's EEL offering. Specifically, BA-MA has requested reconsideration of (1) the requirement for commingling of special access and EEL arrangements; (2) the rejection of BA-MA's proposal to require new EEL arrangements to terminate at a CLEC's collocation facilities; and (3) the requirement that BA-MA allow all elements of an EEL arrangement to be ordered on a single service order. BA-MA's EEL offering already complies with the requirements of the FCC's *UNE Remand* and *Supplemental* Orders, regardless of the outcome of this Motion.

[17] Massachusetts has certified to the FCC that it will regulate the rates, terms and conditions for pole attachments.

and conditions with the requirements of the Act. Based on information presented in the Checklist Affidavit and BA-MA's standard license agreements for poles and conduits, BA-MA has demonstrated that it is providing nondiscriminatory access to its poles, ducts and rights-of-way at just and reasonable rates in accordance with the requirements of section 224.

The FCC concluded that Bell Atlantic in New York "demonstrates that it is providing nondiscriminatory access to its poles, ducts, conduits, and rights-of-way at just and reasonable rates, terms and conditions in accordance with the requirements of section 224, and thus satisfies the requirements of checklist item 3." (*FCC Approval Order*, at ¶ 265) In a separate FCC Order relating to BellSouth's Section 271 Application, the FCC found that BellSouth is providing nondiscriminatory access to its poles, ducts, conduits, and rights-of-way at just and reasonable rates terms and conditions. *Application of BellSouth Corporation*, FCC 98-271 (rel. October 13, 1998) (*"BellSouth")*.[18] Based on these cases, BA-MA has demonstrated that it meets the Act's checklist item 3 requirements.

1. BA-MA Meets the Criteria of the FCC Approval Order

The evidence shows that BA-MA has a very long history of providing non-discriminatory access to poles, ducts, conduits and rights-of-way that it owns or controls. (Harrington Affidavit ¶6) As of March 2000, BA-MA has 352 pole-attachment agreements and 82 conduit-occupancy agreements. There are 27 pole-attachment agreements with CLECs/Other Common Carriers ("OCCs") and 141 pole-attachment agreements with Cable Television Companies ("CATVs"). Of the 82 conduit-occupancy agreements, 14 are with CLECs/OCCs and 18 with CATVs. (Checklist

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See States That Have Certified That They Regulate Pole Attachments, Public Notice, 7 FCC Rcd 1498 (1992). *See also* G.L. c. 166, § 25A; 220 C.M.R. 45.00.

[18] The FCC denied BellSouth's application based on deficiencies unrelated to checklist item #3. See *BellSouth, Executive Summary*.

Affidavit ¶ 143)

BA-MA treats all licensees, including CLECs, in a similar and non-discriminatory manner. For example, BA-MA uses a standard license agreement for pole attachments for Maine, Massachusetts, New Hampshire and Rhode Island and a standard conduit occupancy agreement for these states plus Vermont.[19] Bell Atlantic maintains a centralized License Agreement Group ("LAG") that serves these states, and follows standard practices and procedures. BA-MA, additionally, has standard documented processes that it provides to licensees that detail how they may obtain access to BA-MA's carrying plant. (Harrington Affidavit ¶12) The use of standard license agreements and practices help ensure consistency and efficient service to all licensees, including CLECs.[20] BA-MA has added additional personnel to its License Administration Group ("LAG") to address the continuing demand for requests for access and also made managerial changes in its LAG staff to respond to requests by licensees more effectively and efficiently. (Response to Information Request DTE-ATT-1-182)

BA-MA holds monthly workshops with licensees to ensure two-way communication between BA-MA and licensees. As a result of these workshops, BA-MA has instituted a project-management function to handle large or complex requests in an efficient manner both for licensees and BA-MA. Additionally, BA-MA has modified certain procedures, such as the conduit occupancy procedure (Procedure 9), as a result of on-going feedback from licensees. (Checklist Aff. ¶ 146)

BA-MA provides the same type of non-discriminatory access to poles, ducts, conduits and rights-of-way at just and reasonable rates in accordance with the requirements of section 271 of the Act as BA-NY.

(a) New BA-MA Licensing Agreements

In response to the Act, BA-MA discontinued its enforcement of provisions that are in conflict

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[19] Pole attachments are provided in Vermont under tariff arrangements.

[20] *See BellSouth*, at ¶ 177 ("BellSouth demonstrates that it utilizes a standard license agreement for access to poles, conduits, ducts, and right of way, which outlines specific terms and conditions.")

with the Act and has undertaken an effort to update its license agreements for both pole attachments and conduit occupancy. (Checklist Aff. ¶ 144) As noted in the Initial Harrington Affidavit (¶ 19), this effort began with workshops with licensees that were initially held in April 1999, and continue to be held monthly. Although certain provisions of the older licensing agreements were not in compliance with the Act, BA-MA has not enforced those provisions, and they are no longer included in the updated agreements. (Record Request No. 2; Checklist Aff. ¶ 145) The updated agreements comply with all relevant requirements of the Act concerning the nondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by BA-MA. BA-MA has not enforced terms and conditions contained in its existing license agreements that may conflict with the Act. (DTE-NECTA-1-21, Tr. 21-22)

There were a number of items identified by RCN, AT&T and Conversent in which they contended that BA-MA's then current license agreements were inconsistent with the Act or were otherwise discriminatory. BA-MA has addressed those claims in its revised aerial and conduit licensing agreements previously filed with the Department. Further, BA-MA met with representatives from NECTA in February to address its comments. (Checklist Aff. ¶ 144) For example, some of the changes that BA-MA has made include: (1) incorporating the 45-day requirement to complete field surveys and provide a response to the CLEC application; (2) inserting a new commitment that BA-MA will strive to complete make-ready work within 90 days for conduit, and 180 days for pole attachments; (3) modifying the language concerning the limit on the number of pole applications to reserve BA-MA's right to limit (rather than prohibit) the filing for pole attachments to no more than 2,000 poles on all pending applications from each CLEC; (4) providing CLECs with the ability to access BA-MA's pole and conduit records; and (5) eliminating provisions that required a CLEC to bear the costs for make-

ready work done for BA-MA's own requirements. (Record Request No. 2.) In written comments, and during the Technical Sessions, certain participants raised other issues that they claim undercut BA-MA's assertion that it complies with checklist item 3. These issues are addressed below.

(b) Non-Discriminatory Process

Conversent suggested that BA-MA's process for providing access to conduit is discriminatory because the process flow for BA-MA's own conduit requests is "simple and straight forward", whereas the process for CLEC requests is "extremely complex." (Record Request No. 137) Conversent fails to recognize that BA-MA's process for itself is inherently different from the process applied to CLECs because BA-MA does not license itself. (Tr. 114-15) As an owner of the poles and conduits, BA-MA need not establish the same process for itself that it uses in order to satisfy the requirements of the Act for CLECs' access to poles, conduits and rights-of-way. *(Id.*) Indeed, it is precisely because of the need to prevent discrimination and to ensure compliance with the Act that BA-MA incorporated additional steps in BA-MA's process to provide access to licensees, including CLECs.

(c) Standard Intervals, Performance Standards and Liquidated Damages

Conversant contended that BA-MA's licensing agreements should include, "to the extent practicable," standard intervals and performance standards, together with liquidated damage provisions that would apply to BA-MA if it fails to meet such standards. (Conversent Aff. (David A. Graham) ¶ 11) Neither the Act nor FCC regulations – nor either of the FCC decisions finding BA-NY's and Bell South's 271 applications sufficient under Checklist Item # 3 – require performance standards and liquidated damage provisions. In fact, performance standards, in the context of make-ready work, are not practical or equitable because BA-MA may not have exclusive control over the pole and its existing attachers (*e.g.*, joint-pole ownership arrangement). (Tr. 186-87) Moreover, every request for access

is different in its scope and specific elements, requiring a case-by-case analysis of the make-ready work and reasonable time frames necessary to complete such work. (Tr. 208-09) Both BA-MA's proposed standard conduit licensing agreement and its Pole Attachment Agreement[21] provide that BA-MA will use reasonable efforts to complete make-ready work in set time frames -- the only practical commitment that can be made under the circumstances. Moreover, as shown in the comparison for make-ready work between BA-MA's internal work and that for CLECs, the results show that BA-MA's actual performance are both reasonable and non-discriminatory. (Checklist Aff. ¶ 152) The averages for make-ready work for CLECs, CATV, and others vary by quarter, as do BA-MA's own internal results since the timeframes for all jobs, both BA-MA's own work and that for licensees, vary depending on the individual make-ready requests associated with each request and the number of requests. (Checklist Aff. ¶ 153)

BA-MA's proposed standard licensing agreements comply with the FCC's regulation that written requests for access must be responded to within 45 days. *See* 47 C.F.R. § 1.1403. *See also First Report and Order*, at ¶ 1224. BA-MA's proposed standard conduit and pole attachment agreements each provide a BA-MA commitment to perform a pre-construction survey and communicate the results to the CLEC within 45 days.[22] (Checklist Aff. ¶¶ 147-148; *Pole Attachment Agreement*, ¶ 5.3; *Conduit License Agreement*, ¶ 5.3)[23] Of course, BA-MA does not wait 45 days if

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[21] See § 5.5 of each agreement.

[22] This is consistent with the FCC's decision in *BellSouth*, where BellSouth commits to inform competitors within 45 days if facilities are not available. (BellSouth, at ¶ 177) As indicated in the Checklist Aff. ¶ 148, BA-MA is willing to file performance data regarding the 45-day timeframe with the Department as part of its quarterly performance reports, should the Department so desire. However, BA-MA opposes the monthly detailed reporting requested by AT&T because it is burdensome to administer and confusing to understand. (Record Request No. 147)

[23] AT&T maintained that BA-MA's Procedure 9 extends BA-MA's decision-making process regarding access to a period of 52 days because the procedure permits BA-MA seven days from receipt of an application to send

the information can be made available to an applicant in a shorter time frame. (Tr. 32) The time required is ultimately dependent upon the size and scope of the request. *(Id.)* BA-MA has been able to meet the 45-day timeframe on nearly a 95% combined average for the last year. (Checklist Aff. ¶ 148) Accordingly, BA-MA's conduit and pole attachment agreements, as they relate to standard intervals are reasonable and non discriminatory.

(d) No Barrier to Conduit Access

AT&T complained that BA-MA's process for obtaining conduit space has made it particularly difficult to develop a route because it requires that an applicant specify the two endpoints of the conduit run and the exact route between them desired by the CLEC. (*AT&T Comments,* at ¶ 10) According to AT&T, if conduit space is unavailable, the applicant is expected to specify another route until a route is found with spare conduit space in all of its requested segments (AT&T labels this process "go fish"). *(Id.*) However, as AT&T acknowledges, this process is no longer in place. *(Id.*, at ¶ 11)

On October 25, 1999, BA-MA amended Procedure 9 to address this problem. (DTE-NECTA 1-28 (Supplemental)) The amended Procedure 9 now provides three options to a CLEC seeking conduit access from BA-MA:

Option 1	The CLEC has developed its required route; if no conduit or manhole breakout is available, no alternatives will be explored by BA-MA.
Option 2	The CLEC has developed its required route; if no conduit or manhole breakout is available, then BA-MA will consider alternate routes.
Option 3	The CLEC requests assistance in developing a conduit route or manhole breakout.

Using Option 3, a CLEC need not play "go fish". BA-MA will work together with a CLEC to develop

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the applicant a written statement for the estimated costs to perform the record search and survey to determine conduit availability. (AT&T Aff. ¶ 8) AT&T's interpretation of the 45-day requirement is unreasonable. It is appropriate that all application-related time frames, including this one, be measured from the date all necessary paperwork and applicable fees are received until the date all work is complete.

a conduit route or manhole breakout to achieve the CLEC's requested route in some manner. AT&T is left to suggest that BA-MA has not demonstrated that it actually follows the new procedure. (AT&T Comments, at ¶ 11)

(e) BA-MA Reservation of Conduit Space

AT&T and Conversent complained about provisions in BA-MA's written procedures that permit BA-MA to reserve space for one year in its conduits for its own telecommunications services, compared to a 90-day period for CLECs, as specified in the Conduit Licensing Agreement. (AT&T Comments, at 21; Record Request No. 137) BA-MA will pre-allocate structure space for its own work for a job only if documented by a fully engineered plan. Construction of this documented job shall commence within one year of its being authorized. This permits sufficient time to complete field surveys, final detailed work-prints, and ordering of materials that precede actual structural occupancy. (Supplemental Reply DTE NECTA 1-30, at 2) Once a CLEC has initiated the process of filing for a license with BA-MA, the CLEC will have the first right to occupy the requested space. Should its pre-construction work (which is often initiated well-before the actual filing for a license with BA-MA) take nine months to complete, the CLEC, in effect, would have the same opportunity to pre-allocate structure space as BA-MA. Therefore, the first-come, first-serve allocation of space occurs at the same stage for BA-MA as it does for CLECs. *(Id.*)

BA-MA does not discriminate against the CLECs concerning its reservation policy. Although BA-MA expects CLECs to begin placing their facilities within 90 days of being issued a license by BA-MA, nothing precludes the CLEC from beginning pre-construction work in advance of receiving its occupancy license from BA-MA. A CLEC's pre-construction includes planning, ordering of materials and construction of a private conduit system, and may not include occupying the BA-MA conduit

space.

BA-MA's policy protects other CLECs and BA-MA from being unable to use available structures that had been pre-allocated to another licensee for a long period of time. In general, customers who apply for conduit space usually need it as soon as possible to serve their customers and begin construction in a timely fashion. (Tr. 362) To date, BA-MA has never requested a CLEC surrender its unused, post-90 day pre-allocated structure. *(Id.*; Tr. 355)

(f) Use of BA-MA Employees

AT&T and Conversent object to BA-MA's requirement that licensees seeking to make attachments use BA-MA employees or contractors hired or pre-designated by BA-MA for survey and make-ready work. (AT&T Comments, at ¶ 22; Record Request No. 137) These objections overstate the impact of the restriction.

For a period of approximately two years, BA-MA has allowed CLECs to perform their own pre-construction survey to determine which poles, if any, will require make-ready work in order to accommodate a potential overlash. (DTE-NECTA 1-35**,** *Terms and Conditions for a Licensee To Perform an Overlash To Their Own Existing Authorized Aerial Attachments*) Additionally, CLECs have the option to have manhole break-out work performed in coordination with BA-MA and using the same BA-MA approved contractors with a BA-MA Contract Work Inspector present. Except for safety reasons or in cases of some damage/emergency conditions, CLECs have always been able to use their choice of workforce when performing work on CLEC-owned facilities (for example, placement, rearrangement or removal of CLEC owned facilities, transfers or to accommodate the needs of other attachees) (Checklist Aff. ¶ 72) For other types of work, BA-MA has labor agreements with its bargained-for employees, and work on BA-MA's plant and facilities must be performed in

accordance with those agreements. (Tr. 273)

(g) Procedures for Making Conduit Available

AT&T maintained that certain aspects of BA-MA's pricing procedures are unnecessarily expensive and its charges for the make-ready work "tend to be overstated". (AT&T Comments ¶ 12) AT&T provides no support for these assertions. They are not correct since the costs are based on prevailing labor rates and actual time expended to complete the work.

AT&T also objected to BA-MA's policy of not allowing a CLEC to license a full duct if the cable being placed by a CLEC applicant is less than 1.1 inches in diameter. *(Id.* at ¶ 13) In such cases, BA-MA will make an innerduct available. Installed innerducts are available for the use of other CLEC conduit applicants where required. This policy is reasonable and appropriate because it provides a CLEC applicant with what is specifically needed by the CLEC, and does not permit the CLEC unfairly to obtain more space than it requires.

Contrary to AT&T's assertions, BA-MA does not profit from the make-ready work that the party has paid to complete. *(Id.*) Because AT&T may be equally likely to be the beneficiary of earlier make-ready work performed by BA-MA for another CLEC, or for BA-MA itself, AT&T (or another CLEC) would avoid any future make-ready work and associated costs. BA-MA collects costs for make-ready work only once and charges proportionate rent based on the space occupied.

(h) Itemized Make-Ready Work Estimates

AT&T claimed that the make-ready work estimates from BA-MA are not sufficiently itemized for an applicant to be able to evaluate their accuracy. (AT&T Comments at ¶ 14) As shown in Technical Session Exhibit 3, BA-MA provides AT&T with sufficient detail concerning make-ready estimates to evaluate their accuracy. For example, Exhibit 3 includes the specific information that was

used by BA-MA to calculate the estimated $84,291.97 make-ready costs, broken down into the following elements:

- Estimated engineering time (in hours) and labor rate per hour
- Estimated police detail (in hours) and labor rate per hour
- Estimated contract work inspection (in hours) and labor rate per hour
- Estimated manhole survey (in hours) and labor rate per hour
- Estimated rod and rope, including number of feet and unit cost per foot
- Estimated line crew placement of innerduct (includes number of innerducts and unit cost per innerduct, together with estimated hours of labor and unit labor cost.

If there are additional questions that such an estimate raises, BA-MA is always available and ready to provide whatever further clarification may be requested by a carrier.

(i) The Number of Poles Per Application

Section 4.2 of the proposed standard pole attachment agreement limits an application for pole-attachment licenses to include no more than 200 poles in any one application. In addition, BA-MA reserves the right to limit the filing for pole attachments to no more than 2,000 poles on all applications that are pending approval at any one time within a single Planning Manager's Area. (Checklist Aff. ¶ 145) RCN challenged this limitation. (Tr. 2600)

BA-MA's reservation of its right to limit the number of poles is intended to prevent a single CLEC from potentially using most or all of BA-MA's resources with an unusually large request. (Tr. 195) Such an approach also provides practical benefits to CLECs because construction cannot begin until a license is granted pursuant to an application. Segmenting a large application allows the CLEC to begin placing their cable before BA-MA has completed all the necessary survey and make-ready work that may be required on an extremely large single application. (*See* Tr. 198-99.) Notably, BA-MA's updated proposed pole attachment agreement no longer establishes an absolute prohibition against more

than 2,000 poles. (*Compare Original Pole Attachment Agreement*, at Article VII(B) with *Updated Pole Attachment Agreement*, § 4.2) BA-MA's proposed Pole Attachment Agreement now provides the additional flexibility for BA-MA to work together with a particular CLEC to reach an acceptable accommodation based on the unique facts and circumstances, and in consideration of BA-MA's other requirements for itself and other licensees. (Tr. 198-99)

(j) CLECs' Access to Conduit Plats Is Reasonable.

Conversent and AT&T complained about BA-MA's procedure to provide CLECs with access to BA-MA's conduit plats.[24] (Conversent Comments at 3; Tr. 2557-59*)* Conversent and AT&T suggested that they should be able to come to BA-MA's offices and browse through all plats within BA-MA's collection. That sort of unrestricted review is neither required nor necessary. Instead – like the Section 271 compliant Bell South procedure – BA-MA will provide copies of specifically requested drawings to a CLEC.[25] BA-MA has a standardized process regarding providing access to records.[26] During the first quarter of 2000, BA-MA received 53 requests for access to records and was able to provide the information requested for 75% of those requests within five business days after receipt of the request. Further, BA-MA responded to the 53 requests on an average of 5.8 business days.[27] (Checklist Aff. ¶ 155)

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[24] A plat is a map of the network that shows the location of conduit and manholes on a particular street, the number of ducts, the size of the manhole and other proprietary information. (Tr. 2558-59)

[25] *See BellSouth*, at ¶ 180. ("BellSouth commits in its SGAT to provide 'access to relevant plats, maps, engineering records and other data upon receiving a bona fide request for such information" (footnote omitted))

[26] As part of BA-MA's process, it reviews the request, records it, and then retrieves the plat, either locally or from an off-site vendor. The customer is then informed that the copy is available subject to the signing of the non-disclosure agreement and payment of the applicable cost. (Checklist Aff. ¶ 154)

[27] *See BellSouth*, at ¶ 180. ("BellSouth further commits to providing competitive LECs with access to engineering records within five business days of a competitor's request for such information. We reject AT&T's contention that a five business day waiting period for competitors is discriminatory, when BellSouth has instant access to engineering information.")

(k) Nondiscriminatory Access to Municipal Duct Space

MCIW and NECTA raised certain questions concerning the availability to CLECs of spare municipal duct space. (Tr. 301-307) BA-MA generally reserves duct space in conduit for municipal use. BA-MA's policy is not to use reserved municipal duct space for its own purposes. However, BA-MA may, on occasion, occupy this duct space on a temporary basis for emergency or maintenance reasons. (DTE-MCIW 1-17) That existing municipal duct space is available to all licensees for emergency or maintenance reasons on a similar temporary basis. (Tr. 302)

(l) Miscellaneous Issues

AT&T raised several miscellaneous issues relating to various provisions of BA-MA's pole attachment agreement. (AT&T Comments, at ¶¶ 20-29) AT&T objects to the fact that BA-MA assumes no obligation to construct, retain or maintain any facility not needed for its own service requirements. *(Id.*. at ¶ 23) (*See* BA-MA Pole Attachment Agreement, at ¶ 2.4) There is nothing unusual or discriminatory about this provision. The poles are owned (often jointly) by BA-MA and are made available to CLECs if, and to the extent, such poles continue to be used for BA-MA's own service requirements.

AT&T objected to a provision permitting BA-MA to remove or rearrange a CLEC's pole attachments in an emergency without liability for damages. (AT&T Comments, at ¶ 25) (*See* BA-MA Pole Attachment Agreement, at ¶ 7.1.10) This limitation on liability has been removed from the latest version of BA-MA's pole attachment agreement, and AT&T's concern is moot.

AT&T objected to BA-MA's failure to credit a CLEC if BA-MA realizes additional revenue from any additional space that results from a required CLEC rearrangement. In addition, AT&T

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[27] *See* DTE-NEVD 1-36.

suggested that CLECs should not bear the expenses associated with rearrangement of the CLEC's facilities that BA-MA requires the CLEC to make to accommodate BA-MA's service requirements. (AT&T Comments at ¶¶ 25-26) AT&T's objections are without merit. BA-MA does not "profit" from improvements paid for by the CLEC. When rearrangement of facilities are performed at the request of a CLEC, such rearrangement provides the additional space needed to serve the applicant on a cost-causer basis. (Checklist Aff. ¶¶ 145, 159) Costs incurred by a CLEC to rearrange facilities to accommodate BA-MA have been addressed in a recently drafted provision, which states:

> Licensee shall not be required to bear any of the costs of rearranging or replacing its attachment if such rearrangement or replacement is necessitated solely as a result of an additional attachment or modification of an existing attachment sought by another party (including Licensor, Joint Owner(s) or Joint User(s)) and should be paid for any work it performs to accommodate such request. Where multiple parties join in a modification, each party's proportionate share of the total cost will be based on a ratio of the amount of new space occupied by that party to the total amount of new space occupied by all parties joining in the modification. If a Licensee brings its facilitates into compliance with applicable safety codes and requirements during such modifications, Licensee will be responsible for a share of the modification costs. Licensor shall not be required to use revenue that may result from the use of any additional space resulting from such replacement or rearrangement to compensate parties that paid for that modification.

AT&T raised objections concerning BA-MA's indemnification and liability provisions relating to interference with service and other potential losses, asserting that BA-MA's requirement for CLEC indemnification and its liability provisions relating to interference with service are not reciprocal. (AT&T Comments, at ¶¶ 27-28) Although BA-MA maintains a primary obligation to serve that is not shared by CLECs, BA-MA has created a level of reciprocity to CLECs through the incorporation of the following provision:

> Licensor shall exercise precaution to avoid damaging the facilities of Licensee. Licensor shall make an immediate report to Licensee of the

> occurrence of any such damage and agrees to reimburse the respective parties for reasonable, direct costs incurred in making repairs.

This provision holds BA-MA accountable to CLECs for all reasonable direct damages it causes to CLECs' facilities, and provides reciprocity to CLECs regarding CLECs obligations to BA-MA for damaging the facilities of BA-MA. (*See* Pole Attachment Agreement, § 13.2) Reciprocity with respect to indemnification provisions are unnecessary because BA-MA's retail customers, as a matter of public policy, are prevented from seeking consequential damages from BA-MA as a result of service disruptions. Accordingly, there would be no need to establish reciprocal indemnification provisions with CLECs.

(m) Reasonable Rates

RCN complained that BA-MA's rates for pole attachments are excessive is completely inaccurate. BA-MA has not modified its pole-attachment rate for more than 20 years even though labor costs have continued to rise over time. A potential licensee that contests BA-MA's rates for attachments has specific rights under Massachusetts law to have the Department set the rates. No licensee has, however, brought such an action concerning pole attachment rates.

D. UNBUNDLED LOCAL LOOPS (Checklist Item 4)

Section 271(c)(2)(B)(iv) of the Act requires that BA-MA provide "[l]ocal loop transmission from the central office to the customer's premises, unbundled from local switching or other services." The FCC has noted that it has defined the loop as " a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer's premises." (*FCC Approval Order* ¶ 268) Further, the definition includes different types of loops, including two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as Integrated Services Digital

Network ("ISDN"), Asymmetrical Digital Subscriber Line ("ADSL"), High-bit-rate Digital Subscriber Line ("HDSL"), and 1.544 Mbps digital ("DS-1") transmission services. *(Id.*)

In reviewing the application of BA-NY, the FCC also stated that "Bell Atlantic must demonstrate that it has a concrete and specific legal obligation to furnish loops and that it is currently doing so in the quantities that competitors reasonably demand and at an acceptable level of quality." (*FCC Approval Order* ¶ 269) The FCC observed that Bell Atlantic must also demonstrate that it provides non-discriminatory access to unbundled loops, although it noted that this inquiry involved as well the non-discriminatory access to the various functions of Bell Atlantic's OSS that were under separate scrutiny in Checklist Item # 2. With respect to this data, the FCC said:

> To demonstrate that it provides unbundled loops in compliance with its checklist obligations, Bell Atlantic submitted performance data for various metrics relating to loop provisioning, including data on the length of provisioning intervals, missed appointment rates, "on-time" hot cut performance, and new loop and hot cut installation troubles. In addition, Bell Atlantic submitted performance data addressing both voice-grade loops and loops capable of transmitting the digital signals necessary to support high-speed data services. In view of the variety of these measures, we conclude that our analysis of this checklist item cannot focus on Bell Atlantic's performance with respect to any single metric or any single type of loop. Rather, we examine the performance data for all of the various loop metrics, as well as the factors surrounding those metrics, in order to obtain a comprehensive picture of whether Bell Atlantic is providing unbundled local loops in accordance with the requirements of checklist item 4. (*FCC Approval Order* ¶ 278)

The FCC went on to consider the provisioning data provided by BA-NY on three different bases: standalone, new loops; coordinated loop transfers, called "hot cuts"; and loops provided as part of an unbundled loop and switch port ("UNE-P") platform. Based on the performance data provided, the FCC concluded that Bell Atlantic satisfies these requirements in New York.

The same type of performance data provided by BA-MA in this proceeding similarly show

strong performance in the provision of UNE loops. The contrary claims of AT&T concerning hot cuts are simply factually incorrect. Hot cut provisioning has been excellent, indeed far better than the on-time and quality provisioning levels that were approved by the FCC. Similarly, the technical and coordination challenges presented in provisioning quality xDSL loops on-time have been overcome by the use of collaboratively developed procedures specific to these UNEs. There is no need for a separate Massachusetts xDSL collaborative to cover the same subject areas effectively addressed in New York. Rather, the development of different approaches and procedures would risk inhibiting the success and market growth achieved. Finally, MCI's various claims about IDLC loop access and quality are technically inaccurate, and its characterization of Bell Atlantic's prior statements and actions are simply incorrect.

1. BA-MA Provides UNE Loops

Like BA-NY, BA-MA has a concrete and specific legal obligation to provide unbundled local loops through its Wholesale Tariff, DTE MA No. 17 and various interconnection agreements. (Stern Aff. ¶ 41) And, like BA-NY, BA-MA has provided "sufficient evidence that it provides unbundled local loop transmission, for the provision of both traditional voice services and various advanced services, in a non-discriminatory manner." (*FCC Approval Order* ¶ 273)

First, BA-MA provides local loops unbundled from local switching or other network elements. (Stern Aff. ¶41) Access to loops is provided by cross connects that run from the BA-MA distribution frame to the CLEC's collocation arrangement. Where a Network Interface Device ("NID") is installed at the customer's premises, the unbundled loop includes the NID. In addition, BA-MA provides access to BA-MA's NIDs on a stand-alone basis to CLECs that have their own loops. (Stern Aff. ¶ 54) BA-MA also has a process in place to provide CLECs with access to the house and riser cables

and inside wiring owned by BA-MA. *(Id.)* (*See also* DTE MA No. 17, Part B, Section 5.12)

Second, BA-MA provides CLECs with service in the same manner and of the same type provided by BA-NY that the FCC found satisfied this checklist item. That is, like BA-NY, BA-MA provides a full range of unbundled loops (analog and digital, 2-wire and 4-wire) that can be used by CLECs to offer a full range of services, such as ISDN, ADSL, HDSL, and DS-1 level transmission services. (Stern Aff. ¶¶ 42-49; Tr.1556-58) CLECs are ordering ISDN loops to provision IDSL services to their end users, and ordering ADSL qualified loops to provision SDSL services. BA-MA uses provisioning processes that are specifically designed to ensure that these UNE loops are installed in a timely and quality manner.

BA-MA also now provides unbundled sub-loops consistent with the FCC's sub-loop unbundling requirements. This offering was made available in Massachusetts on May 17th in compliance with the FCC's *UNE Remand Order*. BA-MA has also filed with the Department on May 5, 2000, its unbundled Line Sharing offering, in compliance with the FCC's *Advanced Service Order*. BA-MA will evaluate requests for additional loop types pursuant to the process that is included in virtually all interconnection agreements and in DTE MA No. 17. (Checklist Aff. ¶ 162)

Third, as explained in the accompanying Measurements Affidavit, BA-MA uses the same measurement data to demonstrate its performance results in providing unbundled loops in Massachusetts as BA-NY did in New York. The Department has adopted the New York Carrier-to-Carrier Performance Guidelines ("C2C") as the basis for assessing BA-MA's Section 271 compliance.[28] The data being provided by BA-MA is undergoing validation by KPMG as part of the ongoing comprehensive testing of OSS for Massachusetts. (Measurements Aff. ¶¶ 130-31)

In Massachusetts, BA-MA has provided approximately 14,000 2-wire analog POTS loops to CLECs on either a stand-alone or hot-cut basis,[29] and over 3,000 2-wire digital ISDN loops and approximately 5,500 ADSL-qualified unbundled loops to CLECs on a stand-alone basis through February 2000. Bell Atlantic's Telephone Industry Services Operations Center ("TISOC") work teams are capable of handling large volumes of orders. (Checklist Aff. ¶¶ 163-64)

(a) Provisioning Unbundled Local loops

The FCC analyzed three provisioning performance measures in assessing the BA-NY long distance application – on-time performance as scheduled, installation quality, and provisioning intervals. For stand-alone loops and loops provided as part of a UNE-P platform, the FCC agreed with the New York PSC's adoption of a retail analogue for purposes of comparison to determine whether Bell Atlantic "provisions new unbundled loops to competing carriers in substantially the same time and manner as it does its retail carriers." (*FCC Approval Order* ¶ 279) First, the FCC considered the "missed appointment" data provided.[30] The performance data for BA-MA are contained in the Measurements Affidavit and is discussed in both the Measurements Affidavit and the Checklist Affidavit. As reviewed in the Checklist Affidavit, BA-MA's performance in provisioning unbundled stand-alone loops and loops provided as part of UNE-P arrangements is very good. For instance, during the fourth quarter 1999, BA-MA completed 95.3% of new loop and Platform orders on-time.

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[28] Attachment "A" to the Department's Letter Order on Final OSS Master Test Plan, dated January 14, 2000.

[29] The separate number of loops provided on a standalone and hot cut basis is not available because these hot cuts are tracked on an order, rather than line basis. However, using a general average of 4.5 lines per hot cut order, it can be reasonably estimated that the 2,600 hot cut orders that BA-MA completed for CLECs in Massachusetts between July 1999 and February 2000 have involved approximately 12,000 UNE loops. (Checklist Aff. ¶ 174-75)

[30] Missed appointment results are inversely related to on-time performance results, meaning that a missed appointment rate of 5% would equal an on-time completion rate of 95%. These terms are used interchangeably in the Supplemental Comments.

(Checklist Aff. ¶ 166) BA-MA's on-time performance in provisioning orders for new POTS loops and new UNE-P arrangements in January and February 2000 was even better, at 97.0% and 97.6%, respectively. (Measurements Affidavit Exhibit B1)[31] BA-MA also completed 100% of UNE-P migration orders on-time during the period October 1999 to February 2000. (*Id.*) In contrast, BA-MA's on-time performance for retail POTS dispatched orders (*i.e.*, new installation orders) ranged between 90.2% to 93.0% and for non-dispatched orders results ranged between 99.8% to 99.9% (*Id.*) Thus, BA-MA is meeting the due date on CLEC new loop and Platform orders a higher percentage of the time than it does for its own retail orders.

Next, the FCC concluded that BA-NY was provisioning unbundled loops, both on a stand-alone basis and as part of the Platform, at an acceptable level of quality based on its low level of installation trouble reports. (*FCC Approval Order* ¶ 284) The same is true in Massachusetts. BA-MA's installation quality performance for unbundled stand-alone POTS loops is very good. In six of the past eight months, the "percent of installation troubles reported within 7 days" for new POTS loops was significantly better than retail. (Measurements Aff. Exhibit B1) BA-MA also is providing UNE-P combinations in a quality manner. For example, from November 1999 through February 2000, less than 2% of UNE-P arrangements provisioned had troubles reported within 7 days of installation. These results compare favorably with BA-MA's retail trouble report rates, which ranged between 1.88% and 2.16% during the same four-month period. Thus, no discernable differences exist in the quality of BA-MA's provisioning of UNE-P arrangements when compared to its provisioning of retail exchange service. (*Id.*)

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[31] New UNE-P arrangements are identified in the C2C reports as "Dispatch – Platform" orders. Migration UNE-P orders are identified as "No Dispatch – Platform" orders.

Finally, the FCC reviewed data related to provisioning intervals. Here, although the data in New York indicated a difference in the intervals for retail and CLECs, the FCC found that "the disparity between wholesale and retail average installation intervals is not the result of discriminatory conduct, but rather is the result of factors outside of [Bell Atlantic's] control." (*FCC Approval Order* ¶ 285) As discussed in the Measurements Affidavit, CLEC requests for longer intervals than were made available by BA-MA continue to distort the comparison of actual retail and wholesale provisioning intervals. (Measurements Aff. ¶ 63) When these requests are removed, the offered and completed intervals provided show that BA-MA is providing service consistent with the C2C Guidelines, whether measured by a retail comparison or a fixed service interval (for non-comparable UNEs). (Measurement Aff. ¶¶ 69-73)

Based on this evidence, as well as other data contained in the C2C reports, the FCC determined "the missed rate of installation appointments to be the most accurate indicator of Bell Atlantic's ability to provision unbundled loops." (*FCC Approval Order* ¶ 288) The same review shows that BA-MA, like Bell Atlantic in New York, "is providing new standalone loops to competing carriers in a timely manner." *(Id.*)

A review of similar data led the FCC to conclude that BA-NY also met the checklist requirements in its provisioning of high capacity UNE loops and UNE loops provided by BA-NY as part of the "UNE-P" platform. (*FCC Approval Order* ¶ 289) In Massachusetts, the volume of orders for high-capacity loops through February 2000 has been relatively small. Specifically, as of end of February, BA-MA provisioned only 54 DS-1 loops, including 15 provisioned in January and February 2000. The average completion interval for the installation of DS-1 loops ordered by CLECs is longer than the completion interval for retail. (Measurements Aff. Exhibit B1) However, BA-MA is meeting

its installation due dates for high capacity loops provided to CLECs on a more reliable basis than it is for hi-capacity loops provided to its own retail customers. In fact, between July 1999 and February 2000, BA-MA recorded a missed rate of installation appointments of zero percent (*i.e.*, no misses) in five of the eight months, including the months of January and February 2000**.** BA-MA missed only 4 of 30 installation appointments in the other three months. (Checklist Aff. ¶ 171)

(b) UNE Loop "Hot Cuts"

The FCC also reviewed BA-NY's performance in providing UNE loops via the hot cut process. Here, the FCC observed that in New York, "hot cut performance is measured according to the percent of coordinated conversions completed within a specified time window … a fixed period of time ranging from one hour to eight hours, depending upon the number of lines involved." (*FCC Approval Order* ¶ 292) Further, because there is no retail equivalent to a hot cut, the FCC found that BA-NY was required to demonstrate that it "provides unbundled loops through hot cuts in a manner that offers an efficient competitor a meaningful opportunity to compete." (*FCC Approval Order* ¶ 291) Based on the evidence presented, the FCC concluded that BA-NY "is provisioning unbundled loops through the use of coordinated conversions of active customers from Bell Atlantic to competing carriers, a process known as "hot cuts", in accordance with the requirements of checklist item 4." (*Id.*)

BA-MA's hot-cut performance is better than it was in New York. The two principal measures that the FCC used to evaluate BA-NY's performance were the high percentage of hot cuts delivered on-time and the low percentage of installation troubles reported for these hot cuts. With respect to the provisioning of hot cuts on-time, the FCC noted that the best evidence in the record indicated that BA-NY provided service better than 90% on-time, and "that on-time hot cut performance at a level of 90 percent or greater is sufficient to permit carriers to enter and compete in a meaningful way in the New

York local exchange market." (*FCC Approval Order* ¶ 298) The FCC also noted that the C2C performance data showed "extremely low rates of installation troubles reported on the lines provisioned through hot cuts." (*FCC Approval Order* ¶ 300) In the case of BA-NY, this trouble rate was less than 2% of the lines provisioned through hot cut loops.

In Massachusetts, the C2C on-time performance data indicates that, since July 1999, BA-MA has completed 97% of its more than 2,600 hot cut orders on-time. (Checklist Aff. ¶ 174) Since there are about 4.5 lines per order, BA-MA has successfully completed the conversion of approximately 12,000 UNE loops to CLECs via the hot cut process. *(Id.)* Further, the quality of these hot cuts has been excellent, as demonstrated by an installation trouble report rate of less than 1%. (Checklist Aff. ¶ 181; Measurements Aff. Exhibit B1)

The FCC also specifically dealt with AT&T's claims that Bell Atlantic's on-time and installation quality data was poor – the same claims as AT&T made in Massachusetts. With respect to the on-time data, the FCC noted that "AT&T submitted data indicating that Bell Atlantic completed only 76 percent of its ordered hot cuts within the established window for July and August. (*FCC Approval Order* ¶ 294) The FCC disregarded these claims based on the exhaustive review of AT&T's claims and records by the New York PSC showing that "Bell Atlantic had completed 88 percent of AT&T's orders on-time in July and 90.55 percent of AT&T's orders on-time in August." *(Id.)* The facts demonstrate that AT&T's claims and records are fundamentally unreliable. By contrast, the same exhaustive analysis of the Bell Atlantic data by the New York PSC produced a minimal BA-NY error rate (1.5% in the June 21 – July 16, 1999 reconciliation, 3.7% for the remainder of July, and 2.5% in the August review). (Checklist Aff. ¶ 176) The facts in Massachusetts demonstrate that BA-MA's provisioning performance for AT&T has been excellent. In keeping with the improvement seen

generally as operating experience has been gained, BA-MA's performance for AT&T over the period September 1999 through February 2000 has been even better than it was earlier in New York, ranging between 97% and 100%. (Checklist Aff. ¶ 177)

AT&T similarly claimed at the FCC – as it did here – that errors in the hot cut provisioning process were "placing nearly 12 percent of its customers out of service." (*FCC Approval Order* ¶ 301) Again, the FCC concluded that AT&T's claims and data were simply not reliable: "[a] comprehensive reconciliation of AT&T's outage data that was conducted by the New York Commission, however, largely refutes AT&T's allegations." *(Id.*) Instead, the FCC noted that the New York PSC's analysis showed that the outages were less than 5%, thus heavily discounting the AT&T documentation behind these claims, just as it had done for the on-time performance records. Here, BA-MA's hot cut performance has an installation trouble report rate below 1%.

Moreover, with respect to AT&T's claims of extended outages, the FCC correctly noted that: "[t]he New York Commission concluded that in many cases of service disruptions, 'AT&T took longer to identify and report the problem to Bell Atlantic than Bell Atlantic took to fix it'." (*FCC Approval Order* ¶ 303) The same investigation highlighted that many of these service problems occurred well after the hot cut – some as long as one month after the migration to AT&T. These service problems had nothing whatsoever to do with the migration of the end user from Bell Atlantic to AT&T.

AT&T relies upon the same faulty record keeping in making attacks on Bell Atlantic in Massachusetts. AT&T acknowledges that nearly three out of every four orders ** *** were served without any sort of problem. (Checklist Aff. ¶ 178) However, in the 41 instances where AT&T claims there was a problem, it is correct on only ** *** claims of missed due dates (1.3% of ** *** orders), only three of seven trouble report claims (2.0% of **

*** orders), and ** *** LSRC claims (again 2.6% of ** *** orders). (Checklist Aff. ¶¶ 178-80, 187)

Only MCI of the other 10 CLECs that Bell Atlantic is serving via the hot cut process raises a performance claim. (Checklist Aff. ¶ 182) AT&T and MCI together constituted only **

*** of the hot cuts completed by BA-MA between July 1999 and February 2000. Specifically, MCI alleged that BA-MA was unable to perform hot cuts involving IDLC in an acceptable fashion, although it produced no data to support its claims. The facts are that only 8.6% of hot cuts involve IDLC, and that during the period of July 1999 through February 2000, BA-MA performed over 2,000 hot cuts, with a 96.6% on-time performance rate. (*Id*.)

(c) The Hot Cut Process

Bell Atlantic uses the same methods and procedures in Massachusetts as it uses in New York to perform hot cuts. These were reviewed and found satisfactory by the New York PSC and KPMG in NY. All of the steps of the hot cut process are set forth in BA-MA's response to DTE-NECTA 1-19.

As in Massachusetts, AT&T raised claims before the New York PSC and the FCC that Bell Atlantic was failing to adhere to the hot cut process. Once again, the FCC reviewed these claims and rejected them: "[w]e also dismiss claims by AT&T and other carriers that additional hot cut provisioning deficiencies, which are not reflected in performance data, impose significant costs and delays upon competing carriers and their customers, thereby impairing new entrant's ability to compete." (*FCC Approval Order* ¶ 304) After a thorough review of the claims of AT&T and others, the FCC said:

> . . . we conclude that the evidence weighs in favor of finding that Bell Atlantic adheres to the hot cut provisioning process. Bell Atlantic demonstrates, and KPMG and the New York Commission have confirmed, that the hot cut procedures are being followed, and we

> believe contrary allegations in the record are insufficient to refute this showing. Although we take seriously AT&T's claims regarding additional costs it incurs as a result of Bell Atlantic's hot cut provisioning failures, we nonetheless conclude that the record does not indicate that any alleged failure to comply with the procedures results in adverse hot cut provisioning that denies efficient competitors a meaningful opportunity to compete. Rather, Bell Atlantic's high rate of on-time hot cuts bolsters the evidence in the record that it is adhering to the hot cut procedures. (*FCC Approved Order* ¶ 307)

Among the claims that AT&T has repeated here is its allegation that the LSRCs generated by Bell Atlantic did not contain the necessary cable and pair information. The FCC specifically rejected this claim: "[w]e find that AT&T's claims of LSRC inaccuracy are largely overstated." (*FCC Approval Order* ¶ 305, n.973) AT&T has failed entirely to provide specific support for this claim in this proceeding. (AT&T Record Request No. 220) Further, AT&T acknowledged at the Technical Sessions that, the requested information is already in AT&T's possession. (Tr. 3985-87) Nevertheless, Bell Atlantic developed a system change to automatically populate the requested data. This system change was implemented on December 18, 1999. (Tr. 3982-83)

AT&T also repeated in Massachusetts other alleged failures of BA-MA to adhere to certain hot cut process steps that were rejected in total by the FCC. These include: an alleged recurrent failure to make Due Date-2 calls to the CLEC where the CLEC had failed to establish dial-tone; to make pre-calls to CLECs to ensure that they and their customer were ready as scheduled (and did not want or need to reschedule or cancel the hot cut); and to make a call after the hot cut was complete so that the CLEC could test the cut-over for acceptance and initiate the number porting transfer through NPAC. None of these claims are supported by facts, and, indeed, they are contrary to the experience reported by AT&T's own operating personnel. (Checklist Aff. ¶¶ 190-91)

As the FCC found in the case of BA-NY, the record of on-time, quality hot cuts that Bell

Atlantic has established in Massachusetts demonstrates that Bell Atlantic closely follows the hot cut process.

(d) xDSL Loops

(1) Available xDSL Loops

BA-MA also provides under interconnection agreements three unbundled loop products that are specifically intended for use in the provision of a CLEC's xDSL services: 2-wire ADSL, 2-wire HDSL and 4-wire HDSL loops. (Stern Aff. ¶ 42, Tr. 1556-58) BA-MA filed an xDSL tariff offering for the Department's approval in D.T.E. 98-57 on May 5, 2000. In the meantime, BA-MA is making xDSL loop offerings available under interconnection agreements. Since these loops must meet specific technical criteria, they must first be "qualified" and then provisioned in a cooperative effort with CLECs. In addition, once assigned for use, xDSL-capable loops are separately identified in BA-MA's inventory systems for purposes of managing spectrum interference, facilitating trouble detection and isolation, and ensuring that their specific technical criteria are maintained during normal network maintenance and eventual network upgrades. *(Id.)* In the first quarter of 2000, BA-MA provisioned over 4,000 digital 2-wire loops (ADSL and ISDN) for 11 CLECs. (Checklist Aff. ¶ 193) BA-MA's performance record demonstrates that it can handle commercial volumes of xDSL loops.

(2) xDSL Provisioning Process

The FCC began by noting that Bell Atlantic and the CLECs had already undertaken a number of process improvements in the New York xDSL collaborative. (*FCC Approval Order* ¶ 318) Specifically, it observed that the New York PSC had already overseen "a process change to simplify xDSL central office cross-connections and is working to remedy customer contact problems that have led to a significant portion of installations in which Bell Atlantic cannot access the customer's premises."

(Id.)

The FCC also favorably noted that the collaborative proceeding was "addressing problems relating to the timing of loop installations by ensuring that carriers engage in close operational coordination so that loop installations are accurate and less likely to be the subject of trouble reports." *(Id.*) The FCC referred to the joint testing and provisioning procedures that have been adopted in New York for xDSL loops – a process the FCC believed was warranted and beneficial because "[p]rovisioning xDSL loops to competitors involves processes that are more complex than those involved in the provision of a voice grade loop." (*FCC Approval Order* ¶ 319) Accordingly:

> participants in the New York collaborative proceeding have agreed to a provisioning process for xDSL loops that involves collaborative testing between Bell Atlantic and the requesting carrier. The process, which has been in place since September 15, 1999, involves individual and joint testing of loops, sharing of test results, joint review of order status, and procedures for establishing a dialogue between Bell Atlantic and the requesting carrier on orders in jeopardy. These procedures ensure, for instance, that the parties test loops during the installation process and that competitors receive demarcation information at the time of installation. The New York Commission confirms that, where cooperative testing is conducted, xDSL loop installation problems are reduced. *(Id.*)

Bell Atlantic has deployed the same UNE loop provisioning process improvements, specifically designed for xDSL loops, in Massachusetts as in New York. (Tr. 1563, 1795; Checklist Aff. ¶196) The resulting process is described in a document that was provided by Bell Atlantic to the CLECs in the New York collaborative sessions. (Checklist Aff. Exhibit F) That document also explains – as the CLECs, the New York PSC and the FCC agreed – why a different process was necessary to meet the technical requirements for xDSL UNE loops than the process that is used to provision non-data-oriented "dial-tone" services for both CLEC and retail customers.

The cornerstone of this provisioning process is a joint BA-MA/CLEC turn-up and turnover

procedure that has greatly reduced earlier instances of installation problems and technical failures. Indeed, even Covad – the most vocal critic of BA-MA's provisioning process at the Technical Sessions – has told BA-MA and the Department that problems with loop identification and tagging, for example, and with loops delivered to the wrong location are now a thing of the past. (Tr. 3182) All of the xDSL procedures developed and used in New York have now been implemented in Massachusetts. Cooperative testing was initiated in Massachusetts on September 15, 1999. The simplified central office wiring process and the sharing/exchange of data began in January 2000. (Checklist Aff. ¶196) In addition to joint processes, BA-MA has initiated a number of important changes in its internal processes to deal with the growing volume of CLEC xDSL orders. These include establishing a dedicated Loop Qualification work force to process all manual requests, implementing work load and force management processes, and introducing specialized training for all field technicians installing xDSL loops. (*Id*.) The results of these efforts are shown in the dramatically improved measurement results. (*Id*.)

Despite the advances that have been made by Bell Atlantic and the CLECs collectively, CLECs that do not wish to participate in the joint turn-up and testing procedures are not required to comply with them. (Tr. 1821-22) However, Covad, Northpoint and Rhythm Links – major xDSL providers in New York – have adopted and implemented the joint testing procedures in the New York xDSL market, and the same CLECs have supported their implementation in Massachusetts. These CLECs have 90 percent of the volume in this market in New York and use the majority of the xDSL loops in Massachusetts. It is BA-MA's understanding that the companies who chose not to participate have based their decisions on the lack of their own test platform capability. It is expected that as these CLECs grow they also will want to participate in the testing process. (Checklist Aff. ¶ 197)

(3) Separate Data Subsidiary

The FCC then went on to describe the "two avenues of proof that we would find persuasive in future applications." (*FCC Approval Order* ¶ 336) The first of these is for the Section 271 applicant to establish a separate subsidiary for the provision of advanced services. The FCC stated that the creation of such a separate affiliate may "provide significant evidence that a BOC complies with the non-discrimination requirements of the competitive checklist." (*FCC Approval Order* ¶ 331) The FCC reasoned that:

> [p]roviding advanced services through a separate affiliate would reduce the ability of the BOC to discriminate against competing carriers with respect to xDSL services. Significantly, under this structure, the BOC would be required to treat rival providers of advanced services the same way it treats its own separate affiliate. Because the BOC's advanced services affiliate would use the same processes as competitors to conduct such activities as ordering loops, and pay an equivalent price for facilities and services, the creation of the affiliate should ensure a level playing field between the BOC and its advanced services competitors. (*FCC Approval Order* ¶ 332)

The FCC found that "we have further assurance that competing carriers in New York will have nondiscriminatory access to xDSL-capable loops in the future as a result of Bell Atlantic's commitment to establish a separate affiliate through which it will offer retail advanced services." (*FCC Approval Order* ¶ 331) The Department and the FCC can have the same confidence with respect to BA-MA since Bell Atlantic has committed to establish a separate data affiliate for Massachusetts in the Bell Atlantic – GTE Merger proceeding before the FCC.

(4) xDSL Service Measurements

The other "avenue of proof" set out by the *FCC Approval Order* calls for the Section 271 applicant to demonstrate that it meets the checklist requirements by submitting performance data that establishes "by a preponderance of the evidence that it provides xDSL-capable loops to competitors in

a nondiscriminatory manner." (*FCC Approval Order* ¶ 333) Here, the FCC specifically reviewed the performance data provided by BA-NY relating to installation intervals, on-time provisioning and installation quality, and addressed the contrary claims made by Covad and others.

The FCC noted that the absence of state performance benchmarks and New York PSC reconciliation of data made its analysis of the conflicting data claims difficult. (*FCC Approval Order* ¶ 326) As a result, the FCC encouraged state commissions to adopt "specific xDSL loop performance standards measuring, for instance, the average completion interval, the percent of installation appointments missed as a result of the BOC's provisioning error, the timeliness of order processing, the installation quality of xDSL loops provisioned, and the timeliness and quality of the BOC's xDSL maintenance and repair functions." (*FCC Approval Order* ¶ 334)

The establishment of such standards has now been completed in the C2C proceeding in New York, and reporting of performance results will be implemented in Massachusetts as it is implemented in New York. (Measurements Aff. ¶ 61) Beginning with the March C2C report, BA-MA will report % Missed Appointments for 2-wire xDSL loops. A review of the preliminary missed appointment % data for March shows that BA-MA recorded a missed appointment rate for ADSL 2-wire and HDSL 2-wire loops of only 3.62%. These are excellent results by any measurement standard and are well above the standard of acceptable performance set by the New York PSC. The new cooperative test procedures have been in effect in Massachusetts since September, and other aspects of the revised processes were introduced in January. These new procedures were developed to improve the provisioning process and correct many of the problems in the early stage of DSL provisioning. BA-MA's performance results show that these new procedures are working well. Results for on-time appointments completed in 1st Quarter of 2000 were in the 99-100% range. (Checklist Aff. ¶202)

Seventeen percent of the orders could not be completed for customer reasons and 14% could not be completed for facility reasons. It is appropriate to exclude "misses" due to customer reasons because BA-MA has no control or influence on this. However, orders that are missed due to customer reasons are rescheduled, and BA-MA's performance in meeting the due date ultimately is scored against a new due date. (*Id*.)

Although Covad, Rhythm Links and Vitts complained about BA-MA's service performance at the Technical Sessions, they did not provide the supporting order processing and installation detail behind their claims. This is a significant omission because earlier reviews have shown that CLEC claims are frequently based on flawed record keeping or measurement methodologies. Accordingly, each of these carriers was specifically asked Record Requests for data for the month of November, which substantiated their claims. Only Rhythms Links and Vitts responded in sufficient detail to permit an investigation.

Covad provided no detailed order information whatsoever in response to Record Request 197. Given Covad's history of making claims based on data tracking errors and indefensible measurement methodologies, the absence of any backup data requires the rejection of Covad's complaint. For example, when Covad revealed the data underlying the claims of missed appointments it made in the New York Section 271 process, approximately one-third of the test failures counted by Covad were for DSL loops that could not be installed. (Checklist Aff. ¶ 204) These installation "failures" occurred either because the Covad customer did not provide access to the premises or because the Covad customer cancelled the order when BA-NY arrived to install it. *(Id.*) Another third of the loops that Covad reported as failures actually had test readings that met the testing criteria and should have been

scored as passes. *(Id.)*[32] Thus, absent hard data to the contrary, Covad's tracking and/or reporting for virtually identical claims it made in Massachusetts should be viewed with rejected.

Similarly, CLEC claims of untimely FOCs have been flawed by poor record keeping. For example, it was clear that Covad based its claims in New York of average FOC delivery days – claims repeated in this proceeding – on measurements made from the date of its first request, completely ignoring the fact that 25% of its requests had two or more corrections associated with them. (Checklist Aff. ¶ 205) Not surprisingly, the FCC also rejected this measurement of intervals:

> …Covad begins measuring the FOC interval the first time it submits an order, whereas Bell Atlantic calculates the interval from the time it receives an error-free order. *See* Covad Cutcher/McChesney/Clancy Decl. at para. 34. We believe it would be appropriate to measure FOC intervals from the time a valid order is placed. (*FCC Approval Order* ¶ 326 n.1027)

Moreover, these errors in order tracking and measurements have clearly continued to the present. When Bell Atlantic recently reviewed ** *** orders identified by Covad for the period from January 31 to February 2, 2000 as resulting in "failed Covad truck rolls", that review showed that 80% of the orders ** *** were dispatched after BA-MA had already informed Covad that the order had not been completed – primarily because of Covad customer "no access" and customer not ready conditions. (Checklist Aff. ¶ 206) No legitimate claim of a BA-MA performance failure can be made regarding these orders.

A specific data reconciliation conducted by the parties under the guidance of the Department bears out the quality of BA-MA's service provisioning for Covad. This Covad/BA-MA joint study looked at ** *** orders completed between February 7 and February 11, 2000. Here, Covad

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[32] With respect to the Covad claims, the FCC rejected the inclusion of CLEC customer no access conditions as BA missed orders: "[w]e do not believe that it is appropriate to include legitimate "no access" situations in a

itself acknowledged that BA-MA had timely completed ** *** orders (88%). A review of Covad's claimed BA-MA "misses," moreover, showed that at least ** *** were incorrectly ascribed to BA-MA in Covad's record keeping, thus raising the level of timely provisioning to 92% and causing Covad to acknowledge before the Department staff that BA-MA's service provisioning was very good. (Checklist Aff. ¶ 207)

Vitts provided in Record Request No. 199 a list of ** *** orders they claimed were missed in October and November 1999. BA-MA also investigated the orders Vitts' claims were missed. Based on BA-MA's paper records, and contrary to Vitts claims, four of the 13 orders (30%) were not missed by BA-MA. (Checklist Aff. ¶ 210) BA-MA also reviewed C2C data for Vitts for the period October 1999 to March 2000. Percent missed appointments averaged 5.8% ** *** over the six month period. By March 2000, BA-MA's missed appointment rate for Vitts orders had improved to 2.44%. (*Id.*)

Because of the age of the orders identified in the Vitts and Rhythms Links responses, the transactional data needed for BA-MA to fully investigate these orders is no longer available in Bell Atlantic's databases. Consequently, BA-MA has not completed its investigation of the specific Rhythms Links orders. However, BA-MA has completed an analysis of Rhythms Links' missed appointments (BA-Dispatch) for complex services (PR-4-04) using C2C data for the period October 1999 to March 2000. As expected, BA-MA's performance has improved substantially over this timeframe. Specifically, the percent of missed appointments dropped from 21.43% in October 1999 to 4.73% in March 2000. (Checklist Aff. ¶ 211) This improvement has occurred as the order volume has increased **

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measure of missed appointments." (*FCC Approval Order* ¶326)

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Since the introduction of the improved DSL Provisioning Process discussed above, disagreement at the operations level has essentially been eliminated. (Checklist Aff. ¶ 209) BA-MA is confident that it has resolved those xDSL provisioning problems that some CLECs may have experienced during the start-up phase. As shown in the C2C metric results, BA-MA's current performance is far better today than it was in October or November and should continue to meet or exceed requirements.

(e) Loop Qualification

BA-MA is also providing CLECs with information about xDSL-capable loops in BA-MA's network. BA-MA is currently surveying its loop inventory, on an office by office basis, to identify the loops that are ADSL-capable. (Checklist Aff. ¶ 212) This survey process was conducted first in the concentrated, largely urban offices where CLECs are already collocated and most likely ready to provide ADSL services. By the end of first quarter 2000, the loop qualification inventory had been completed in 93% of BA-MA's central offices with collocation or pending collocation orders. (*Id*.)

As this loop qualification information is collected, it is provided to CLECs and BA-MA's retail marketing organization at the same time on a non-discriminatory basis. CLECs can access this information via the WEB GUI or the Electronic Data Interface ("EDI") application-to-application interfaces. (Checklist Aff. ¶ 213) On request, BA-MA will also examine individual loops in offices that have not yet been surveyed to determine whether they are xDSL-capable. This process satisfies the Act by providing CLECs with the same information as is ordinarily available through the mechanized loop qualification process described above. In fact, CLECs will receive information such as loop lengths that BA-MA's retail operation does not receive.

BA-MA is providing CLECs with additional loop information on a timely basis. CLECs can submit an order for a Manual Loop Qualification, or for an Engineering Query, which provide different levels of information beyond that available in the loop qualification database on a timely basis. BA-MA provides Manual Loop Qualification information (which includes the presence/absence of load coils and digital loop carrier) within 48 hours of receiving a request. BA-MA's on-time performance for manual loop qualification for first quarter of 2000 was 92%. An Engineering Query can provide the physical loop length; the number and location of load coils; the length and location of bridged taps; the gauge of the wire, the gauge changes and their associated locations; and the presence of digital loop carrier. Almost all of this data must be obtained and verified utilizing paper plat records. (Checklist Aff. ¶ 214) BA-MA provides this information within 72 hours. If BA-MA's retail sales representatives wanted to use this information, they would obtain it in the same manner as CLECs do today.

The existing mechanized and manual loop qualification processes BA-MA offers have been designed to comply with the information requirements of the FCC's *UNE Remand Order*. (Checklist Aff. ¶ 215) Nevertheless, Bell Atlantic is working with the CLECs through the New York DSL collaborative process to enhance database access for the Loop Qualification process. For instance, CLECs indicate they would prefer an automated process for obtaining the additional loop qualification information that currently is available only through the Manual Loop Qualification or Engineering Query processes. Loop-makeup information is posted in the Facility Assignment Control System ("FACS") for approximately 10% of the terminal locations in Massachusetts. *(Id.)* In other cases, a manual effort is required to trace the cable and pair on paper records and to record the data required. A sub-committee of the New York collaborative has been investigating various possibilities, including the costs for providing loop makeup information (to the extent such information is available in FACS) through a

mechanized system. It is expected that this issue will be resolved through the collaborative process. (*Id.*)

(f) Loop Conditioning

For loops that are not initially xDSL-capable, BA-MA will condition them on request. (Checklist Aff. ¶ 216) Conditions that render a loop xDSL-incapable include the presence of load coils, bridged taps, Digital Added Main Lines ("DAMLs"), repeaters and DLC systems. These devices or technologies allow analog POTS signals to be transmitted over the loop in question but will hinder the support of most xDSL technologies. *(Id.)* Although the FCC indicated that Bell Atlantic must provide access to any functionality of the loop (unless it is not technically feasible to condition the loop facility to support the particular functionality requested), it ruled that the costs of conditioning existing loop facilities or of accessing particular loops served by "integrated digital loop carrier (IDLC) technology or similar remote concentration devices" shall be recovered from the competing carrier(s). (*FCC Approval Order* ¶ 271)

To facilitate the loop-conditioning process, BA-MA has recently filed with the Department a new loop offering called Digital Designed Links in DTE MA No. 17. This offering includes standardized terms and options for conditioning loops and obtaining loop extensions and related services. (Checklist Aff. ¶ 217) BA-MA's new Digital Designed Link offering, which is also offered in CLEC interconnection agreements, includes standard pricing terms that enable CLECs to order the removal of bridged tap or load coils on copper loops or to request the addition of electronics that extend the effective range of ISDN/IDSL equipment on longer loops. In addition, if a customer is currently served on a loop that includes fiber, BA-MA will move the customer to available alternative copper facilities. (*Id.*)

Covad claims that Bell Atlantic discriminates against CLECs by assessing non-recurring charges to condition long loops for xDSL while offering similar services to its own customers without additional charge. (Covad Aff. ¶ 20.) Covad's claim is simply not correct. Covad is mixing apples and oranges. BA-MA uses long loops equipped with fiber optics and digital loop carrier ("DLC") to provide ISDN service – not xDSL services - to its retail customers. (Checklist Aff. ¶ 218) Loops capable of providing ISDN are available to Covad on an unbundled basis, and Covad admits that these loops could be used to provide its xDSL service. (Covad Aff. ¶ 16) Covad does not, however, want these loops. Instead, Covad wants BA-MA to condition long copper loops for xDSL service by removing load coils and bridged taps and by adding repeaters, and to perform this work without charge. (*Id*.) In short, Covad wants a different type of loop than BA-MA uses to provide its ISDN service and wants those loops conditioned for free.

(g) Rhythms Links' Request for xDSL Collaborative Sessions

On January 18, 2000, Rhythms Links requested that the Department hold collaborative Sessions between BA-MA and CLECs to address issues related to DSL provisioning. MCI and Vitts filed comments supporting Rhythms Link's proposal. The Department asked BA-MA to address this proposal in its Supplemental Comments.

Rhythms Links suggests a collaborative is needed in Massachusetts to cover technical and operational issues associated with the DSL services market. Rhythms Links identifies in its petition several issues that it believes should be addressed in Massachusetts collaborative sessions: (a) xDSL capable loops unrestricted by length; (b) line sharing; (c) sufficient loop make-up information; (d) loop testing; (e) timely and accurate provisioning; (f) automated pre-ordering and ordering; and (g) various collocation arrangements. In support of its petition Rhythms Links points to the FCC's support of the

concept of collaborative sessions. MCI in its comments notes that Bell Atlantic has declined to commit to use in Massachusetts the practices and policies adopted in the New York Collaborative. (*See* MCI Letter dated February 3, 2000, filed in D.T.E. 99-271) Finally, Vitts suggests that a collaborative is needed for the benefit of carriers operating in Massachusetts that did not participate in the New York collaborative. (*See* Vitts Networks Letter dated February 10, 2000, filed in D.T.E. 99-271)

BA-MA agrees with Rhythms Links, MCI and Vitts that the Bell Atlantic-CLEC New York collaborative sessions have served a very useful purpose and resolved a wide range of important technical and operational issues associated with the roll-out of xDSL services. BA-MA opposes Rhythms Links' petition, however, because it would require the parties to participate in unnecessary, redundant DSL collaborative sessions in Massachusetts. Indeed, Rhythm Links has been a very active participant in the New York collaborative sessions. Additionally, any state-specific DSL collaborative only raises the possibility of establishing inconsistent processes, which could impede the efficient deployment of xDSL services in Massachusetts.

Most carriers – data CLECs ("DLECs") and Bell Atlantic alike – want to establish the same processes throughout the entire Bell Atlantic footprint. (Checklist Aff. ¶ 222) It would serve no useful purpose to conduct multiple collaborative processes on a state-by-state basis because the issues, operational factors, and process changes will be the same for all Bell Atlantic states. Moreover, most of the technical and operational issues that Rhythms Links identified in January as needing resolution have now been resolved through the DSL collaborative sessions conducted in New York. Contrary to MCI's claims, Bell Atlantic has stated in writing that it will adopt in Massachusetts the same operating policies and procedures determined in the New York DSL collaborative sessions. (Checklist Aff. ¶ 223)

All of the issues identified by Rhythms Links in its petition to establish a DSL Collaborative in Massachusetts are addressed in the Checklist Affidavit and in Exhibit F. These issues also are being fully addressed in the existing DSL collaborative process in New York as well as in CLEC-specific interconnection agreement negotiations. These issues also may be addressed in the Department's review of BA-MA's proposed xDSL and line sharing tariffs in Docket No. 98-75, Phase II. The need for redundant collaborative sessions in Massachusetts on these subjects has been superseded by the progress that has been, or is being made, in these forums.

(1) Line Sharing

BA-MA filed terms and conditions to provide unbundled line sharing under DTE MA No. 17 on May 5, 2000, for implementation on June 6, 2000. The filing was designed to comply with the FCC's requirements in the *Advanced Services Order*.

BA-MA has been working with the CLECs through the New York DSL collaborative process to develop and test provisioning and maintenance processes for line sharing prior to a full product rollout. A trial is underway in six central offices in New York, with Covad, Northpoint, and Rhythms Links as its participants. (Checklist Aff. ¶ 226) A final report of the trial results is due to the New York PSC administrative law judge overseeing the collaborative by June 7, 2000. *(Id.*) Bell Atlantic is also working with CLECs operating in Massachusetts to establish installation schedules for specific central offices requested by them. Central offices with multiple CLEC requests and high volumes are being given priority for completion. Test findings are being incorporated into Bell Atlantic's methods and procedures in order to ensure a smooth line sharing product offering. Additionally, BA-MA is project managing/expediting requests for collocation that were received by April 15, 2000 in order to facilitate the availability of line sharing service beginning June 6, 2000.

Bell Atlantic also has recently signed multi-state Line Sharing interconnection agreements with Covad and Rhythms Links that enable these DLECs to provide xDSL service over existing BA-MA voice lines. (Checklist Aff. ¶ 225) The rates included in these agreements are considered interim and subject to retroactive adjustment, if necessary, when the Department approves permanent rates.

(2) Loops Served by IDLC Systems

MCI offered the same litany of claims that it unsuccessfully made during the New York Section 271 review process concerning the technical feasibility of unbundling loops served by IDLC at the DS-1 level (individual analog end user loops handed off to a CLEC over a DS-1 interface) and Bell Atlantic's willingness to consider its proposals. (MCI Aff. ¶¶ 52-57) The MCI affidavit misconstrues Bell Atlantic's position, offers an array of misleading and unsound "technical claims," and misrepresents BA-MA's willingness to address this issue with MCI. (*Id.*)[33]

First, MCI mischaracterizes the Bell Atlantic position on the technical feasibility of providing unbundled loops served by IDLC. (MCI Aff. ¶¶ 53-56). Bell Atlantic did not concede the technical feasibility of unbundling loops served by IDLC in New York (MCI Aff. ¶ 54). To the contrary, BA-NY's Report on the Feasibility of Alternative Means for Implementing Central Office Cross-Connections, dated November 23, 1998, supports the fact that it is not currently technically feasible for unbundled loops to be handed off as a single multiplexed DS-1. (Checklist Aff. ¶ 229)

Second, MCI claims that BA-MA's policy of transferring a customer's service from IDLC to alternate spare facilities – either loops served by Universal Digital Loop Carrier ("UDLC") or copper

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[33] References to MCI Affidavit in these Comments (other than OSS) are to the Joint Affidavit of Ms. Guariglia, Ms. Kinard, Ms. Lichtenberg and Ms. Ryan ("MCI Aff.").

pairs – when a customer migrates to a competitor is highly discriminatory and anticompetitive. (MCI Aff. ¶ 57). As explained in the Checklist Affidavit, this too is incorrect. (Checklist Aff. ¶ 231)

Third, MCI claims that copper and UDLC loops are "vastly inferior to the loops" (IDLC loops) that BA-MA currently uses to serve some of its own customers. (MCI Aff. ¶ 43) This is factually incorrect. Approximately 87 % of BA-MA's existing customers are served by copper loops and UDLC loops. The claim is also technically incorrect. MCI fails to mention that BA-MA's "superior" IDLC loops are constructed with up to 12,000 feet of copper loop (distribution cable) connecting the DLC remote terminal system to the end user premises. (Checklist Aff. ¶ 234) MCI's claim is further undermined by the fact the "inferior" copper loops about which MCI complains are the same copper loops that other CLECs, such as Rhythms Links and Covad, are demanding that BA-MA provide because they can support advanced high speed data services, such as ADSL. *(Id.*)

Fourth, MCI claims that BA-MA's substitution of either copper pairs or UDLC for IDLC results in degraded transmission performance. (MCI Aff. ¶¶ 45, 46) Again, this is not correct. The transmission characteristics of loops are variable. These variations exist for BA-MA's retail as well as wholesale customers. (Checklist Aff. ¶ 235) There is no basis for MCI's claim that BA-MA "downgrades" service to an end user by placing the customer on UDLC or copper cables. MCI made a host of other statements that are either technically incorrect or extremely misleading, each of which is rebutted fully in the Checklist Affidavit.

2. UNE Loop Maintenance And Repair

The FCC reviewed BA-NY's performance regarding the maintenance and repair of unbundled loops in New York. (*FCC Approval Order* ¶¶ 310-314) The review focused on the performance results for missed repair appointments and repair intervals compared to comparable retail services.

Although the data showed that BA-NY did not perform some loop maintenance and repair functions for competitors as quickly as it performed them for retail customers, the FCC observed that "we do not consider these slight differences to be competitively significant." (*FCC Approval Order* ¶ 310)

Although there has been little maintenance activity for UNE platform services, BA-MA would expect performance similar to that of resale for these services, which are particularly strong in Massachusetts. (Checklist Aff. ¶ 247) Report rates for Resale are much lower than for retail, mean times to repair are significantly shorter, and out-of-service over 24 hours performance is much better. (Measurements Aff. Exhibit B1) Although the missed appointment rate for Resale is sometimes higher than for retail at the aggregate state level, this is more a function of disparity in product mix than of disparity in performance. (*Id*.) The retail mix is roughly 80% residence/20% business, while the Resale mix is about 20% residence/80% business. When corrected to compare UNE/retail residence-to-residence and business-to-business data, the service levels are clearly comparable. (Checklist Aff. ¶ 247)

Maintenance results reported in the C2C reports for the period July 1999 through February 2000 for stand-alone POTS loops are mixed. Network trouble report rates for POTS loops shown on the 1999 C2C reports generally are higher than for retail, however, both the retail and UNE results are very good when compared to the MA DTE Service Quality Index ("SQI") requirements. Repair missed appointment results reported in the C2C reports also tend to be less favorable for POTS loops than for "retail." A number of measurement and operational factors may be contributing to the less favorable UNE maintenance C2C results. First, UNE loop trouble report volumes are relatively small, thus rendering them susceptible to wide variations in reported performance results. Second, as mentioned earlier, through February 2000 BA-MA's C2C reports included complex digital loops, such

as unbundled xDSL and ISDN loops, in the maintenance results for POTs UNEs. Beginning with the March 2000 C2C report, maintenance results for complex loops will be separately reported and thus, will be excluded from the POTs maintenance results. (Checklist Aff. ¶ 249)

BA-MA's preliminary March C2C results support the expectation that POTS maintenance results as reported in the C2C reports will show marked improvement over prior month reports. (Checklist Aff. ¶ 250) For example, the network trouble report rate for loops in March 2000 (approximately 0.5%) is significantly better than the results reported in the C2C reports for the period July 1999 through February 2000. Moreover, the network trouble report rate for loops is less than half the comparable network trouble report rate for retail POTS services (approximately 1.1%). (*Id.*) Similarly, although the results are not as yet as good as the retail figures, BA-MA's missed appointment rate for March is significantly better than that reported in prior months.

One of the most significant underlying factors driving maintenance performance for UNE loops is the inability of most CLECs to test these loops and provide necessary test result information to the BA-MA technician to effect repairs. UNE loops are part of the CLEC's facilities-based provision of service. The CLEC is responsible for testing its UNE loops and for providing information from its test results to Bell Atlantic's Regional CLEC Maintenance Center ("RCMC") as to the location and type of trouble it is reporting. This process is similar to the manner in which BA-MA's retail organization provides test information (for its own retail services) to the BA-MA maintenance center for its retail services. (Checklist Aff. ¶ 251)

The failure of CLECs to isolate UNE loops results in at least two situations that adversely affect BA-MA's maintenance and repair performance. Misdirected trouble reports to BA-MA from CLECs frequently require multiple dispatches. In these circumstances, the initial dispatch typically uses up most

of the appointed-time interval. Therefore, once the actual trouble location is identified by BA-MA and addressed (typically by a second technician at a different location), a Missed Repair Appointment (Central Office and Loop) and a longer MTTR and associated OOS duration time are experienced for UNEs. Further, even when appropriately dispatched, BA-MA technicians experience greater difficulty in locating, diagnosing, and repairing CLEC-reported troubles because they lack the information that is generally available to them on retail troubles (*e.g.*, tracking and repairing a metallic fault [grounds and shorts] is a very different repair procedure than clearing an open circuit). This also could result in a longer trouble duration interval. (Checklist Aff. ¶ 252)

For the UNE maintenance process and performance results to be considered truly in parity with BA-MA retail, it is imperative that the CLECs develop a means of isolating troubles on UNE loops where BA-MA has no ability to test.[34] Moreover, from January to March 2000, approximately 50% of all reported CLEC troubles were closed as "no trouble found" or "NTF". This means that BA-MA technicians were dispatched unnecessarily. These unnecessary dispatches divert BA-MA technicians from the clearance of legitimate troubles, thus further diminishing the effectiveness and efficiency of the repair process. (Checklist Aff. ¶ 253) BA-MA has identified and resolved a number of other operational issues that were contributing to less favorable UNE maintenance results and, in particular, to

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[34] At the Technical Sessions, AT&T witness Mr. Meek stated, "[w]e have Harris [test equipment] deployed in some cases, but it's not deployed sufficiently for us to use it in the provisioning process. It's being used in maintenance, but not in provisioning." (Tr. 3958-59) In its response to Record Request No. 288 requesting information for the period August – November 1999 concerning how often Harris test equipment was available and how often it was used, AT&T replied: "Although AT&T does use Harris test equipment, it does not have any system for tracking the information requested." AT&T offers no specific evidence, therefore, indicating that it in fact utilizes Harris test equipment *to isolate a trouble prior to reporting the same to BA-MA*. Nor, does AT&T offer evidence indicating it has methods and procedures in place that provide for the testing of loops prior to reporting a trouble. The best BA-MA can conclude from the sketchy information presented by AT&T at the Technical Sessions and in its record response is that, on some occasions, AT&T might use test equipment to test a loop prior to reporting the trouble to BA-MA. As discussed above, the failure of AT&T and other CLECs to routinely isolate and identify UNE loop troubles (and then convey this information to BA-MA when reporting a trouble) adversely affects BA-MA's UNE maintenance and repair performance.

the missed repair appointment results it has reported. Specifically, Bell Atlantic's administrative process inadvertently added time to the trouble ticket *after* the BA-MA technician restored service to the end user, thus, greatly overstating the Missed Appointment rate, Mean Time-To-Repair ("MTTR") and OOS measurements for POTS loops. (Checklist Aff. ¶ 254) This problem has been corrected. BA-MA also identified procedural differences in appointment offerings that have since been resolved. (*Id.*) For example, BA-MA has now aligned the repair interval offerings between CLEC customers and BA-MA retail customers so that UNE repair interval will more closely approximate the retail interval for repair. This should help address the Missed Repair Appointment and cycle time differentials currently shown for UNE POTS loops. (*Id*.)

Repair Call Handling. The absence of CLEC-developed capabilities to test UNE loops also has a direct affect on the volume of calls that CLECs generate to Bell Atlantic's RCMC. It is not unusual for the RCMC to receive multiple calls from CLECs on the same trouble (*e.g*., an initial call to report a Dispatch-in trouble followed by a call to Dispatch-out, when no trouble is found on the initial call). (Checklist Aff. ¶ 255) The RCMC also fields a substantial proportion – as great as 50% some months – of calls merely requesting trouble report status and other such inquiries, which should be queried electronically via the Repair Trouble Administration System ("RETAS"). *(Id.*) Repair call volumes, of course, also correlate to in-service UNE and resale volumes, which, as discussed above, have been steadily increasing.

In an attempt to maximize resources dedicated to increasing UNE provisioning volumes, specifically hot cuts, Bell Atlantic consolidated the call-receipt function for CLEC repair for the entire region into a single center in June 1999. (Checklist Aff. ¶ 256) In August 1999, additional employees designated for this center came out of training and began to take calls. Thereafter, the results for the

period from October 1999 through January 2000 were consistently at or above the benchmark level of 80% of calls answered within 30 seconds. (Measurements Aff. Exhibit B1) However, while BA-MA was meeting or beating the standard, repair call volumes received by the RCMC continued to grow at an increasing rate, particularly in the months of December 1999 and January and February 2000. (*Id.*) In fact, CLEC repair call volumes from across the Bell Atlantic region increased from under 52,000 calls in November 1999, to approximately 80,000 calls in February 2000, or over 50% in just three months. During that time period, repair call volumes ran 100% above forecast, although actual trouble reports were right on target. *(Id.*) This supports the observation that the CLECs are making two to three calls per trouble. These calls were driven by a decrease in RETAS utilization by the CLECs and the inability of the CLECs to test and isolate troubles (*i.e*., many of the CLECs use BA-MA to shoot their troubles). *(Id.*)

To meet this growth, Bell Atlantic accelerated its plans to open an additional call center and to expand the existing call center's capacity. (Checklist Aff. ¶ 257) As a result of these measures, the preliminary March performance data show call response results to again be above the standard level. Although repair call volumes continue above forecast, staffing levels in the new RCMC, which opened three months ahead of schedule, also exceed projections resulting in consistently good service. In addition to the increased staffing, Bell Atlantic has devoted additional resources to work with the CLECs to increase their usage of RETAS for trouble entry and status information.

The FCC noted that KPMG had verified Bell Atlantic's non-discriminatory provision of maintenance and repair services for competing carriers and retail customers through extensive testing in New York. (*FCC Approval Order* ¶ 314) Bell Atlantic has applied those same processes and procedures in Massachusetts. These processes are now being re-tested by KPMG. BA-MA expects

that the results of that review in Massachusetts, like the performance measurements discussed above, will demonstrate that BA-MA is providing maintenance and repair services to CLECs in "substantially the same time and manner in which it provides these functions to its retail customers." (*FCC Approval Order* ¶ 310)

E. UNBUNDLED LOCAL TRANSPORT (Checklist Item 5)

Section 271(c)(2)(B)(v) of the Act requires that BA-MA provide "[l]ocal transport from the trunk side of a switch unbundled from switching or other services." The FCC has indicated that this includes both dedicated and shared transport. The FCC has defined dedicated transport as "consist[ing] of BOC transmission facilities dedicated to a particular customer or carrier that provide[s] telecommunication between wire centers owned by BOCs or requesting telecommunications carriers, or between switches owned by BOCs or requesting telecommunications carriers." (*FCC Approval Order* ¶ 337*)* The FCC has also stated that shared transport consists of "transmission facilities shared by more than one carrier, including the LEC, between end office switches, between end office switches and tandem switches, and between tandem switches in the LEC's network." *(Id.*) In reviewing BA-NY's Section 271 application, the FCC concluded "that Bell Atlantic provides both shared and dedicated transport in compliance with this checklist item." (*FCC Approval Order* ¶ 338) The FCC did not address the provision of dark fiber by Bell Atlantic in New York because neither the FCC, until the effective date of its conclusions in the *UNE Remand Order*, nor the New York PSC had required the provision of dark fiber in New York.

BA-MA provides CLECs with both dedicated and shared transport service in the same manner provided by Bell Atlantic in New York and approved by the FCC as satisfying this checklist item. (Stern Aff. ¶¶ 27-31; Tr. 1268-77) BA-MA provides local transport pursuant to interconnection

agreements and DTE MA No. 17. (Stern Aff. ¶¶ 27-31; Tr. 1268) No CLEC challenged BA-MA's compliance with this checklist item as to unbundled local transport at the Technical Sessions. BA-MA also provides unbundled spare dark fiber where available for local transport in accordance with the Department's Phase 3 and Phase 4-N Orders in the *Consolidated Arbitrations* (D.P.U. 96-73/74, 96-75, 96-80/81, 96-83 and 96-94) as well as the FCC's *UNE Remand Order*. Only one CLEC (Conversent) challenged BA-MA's provisioning of dark fiber. However, the flaws Conversant purports to find are caused by its own decisions and conduct.

1. Interoffice Transport

As of the end of February 2000, BA-MA was providing to 15 different CLECs a total of 685 IOF transport arrangements (334 DS-1 level and 351 DS-3 level arrangements). (Checklist Aff. ¶ 259) BA-MA has met, and will continue to meet, future CLEC demand for UNE IOF where such facilities are available. Although BA-MA's obligation to provide unbundled IOF is limited to existing in-place transport facilities,[35] BA-MA plans and constructs expansion of its interoffice network based on aggregate projected needs for switched and non-switched services for other carriers, including CLECs. In 1999, BA-MA added approximately 1.1 million DS-0 or voice-grade equivalent circuits to the interoffice facilities network in Massachusetts. (*Id.*) Of this, approximately 175,000 equivalent DS-0's or 15% of the total IOF capacity installed was provided to CLECs as dedicated UNE IOF transport. *(Id.*)

BA-MA has provisioned unbundled IOF to CLECs in commercially reasonable time frames. BA-MA's average completion interval for dedicated DS-1 and DS-3 level transport over the period July 1999 – February 2000 was 22.0 days. (Checklist Aff. ¶ 260) Additionally, over the same eight-

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[35] See UNE Remand Order, ¶ 324; Local Competition First Report and Order, ¶ 451.

month period, BA-MA completed 91.9% of its dedicated IOF transport orders on-time. *(Id.*)

BA-MA also provides shared transport to CLECs in the same manner as Bell Atlantic does in New York. CLECs can use BA-MA's shared transport network element for carrying their customers' traffic between BA-MA's end office switches, between BA-MA's end office and tandem switches, and between BA-MA's tandem switches. In addition, CLECs can use BA-MA's shared transport network element to reach other points within BA-MA's network, such as the operator services and directory assistance platforms, and to reach other carriers' networks that are interconnected to BA-MA's network. (Stern Aff. ¶ 71; Tr. 1279-83)

BA-MA provides shared transport in conjunction with unbundled local switching. (Stern Aff. ¶ 71; BA-MA response to DTE 2-81; Tr. 1268) CLECs that plan to use BA-MA's shared transport do not need to order it separately when they order individual local switching ports. The UNE switching port is normally configured to use shared transport. Through February 2000, BA-MA was providing shared transport in conjunction with routing traffic to and from each of the 1,400 plus unbundled local switching ports it has provisioned to CLECs as part of the UNE-P combination. (Checklist Aff. ¶ 262)

2. Dark Fiber

As of March 30, 2000, Bell Atlantic was providing 901 miles of dark fiber to four CLECs in Massachusetts. From October 1999 through February 2000, BA-MA completed 72 dark fiber orders. (Checklist Aff. ¶ 263) For these orders, BA-MA's average completion interval was 26.1 days and it completed 87.5% of these orders on-time. Also, in 23 of the 72 orders (32% of the orders) the CLEC was not ready to accept the dark fiber order on the scheduled due date. *(Id.*)

Prior to ordering unbundled dark fiber, a CLEC has the option of requesting a fiber layout map showing the routes within the wire center where there are existing BA-MA fiber cable sheaths. This

request process has been approved by the Department as providing "a reasonable process for meeting the needs of the CLECs when they are thinking of using dark fiber in a given geographic area." (*Consolidated Arbitrations* Phase 4-N at 17)

Conversent takes issue with the fact that some fibers may not meet its transmission loss budget. However, like BA-MA itself for its retail services, it is the CLEC's responsibility to ensure that their fiber system transmission loss design will work with the fiber(s) BA-MA has available. To assist the CLECs in the proper design of their fiber optic systems, BA-MA includes optical engineering services as part of its standard fiber offering that enables the CLEC to obtain the optical transmission characteristics *before* ordering fibers. (Checklist Aff. ¶ 267) More specifically, BA-MA will conduct a field survey (on a time and materials cost basis) upon request and provide the CLEC with optical test measurements so the CLEC can make a determination as to whether the degree of transmission loss meets its requirements. (*Id.*) In the end, the CLEC must perform the engineering design of its fiber optic system, adding electronics (optical repeaters) where necessary, to compensate for optical transmission loss on excessively long circuits.

However, Conversent has elected not to take advantage of this offered service, and has simply chosen to refuse to accept the order. (Checklist Aff. ¶ 268) The fact is that the optical transmission loss issues that Conversent has highlighted could have been minimized if Conversent used the existing field survey process. Conversent's refusal to accept dark fiber circuits, in which light can pass, also has an adverse impact on BA-MA's average installation interval for dark fiber.

Notwithstanding Conversent's self-defeating conduct, BA-MA has nevertheless continued working diligently with Conversent to develop engineering services to improve the transmission characteristics of specific dark fibers. (Checklist Aff. ¶ 269) As a result, BA-MA will shortly roll-out

new standardized engineering services, which it will make available to CLECs. These engineering services will include replacing fiber optic connectors and/or cleaning fiber optic connectors upon a CLEC's request. *(Id.*) More importantly, these offerings go far beyond the requirements of the Act, the FCC, or the Department's Orders.

F. UNBUNDLED LOCAL AND TANDEM SWITCHING (Checklist Item 6)

Section 271(c)(2)(B)(vi) of the Act requires that Bell Atlantic in Massachusetts provide "[l]ocal switching unbundled from transport, local loop transmission, or other services." The FCC has said that unbundled local switching includes "line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch." (*FCC Approval Order* ¶ 343) In addition, "local switching includes all vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions." *(Id.*) Further, satisfaction of this checklist item requires that the unbundled local switching provided enable the CLEC " to offer, and bill for, exchange access and the termination of local traffic." (*FCC Approval Order* ¶ 344)

Based on its review of the record for BA-NY, the FCC concluded that Bell Atlantic demonstrated compliance with the requirements for this checklist item by showing "that it provides: (1) line-side and trunk side facilities; (2) basic switching functions; (3) vertical features; (4) customized routing; (5) shared trunk ports; (6) unbundled tandem switching; and (7) usage information for billing exchange access; and usage information for billing reciprocal compensation." (*FCC Approval Order* ¶ 346) The record in this case shows that BA-MA provides CLECs with the same unbundled local switching as the FCC approved for BA-NY. Indeed, even the methods, practices and procedures employed by BA-MA are the same as those used by BA-NY. Two CLECs raised issues relating to unbundled local switching at the Technical Sessions. No CLEC raised any issue with respect to

unbundled tandem switching. As discussed below, none of the CLEC claims diminishes BA-MA's showing that it provides unbundled switching consistent with the criteria of the *FCC Approval Order*.

1. BA-MA Provides Local and Tandem UNE Switching

BA-MA provides CLECs with unbundled local switching of the same type and in the same manner as in New York, which the FCC approved. (Tr. 1442-43) Specifically, BA-MA provides local and tandem switching unbundled from loops and other network components.[36] BA-MA makes available line-side and trunk-side facilities, plus all of the switch features and functionality that it currently uses for its own services. (Stern Aff. ¶ 80) BA-MA's unbundled local switching may be configured for customized routing by the CLEC via the Network Design Request ("NDR") process, as discussed below. Finally, the unbundled switch provided by BA-MA will provide CLECs with the necessary billing information in the same way that it does in New York. (Checklist Aff. ¶ 288)

(a) Establishing UNE Switching

As part of a NDR, BA-MA will create a unique set of local switching translations (Office Dialing Plans and Line Class Codes) for a CLEC. (Checklist Aff. ¶ 270) The establishment of these local switching translations will enable the CLEC to establish unique switch arrangements for such things as default features, blocking parameters and the creation of appropriate billing and usage records. These carrier-specific plans are known as "Option A." (Checklist Aff. ¶ 271) Like BA-NY, BA-MA also offers a multi-CLEC shared or "standardized" local switching configuration, called "Option B." (*Id.*) This standardized local switching configuration mimics the local call routing and customer features used by BA-MA itself. BA-MA has pre-built all the necessary translations for Option B into all of its

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[36] As indicated above with respect to Checklist item 2, BA-MA's unbundled local switch offerings may also be combined with either dedicated or shared transport, and may be combined with unbundled loops to provide UNE Platform.

switches to afford CLECs the quickest way to obtain ubiquitous switch presence in Massachusetts. (Checklist Aff. ¶ 276) As of February 2000, nine CLECs are using BA-MA's unbundled local switching arrangements through Option B. (Checklist Aff. ¶ 277) These arrangements have been implemented for CLECs within three to eight weeks because they involve the CLECs in a shared use of a capability that Bell Atlantic has already established in the switch. (Tr. 1438)

CLEC commentary on UNE Switching at the Technical Sessions was very limited. Z-Tel alleged that BA-MA was delaying its implementation of Option A. (Tr. 3431-32) In fact, Z-Tel never submitted an NDR request to BA-MA for Option A. (Checklist Aff. ¶ 282) Over the latter half of 1999, BA-MA representatives met with Z-Tel representatives on a number of occasions, including making a visit to Z-Tel's headquarters in Florida. Z-Tel was fully aware of the timeframes required for BA-MA to complete an Option A routing plan, and had agreed to provide the initial paperwork by November 29, 1999, in order for BA-MA to begin the NDR process in Massachusetts. However, Z-Tel did not initiate a request. (*Id.*) Subsequently, Z-Tel requested in January 2000 that BA-MA establish Option B UNE Switching, and BA-MA set a tentative NDR completion date of March 22, 2000. The actual establishment of UNE Switching for Z-Tel was completed on February 28, 2000, nearly one month ahead of schedule. *(Id.)* BA-MA has engaged Z-Tel in active discussions concerning its technical requirements and any further commercial interest in the establishment of Option A unbundled switching.

Z-Tel also suggested at the Technical Sessions that it would be better if a CLEC could effect a quicker or easier transition from Option B (as a start-up position) to Option A. (Tr. 3454) However appealing the concept, there is no easy "transition" possible. (Checklist Aff. ¶ 278) First, the conversion requires the establishment of a unique set of local switch translations for every BA-MA

switch involved – completely independent of the existing shared, standard switch translations – so as not to adversely affect other CLECs using these translations. Second, the conversion requires the establishment of each customer's line in the unique Option A arrangement instead of the shared Option B arrangement, with appropriate record changes made for each line by both BA-MA and the CLEC via individual service orders. Z-Tel itself acknowledged that it knew of no other ILEC employing a different method for making these changes. (Tr. 3456)

Z-Tel also suggested that an "implementation interval" for establishing the Option A switching translations be set at 60 calendar days from the time the NDR application is completed, however, it offered no evidence to support this arbitrary timeframe. (Z-Tel Aff. ¶ 8) There is no such standard interval established in New York, nor did the FCC find that this was necessary for Bell Atlantic to satisfy its unbundled switching obligations. Furthermore, Z-Tel's witness did not know of any State that had set fixed intervals for a customized NDR. (Tr. 3440) This is not surprising given the major work effort involved in setting up of a customized switching plan is a major work effort, and the competition for limited switch access with other work scheduled to occur such as switch updates, NPA splits and overlays, and major customer network changes. (Checklist Aff. ¶ 280)

(b) Providing UNE Switching

The same processes, systems and procedures are used to process orders for switching for Bell Atlantic in Massachusetts as are used in New York. (Tr. 1442) Although there are different Line Class Codes and different billing order support systems, these differences do not directly affect the provisioning of switched services. (*See* BA-MA response to DTE-Media One 1-10) Accordingly, they do not adversely affect the ability of BA-MA to process and provision orders for unbundled switching.

Through the end of February 2000, BA-MA had provided over 1,400 local switching ports on a line side basis as part of UNE-P platforms. (Checklist Aff. ¶ 290) Although all of these platform orders were for POTS service, BA-MA is prepared to provision all line ports and switch features offered in interconnection agreements or in DTE MA No. 17. (*Id.*)

Z-Tel complained at the Technical Sessions that BA-NY had wrongfully changed its policies by first agreeing to "pre-program" speed dialing for Z-Tel and then deciding not to offer this service to CLECs. (Tr. 3693) Z-Tel's claim is factually inaccurate. BA-NY has no record of having programmed speed dialing for any of Z-Tel's LSR orders. (Checklist Aff. ¶ 284) Moreover, Bell Atlantic properly does not offer this service to CLECs because programming speed dialing is a customer service function, and the customers here are Z-Tel's customers, not BA-MA's customers. If it wishes, Z-Tel can provide this service to its customers in accordance with their requirements. The FCC dismissed the same Z-Tel claim in New York by noting that the claim "does not present a sufficient basis" to find that BA-NY does not satisfy the requirements of this checklist item. (*FCC Approval Order* ¶ 348)

During the Technical Sessions, MCI referred to an alleged quality failure by BA-MA in establishing an end-user (an MCI employee) on UNE-P that had led to a trouble report. (Tr. 3881) Upon review, this claim was found to be incorrect. (Checklist Aff. ¶ 285) Instead, tests confirmed that all unbundled network elements had been properly established.

(c) Tandem UNE Switching

BA-MA also provides access to tandem switching to all CLECs using unbundled local switching. There is no need for these CLECs to order unbundled tandem switching separately. It is part of unbundled shared transport and can be accessed through all unbundled local switching elements.

BA-MA has not received any requests for unbundled tandem switching on a stand-alone basis. Bell Atlantic has developed methods and procedures for providing this unbundled network element and is prepared to provision unbundled tandem switching should demand develop. In fact, BA-MA already provides tandem-switching functionality under interconnection agreements and DTE MA No. 17. (Checklist Aff. ¶ 287)

G. ACCESS TO E-911, DIRECTORY ASSISTANCE AND OPERATOR SERVICES (Checklist Item 7)

1. E-911

Section 271(c)(2)(B)(vii) requires *inter alia* that a BOC "provide nondiscriminatory access to – (I) 911 and E-911 services." In its *Ameritech Michigan Order*,[37] the FCC concluded that a BOC must provide competitors access to its 911 and E-911 services in the same manner that a BOC obtains such access, *i.e.*, at parity. That is, the BOC must: (a) "maintain the 911 database entries for competing LECs with the same accuracy and reliability that it maintains the database entries for its own customers;" and (b) for facilities-based carriers, "provide unbundled access to its 911 database and 911 interconnection, including the provision of dedicated trunks from the requesting carrier's switching facilities to the 911 control office at parity with what the BOC provides to itself."[38]

In its ruling on BA-NY's Section 271 application, the FCC concluded that "Bell Atlantic demonstrates that it is providing nondiscriminatory access to 911/E-911 services, and thus satisfies the requirements of checklist item (vii)(I)." (*FCC Approval Order* ¶ 350) The FCC observed that no commenter disputed Bell Atlantic's compliance with this portion of checklist item 7. *(Id.)* BA-MA

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[37] Application of Ameritech Michigan Pursuant of Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-137, 12 FCC Rcd 20543 (1997) ("Ameritech Michigan Order").

[38] Ameritech Michigan Order, 12 FCC Rcd at 20679.

likewise meets the criteria set forth in the *FCC Approval Order* for this checklist item and, as in New York, no CLEC in Massachusetts contests this fact.

(a) BA-MA Access To E-911 Database

BA-MA provides CLECs with nondiscriminatory access to E-911. CLEC customers in Massachusetts are able to dial "911" to reach an emergency service provider in the same manner as BA-MA's end user customers. (Howard Aff. ¶ 36) BA-MA also provides CLECs with the information they need to update their customer's entries in the E-911 database, to interconnect with BA-MA's E-911 tandems, and to route E-911 calls.

CLECs that do not have their own switch, but which instead resell BA-MA's retail dial tone line service or use unbundled local switching service, have access to E-911 service in the same manner as BA-MA's retail customers. (Howard Aff. ¶¶ 32-33 and Figure 3) In the case where the CLEC provides its own dial tone, the CLEC must establish trunks that connect the trunk side of the CLEC's switch to the BA-MA E-911 tandem(s) serving the calling customer's Public Service Answering Point ("PSAP"). CLECs may order these transmission facilities directly from BA-MA or provision their own transmission facilities. (Howard Aff. ¶¶ 35-36 and Figure 3)

In all respects, the access BA-MA provides for CLECs to route E-911 calls from their own switches is non-discriminatory. First, from the BA-MA E-911 tandem to the PSAP, BA-MA uses the same dedicated trunks to handle both BA-MA and CLEC E-911 calls. (Howard Aff. ¶ 33 (BA-MA provided dial-tone) and ¶ 36 (CLEC provided dial-tone)) Second, BA-MA provisions, maintains and repairs all trunks including E-911 trunks for CLECs using the same facilities, equipment and personnel that BA-MA uses for its own trunks.

As of February 2000, BA-MA has provided over 400 E-911 trunks to 24 CLECs. (Checklist Aff. ¶ 26) At the request of CLECs, BA-MA provisions these trunks coincident with the initial activation of the CLEC's switch. BA-MA provides additional E-911 trunks in accordance with the applicable 5-category intervals for interconnection trunks. BA-MA provisions, maintains and repairs E-911 trunks for CLECs using the same facilities, equipment and personnel that BA-MA uses for its own E-911 trunks. (Checklist Aff. ¶ 34)

(b) Maintaining E-911 Database

At the end of February 2000, CLECs with their own switches had over 352,550 E-911 listings in Massachusetts. (Checklist Aff. ¶ 291) BA-MA uses the same processes as BA-NY to ensure that the E-911 database entries for CLECs that resell retail dial-tone line service or that use UNE local switching are maintained with the same accuracy and reliability that BA-MA maintains for its own retail customers. That is, BA-MA provides nondiscriminatory access to the E-911 database so that CLEC end-user information may be entered. (Howard Aff. ¶ 38) The records that are not accepted by the E-911 database are listed on a daily error report. The E-911 database records listed on the daily error report include a mix of BA-MA retail, Resale and unbundled local switching orders, but in each case BA-MA is listed as the service provider. BA-MA's E-911 Data Management Center reviews the daily error report and investigates, corrects and resubmits each record in a non-discriminatory manner and without knowing the service provider associated with individual records. (Howard Aff. ¶ 38; Tr. 1513) For a CLEC providing its own dial tone, BA-MA has established a similar process for providing updates to the E-911 database. (Howard Aff. ¶ 39; Tr. 1513)

BA-MA provides CLECs the same information for investigating and correcting errors that is available to BA-MA. (*Id.*) This "generic" information is available on the Bell Atlantic web site. With

this information, CLECs can correct errors in the E-911 database or contact the municipal E-911 coordinator to correct errors in the Master Street Address Guide.

2. Directory Assistance/Operator Services

Sections 271(c)(2)(B)(vii)(II) and 271(c)(2)(B)(vii)(III) of the Act require that a BOC provide nondiscriminatory access to "directory assistance services to allow the other carrier's customers to obtain telephone numbers" and "operator call completion services, respectively. Section 251 (b)(3) of the Act imposes on each LEC "the duty to permit all competing providers of telephone exchange service and telephone toll service to have nondiscriminatory access to operator services, directory assistance, and directory listing with no unreasonable dialing delays."

In reviewing BA-NY's Section 271 application, the FCC re-iterated specific requirements associated with providing nondiscriminatory access to directory assistance and operator services from its previous decisions. First, the FCC said that a BOC must be in compliance with the regulations implementing Section 251(b)(3). (*FCC Approval Order* ¶ 352) Second, the FCC restated its holding that the phrase "nondiscriminatory access to directory assistance and directory listings" means that "the customers of all telecommunications service providers should be able to access each LEC's directory assistance service and obtain a directory listing on a nondiscriminatory basis, notwithstanding: (1) the identity of a requesting customer's local telephone service provider; or (2) the identity of the telephone service provider for a customer whose directory listing is requested." *(Id.*) Third, the FCC observed that it had earlier concluded that nondiscriminatory access to the dialing patterns of 4-1-1 and 5-5-5-1-2-1-2 to access directory assistance were technically feasible, and would continue. *(Id.*) Fourth, it said that "nondiscriminatory access to operator services" means that a telephone service customer, regardless of the identity of his or her local telephone service provider, must be able to connect to a

local operator by dialing '0,' or '0 plus' the desired telephone number." *(Id.)* Fifth, the FCC noted that CLECs reselling BOC services may request the BOC to brand their calls. (*FCC Approval Order* ¶ 353) Sixth, it stated that CLECs "wishing to provide operator services or directory assistance using their own facilities and personnel must be able to obtain directory listings either by obtaining directory information on a "read only" or "per dip" basis from the BOC's directory assistance database, or by creating its own directory assistance database by obtaining the subscriber listing information in the BOC's database." *(Id.)*

The FCC concluded that BA-NY demonstrated that it provides directory assistance services in accordance with the requirements of checklist item 7. (*FCC Approval Order* ¶ 354) In doing so, it specifically rejected AT&T's claim that its asserted proof of "dropped" directory listings must cause Bell Atlantic to fail this checklist item. (*FCC Approval Order* ¶¶ 355-356) These same claims were raised by AT&T at the Technical Sessions – based on the same information submitted to and rejected by the FCC – and should similarly be rejected here.

Like Bell Atlantic in New York, BA-MA satisfies the criteria of the *FCC Approval Order*. Indeed, with the exception of the same AT&T claim that the FCC rejected, no CLEC challenges BA-MA's satisfaction of its responsibilities.

(a) BA-MA Provided DA and OS

As noted previously in the Howard Affidavit, BA-MA provides access to its Directory Assistance and Operator Services through interconnection agreements and in its Wholesale Tariff, DTE MA No. 17. As in New York, BA-MA has made available to CLECs three options for providing Directory Assistance and Operator Services to their customers. (Howard Aff. ¶¶ 43-46, 56-58) For CLECs that want to provide their own operator services or directory assistance, BA-MA provides

access to directory listings either on a "per-dip" basis from the Directory Assistance database or by a database download from the subscriber listing information in BA-MA's database. Alternatively, CLECs may choose to have BA-MA provide the services for them. Also, as in New York, a CLEC that chooses to resell BA-MA's services also has three options regarding branding: to have its calls be branded with its own name; with no "brand" at all; or, with BA-MA's name. (Howard Aff. ¶¶ 49, 60) As of February 2000, 17 CLECs are using branding other than BA-MA for directory assistance and 16 CLECs are using branding other than BA-MA for operator services. (Checklist Aff. ¶ 293)

CLECs that have their own switch or use BA-MA's local switching network element generally interconnect directly with BA-MA's Directory Assistance platform. BA-MA also allows CLECs that use BA-MA's local switching network element to use BA-MA's shared transport network element to interconnect with BA-MA's Directory Assistance and Operator Services platforms. (Howard Aff. ¶¶ 47, 58) As of February 2000, 18 CLECs were purchasing Directory Assistance service. (Checklist Aff. ¶ 293) Another nine CLECs were purchasing BA-MA's Directory Assistance service and using BA-MA's shared transport service. Also, as of February 2000, 44 Resellers were purchasing BA-MA's Directory Assistance service. *(Id.*)

Through February 2000, BA-MA is providing 1,198 dedicated transport trunks to facilities-based CLECs in conjunction with providing Directory Assistance and Operator Call Completion services. (Checklist Aff. ¶ 26) At the request of CLECs, BA-MA provisions these trunks coincident with the initial activation of the CLEC's switch. BA-MA provides additional Operator Service/Directory Assistance trunks within the applicable 5-category intervals for interconnection trunks. BA-MA provisions, maintains, and repairs Directory Assistance And Operator Call

Completion trunks for CLECs using the same facilities, equipment and personnel that BA-MA uses for its own Directory Assistance and Operator Call Completion trunks. (Checklist Aff. ¶ 34)

As of February 2000, 16 CLECs were purchasing Operator Call Completion service from BA-MA. Another nine CLECs were also purchasing BA-MA Operator Call Completion services using BA-MA's shared transport. (Checklist Aff. ¶ 296) Also, as of February 2000, 44 Resellers were using BA-MA's Operator Call Completion Services. *(Id.)*

(b) Handling CLEC Calls

When BA-MA provides CLECs with directory assistance, the calls from the CLEC's customers are handled in a non-discriminatory fashion. Calls from customers of Resellers are handled in the same Directory Assistance centers that handle BA-MA's retail customers. (Howard Aff. ¶63; Checklist Aff. ¶ 294) Calls from these Resellers' customers are commingled with calls from BA-MA's retail customers and are, therefore, handled in a non-discriminatory manner. In Massachusetts as well as other New England states, directory assistance calls from facilities-based and UNE-P CLEC's customers are handled by dedicated wholesale call centers. (Checklist Aff. ¶ 294) These centers are equipped and staffed in the same manner as BA-MA's retail Directory Assistance call center.

From July through December 1999, the average speed of call answer in the Directory Assistance retail call center was 2.9 seconds. (Checklist Aff. ¶ 295) During the first two months of 2000, the average speed of call answer was 2.5 and 2.6 seconds respectively. (Measurements Aff. Exhibit B1) Since BA-MA's retail call centers handles all calls on a first-come, first-served basis for BA-MA's own retail customers, as well as those served through resale, the speed of answer is the same. In the wholesale center, the average speed of call answering for this same period was a nearly identical 3.2 seconds for the July – December 1999 period and during the first two months of 2000, the

average speed was 0.8 and 0.7 seconds, respectively. *(Id.)* The difference between the figures for the retail and wholesale call centers is not competitively significant. This is underscored by the fact that the time between "rings" for a telephone call is itself 4 seconds. *(Id.)*

Similarly, Operator Call Completion calls from CLECs' customers are handled in a non-discriminatory fashion. All calls from customers of Resellers, CLECs using UNE-P, and facilities based CLECs are handled in the same Operator Call Completion centers that handle BA-MA's retail customers. (Checklist Aff. ¶ 296) Calls from CLEC customers are commingled with calls from BA-MA's retail customers, are answered by the same operators that answer BA-MA's retail customers and are handled in a non-discriminatory manner. The current service arrangement for UNE-P and facilities-based CLEC's was instituted in December, 1999. (Checklist Aff. ¶ 297) Call response was 2.3 seconds in December 1999, and it has varied from 1.3 and 1.5 seconds respectively during the first two months of 2000. *(Id.)*

(c) AT&T's Directory Listings Claim[39]

Just as it did before the FCC, AT&T claimed in this proceeding that BA-NY has dropped a significant proportion of the directory listings for the customers which have converted to its switch-based service via a unbundled local loop with associated number portability. AT&T opined that the same result *may* be true in Massachusetts, but it provided no Massachusetts specific data to support its claim. In addition, just as before the FCC, AT&T was the only CLEC making these allegations in Massachusetts. The FCC found that this fact alone was meaningful: "[n]o other commenter raises this

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[39] BA-MA's witness Crawford was asked numerous questions regarding KPMG Exception 56 in New York and "dropped listings" during the Technical Session regarding Checklist item 8 ("White pages listings") on November 2 - 3, 1999. Similarly, AT&T filed comments which addressed these issues as part of Checklist item 8. However, these topics are more appropriately addressed in connection with this Checklist item 7, as the FCC itself did in the FCC Approval Order.

objection, suggesting the difficulty is of limited competitive consequence." (*FCC Approval Order* ¶ 355)

AT&T made reference to the KPMG Exception 56 relating to directory listings initially issued during its New York analyses. (Tr. 2753, 2766-68) AT&T failed to inform the Department that KPMG subsequently found a 94% success rate for unbundled loop directory listings, which it adjusted to 99% based upon certain process modifications adopted by BA-NY. (Exhibit 4, Technical Session 12/2/99: KPMG Closure Report – Exception 56)

Bell Atlantic's response to KPMG Exception 56 was described by Ms. Crawford at the Technical Sessions. (Tr. 405-06) Specifically, in response to KPMG Exception 56, Bell Atlantic introduced software modifications (in April 1999 and May 1999) to ensure that the "record" ("R") order would not be processed before the "disconnect" ("D") order. Further, in order to address the problems associated with human error, BA-NY held training sessions with its order-processing staff in the TISOC. This training stressed the importance of entering the listing exactly as the customer requested. In addition, BA-NY temporarily assigned a member of the TISOC Methods staff as an observer whose function is to monitor the work of the individuals processing listing orders. As required, the monitor provides "on the spot" remedial training. Lastly, a quality assurance team has been established, to work independent of the TISOC staff, to audit service orders that affect directory listings. KPMG concluded that these steps were reasonable and closed Exception 56.

AT&T argued here – as it did before the FCC – that various "studies" it produced after the date of the KPMG review showed that these process modifications were ineffective. But these studies have already been considered and rejected by the appropriate regulatory authorities. (Tr. 2749) AT&T failed to note for the Department that, upon its review and assessment of these claims, the New

York PSC concluded that BA-NY satisfies this checklist requirement. (*FCC Approval Order* ¶ 354) Now, it is clear that the FCC has done the same.

Most importantly, however, BA-MA has implemented a systems change that avoids the "listing drop" entirely. (Checklist Aff. ¶ 300) This is the exact system that AT&T suggested. (Tr. 2755-58) Accordingly, the directory listing "disconnects" that AT&T complained about earlier no longer occur. (Record Request No. 14) As expected, this system change has effectively eliminated the issue. *(Id.*)

H. WHITE PAGES DIRECTORY LISTINGS (Checklist Item 8)

Section 271(c)(2)(B)(viii) requires that BA-MA provide "[w]hite pages directory listings for customers of other carrier's telephone exchange service." In its recent order approving the application of Bell Atlantic for authority to provide interLATA service in New York, the FCC noted that Section 251(b)(3) of the Act obligates ILECs to permit CLECs nondiscriminatory access to directory listings. (*FCC Approval Order* ¶ 357) The FCC also referred to its *Second BellSouth Louisiana Order*[40] in which it concluded "that a BOC satisfies the requirements of checklist item 8 by demonstrating that it: (1) provided nondiscriminatory appearance and integration of white page directory listings to competitive LEC's customers; and (2) provided white page listings for competitors' customers with the same accuracy and reliability that it provides its own customers." *(FCC Approval Order* ¶ 358) With respect to BA-NY's application, the FCC found that "Bell Atlantic demonstrates that it is providing white pages and directory listings for customers of competitive CLECs that are non-discriminatory in appearance and integration, and have the same accuracy and reliability that Bell Atlantic provides for its own customers." *(FCC Approval Order* ¶ 360)

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[40] Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, Inter-Lata Services in Louisiana, CC Docket No. 98-121. Memorandum Opinion and Order, ("BellSouth Louisiana") 13 FCC Rcd at 20748.

The record here similarly shows that BA-MA satisfies the criteria of the *FCC Approval Order* for this checklist item. (Crawford Aff. ¶¶ 27-41; Tr. 400-509) Again, no CLEC challenged this fact at the Technical Sessions.[41]

1. BA-MA White Page Listings

Bell Atlantic provides CLECs in Massachusetts with white pages directory listings in the same manner that they are provided by Bell Atlantic in New York. BA-MA provides a basic single line listing in the appropriate white pages directory for each customer served by a CLEC at no charge to the CLEC. BA-MA also provides a CLEC's business customers with a basic Yellow Page listing at no charge. These listings include the CLEC's customer's name, address and telephone number and are identical to those provided to BA-MA's customers. They are published by Bell Atlantic Yellow Pages Company ("BAYP"), an affiliate of BA-MA. BA-MA provides the basic white page directory listings under interconnection agreements and under D.T.E. MA Nos. 14 and 17. (Crawford Aff. ¶ 28)

Like BA-NY, BA-MA provides for the non-discriminatory appearance and integration of White Page directory listings to customers of CLECs. The White Page directory listing that BA-MA publishes for a CLEC customer looks identical to the listing for a BA-MA customer. CLEC customers are not separately classified or otherwise identified on the printed directory page. In addition, CLEC customer listings are included alphabetically and printed in the same font and size as BA-MA customers and without any distinguishing characteristics. (Crawford Aff. ¶ 41)

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[41] AT&T argued before the Department – as it did before the FCC – that BA-MA was erroneously dropping some customer listing from its directory assistance database, but it did not provide any proof to support this allegation. In any event, this claim is addressed in the directory assistance section of this Affidavit because in Massachusetts, as before the FCC, "AT&T provides no evidence of problems with the white pages listings themselves as a result." (*FCC Approval Order* ¶ 361) On the contrary, BA-MA provides several different means by which a dropped directory listing can be corrected before the White Pages are published. (See BA-MA response to DTE 2-109)

BA-MA can now update the record to indicate that Bell Atlantic publishes 56 primary and 14 Community White pages directories annually in Massachusetts. Through March 9, 2000, Bell Atlantic's Massachusetts directories included approximately 118,000 White Page directory listings for 99 CLECs. Approximately 51,000 of these listings were for business customers and approximately 67,000 listings were for residential customers. (Checklist Aff. ¶ 303)

CLECs are provided with numerous opportunities to verify both the existence of and the accuracy of the listings for their end users before directory publication. CLECs can verify the listing information on the order confirmation. Further, CLECs can view listing information on the Customer Service Record ("CSR") and they can utilize the DCAS Directory Listing Request ("DLR"). (*See* BA-MA response to DTE 2-109; Tr. 491) Finally, 90 days prior to the service order close date, CLECs are provided with a Listings Verification Report ("LVR") which contains all listings that are currently included in the inventory to be published in the upcoming directory. The LVR enables the CLEC to confirm the accuracy of its customers' entries. (Crawford Aff. ¶ 35; Tr. 479) Of the 2,439 LVRs published in New York and New England during 1999, approximately 93% were provided at least 90 days prior to the scheduled directory publishing date, and those few which were delayed arrived at least 75 days prior to the scheduled directory publishing date. (Checklist Aff. ¶ 302)

I. NON-DISCRIMINATORY ACCESS TO TELEPHONE NUMBERS (Checklist Item 9)

Section 271(c)(2)(B)(ix) of the 1996 Act requires that, until the date by which telecommunications numbering administration guidelines, plans, or rules are established, BOCs must provide "nondiscriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers." As the FCC noted in its review of the BA-MA application, "[t]he checklist mandates compliance with 'such guidelines, plan, or rules' after they have been established."

(*FCC Approval Order* ¶ 362) The FCC further noted that NeuStar, Inc. ("NeuStar"), rather than Bell Atlantic, is the Commission-designated North American Numbering Plan Administrator responsible for assigning blocks of 10,000 telephone numbers (NXX Codes) to carriers within each area code, and for coordinating area code relief planning efforts with state commissions. (*FCC Approval Order* ¶ 363) The FCC went on to explain that to show compliance, BA-NY must demonstrate that it adheres to industry numbering administration guidelines FCC rules, including provisions requiring the accurate reporting of data to the code administrator, in order to show compliance. *(Id.*)

Upon review, the FCC found that Bell Atlantic satisfied the requirements of this checklist item in New York. (*FCC Approval Order* ¶ 364) It also noted that no commenters alleged that Bell Atlantic failed to meet these requirements. Similarly, Bell Atlantic has demonstrated that it meets the criteria of the *FCC Approval Order* for this checklist item in Massachusetts. And, again, no CLEC has challenged this demonstration.

1. NeuStar's Administration of Telephone Numbers

BA-MA complies with all directives for activation of codes in a non-discriminatory manner. (Howard Aff. ¶ 74) Once a telephone number code has been assigned to a carrier, BA-MA follows the same industry guidelines and procedures for activating the newly assigned central office codes irrespective of whether the code has been assigned to BA-MA or another carrier. (Howard Aff. ¶ 73) These common industry procedures and guidelines are the same as those followed by Bell Atlantic in New York and found to be acceptable by the FCC.

As noted by the FCC, NeuStar has assumed the responsibilities for telephone number administration from Lockheed Martin. BA-MA is treated as any other Massachusetts telephone company. BA-MA adheres in a timely and accurate manner to all industry numbering administration

guidelines and FCC rules, including provisions requiring the accurate reporting of data to the code administrator, NeuStar. This includes reporting COCUS (Central Office Code Utilization Survey) forecast data and providing supporting documentation required when requesting exchange codes for growth in accordance with the INC (Industry Numbering Committee) Central Office Code Assignment guidelines.

J. DATABASES AND SIGNALLING (Checklist Item 10)

Section 271(c)(2)(B)(x) of the Act requires that Bell Atlantic provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion." Earlier, in the *Second BellSouth Louisiana Order*, the FCC had required BellSouth to prove that it was providing requesting carriers with nondiscriminatory access to: "(1) signaling networks, including signaling links and signaling transfer points; (2) certain call-related databases necessary for call routing and completion, or in the alternative, a means of physical access to the signaling transfer point linked to the unbundled database; and (3) Service Management Systems (SMS); and to design, create, test and deploy Advanced Intelligent Network ("AIN") based services at the SMS through a Service Creation Environment."[42] The FCC rules require that an incumbent LEC provide access to the following databases: Line Information database ("LIDB"), Toll Free Calling database, downstream number portability databases, and Advanced Intelligent Network database. (47 C.F.R. § 51.319(e))

In the *FCC Approval Order*, the FCC found that Bell Atlantic has satisfied the requirements of the Act for this checklist item in New York. (*FCC Approval Order* ¶ 366) Bell Atlantic has demonstrated that it likewise satisfies the criteria of the *FCC Approval Order* for this checklist item in Massachusetts. (Crawford Aff. ¶¶ 42-79; Tr. 806-45) Specifically, BA-MA is providing CLECs with

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[42] Second BellSouth Louisiana Order, 13 FCC Rcd at 20755-56.

access to its call-related databases and signaling network in the same manner as Bell Atlantic does in New York. As was the case before the FCC in its review of this checklist item in New York, no CLEC in Massachusetts has challenged BA-MA's similar satisfaction of its responsibilities.

Access to BA-MA's databases and associated signaling is available pursuant to interconnection agreements and its Wholesale Tariff, D.T.E. MA No. 17. In all cases, the access BA-MA provides to its signaling network is non-discriminatory. First, BA-MA uses the same facilities, equipment and personnel to provision signaling links for CLECs and itself. (Checklist Aff. ¶ 307) Second, CLEC signaling traffic is handled by BA-MA's signaling network in the same manner as BA-MA's signaling traffic. All signaling traffic on BA-MA's signaling network is queued and routed on a non-discriminatory basis. (Crawford Aff. ¶¶ 46, 50 and 79)

Numerous CLECs are making use of the access that BA-MA has provided. As of March 1, 2000, 29 CLECs have access to BA-MA's signaling network (21 via third party hub providers and 8 with direct access), four CLECs have established access to BA-MA's Toll Free Database, eight CLECs have made the necessary arrangements for accessing Bell Atlantic's Calling Name Database ("CNAM") in the New England region, and four CLECs have made the necessary arrangements for accessing BA-MA's Local Number Portability Database. (Checklist Aff. ¶ 308) Although there is only one CLEC that is directly accessing Bell Atlantic's LIDB, Bell Atlantic is providing access to its LIDB to 40 other telecommunications carriers, such as interexchange carriers, Independent Telephone Companies, wireless carriers, and third party hub providers in the New England region. In 1999, Bell Atlantic processed more than 77 million queries to its LIDB in New England. *(Id.*)

Currently, there are no CLECs using the access BA-MA provides to its Service Creation Environment ("SCE") to create their own AIN-based telecommunications services, as was the case in

New York. However, access to the SCE is available to CLECs in Massachusetts. (Crawford Aff. 75) The FCC has clearly stated that "…if no competitor is actually using a checklist item, a BOC must show that it has a concrete and specific legal obligation to furnish the item upon request and be 'presently ready to furnish each item in quantities that competitors may reasonably demand and at an acceptable level of quality.'" The FCC specifically found that BA-NY "met this burden." (*FCC Approval Order* ¶ 366) The same conclusion is appropriate here.

K. NUMBER PORTABILITY (Checklist Item 11)

Section 271 (c)(2)(B)(xi) requires a BOC to be in compliance with the number portability regulations adopted by the FCC pursuant to section 251 of the Act. Specifically, section 251 (B)(2) requires all LECs "to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission."[43] Section 251 (e)(2) requires that "[t]he cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."

In reviewing BA-NY's Section 271 application, the FCC re-iterated specific requirements associated with providing number portability, including the requirements that LECs offer interim number portability "to the extent technically feasible" and gradually replace interim number portability with permanent number portability. (*FCC Approval Order* ¶ 368) The FCC also noted that it has established guidelines for states to follow in mandating a competitively neutral cost-recovery mechanism for interim number portability. *(Id.*)

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[43] Section 153 (30) to the 1996 Act defines number portability as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another." (*See also*, 47 C.F.R.

The FCC concluded that BA-NY complied with the requirements of this checklist item. (*FCC Approval Order* ¶ 369) The FCC specifically rejected the claims of several CLECs as being nothing more than "unsupported, conclusory allegations that do not warrant a finding of noncompliance with this checklist item." (*FCC Approval Order* ¶ 370-371) The rejected claims included the same AT&T claims of number portability problems associated with hot cut UNE loop cutovers reiterated by Mr. Meek in the Technical Sessions.

As it did in New York, Bell Atlantic has demonstrated that it meets the requirements for this checklist item. BA-MA has established Long Term Number Portability ("LNP") in accordance with its FCC obligations and is providing excellent LNP on-time service. AT&T's claim to the contrary is not supported by any evidence and, indeed, is contrary to the record information provided by MediaOne. Further, to whatever extent RCN had valid concerns earlier about FOC timeliness, these concerns have been answered. Similarly, BA-MA earlier proposed an operational alternative to MediaOne and RCN that would permit them to provide number porting on the weekend which has now been successfully trialed and implemented by MediaOne.

1. BA-MA Provides Number Portability

BA-MA has timely established the capability to provide LNP to CLECs in every Massachusetts central office under approved interconnection agreements. (Howard Aff. ¶ 87, n. 51) The actual rollout met and, in most instances, exceeded the FCC-mandated implementation schedule. Where LNP is available, it replaces Interim Number Portability ("INP") arrangements. (Howard Aff. ¶ 79, 81)

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§ 52.21 (k))

Through February 2000, BA-MA has ported 117,400 telephone numbers through LNP arrangements for 21 CLECs. This constitutes a roughly ten-fold increase over the 11,700 numbers ported at year-end 1998. (Checklist Aff. ¶ 310) Bell Atlantic also continues to support interim number portability ("INP") where the arrangement is already in place in Massachusetts. These INP arrangements are provided under approved interconnection agreements. Because BA-MA has deployed LNP in all of its switches, BA-MA is not accepting any CLEC orders for INP, in accordance with the FCC's directives.[44] However, BA-MA has worked cooperatively with CLECs in transitioning from INP to LNP on a mutually agreed-upon schedule. As of the end of February 2000, BA-MA was supporting six CLECs with INP on approximately 6,500 telephone numbers. *(Id.*)

(a) Timely LNP Provisioning

BA-MA is provisioning LNP in a timely fashion. BA-MA has met its due date commitments on approximately 99% of all the orders for standalone LNP that it has processed since October 1999. (Measurements Aff. Exhibit B1) AT&T and MediaOne addressed BA-MA's LNP provisioning performance at the Technical Sessions. AT&T claimed that BA-MA's provision of service was fraught with errors, but it provided no data to support its claims – even after a specific Record Request for such data was made. Contrary to AT&T's claims, BA-MA's record of on-time service for AT&T has been 100% over the period since October 1999. (Checklist Aff. ¶ 312; Measurement Aff. Exhibit E)

In contrast, MediaOne acknowledged at the Technical Sessions that "…MediaOne has experienced substantial improvement in [BA-MA's] LNP process since last year…", and when referring to problems, conceded that "the [error] numbers are relatively small…". (MediaOne

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[44] In re Telephone Number Portability, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8411-12 (1996); In the Matter of Telephone Number Portability, Second Memorandum Opinion and Order on Reconsideration, 13 FCC Rcd 21204, 21211-12 (1998).

(Kowolenko) Aff. p. 7) In its response to Record Request No. 156, MediaOne tallied total BA-MA "misses" of its due date commitments that amounted to less than 1% of its orders BA-MA completed in the period analyzed by MediaOne. (Checklist Aff. ¶ 313; Measurement Aff. Exhibit E) In fact, the only recurrent occasions where MediaOne recorded a BA-MA "miss" were where MediaOne had sought to cancel or reschedule its order on the due date itself. MediaOne cancelled and rescheduled more than 65% of its orders in the August through October 1999 period. Even here, BA-MA has been able to accommodate the vast majority of these changes without adverse customer impact because of the telephone contact procedure that BA-MA has adopted to support MediaOne. *(Id.*)

(b) Providing FOCs

RCN, the only other CLEC to address BA-MA's LNP performance at the Technical Sessions, focused on BA-MA's provision of FOCs. RCN claimed that it has been unsuccessful in ordering on the 3-day standard interval due in part to untimely FOCs, and in part to ordering errors. (Tr. 2793-2835) Although FOC timeliness was a challenge for BA-MA earlier for manually handled orders, the substantial TISOC force additions that Bell Atlantic made have substantially improved this result in 2000. (OSS Aff. ¶ 70; Measurements Aff. Exhibit B1) Contrary to the RCN claims, BA-MA processes and completes in a timely manner hundreds of LNP orders within the 3-day interval every month, including orders for RCN.

Another reason for this improvement is that RCN has substantially improved the quality of its orders. This has both raised its order flow-through rate and lowered its order reject rate this year the levels it achieved in 1999. BA-MA's performance in providing FOCs within 2-hours on flow-through orders has consistently been nearly 100%. (Measurements Aff. Exhibit B1) Still, there would appear

to be room for further improvement as both the RCN order flow-through rate and the order reject rate still trail those of the CLEC that accounts for most of the LNP orders. (Checklist Aff. ¶ 315)

RCN also claimed that, when it reschedules an order, it must do so on a 6-day interval because of an alleged BA-MA need to schedule cut-down time on the lost loop. (Tr. 2827-28) This is incorrect. For POTS-type LNP orders, which RCN says is its market, BA-MA does not schedule premises work for the loop removal. (Checklist Aff. ¶ 317) Disconnects of POTS-type LNP orders with triggers consist solely of switch software translations. The translations are scheduled in the switch software and, if there is no coordinated work, these do not require human intervention. For LNP orders on POTS type telephone numbers that are not involved with a hot cut, the switch translations are mechanized. They do not require a frame technician, as RCN assumed. (Tr. 2827-28) Instead, the interval established for LNP orders is based on the order processing time required for the 10-digit unconditional trigger and, for disconnect orders, the application of the trigger in the BA-MA switch at least one day prior to the due day and the entry of the Number Portability Administration Center ("NPAC") communications. Taking into account the work effort required and systems involved, the industry established the 3-day interval used by BA-MA as the minimum standard for porting telephone numbers between service providers.

2. Miscellaneous Issues

AT&T also claimed that BA-MA does not enable its LNP translations to be verified. (AT&T Aff. p. 6) There is no activity denoted "translations verification" as part of the LNP procedures, either with AT&T or any other CLEC. Similarly, there is no such activity supported in the New York procedures reviewed and approved by the FCC. (Checklist Aff. ¶ 318) BA-MA's LNP processes are either coordinated with the CLEC or under the control of the CLEC. With the coordinated LNP

processes, BA-MA relies on the CLEC to advise BA-MA when to start the cutover. The verification would take place by the CLEC after the work is complete. With a non-coordinated cutover, the CLEC, as the new service provider, initiates the network translations that move the end-user's telephone number to the new network. Since the CLEC controls the transfer activity, there are no translations to be verified in BA-MA's network. *(Id.*)

Similarly, AT&T's claim that BA-MA did not set triggers or failed to disconnect BA-MA's retail service is also unfounded. BA-MA routinely sets the LNP 10-digit unconditional triggers on all applicable orders. As stated above, BA-MA's LNP on-time performance is 99%. If the necessary triggers were not in place, LNP on-time performance would be markedly lower. The records of the only CLEC to provide substantive data (MediaOne) confirm the fact that triggers were missed on only ** *** LNP orders BA-MA delivered for it in November, a "made" rate of over 99%. (MediaOne response to Record Request 153 and BA-MA internal ported telephone number tracking) Since virtually all of MediaOne orders are provisioned with LNP triggers, this is indicative of BA-MA's overall performance in setting triggers. Except for AT&T, BA-MA has had no other complaints from CLECs that the trigger is not applied. (Checklist Aff. ¶ 320) Operational experience with coordinated cutovers indicates that BA-MA completes these orders in a timely manner. (Checklist Aff. ¶ 318)

Finally, at the Technical Sessions, both MediaOne and RCN asked that BA-MA be required to support their interest in number porting on Saturdays. BA-MA described an alternative approach to MediaOne and RCN at the Technical Sessions that they could pursue if they wanted to complete their customer premise work efforts over the weekend. (Tr. 640-41) This alternative allows the CLEC to proceed without support from BA-MA. MediaOne has now completed a trial using this method and

there were no service failures during the trial. MediaOne is currently deploying this process when porting customers to their network. (Checklist Aff. ¶ 321)

L. LOCAL DIALING PARITY (Checklist Item 12)

Section 271(c)(2)(B)(xii) requires a BOC to provide "nondiscriminatory access to such services or information as are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements of Section 251(b)(3)." Section 251 (b)(3) imposes upon all LECs "the duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service with no unreasonable dialing delays." Section 153(15) of the Act defines "dialing parity" to mean that: "... a person that is not an affiliate of a local exchange carrier is able to provide telecommunications services in such a manner that customers have the ability to route automatically, without the use of any access code, their telecommunications to the telecommunications services provider of the customer's designation . . ."

In its review of BA-NY's Section 271 application, the FCC found that Bell Atlantic had demonstrated that it satisfies this checklist item by providing local dialing parity in accordance with the requirements of section 252 (b)(3). (*FCC Approval Order* ¶ 374) The FCC noted that no CLEC challenges Bell Atlantic's assertion that it provides local dialing parity. *(Id.*) Similarly, Bell Atlantic has demonstrated that it meets the criteria of the *FCC Approval Order*. No CLEC has challenged this demonstration.

BA-MA provides local dialing parity as an inherent component of its network interconnection arrangements with competitive carriers. (Howard Aff. ¶ 90) Local calls, whether placed over a BA-MA resold line or passed to BA-MA by a facilities-based carrier, are handled in the same manner as BA-MA handles calls placed by its own customers. Consequently, transmission quality standards and

performance are the same for customers of competing carriers and BA-MA's own retail customers. Further, end user customers have the ability to route their telecommunications to their chosen telecommunications services provider automatically, without the use of any access code. (Howard Aff. ¶¶ 90-91)

M. RECIPROCAL COMPENSATION (Checklist Item 13)

Section 271(c)(2)(B)(xiii) requires that a BOC's access and interconnection includes "[r]eciprocal compensation in accordance with the requirements of Section 252(d)(2)." In its review of Bell Atlantic's Section 271 application in New York, the FCC indicated that, in turn, Section 252(d)(2)(A) states that "a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless (i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls." (*FCC Approval Order* ¶ 375)

The FCC found that Bell Atlantic had demonstrated that "its access and interconnection in New York include reciprocal compensation arrangements in accordance with the requirements of section 252(d)(2), and thus, satisfied the requirements of checklist item 13." (*FCC Approval Order* ¶ 376) The FCC also observed that Bell Atlantic demonstrated in New York that "it (1) has reciprocal compensation arrangements in accordance with section 252(d)(2) in place, and (2) is making all required payments in a timely fashion." *(Id.*) In reaching this conclusion, the FCC specifically rejected the claim made by Global NAPs that BA-NY acted in an anticompetitive manner by failing to pay compensation for traffic terminated by competitive LECs to ISPs, as well as its arguments disputing the

amount of per-minute compensation payment which is owed pursuant to the decision of the New York PSC regarding reciprocal compensation. (*FCC Approval Order* ¶ 377)

With respect to Global NAPS' first claim, the FCC concluded that, in light of its prior ruling that "ISP-bound traffic is non-local interstate traffic" and that "the reciprocal compensation requirements of section 251(b)(5) of the Act . . . do[es] not govern inter-carrier compensation for this traffic", Global NAPs' arguments were irrelevant to its assessment of Bell Atlantic's compliance with checklist item 13. (*FCC Approval Order* ¶ 377) With respect to Global NAPS' second argument, the FCC found that Bell Atlantic in New York has an obligation to comply with New York PSC orders concerning inter-carrier compensation for ISP-bound traffic, pursuant to the NYPSC's *Inter-Carrier Compensation for ISP-Bound Traffic Order*[45] and pending the completion of its rulemaking on this issue. *(Id.*) The FCC also specifically ruled that inter-carrier compensation for ISP bound traffic is not governed by section 251(b)(5), and, therefore, is not a checklist item. *(Id.*)

Bell Atlantic satisfies the requirements for this checklist item in Massachusetts as it does in New York. BA-MA offers reciprocal compensation arrangements through interconnection agreements with competitive carriers. (Howard Aff. ¶ 98; Checklist Aff. ¶ 322) As of February 2000, BA-MA has 74 reciprocal compensation agreements with facilities-based CLECs, 10 cellular providers, and 8 paging companies. *(Id.*)

Like BA-NY, BA-MA has properly adhered to the reciprocal compensation requirements of its state regulatory authority. Specifically, pursuant to those agreements and the Department's order in D.T.E. 97-116-C, BA-MA continues to bill and pay reciprocal compensation to CLECs (Tr. 791) Throughout 1999, approximately 300 million minutes of use ("MOUs") originated with CLECs and

were terminated by BA-MA; while approximately 16 billion MOUs originated with BA-MA and were terminated by CLECs. Under the 2:1 ratio approved in the Department in D.T.E. 97-116-C, BA-MA paid $48.9 million to CLECs to terminate approximately 600 million minutes of BA-MA traffic. (Checklist Aff. ¶ 323) In accordance with the requirements of D.T.E. 97-116-C, BA-MA will make the appropriate reciprocal compensation payments for that traffic in cases where a CLEC shows evidence that its "local" traffic exceeds the 2:1 ratio. (Checklist Aff. ¶ 324)[46]

The only CLECs that have challenged Bell Atlantic's compliance with the requirements of this checklist item in Massachusetts are Global NAPS and AT&T.[47] For the reasons set forth in the Checklist Affidavit, Global NAPS and AT&T's claims should fail here, as they failed before the FCC. (*See* Checklist Affidavit ¶¶ 325-29) BA-MA satisfies this checklist item in accordance with the requirements set forth in the *FCC Approval Order*.[48]

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45 Opinion and Order Concerning Reciprocal Compensation, Case 99-C-0529 (NYPSC August 26, 1999).

46 Although not part of its checklist requirements, BA-MA has negotiated and signed inter-carrier compensation agreements with two CLECs in an effort to resolve disputes concerning compensation for terminating ISP-bound traffic. (Checklist Aff. ¶ 328 n.31)

47 AT&T made essentially a legal argument relating to the status of Internet-bound traffic generally and under the Department's Order in D.T.E. 97-116-C (AT&T Comments on Checklist Item 13).

48 The recent Court of Appeals ruling in Bell Atlantic Telephone Companies v. FCC (206 F.3d 1 (D.C. Cir., March 24, 2000)) concerning the FCC's Internet Traffic Order does not compel any different conclusion. (Declaratory Ruling and Notice of Proposed Rulemaking, In re: Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Inter-Carrier Compensation, CC Docket Nos. 96-98 and 99-68 (rel. Feb. 26, 1998). The Court did not rule that Internet-bound traffic is "local" and subject to reciprocal compensation; it merely remanded the matter to the FCC for a clearer explanation of the agency's earlier decision. Whatever the outcome of all regulatory and judicial proceedings, BA-MA will pay reciprocal compensation as required by law (as it always has in the past). As described in the Checklist Affidavit, BA-MA has complied with all elements of the Department's Order in D.T.E. 97-116-C. (Checklist Aff. ¶ 323) Accordingly, BA-MA complies with checklist item 13 by paying reciprocal compensation as required.

N. RESALE (Checklist Item 14)

Competitive checklist item 14 requires that telecommunications services are available "for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3)"[49] of the Act. Section 251(c)(4)(A) requires ILECs "to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers." Section 251(c)(4)(B) prohibits the imposition of any unreasonable or discriminatory conditions or limitations on resale "except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers." Section 252(d)(3) establishes retail rates "…excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier" as the basis for wholesale rates.

As indicated in the *FCC Approval Order*, Bell Atlantic satisfies the requirements of the Act for this checklist item in New York. (*FCC Approval Order* ¶ 381) Specifically, the FCC found that BA-NY "(1) offers for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers, and (2) offers such telecommunications services for resale without unreasonable or discriminatory conditions or limitations." *(Id.)* The FCC also found that Bell Atlantic demonstrates that it provides nondiscriminatory access to operations support systems for the resale of its retail telecommunications services." *(Id.)*

Just as Bell Atlantic satisfies the requirements of this checklist item in New York, so too does it satisfy the requirements in Massachusetts. Indeed, with the single exception of one Reseller (RNK

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[49] 47 U.S.C. §271(c)(2)(B)(xiv)

Telecom) raising several Resale-billing issues, no CLEC has challenged BA-MA's satisfaction of these requirements. Although billing generally will be addressed in the KPMG review, BA-MA has carefully reviewed RNK's claims. While some have little merit, others were helpful in enabling BA-MA to find and resolve certain performance issues. BA-MA continues to work with RNK on these issues.

1. Resold Services Generally

BA-MA's retail telecommunications services are available pursuant to Interconnection Agreements and its Resale DTE MA No.14. (Crawford Aff. ¶¶ 4-11; Tr. 683-770) The terms and conditions of DTE MA No.14 were approved by the Department in its September 17, 1998, Order in Phase I of D.T.E. 98-15. BA-MA does not impose any unreasonable or discriminatory conditions or limitations on the resale of its telecommunications services. The only restrictions are those expressly authorized by applicable rules of the FCC. (Crawford Aff. ¶ 15-19)

The Reseller support provided by BA-MA includes the Wholesale Market organization, the Operations Center, Systems Support, Repair Assistance, Account Management, Reseller documentation and Reseller training. (Crawford Aff. 9-14) Reseller support also includes nondiscriminatory access to Bell Atlantic's Operating Support Systems, as discussed in Section III below.

2. Providing Resale Services

BA-MA is provisioning resale service in the commercial volumes demanded by CLECs. Through December 1999, BA-MA had provided approximately 193,000 resold lines to over 44 Resellers. Of these, over 21,000 lines are in service for Reseller residential customers. The number of resold lines in service has grown by nearly 45% since December 1998. (Checklist Aff. ¶ 332) By the end of February 2000, the total number of resold lines had increased to 209,000. *(Id.*)

The performance measurements filed with the Department show that BA-MA is providing resold services at parity with BA-MA's retail operations. As the FCC found with respect to Bell Atlantic in New York, BA-MA "is provisioning competitive LEC's orders for resale in substantially the same time and manner as for its retail customers." (*FCC Approval Order* ¶ 400) As it spoke to both resale services and UNE loops, the FCC focused first on the fact that "Bell Atlantic's systems are set up to provide parity of service for provisioning wholesale and retail orders." (*FCC Approval Order* ¶ 193) In the case of Resale services, the identical BA-MA provisioning personnel are providing Resellers with the identical services provided to retail customers. (Checklist Aff. ¶ 333) This creates a designed parity of performance for the Resale provisioning process.

Next, the FCC focused on the provisioning results for missed appointments, installation quality and, to a lesser extent, on the provisioning intervals. (*FCC Approval Order* ¶¶ 194-210) In accordance with the C2C Guidelines, Resale provisioning measurements are provided separately for POTS, Complex and Special Services. (Measurement Aff. Exhibit B1) As in any parity process, these provisioning measurements vary monthly – sometimes providing better results for Resellers' customers and sometimes better results for retail customers. Nevertheless, these provisioning measurements show that BA-MA's resale provisioning performance from July 1999 – February 2000 is generally better than or equivalent to its performance for retail customers. (Checklist Aff. ¶¶ 334)

With respect to the FCC's two primary provisioning measurements, Percent Missed Appointments and Installation Quality, the data show that BA-MA has delivered service on-time and at a level of quality comparable to retail services. (Checklist Aff. ¶¶ 335-36) Another provisioning measure, Facility Missed Orders, shows similar results generally favoring Resellers' customers. Only in the area of completion intervals, does BA-MA's retail performance appear to be slightly more favorable

than BA-MA's Resale performance. However, the small disparity shown does not rise to the level of competitive significance. (*FCC Approval Order* ¶ 208) Moreover, as explained in the accompanying Measurements Affidavit, the reason that the Resale interval is longer is because the resellers themselves ask for longer intervals than do BA-MA's retail customers. (Measurements Aff. ¶¶ 68)[50] The FCC recognized the effect of these same operating factors in New York in giving less weight to this apparent disparity in its checklist analyses. (*FCC Approval Order* ¶¶ 202–10) As in New York, the performance metrics show overall that BA-MA provisions Resale services for CLECs at parity with its provision of retail services. (Measurements Aff. Exhibit B1)

Similarly, BA-MA's maintenance and repair performance for Resale continues to generally exceed its retail performance. (*Id*.) In the area of POTS/Complex services (over 95% of the resold lines), for example, BA-MA's performance metrics have been consistently better for resold services, while the results have indicated parity for Resale special services. (Checklist Aff. ¶¶ 337) As the FCC found for BA-NY, these performance results indicate that Bell Atlantic provides repair and maintenance services to Resellers in Massachusetts in substantially the same time and manner as it provides service to retail customers.

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[50] In a related area, the FCC gave little weight to BA-NY's measurement #OR-6-01, "% Accuracy - Orders". (*FCC Approval Order* ¶¶ 174 (UNE), 183 (Resale)) This metric was originally designed to count all "mismatches" between the latest version of the local service request ("LSR") submitted by the Reseller and the completed BA-MA service order(s). (Measurement Aff. ¶ 48) In practice, however, there are numerous cases where the "mismatch" actually represents BA-MA's efforts to correct an error made by the Reseller, *i.e.*, entered wrong zip code, and is, therefore, beneficial to the Reseller. (OSS Aff. ¶ 89) The reviewers have been working closely with the TISOC staff to ensure that all mismatches are truly errors and have modified the review procedures as necessary. Further, an issue involving the application date procedures in the New England Resale Center was uncovered. New methods and procedures for determining application date have been developed, published and implemented. (OSS Aff. ¶¶ 90-91) Through these efforts, BA-MA's performance measurement is becoming more accurate and, as a result, improving. (Measurement Aff. Exhibit B1)

3. RNK Resale Billing Issues

The general issue of resale billing, like billing generally, is addressed in the accompanying Joint OSS Affidavit. Billing is also being reviewed in detail by KPMG. Nevertheless, the only resale issues raised by a Reseller is found in RNK's affidavit complaining about the timeliness and accuracy of its resale bills.

There is no issue relating to the timeliness of RNK's bill. BA-MA reviewed fourteen recent RNK bills and found that nine of these bills were sent to RNK by the 8th day after the billing period, and all of the remainder were sent out by the 10th day as committed. (Checklist Aff. ¶ 340) To the extent that this interval – even though within the committed period – is longer than RNK would like, the remedy is in RNK's hands. RNK has elected to receive its electronic version of the bill on a CD ROM even though the bill could be received more quickly through Connect:Direct, which would provide RNK with its electronic bill at the same time that its paper summary bill is completed, generally ensuring delivery of the official electronic bill before the paper bill or CD ROM is received. (Checklist Aff. ¶ 341) BA-MA has provided RNK with specific references to the sections of both the Reseller and CLEC Handbooks that describe this option. To the best of BA-MA's knowledge, RNK has not taken the necessary steps to establish Connect:Direct. (Checklist Aff. ¶ 342)

BA-MA is actively providing service to more than 40 Resellers and no other reseller in this proceeding has raised the issue of the bill timeliness. Perhaps this is because the vast majority of these resellers subscribe to Daily Usage Feeds ("DUF") which, as the name indicates, provides usage on a daily basis. Use of the Daily Usage Files would assist a Reseller in preparing timely end user bills. As discussed below, the C2C performance data show that 98% of the DUF billing is sent by BA-MA within four days. (Measurements Aff. Exhibit B1)

Unlike bill timeliness, there were two idiosyncratic issues associated with the accuracy of RNK's bills, and BA-MA has taken remedial action with respect to both. (Checklist Aff. ¶344-45) Specifically, in light of RNK's complaints, BA-MA undertook a special review of RNK's resale claims from 1998 through present. This review identified a unique order processing problem affecting some of RNK's orders that has been addressed. *(Id.*) Second, RNK also expressed concern about not receiving credits from BA-MA in a timely fashion. To remedy this situation, Bell Atlantic has re-trained the billing associates in the Wholesale/Resale Billing organization. In addition, the Bell Atlantic Wholesale Billing organization has implemented a monthly "audit" in which all CLECs' and Resellers' billing claims which have been outstanding for over 30 days are reviewed by the Billing Supervisor and the Billing Manager. This process allows the Billing Manager to track all open claims efficiently and to identify and escalate issues as appropriate. *(Id.*)

Finally, RNK has stated that it finds it difficult to understand and track the credits that have been issued by BA-MA. In most cases, bill credits are applied by Bell Atlantic to the specific resold line for which a claim was submitted. The credit information supplied by BA-MA includes both the credit amount and the dates associated with the credit. However, in cases where a credit is due to RNK for a line that RNK has disconnected, the credit cannot be applied against the specific line since it is no longer in service. In such instances, the credits are applied to the total balance of RNK's bill. This is the same procedure that is followed for retail accounts. (Checklist Aff. ¶ 347)

It is BA-MA's practice to assist Resellers in reconciling the credits through a telephone conversation between a BA-MA service representative and a Reseller's employee. Many such calls have taken place between RNK and BA-MA. In addition, because of the large volume of billing claims being submitted by RNK, BA-MA developed a billing claims report for RNK. This report is sent to RNK

whenever an RNK claim is investigated and closed. The first report was sent to RNK in May 1999. BA-MA continues to work with RNK to ensure that it is able to reconcile any billing credits.

In sum, BA-MA makes its services available for resale and does not impose any "unreasonable or discriminatory conditions or limitations" on their resale. As demonstrated by the performance measurements, BA-MA provides Resale services in substantially the same time and manner as it provides its retail services. Further, when there are issues that arise between BA-MA and a Reseller, BA-MA addresses them as necessary to assist the Reseller in the pursuit of its business plan.

III. BA-MA SATISFIES THE OPERATING SUPPORT SYSTEMS REQUIREMENTS

One of the focal points of the FCC's consideration of Bell Atlantic's application in New York was whether its Operating Support Systems ("OSS") provided CLECs with "[n]on-discriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)." (*FCC Approval Order* ¶ 84) Upon specific detailed review of the OSS employed in the preordering, ordering, provisioning, maintenance and repair, and billing functions, the FCC found that "Bell Atlantic offers non-discriminatory access." (*FCC Approval Order* ¶ 82) In addition, the FCC also reviewed the training and assistance that Bell Atlantic provides to CLECs, the Bell Atlantic Change Control Management process, and Bell Atlantic's carrier interface testing practices and procedures. Here, the FCC stated that "Bell Atlantic provides a change management process and technical assistance that offers competing carriers a meaningful opportunity to compete." *(Id.*)

The FCC used two tests in reaching these conclusions. First, for OSS functions that are analogous to those that Bell Atlantic provides to itself, its customers or affiliates, the FCC indicated that the non-discrimination standard was met by Bell Atlantic showing that it offers the requesting carrier access that is equivalent in terms of quality, accuracy and timeliness. That is, that Bell Atlantic permitted

competing carriers to perform these functions in "substantially the same time and manner." (*FCC Approval Order* ¶ 85) The FCC specifically noted that the requirement that the access provided be nondiscriminatory *did not require* that it be equivalent. *(Id.)* Second, for OSS functions that have no retail analogues, the FCC found that Bell Atlantic offers access "sufficient to allow an efficient competitor a meaningful opportunity to compete." (*FCC Approval Order* ¶ 86) In this area, the FCC noted the importance of specific performance standards for measuring OSS performance either "adopted by the relevant state commission or agreed upon by the BOC in an interconnection agreement or during the implementation of such an agreement." *(Id.)*

Despite strident claims by certain CLECs, many identical to and others like the claims raised by a few CLECs in the then-concurrent Technical Sessions, the FCC concluded that Bell Atlantic had met its obligations. The FCC based its conclusions on a review of the evidence presented by BA-NY and other parties, on the performance results recorded in BA-NY's C2C reports, on the report of KPMG relating the findings from its lengthy and comprehensive test of Bell Atlantic's OSS in New York, and on the favorable recommendations of the New York PSC. The FCC specifically declared that its conclusions were based on "the totality of the evidence," rather than any specific individual aspect of Bell Atlantic's service to CLECs. (*FCC Approval Order* ¶ 82)

As the Department is aware, Bell Atlantic's OSS in Massachusetts are nearly identical to those employed in New York. Similarly, the performance measures adopted in New York, and cited with approval by the FCC, have been adopted by the Department for use in Massachusetts. Not surprisingly, a review and update of all of the evidence in this proceeding demonstrates that Bell Atlantic has met its OSS responsibilities in Massachusetts – as both the New York PSC and the FCC concluded that it did in New York. Bell Atlantic understands that this point will again be challenged by

specific CLEC claims in Massachusetts (principally by CLECs anxious to foreclose Bell Atlantic from competing with them in their long distance markets). Thus, the vast majority of OSS claims raised at the Technical Sessions were raised by AT&T and MCI. The same claims were raised before the FCC in the same time frame. The FCC rejected these claims in determining that BA-NY met the requirements of the Act.

As discussed below, the record established here shows that BA-MA meets the criteria of the *FCC Approval Order*. BA-MA believes that this conclusion will ultimately be demonstrated as well by the results of the KPMG testing currently underway.

A. Pre-Order OSS

1. Pre-Ordering Systems and Functionality

With respect to the Pre-ordering function, the FCC noted favorably that Bell Atlantic offers requesting carriers an industry-standard application-to-application preordering interface to integrate preordering and ordering functions. Bell Atlantic makes available to requesting carriers all the functionality that it provides to itself through this and other pre-ordering interfaces. (*FCC Approval Order* ¶ 128) The affidavit and testimony provided earlier by Mr. Miller and others demonstrate that Bell Atlantic provides CLECs with the same preorder systems and functionality in Massachusetts as it does in New York. The record also shows that BA-NY service representatives and CLEC employees obtain the same pre-ordering information from the same OSS. (Miller Aff. ¶ 23; Tr. 2046-64)

The FCC noted that Bell Atlantic in New York had made available three electronic interfaces: a Web-based Graphical User Interface ("Web GUI"), an application-to-application interface based on the industry standard EDI Issues 9 & 10 protocol, and a second application-to-application pre-ordering interface, Common Object Request Broker Architecture ("CORBA"), then recently made available.

(Id.)[51] These systems permit CLECs to perform the following pre-order functions: (1) retrieve CSRs; (2) validate addresses; (3) select telephone numbers; (4) determine services and features available to a customer; (5) obtain due date availability; (6) access loop qualification information; and (7) view a customer's directory listings. (*FCC Approval Order* ¶ 132) The FCC also specifically noted that CLECs "can also check the status of pending orders." *(Id.)* The same pre-order interfaces provide the same functionality in Massachusetts. (Miller Aff. ¶ 76; Tr. 2155-85)

2. Pre-Order System Performance & Volumes

The FCC also found that Bell Atlantic had shown, through response times and interface availability performance data and third-party testing, that its pre-ordering interfaces and systems are operationally ready. (*FCC Approval Order* ¶ 128) Bell Atlantic has produced these same measurements for Massachusetts in Exhibit B1 (total) and B2 (monthly) associated with the Measurements Affidavit.

With respect to system response times, the FCC supported the use of the "parity plus four seconds" standard established by the New York PSC (and now Massachusetts) based on the C2C collaborative to prove that Bell Atlantic processes pre-order transactions for CLECs "in substantially the same time" that it processes its own pre-order transactions. (*FCC Approval Order* ¶ 146) Although BA-NY had missed the standard by a small margin in some circumstances, the FCC held that the slight variations in response times "are not likely to impair the ability of a competing carrier to negotiate a service order while a customer is on the line." *(Id.*, at ¶ 147) The Bell Atlantic response times are now substantially better than those earlier demonstrated in New York, with measurements

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[51] Although AT&T claimed earlier that the CORBA interface has only been made available to it, that is not correct. (OSS Aff. ¶ 33)

consistently showing less than the 4 second differential. (Measurements Aff. Exhibit B1) Further, excellent results have also been recorded for the Web-GUI and CORBA pre-order interfaces. (Measurements Aff. Exhibits C, B1)

CLECs challenged the EnView "response time" measurement system in the FCC proceeding, as they did in the Massachusetts Technical Sessions. (*FCC Approval Order* ¶ 149) The FCC determined, however, that it had adequate performance data to conclude that "the EnView system is a suitable measure of the time that a carrier or retail representative's pre-order request traverses Bell Atlantic's system." *(Id.*) Nothing has changed to make the simulation system less appropriate or necessary in Massachusetts, and its use here should be approved as it was in New York. Moreover, the EnView system has been improved since it was validated for use in New York. (Measurements Aff. ¶ 25)

The FCC also found that the "parity plus 10 seconds" standard, agreed upon in the New York collaborative process, was an appropriate measurement for parsed CSR retrieval. (*FCC Approval Order* ¶ 152) This standard properly reflects the fact that, unlike other preordering transactions, Bell Atlantic must perform the additional step of parsing CSR information into identifiable fields prior to sending the information to the CLEC. *(Id.*) The OSS performance for CSR retrieval has also demonstrated results consistently better than this standard. (Measurements Aff. Exhibit B1)

The FCC found that Bell Atlantic's interfaces were sufficiently available, based on C2C performance data. (*FCC Approval Order* ¶ 156) In doing so, it agreed that a distinction made in the C2C measurements between prime and non-prime hours was reasonable and, further, that the changes planned to the EnView measurements used to calculate interface availability were positive. (*FCC Approval Order* ¶155, n. 469) Importantly, the FCC found that the instances of limited unavailability

reflected in these data did not deny a CLEC a meaningful opportunity to compete. (*FCC Approval Order* ¶ 156, n. 469)[52]

Bell Atlantic uses the same interface measures in Massachusetts that the FCC approved for New York. Further, as explained in the Measurements Affidavit, BA-MA uses the revised EnView calculations referenced favorably in the *FCC Approval Order*. BA-MA reports the availability of the interfaces provided to CLECs during both "prime time" (6:00 a.m. to 12 midnight Eastern time, Monday through Saturday) and "non-prime time" (12:01 a.m. to 5:59 a.m. Eastern time, Monday through Saturday; all day Sunday and holidays). The measurements data show that the interfaces were available more than 99% of the time they were scheduled to be available during prime time and non-prime time in the first two months of 2000, except for a 98.57% availability during non-prime time for the EDI interface in February. (Measurements Aff. Exhibit B1) During the last six months of 1999, interface availability was similarly strong with over 99% availability for 27 of 36 measurements with many others close to 99% and only one less than 97% (non-prime time EDI).

AT&T claimed in its November 30, 1999, comments that the CORBA pre-ordering interface was frequently not available. (AT&T Aff. ¶ 29) AT&T then went on to identify a series of times for which the CORBA interface was not available and claimed that CLEC system access is not as responsive as pre-ordering systems used by Bell Atlantic representatives. (AT&T Aff. ¶ 29-31) BA-MA began reporting on CORBA interface availability in January 2000. Since that time, CORBA has been available *24 hours a day/7 days a week* more than 99% of the time. Further, prime time

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[52] In addition, the FCC also cited KPMG's finding in New York that Bell Atlantic's interfaces are consistently available during scheduled hours of operation. (*FCC Approval Order* ¶ 157) KPMG is conducting a similar review in Massachusetts.

availability of CORBA has consistently exceeded the C2C standard of 99.5%. (Measurements Aff. Exhibit B1)

The FCC similarly found that the Bell Atlantic pre-order systems and interfaces are scalable to handle reasonable foreseeable demand volumes. (*FCC Approval Order* ¶ 150) The FCC relied upon the actual volumes being handled from January to July 1999. It also noted that KPMG had found that Bell Atlantic had the tested capability in place (in March 1999) to meet projected year end volumes and found that "its systems have sufficient capacity to meet expected future usage volumes." *(Id.*) The Bell Atlantic preorder systems and interfaces are now handling almost 500,000 transactions a month, nearly double the levels referred to by the FCC. The excellent response time data addressed above attest to the ability of these systems to be scaled to meet growing demand. Moreover, as in New York, KPMG is testing the scalability of Bell Atlantic's interfaces and systems to meet future volume.

Finally, with respect to the integration of preorder and ordering systems, the FCC rejected the claims of MCI and AT&T – like those made here – that Bell Atlantic had not done enough to make its pre-order and ordering OSS "integratable."[53] The FCC noted that its favorable OSS conclusion was supported both by evidence of commercial integration and KPMG's findings. In terms of commercial usage, the FCC found that CTC Communications was able to develop an integrated EDI pre-ordering and ordering system for parsed CSR information, and that MCI and AT&T had already integrated parsed CSR retrieval and limited address validation functionality into their back office systems – providing "probative evidence that CLECs are capable of integrating the remaining pre-ordering functions." (*FCC Approval Order* ¶ 138) The FCC specifically found that this evidence was also

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[53] Although opposing CLECs argued that Bell Atlantic was obliged to integrate its pre-order and ordering OSS, Bell Atlantic in fact is only obligated to make its systems "integratable" by the CLECs. (See, Pre-Filing Statement of BA-NY, dated April 6, 1998 at 28-29) The FCC properly found that Bell Atlantic had met this

consistent with KPMG's finding "that Bell Atlantic's pre-ordering and ordering interfaces are integratable." *(Id.*) Thus, the FCC has already concluded that Bell Atlantic provides for the system integration capability that AT&T has said that it needs. (*See, e.g.*, AT&T ¶ 27).[54]

AT&T claims that BA-MA's pre-ordering interface does not provide parity because responses obtained via CORBA cannot be fully integrated with the Bell Atlantic interface used to place orders. (AT&T Aff. ¶ 27) But AT&T has argued to the FCC that Bell Atlantic has provided key functionality to allow CLECs to integrate their pre-ordering and ordering interfaces – parsed service address information – since August 1999, and that Bell Atlantic provides documentation of its parsing rules to CLECs upon request. (Supplemental Declaration of Julie S. Chambers and Sarah DeYoung on behalf of AT&T Corp., attached to *Supplemental Comments of AT&T Corp. in Opposition to SBC's Section 271 Application for Texas*, CC Docket No. 00-65, filed April 26, 2000) In addition, BA-MA has assisted CLECs in their pre-ordering and ordering integration efforts through its active participation in collaborative sessions. For example, address components, community names and thoroughfare abbreviations have been made consistent throughout the Bell Atlantic footprint. In addition, field names for pre-order and order data elements have been synchronized to make it easier for a CLEC to integrate the pre-ordering data with its ordering data. (OSS Aff. ¶ 37)

During the Technical Sessions, MCI explained how it has implemented the pre-population of certain ordering fields with information obtained through the pre-ordering process. (Tr. 3770) Moreover, in comments made on the Application by SBC for Authorization to provide In-Region,

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obligation. (*FCC Approval Order* ¶ 139)

[54] References to AT&T are to the Crafton Affidavit filed November 30, 1999, presented by Mr. Carmody at the Technical Session held on December 9, 1999. References to MCI are to the Lichtenberg/Sivori Affidavit filed November 30, 1999, unless otherwise specified.

InterLATA Services in Texas, MCI stated that it had achieved pre-order/order integration in New York:

> In New York, in contrast, MCI WorldCom had successfully integrated Bell Atlantic's EDI pre-order interface with key order functionality and KPMG had evaluated CLECs' ability to do so for all pre-order functionality.[55]

In addition, in New York, MCI WorldCom had successfully integrated Bell Atlantic's EDI pre-order interface with key order functionality and KPMG had evaluated CLECs' ability to do so for all pre-order functionality.[56]

At the Technical Sessions, AT&T complained that the lack of complete uniformity in ordering fields and formats made full integration impossible. The FCC specifically rejected these claims. (*FCC Approval Order* ¶ 139) However, the FCC advised Bell Atlantic that it should assist any CLECs that were impeded in the task of integration by inconsistencies in field names or formats "by design[ing] and deploy[ing] a software correction or provid[ing] the necessary technical assistance." As noted above, Bell Atlantic has assisted CLECs in their integration efforts. (*Id.*)

3. Loop Qualification

With respect to loop qualification, the FCC notes that Bell Atlantic in New York – as in Massachusetts – provides three avenues for CLECs to obtain information regarding its loops. (*FCC Approval Order* ¶ 142) First, it provides a mechanized loop qualification process that indicates whether a loop is qualified for ADSL service. Second, for central offices not yet in the loop qualification database, Bell Atlantic offers to conduct a "Manual Loop Qualification" to provide carriers with the same information ordinarily available through the mechanized process. Third, in order to access

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[55] CC Docket No. 00-4, Joint Declaration of Terri McMillon and John Sivori on behalf of MCI WorldCom, attached to Comments, ¶ 50, filed January 31, 2000.

[56] CC Docket No. 00-4, Joint Declaration of Terri McMillon and John Sivori on behalf of MCI WorldCom, attached

more detailed information about the makeup of a particular loop, CLECs can ask Bell Atlantic to conduct a manual "Engineering Query." The FCC found that "these mechanized and manual processes enable requesting carriers to access loop qualification information in substantially the same time and manner as Bell Atlantic's retail operations," noting that Bell Atlantic's retail representatives can pre-qualify a loop only through the mechanized loop qualification process. (*FCC Approval Order* ¶ 143, n. 430)

As previously explained by Ms. Stern and other BA-MA witnesses, competing carriers have access to the same loop qualification database as Bell Atlantic's own retail representatives, and obtain the same information (and more). (Stern Aff. ¶ 48; Checklist Aff. ¶ 214; Tr. 1561-62) This means that if a retail representative needs to check whether a customer's line is qualified for ADSL, he or she queries the same database as the CLECs. He or she first logs onto PHOENIX (the system used for loop qualification transactions), then submits a Request for Information. When the Loop Qualification query screen is returned, the retail representative must provide information on the loop for which qualification is requested. Normally, this consists of populating the telephone number of the customer whose loop the representative is seeking to qualify. After this request is submitted, a Loop Qualification Response screen is returned. The only information returned to the retail representative is a "Y" or "N" response indicating whether the address is qualified or not, and the maximum DSL speed the loop can support. If the response is "no," the retail representative cannot offer ADSL service to the end user. (Tr. 1852)

As the FCC recognized, CLEC representatives can obtain more information from the loop qualification database than Bell Atlantic's retail representatives can obtain. In addition to the Y/N

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to Comments, ¶ 50, filed January 31, 2000.

indicator and maximum speed, CLECs also get loop length information. As a result, CLECs may learn that a 16,000-foot loop is ADSL-capable, while a Bell Atlantic representative will only get a response that the loop is not qualified. (*Id.*)

The testimony of Ms. Stern and others also show that the two manual means for a CLEC to obtain loop qualification information in New York are equally available in Massachusetts. If a loop is over 18,000 feet (not qualified), the CLECs still have the option of requesting a manual loop qualification which provides them more information, including whether there are load coils or DLC on the loop. Again, the performance data provided by BA-MA shows that the CLECs are able to get this information in a timely way. (Checklist Aff. ¶¶ 213-14)

Finally, the FCC did not earlier address the requirements of the *UNE Remand* rules with respect to the non-discriminatory access to loop qualification information in New York, as these rules were not then in effect. (*FCC Approval Order* ¶ 140) However, since that time, Bell Atlantic and the CLECs have continued to work together in the xDSL collaborative being overseen by the New York PSC to determine the type of information and access that Bell Atlantic will make available in response to this order. Specifically, Bell Atlantic is working with the CLECs through the New York DSL collaborative process to enhance database access for the Loop Qualification process. Even though loop makeup information is posted in the Facility Assignment Control System ("FACS") for only 10% of the terminal locations in Massachusetts, CLECs indicate they would prefer an automated process for obtaining this additional loop makeup information. This information is currently available only through the Manual Loop Qualification or Engineering Query processes because a manual effort is required to trace the cable-and-pair on paper records and to record the data required. A sub-committee of the New York DSL collaborative has been investigating various possibilities, including the costs for

providing loop makeup information (to the extent such information is available in FACS) through a mechanized system. It is expected that this issue will be resolved through the collaborative process. (Checklist Aff. ¶ 215) BA-MA has indicated that it will apply the results of those collaborative efforts in Massachusetts as well as New York. (Checklist Aff. ¶ 223)

B. Ordering OSS

With respect to the OSS ordering function, the FCC concluded that Bell Atlantic provides CLECs in New York with nondiscriminatory access in accordance with the requirements of *Section* 271. (*FCC Approval Order* ¶ 158) It also found that Bell Atlantic's systems are able to meet reasonably foreseeable commercial volumes in the future. Finally, the FCC determined that Bell Atlantic provides nondiscriminatory access to order completion notices to CLECs in New York.

1. Ordering Systems and Interfaces

The FCC began by noting that Bell Atlantic's systems provide competing carriers with electronic access for a full range of ordering functionality. (*FCC Approval Order* ¶ 159) As earlier explained by Mr. Miller and other Bell Atlantic witnesses, the ordering systems that are used in Massachusetts are the same as those used by BA-NY and approved by the FCC. (Miller Aff. ¶ 76; Tr. 2155-85) That is, BA-MA provides CLECs a choice of two interfaces for submitting resale and UNE orders – EDI and the Web GUI. Currently eight carriers are using EDI in Massachusetts, and 71 more are using the Web GUI in Massachusetts. (OSS Aff. ¶ 50)

BA-MA currently provides the industry standard EDI issues 8 and 10 (with LSOG version 2 and 4 formats) for ordering. (OSS Aff. ¶ 51) These systems allow CLECs to order both UNEs – including combinations of UNEs such as UNE-P – and resold services. These ordering systems continue to support growing volumes of CLEC orders, amounting to over 500,000 orders in March

2000. (OSS Aff. ¶ 180) Here again, KPMG will separately report to the Department the results of its volume testing.

In addition, for ordering certain arrangements like interconnection trunks that resemble access-type services, BA-MA provides Connect:Direct (formerly called Network Data Mover or NDM). (OSS Aff. ¶ 51) Connect:Direct is a well-established industry standard protocol for exchanging information within and between telecommunications carriers, and has traditionally been used by Bell Atlantic to receive access service requests from interexchange carriers. CLECs may order interconnection trunks by submitting an access service request over Connect:Direct or by faxing their orders. (Checklist Aff. ¶ 29)

2. Order Flow-Through/Order Rejects

Flow-through is the process by which electronically submitted CLEC orders flow-through and are entered into the Service Order Processor ("SOP") without manual assistance by Bell Atlantic. (OSS Aff. ¶ 53) There are various types of orders that are designed to flow-through. However, actual order flow-through is dependent on several factors. First, the order as submitted must contain all appropriate information for the type of request. Thus, if an order fails to contain a valid due date or provides a listed address in an incorrect format, it will be rejected by the system front-end edits. Second, the order must pass all parameters designed for establishing the order in SOP. For example, after an LSR for a migration from retail passes the initial up front edits, the request is reviewed by the system against the customer service record. If the existence of optional calling plans or contractual agreements are found, then the order may be rejected back to the CLEC or forwarded to the TISOC for review. *(Id.*)

Orders requiring manual handling by the TISOC are automatically directed by the system to the

appropriate work group based on order type. (OSS Aff. ¶ 54) There, the TISOC representative processes any orders that are not designed to flow-through or that fail to flow-through as the result of an error. Importantly, the TISOC representative also reviews those orders and, if a discrepancy is uncovered that requires input from the CLEC, the representative sends a query to the CLEC for clarification. (*Id*.)

Several CLECs argued at the Technical Sessions that BA-MA was not able to flow-through enough orders to its service order processing system without manual intervention by its TISOC order handling group. (*See, e.g.*, AT&T ¶ 35) In reaching its conclusions, the FCC specifically rejected CLEC claims that Bell Atlantic's order flow-through percentage levels provided an independent reason to deny Section 271 approval. It stated that "it would be inappropriate to consider order flow-through rates as the sole indicia of parity." (*FCC Approval Order* ¶ 161) Instead, the FCC noted that Bell Atlantic's ability to return timely order confirmation notices, to accurately process manual orders, and to scale its systems was more relevant and probative to the FCC's analysis than a simple flow-through analysis. (*FCC Approval Order* ¶ 163)

Nevertheless, Bell Atlantic has made considerable effort to increase the level of flow-through that CLEC's experience on their orders. (OSS Aff. ¶ 61-63) One of the ways Bell Atlantic has acted is to add new transactions to the type of orders made eligible for system flow-through. These efforts have been focused on the high volume transactions that Bell Atlantic has observed, thus serving to reduce the number of transactions requiring the manual assistance of the TISOC personnel. Looking forward, the next significant advancement in order eligibility for flow-through will cover xDSL orders in June. (OSS Aff. ¶ 63) Clearly, many CLECs are already benefiting from the steps taken to date, with

overall UNE flow-through rates up from 23.15% in October to 36.51% in February, and Resale flow-through rates up from 41.01% to 49.25% during this same period. (Measurements Aff. Exhibit B1)

Another of the factors that is important in achieving high order flow-through levels, and low order "fallout" levels (to manual processing) and/or frequent order rejection, is the care with which CLECs prepare their orders. For example, although some Resellers have been able to achieve high flow-through rates and low rates of order rejection, others have experienced far poorer results. (OSS Aff. ¶ 64) Similar results also prevail with respect to facilities-based carriers. (*Id*) Significantly, the FCC found that the observed variations in individual CLEC experiences in their respective flow-through/reject rate success level indicate that Bell Atlantic cannot be held solely responsible for the results. (*FCC Approval Order* ¶ 166)[57] Indeed, it is the proportionate participation of CLECs with good order flow-through/order reject rates in the market each month that generally determines the average C2C result shown, thus causing up-and-down fluctuations. (OSS Affidavit ¶ 64) For all of these reasons, the FCC did not give significant weight to the average flow-through and rejection rate data.

Bell Atlantic has sought, however, to help the CLECs seeking such assistance to analyze and avoid the errors which they are making today. In addition to providing CLECs with a clear understanding of the error codes which are returned with rejected orders, Bell Atlantic has conducted monthly seminars focusing on the most significant recurring errors and providing explanations as to how these errors can be avoided. (OSS Aff. ¶ 65) Bell Atlantic will also provide individual CLECs with a

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[57] *See, e.g*., the FCC's conclusion that Bell Atlantic's evidence that order rejection rates vary from 3 percent to greater than 70 percent "strongly implies that the care a competing carrier takes in submitting its orders makes a significant difference in the rate at which its orders are rejected." (*FCC Approval Order* ¶ 175)

consolidated report of their most numerous errors for their own use in training their ordering personnel. *(Id.*)

3. Ordering Notices and Notice Accuracy

As above, the FCC determined that the timely provision of order confirmation notices was an important element of its favorable treatment of the BA-NY application. Here, the FCC correctly indicated that Bell Atlantic's ordering OSS is designed to provide either a Local Service Request Confirmation ("LSRC") or a Local Service Request Rejection (rejection notice) once an order is received. (*FCC Approval Order* ¶ 159) This is true for Massachusetts as well as New York CLEC orders. (OSS Aff. ¶ 68) These notices are returned electronically to the CLEC irrespective of whether they were generated by either the mechanized or manual processing of the order itself. (*FCC Approval Order* ¶ 160) The FCC noted with approval that BA-NY's performance for timely order processing was subject to the standards established for mechanized and manually processed order confirmation and rejection notices in the New York C2C guidelines – now adopted for use in Massachusetts. *(Id.*) The FCC said that these standards provide "a reasonable measure of whether Bell Atlantic processes an order in a manner that provides an efficient competing carrier with a meaningful opportunity to compete." *(Id.*)

In assessing Bell Atlantic's performance in New York, the FCC found that '[it] generally meets these standards, and where Bell Atlantic has fallen short of the standards, the shortfall has not been significant." (*FCC Approval Order* ¶¶ 160, 164-165 (UNEs), 180 (Resale)) The same holds true for Massachusetts. Indeed, the OSS performance measurements show that BA-MA has been providing LSRCs and rejects almost instantaneously where the orders are addressed mechanically throughout the past 8 months. (Measurements Aff. Exhibit B1) The measurement data also show that BA-MA is also

providing LSRCs or rejection notices, as appropriate, on a timely basis now that the force augmentation efforts – earlier described as Bell Atlantic plans at the Technical Sessions – have been implemented. (OSS Aff. ¶¶ 71-76)

The FCC also observed that Bell Atlantic in New York – as in Massachusetts – measures the accuracy of its order processes in at least two ways: (1) accuracy of order confirmation notices (order confirmation accuracy); and (2) overall accuracy of CLEC orders entered into its service order processor. (*FCC Approval Order* ¶ 171-172) Its review of the service performance metric for LSRC accuracy confirmed the strong results that Bell Atlantic has achieved in New York. The Measurement Affidavit demonstrates that results are similar for Massachusetts. (Measurements Aff. ¶ 55; Exhibit B1) Moreover, where there was controversy earlier about the completeness and accuracy of manually-generated LSRCs relating to hot cuts in New York, Bell Atlantic has now introduced a mechanized process for creating these LSRCs that is in effect in Massachusetts as well as New York. Further, as above, a system change was implemented in December to ensure that the LSRC includes the cable and-pair information that AT&T alleged was missing earlier. (Checklist Aff. ¶ 186)

With respect to the "Service Order accuracy" measure, the FCC reported that Bell Atlantic had acknowledged that its implementation of this measurement has been problematic. (*FCC Approval Order* ¶¶ 173-174) The FCC therefore gave little weight to this metric, concluding instead that Bell Atlantic's consistently excellent service quality performance demonstrated that both UNE and resale service orders were being processed accurately. (*FCC Approval Order* ¶¶ 174 (UNEs), 183 (Resale)) The consistently strong installation quality results demonstrated by BA-MA similarly show

that CLEC orders are being processed accurately.[58] Nevertheless, BA-MA has taken action to further improve both its measurement administration and its manual order processing procedures. (Measurements Aff. ¶ 54; OSS Aff. ¶¶ 88-94)

4. Status Inquiries and Jeopardy Notices

The FCC specifically rejected the claims of CLECs in New York, like those raised in the Technical Sessions, that Bell Atlantic did not provide access to its order status and jeopardy information in a nondiscriminatory manner. (*FCC Approval Order* ¶158) CLECs argued in the Technical Sessions that Bell Atlantic should be required to actively provide them with electronic jeopardy notices. (*See, e.g.*,, MCI Aff. ¶ 62) The FCC rejected these claims, pointing out that Bell Atlantic in New York – as in Massachusetts – provides CLECs with electronic access to jeopardy notices contained in Open Query System reports and gives them the opportunity to check on the status of an order in its Work Force Administration ("WFA") system or in the Service Order Processor ("SOP") system through pre-order interfaces, or by calling a dispatch center. (*FCC Approval Order* ¶ 184) Although CLECs might desire some other form of information, the order status and jeopardy information system made available by BA-MA for wholesale orders is nondiscriminatory in accordance with the Act. (*FCC Approval Order* ¶ 185)

5. Completion Notices

The FCC also concluded that Bell Atlantic in New York provides order completion notification "in a manner that affords an efficient competitor a meaningful opportunity to compete." (*FCC*

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[58] Indeed, the measurement title itself is a misnomer because it measures the match of information fields between the Local Service Request and the BA-MA Service Order, and presupposes that any difference is an "error." In fact, some of differences identified as errors are actually corrections to the LSR by the TISOC representatives so that the order will process correctly and deliver the facility or service that the CLEC intended to order. (Measurements Aff. ¶ 49)

Approval Order ¶ 187) Specifically, it observed that Bell Atlantic in New York – as in Massachusetts – provides both a "billing completion" and a "work completion" notice to CLECs. The FCC found that these notices were being timely provided based upon the C2C performance data and on the results of the KPMG review. *(Id.*, at ¶ 190) The performance data provided by BA-MA similarly show that the completion notices are being timely provided to CLECs. (Measurement Aff. Exhibit B1) Further, although expressly not part of its favorable conclusion, the FCC indicated that it was "encouraged" that Bell Atlantic planned a system enhancement to make fielded complex completion notifications available in April 2000. (*FCC Approval Order* ¶ 192) Although the target date for this system enhancement was subsequently rescheduled, BA-MA can now report that it is scheduled to be implemented in June 2000.

6. New York "Missing Notifiers"

CLECs have claimed in this proceeding, and in various motions relating to the KPMG Master Test Plan, that they experienced missing notifiers and lost orders in using the EDI system in New York from November 1999 to February 2000. (*See*, *e.g.*, MCI ¶ 58) Importantly, these claims were never based on Massachusetts allegations, nor did they relate in any way to the Web-GUI system used to deliver 95% of the orders currently handled by BA-MA. (OSS Aff. ¶ 77)

Instead, as the Department is aware, the CLECs properly brought these New York claims before the New York PSC and the FCC. Although there were software problems that caused the delay of order notifiers, the circumstances were never catastrophic as the CLECs suggested. Indeed, while the CLECs were decrying "lost orders", the BA-NY OSS was processing 16,000 orders per day. (OSS Aff. ¶ 87) In fact, 97% of the New York CLEC orders were processed by BA-NY despite the notifier problem.

Still BA-NY took full responsibility for the problems the CLECs were encountering, and it responded vigorously and decisively. *(Id.*) First, BA-NY identified several short-term work-arounds that enabled the CLECs to continue to conduct their burgeoning competitive marketing efforts. Indeed, over this period where BA-NY's OSS were allegedly broken, the CLECs orders increased more than 25**%** month over month. Second, under the guidance of the New York PSC, addressed the affected orders. Third, BA-NY developed new software to handle the CLEC EDI orders, eliminating the third-party vendor software that gave rise to many of the issues. Fourth, BA-NY implemented computer hardware changes that significantly strengthened the ordering system. Finally, BA-NY agreed with regulators upon a series of reports that would demonstrate whether the steps that were being taken were effective in closing out the problems observed. (OSS Aff. ¶¶ 77-87)

BA-NY currently offers CLECs several options for connecting with BA-NY's EDI interface: Direct connection (Dedicated); Value Added Networks ("VANs"); public network (Internet) connectivity; and Interactive Agent connectivity using Secure Socket Layer 3 (SSL3) technology. (OSS Aff. ¶ 48) Detailed specifications along with the benefits associated with each of these options are provided in Volume II of the CLEC/Resale Handbooks. The Handbooks themselves can also be found on BA-NY's web site.

Some of the delayed notifiers in New York appeared to be related to connectivity issues. Addressing connectivity issues required joint work by BA-NY and the CLECs, because BA-NY has no ability to track a file sent from a CLEC but never received by BA-NY as a result of a connectivity failure. Working with CLECs, BA-NY identified and corrected several connectivity issues. Several of these situations involved CLEC errors and required action by the CLECs, such as correcting

passwords, routing traffic to the proper server, or fixing problems with a CLEC VAN or FTP connection. (OSS Aff. ¶85)

Now, over three months after the implementation of this action plan, it is clear that these steps have been effective. The reports since the beginning of March 2000 have shown that all orders are being received and acknowledged, LSRCs or order rejects (as appropriate) are being timely returned, and work completion and billing completion notices are being timely delivered. (OSS Aff. ¶ 86) To whatever limited extent these issues were ever observable in Massachusetts, they are now resolved. The improved software and hardware is in place for Massachusetts as it is in New York**.** KPMG will review this area and separately report its observations to the Department.

C. Provisioning OSS

In its review of Bell Atlantic's OSS in New York, the FCC favorably pointed first to the fundamental fact that Bell Atlantic's systems are set up to provide parity of service for provisioning wholesale and retail orders. (*FCC Approval Order* ¶¶ 193, 197) For most orders from CLECs (all resale, platform, and new UNE loop orders), the provisioning systems and processes employed are the same as are used for Bell Atlantic retail provisioning. For UNE-loop conversions ("hot cuts"), which involve physically disconnecting an end user's loop from the Bell Atlantic switch and connecting it to the CLEC's transmission equipment, Bell Atlantic coordinates its provisioning activity with the CLEC to minimize the disruption of the customer's service. However, the same provisioning systems used for other orders support the process. These same provisioning systems and processes are used by BA-MA in Massachusetts. (Miller Aff. ¶ 38)

The FCC also found that Bell Atlantic's systems in New York provide "competitive LECs and its retail operations with equivalent access to information on available service installation dates." (*FCC*

Approval Order ¶ 197) These are provided for dispatch orders via Bell Atlantic's SMARTS clock. (*Id.*, at n. 631). Alternatively, for non-dispatch orders, Bell Atlantic makes available the same set of standard intervals for CLECs and its retail representatives. *(Id.*) Again, BA-MA uses the same systems and practices in Massachusetts. (Miller Aff. ¶ 76)

Further, the FCC found that the C2C measurements provided by Bell Atlantic in New York showed that "Bell Atlantic is missing fewer competitive LEC customer appointments and providing equal or better quality installations, compared to appointments for its own retail customers." (*FCC Approval Order* ¶ 193) Specifically, the FCC pointed to the data that showed that Bell Atlantic generally completed a higher percent of installation appointments for CLECs than for itself and was providing CLEC customers with a higher level of quality. (*FCC Approval Order* ¶¶ 200-01) The same is true for Bell Atlantic in Massachusetts. (Measurements Aff. Exhibit B1)

The FCC also gave close consideration to the C2C measurement data for "Average Completion Interval." (*FCC Approval Order* ¶¶ 202-10) Here, it determined that although the disparity in the completion intervals that CLEC and retail customers experience is statistically significant, the evidence presented by Bell Atlantic demonstrated that this disparity results from factors outside Bell Atlantic's control." (*FCC Approval Order* ¶ 202) These same factors - primarily CLEC requested longer intervals – strongly affects the offered and completed intervals in Massachusetts. (Measurements Aff. ¶ 63)

The FCC also observed that, although some orders were not given an appointment date that was the same as their requested date, the number of such orders was less than 10% and that the appointment dates given by Bell Atlantic averaged only a few hours longer than CLEC requested dates. (*FCC Approval Order* ¶ 199) The FCC put this difference in context by stating that "consumers are

much more sensitive to whether their service is being installed on the arranged appointment date, as opposed to whether their appointment is set a little later after the original requested time." *(Id.*) Accordingly, it agreed with the considered judgment of the New York PSC "that Bell Atlantic provides competing carriers with confirmed service installation dates in a non-discriminatory manner." *(Id.*)

The evidence in Massachusetts similarly shows that the CLECs are being given installation appointments for the standard intervals or for the longer intervals they frequently request. (Measurements Aff. ¶ 76) BA-MA has taken action to ensure that its order processing personnel adhere to this practice. (OSS Aff. ¶¶ 92-93)

Finally, the FCC noted that KPMG had conducted a thorough review of these systems in its New York review and "concluded that Bell Atlantic satisfied all test criteria for the provisioning function." (*FCC Approval Order* ¶ 198) KPMG is performing a similar review in Massachusetts and will separately report its observations to the Department.

D. Maintenance and Repair OSS

The FCC concluded that Bell Atlantic in New York demonstrated that it "provides nondiscriminatory access to maintenance and repair OSS functions." (*FCC Approval Order* ¶ 211) The FCC referred *inter alia* to Bell Atlantic's deployment of the necessary interfaces, systems and personnel; the fact that these systems allow CLECs nondiscriminatory access; and that Bell Atlantic restores service to CLEC customers on a nondiscriminatory basis as supporting its conclusion. *(Id.*)[59]

1. Systems and Interfaces

The FCC determined first that Bell Atlantic in New York "offers maintenance and repair

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[59] The FCC also referred to the fact that BA-NY "performs maintenance and repair work for CLEC customers at substantially the same level of quality that it provides its own customers." (*Id.*) These operational factors are addressed above for the individual Checklist facilities and services provided and the same is true in Massachusetts.

interfaces and systems that enable a requesting carrier to access all the same functions that are available to Bell Atlantic's retail representatives." (*FCC Approval Order* ¶ 213) As in New York, BA-MA provides CLECs with two interfaces for obtaining access to BA-MA's maintenance and repair OSS. (OSS Aff. ¶¶ 105 and 121) The most commonly used is the Web GUI, which provides access to a platform called RETAS. Approximately 250 CLECs in the Bell Atlantic region are authorized to use the Web GUI. (OSS Aff. ¶ 105) BA-MA also provides an application-to-application interface, electronic bonding, which is now operating with one CLEC and shortly to be implemented with another. Thus, the claims heard earlier that electronic bonding was needed, but was not available, are now moot. (OSS Aff. ¶¶ 121-123**)**

The FCC properly recorded that CLECs using Bell Atlantic's EDI interface are able to perform six maintenance and repair tasks or functions: (i) conduct a mechanized loop test (for resale and UNE Platform but not for unbundled loops); (ii) create a trouble ticket; (iii) determine the status of a trouble ticket; (iv) modify a trouble ticket; (v) request cancellation of a trouble ticket; and (vi) request a trouble report history. (*FCC Approval Order* ¶ 213) These are the same six maintenance and repair tasks or functions available to BA-NY representatives. However, as the FCC correctly noted, CLECs have more automatic functionality than Bell Atlantic's representatives. *(Id.*, at n. 681) For example, when a BA-MA representative conducts a mechanized loop test, he or she must determine the circuit type, geographic region and destination, and manually submit the test to the correct back-end system. For CLECs, however, RETAS automatically makes these determinations and submits the test to the correct system. Similarly, when the test results are returned, the BA-MA representative must interpret the highly technical results himself or herself. Results for CLEC tests, however, are automatically analyzed

by the system and returned with a recommendation (for example, whether to dispatch a technician). (OSS Aff. ¶ 109)

The FCC also found that Bell Atlantic's OSS in New York "permits competing carriers to open trouble tickets immediately on recently-completed service orders." (*FCC Approval Order* ¶ 216) This was a functionality added to the OSS in operation in Massachusetts as well as New York in April of 1999 after an early KPMG exception was raised in the New York review. (OSS Aff. ¶ 111) Thus, the FCC properly rejected a claim made by Covad in New York – identical to the claim it raised in the Technical Sessions in Massachusetts – that it could not open trouble tickets on new loops for 24 hours. (*FCC Approval Order* ¶ 216)

2. Volumes and Performance

The FCC also addressed the performance of these Maintenance and Repair OSS. Here, the FCC relied upon the C2C measurement data for RETAS response times in concluding that "Bell Atlantic's maintenance and repair interface and systems process trouble inquiries from competing carriers in substantially the same time and manner as Bell Atlantic processes inquiries concerning its own retail customers." (*FCC Approval Order* ¶ 217) Although the numerous measurements taken under the C2C approach were not uniformly within the applicable standards, the FCC determined that the differences were small and were not even alleged to impair CLECs access to maintenance and repair functions. The comparable RETAS results for Massachusetts are better than the earlier results shown for New York, consistently demonstrating response times results equal to, or better than the C2C established standard. (Measurements Aff. Exhibit B1) Thus, the results show in Massachusetts – as they did in New York – "that competing carriers are able to process maintenance and repair requests in substantially the same time as Bell Atlantic's retail operations." (*FCC Approval Order* ¶ 219)

Finally, the FCC also concluded that commercial usage and KPMG's testing showed that Bell Atlantic's maintenance and repair interface is capable of handling reasonably foreseeable demand levels. (*FCC Approval Order* ¶ 214) These Maintenance and Repair OSS supported over 55,000 maintenance transactions a month in the Bell Atlantic region in the second half of 1999. (OSS Aff. ¶ 112) During the first quarter of 2000, there were 4,100 per month in Massachusetts alone. KPMG is again testing these OSS in its Massachusetts review and will separately report its observations to the Department.

E. Billing OSS

The FCC found that Bell Atlantic's OSS provides nondiscriminatory access to its billing functions in New York. (*FCC Approval Order* ¶ 226) It observed that Bell Atlantic provides competing carriers with billing information through Daily Usage Files ("DUFs") that itemize daily usage records for competing carrier customers, although carrier bills serve as a monthly invoice to incorporate charges to the carrier for all Bell Atlantic products and services provided. BA-MA does the same. (Miller Aff. ¶¶ 52-54; Tr. 2058-59)

Bell Atlantic employs its Billing OSS to create 48 million EMI billing records for CLECs each month in New England, and renders 1,500 wholesale CRIS bills and 300 CABs bills each month in New England. (OSS Aff. ¶ 128) Many of the Billing OSS are the same as those in use in New York. (Tr. 2155-85) Where there are OSS differences, KPMG has crafted its review to gain a full assessment of their performance capabilities. KPMG will separately report its observations to the Department.

The FCC pointed to the C2C reports provided by Bell Atlantic and to the KPMG review in New York as evidence that Bell Atlantic provides nondiscriminatory access to billing. (*FCC Approval Order* ¶ 227) Specifically, the FCC affirmed that the C2C standards adopted in New York provided

an appropriate measure of Bell Atlantic's ability to provide CLECs with DUFs and carrier bills in substantially the same time and manner that Bell Atlantic provides such information to itself. *(Id.*) The FCC found that Bell Atlantic's performance consistently exceeds these standards.

These C2C standards are now in effect in Massachusetts and the comparable results achieved in Massachusetts are reported in the Measurements Affidavit. (Measurement Aff. Exhibit B1) These results show that DUF files are consistently provided to CLECs in a timely fashion and that carrier bills have been generally rendered on-time over the eight month period from July 1999 to February 2000. The only exceptions to this excellent record was with respect to the carrier bills rendered in early 2000, which were delayed due to a production problem in the CABS system when the allowable size of an internal table for Billing Telephone Numbers was exceeded. The cause of these delays has now been corrected, and preliminary results for March 2000 show that these bills are again being sent on-time. (OSS Aff. ¶ 130)[60]

The FCC also specifically rejected the claims made by AT&T in New York – repeated at the Technical Sessions – that Bell Atlantic does not provide it with complete billing on a consistent basis. (AT&T Aff. ¶ 58) The FCC rejected these claims, stating that "[t]he specific problems AT&T cites to support this argument, including difficulties with local usage file names and obtaining and processing local usage data, are not cited by any other commenter and are not supported by the Carrier-to-Carrier metrics or findings in the KPMG Final Report." (*FCC Approval Order* ¶ 228) Similarly, AT&T stood alone in asserting these claims here. Nevertheless, BA-MA has addressed them so that the Department

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[60] In addition, the C2C proceeding in New York has now adopted a measurement of, and a standard for, the accuracy of Bell Atlantic's carrier billing. This measure is still being developed. An approximated result is provided in the C2C results, but this is not an accurate depiction of accuracy in billing. (Measurements Aff. ¶ 144)

will see that they are, at best, very stale and were in many respects unfounded even when current. (OSS Aff. ¶¶ 136-44)

F. Change Management

As it had in earlier Section 271 Orders, the FCC stated that an adequate change management process to which the BOC adheres over time is also part of its "obligation 'to provide competing carriers with the specifications necessary to instruct competing carriers on how to modify or design their systems in a manner that will enable them to communicate with the BOC's legacy systems and any interfaces utilized by the BOC for such access.'" (*FCC Approval Order* ¶ 102, n. 280)[61] Unlike the earlier BOC applications, the FCC found that Bell Atlantic demonstrated that it "provides the documentation and support necessary to give competing carriers nondiscriminatory access to its OSS." (*FCC Approval Order* ¶ 101) The FCC found that Bell Atlantic has an adequate change management process in place and has adhered to that process over time. Accordingly, the FCC concluded – despite several CLEC challenges similar to those they raised at the Technical Sessions – that "Bell Atlantic provides access to its OSS in a manner that allows an efficient competitor a meaningful opportunity to compete." *(Id.)* The identical change management process and procedures that is employed in New York is employed in Massachusetts. (OSS Aff. ¶ 153; Tr.2061)

1. Change Management Process

The FCC first defined the change management process as "the methods and procedures that the BOC employs to communicate with competing carriers regarding the performance of and changes in the BOC's OSS system." (*FCC Approval Order* ¶ 103) Next, the FCC noted that Bell Atlantic followed a "detailed process of managing changes" recorded in a document entitled "Telecom Industry

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[61] The FCC specifically cited its BellSouth South Carolina Order, 13 FCC Rcd at 628, and its Ameritech Michigan

Services – Change Management Process" ("Change Agreement") which divides all changes into five different categories and provides specific timelines and intervals for each category. *(Id.* at ¶¶ 104-105) In addition, the FCC noted that the process includes timeframes for the distribution of draft specifications on business rules, receipt of CLEC comments on the documentation, and the distribution of final documentation. *(Id.* at ¶ 106)

The FCC found that change management process documentation is clearly organized and readily accessible to CLECs. (*FCC Approval Order* ¶ 107) CLECs can readily access the Change Agreement and modifications to it on Bell Atlantic's web page that includes procedures for CLECs to cross-reference and track information concerning change management. The FCC concluded that Bell Atlantic "updates and maintains a database that tracks the progress of each specified change, reports changes systematically using change request numbers and uses these same numbers in communications with competing carriers to identify specific changes." *(Id)* The same process applies to Bell Atlantic's OSS in Massachusetts. (OSS Aff. ¶ 182) A copy of the Change Management Process documentation was provided with BA-MA's May 24, 1999, filing as Exhibit 6, Book 5, Tab 13.

The FCC also observed that Bell Atlantic has established a forum where CLEC and Bell Atlantic representatives meet to discuss upcoming system and interface changes, as well as the change management procedures themselves. Through this forum, Bell Atlantic receives CLEC input and makes appropriate changes to its implementation plans in response to the CLEC input. (OSS Aff. ¶¶ 153-170) In particular, the FCC favorably cited the parties' agreement to prioritize the changes based on merit. Last Fall, for example, Bell Atlantic and CLECs met to address their highest priority – uniform business rules for LSOG 4. The product of these discussions was Bell Atlantic's agreement to make

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Order, 12 FCC Rcd at 20617.

numerous changes to the LSOG 4 business rules. Bell Atlantic implemented 17 such changes in the March 1 release of LSOG 4 and will implement an additional 22 changes by July 1, 2000. (OSS Aff. ¶ 161)

Bell Atlantic has recognized the importance of setting priorities to deal with system changes. Working with the CLECs, Bell Atlantic introduced a process where CLEC-impacting Bell Atlantic-initiated changes and CLEC-initiated changes are assigned priorities based on agreed criteria. Once prioritized, these projects are scheduled for implementation using the priority of the change as a key-determining factor. (*Id)*

2. Change Management Performance

The FCC also found "that Bell Atlantic provides competing carriers with change management notification and documentation for upcoming change releases in a manner sufficiently timely to allow an efficient competitor a meaningful opportunity to compete" even though the FCC noted that "the timeliness of Bell Atlantic's performance falls short of the monthly standards for change management notification and documentation set out in the C2C metrics and used in the Change Control Assurance Plan… ." (*FCC Approval Order* ¶¶ 113, 118) The FCC also commended Bell Atlantic and the New York PSC for developing measurements applicable to the administration of the change management process.

BA-MA reports the same measurements for the change management process. The specific measurements are described in the Measurements Affidavit, and the operating results are attached as Exhibit B1 to that document. The measurements show that Bell Atlantic has improved its adherence to the change management process over the levels approved by the FCC. For example, the "Timeliness of the Change Management Notice" metric requires Bell Atlantic to meet the established dates for

publication of draft and final business rules and technical specifications, without any subsequent material changes. Bell Atlantic met that requirement for the first three months of this year for all publications, except for the final issuance of the EDI technical specifications for LSOG 4. (OSS Aff. ¶ 160) However, since no CLEC planned to use EDI for LSOG 4 in production immediately, this did not have a significant impact on the CLECs. (*Id.*)

The FCC also specifically found "that Bell Atlantic provides notification for emergency changes (Type 1 changes) in a manner sufficiently timely to allow an efficient competitor a meaningful opportunity to compete." (*FCC Approval Order* ¶ 116) The FCC rejected the challenge of several CLECs raised before the FCC – and repeated at the Technical Sessions – that Bell Atlantic failed to meet its obligations because emergency changes were not always timely issued. That claim should also be rejected for Massachusetts: of the 78 Type 1 notifications made in January through March 2000, Bell Atlantic failed to provide timely notification to CLECs only one time. (OSS Aff. ¶ 170)

AT&T claimed that Type 1 Bulletins were issued in situations where they were not needed. AT&T is simply wrong. Bell Atlantic has used the Type 1 Bulletins to communicate information about software defects, including situations where the existing documentation contains incorrect information on how to format an order. It is important that Bell Atlantic communicate this information as soon as possible to prevent possible problems for CLECs who are developing interfaces or submitting orders based on the documentation. If Bell Atlantic waited until the next release to provide this information, the CLECs building interfaces could be required to redo some of that effort, and CLECs with existing interfaces might continue to submit incorrect orders and other transactions. (OSS Aff. ¶ 168) KPMG concluded in its New York review that Bell Atlantic had not inappropriately classified any Type 1 notices. This trend has continued. All the Type 1 changes initiated to date either resulted from a CLEC

reported trouble or from the identification by KPMG or Bell Atlantic of a software or documentation defect. (OSS Aff. ¶ 169) These are exactly the type of circumstances that should be communicated in a Type 1 release.

The current process to use bulletins to communicate items of an urgent nature was developed with the CLECs and reflects the way that Bell Atlantic has worked with CLECs to develop a mutually satisfactory way to communicate specific types of urgent information. (OSS Aff. ¶ 164) Bell Atlantic scheduled two workshops in May 1999 in response to CLEC concerns about the frequency of the FLASH announcements (now Type 1 bulletins) and whether Bell Atlantic used these to communicate changes that were not true emergencies. Based on the CLEC feedback, Bell Atlantic agreed to process modifications, including adding a pager notification of emergency changes to ensure that key contacts at each CLEC received notice in a timely fashion. After a July 1999 working session with CLECs to review the modified process, Bell Atlantic circulated an update on August 11, 1999. Two CLECs participated in a two-week beta test of the new process, and the process was implemented for all CLECs at the end of August 1999 with the understanding that there would be another evaluation after a month. The new process for Type 1 notifications was discussed at a meeting on October 15, 1999, as well as at subsequent monthly Change Management meetings. After receiving additional CLEC comments in December, a final meeting was held in January 2000, and the final notification guidelines were published on February 29, 2000. The final documentation is attached as Exhibit C to the OSS Affidavit. In sum, the content, format and conditions under which Type 1 Bulletins will be issued, and pager call-outs will be made, were thoroughly discussed with and agreed to jointly with the CLECs. (OSS Aff. ¶ 166)

In addition, in the event of an emergency outage, Bell Atlantic has adopted a procedure to

conduct a conference call for CLECs whenever there is an announcement of an immediate software change. This conference call enables Bell Atlantic to provide as much information as possible to CLECs quickly, thereby facilitating their implementation of any required modifications at the same time as Bell Atlantic. (OSS Aff. ¶ 167) This procedure is used regularly and has been well received by the CLECs. Not surprisingly, the FCC also favorably referred to this process in its Section 271 approval. (*FCC Approval Order* ¶ 116, n. 333)

Finally, the FCC favorably referenced the fact that the Change Agreement contains a separate escalation and dispute resolution provision. (*FCC Approval Order* ¶ 108) This provision has been used effectively in resolving the schedule for a system enhancement. (OSS Aff. ¶ 163) KPMG is conducting a review of the Change Management process in its Massachusetts testing and will separately report its findings to the Department.

3. Testing Environment

The FCC also concluded that the "Bell Atlantic permanent QA [Quality Assurance] testing environment provides competing carriers with a stable environment and an adequate opportunity to test Bell Atlantic's OSS changes prior to implementation." (*FCC Approval Order* ¶ 119) Specifically, the FCC found that the testing environment "adequately mirrors the production environment" and "offers the extended testing periods the competing carriers need for new entrant certification and new release testing." *(Id.)* The same QA testing environment used for BA-NY is also used in Massachusetts. (*See* Information Request DTE 2-42)

Bell Atlantic's current test environment was developed in response to KPMG feedback during the New York test, as well as CLEC comments and input. The procedures have been used for CLEC testing since May 1999. These procedures have several key aspects. (OSS Aff. ¶ 172) First, Bell

Atlantic has established a software-testing environment that mirrors the production software environment. (OSS Aff. ¶ 172) Second, Bell Atlantic has established a formal set of test transactions – the "test deck" – which is a cross-section of the most frequent types of pre-order and order transactions. Bell Atlantic publishes full documentation of the test deck, including expected results and results actually obtained when executed. (*Id*.) Bell Atlantic solicits and incorporates feedback from CLECs on the test deck and works with CLECs to identify additions or modifications to the test deck as appropriate for each new release. CLECs are not limited to the test deck, but can test other scenarios to satisfy their unique market or ordering patterns. Third, the procedures provide for a "protected period" in the test environment to ensure a stable environment for CLEC testing before a new release is implemented in production. (*Id*) Finally, the procedures set out time frames and processes for CLEC testing, notification to Bell Atlantic of problems encountered, implementation of software "bug" fixes by Bell Atlantic and retesting by CLECs. (*Id*)

As a further enhancement to these procedures, Bell Atlantic established a physically separate test environment for CLECs in Massachusetts in October 1999. The separate test environment mirrored the production environment and allowed for an expansion of the test period for CLECs to four weeks, with extended daily hours. As a result, there are more opportunities for "bugs" to be detected and to be fixed on both sides of the interface. (OSS Aff. ¶ 174)

As the Department is aware, implementation of a new standard set of business rules was planned for the February release (LSOG 4). (OSS Aff. ¶ 175) Along with the changes resulting from the Fall 1999 uniform business rules collaborative and other changes, this was the largest release Bell Atlantic had ever implemented for wholesale services. This was also the first time the separate CLEC Test Environment was used in connection with new release testing outside of New York, and the first

time test decks were executed in all jurisdictions for LSOG 4, thus resulting in over 400 separate test deck scenarios. Although the February release did not go as planned, now that the test decks have been established and used to test a release, subsequent releases will not experience the problems and delays associated with the February release. (OSS Aff. ¶ 175)

KPMG is performing an extensive test in connection with BA-MA's Quality Assurance testing environment. (MTP VII-1 and VII-2) KPMG, acting as a CLEC, has utilized the test environment during the February Releases and will perform further testing during the June Release. KPMG will separately report its findings to the Department.

G. Training and Technical Assistance

The FCC concluded that "Bell Atlantic demonstrates that it provides the technical assistance and help desk support necessary to give competing carriers nondiscriminatory access to its OSS." (*FCC Approval Order* ¶ 127) The FCC specifically referred to the numerous means by which Bell Atlantic extends assistance to CLECs – means that are identical in Massachusetts to those the FCC favorably noted were used in New York. (*FCC Approval Order* ¶ 127) The FCC expressly rejected the claims made by CLECs that Bell Atlantic's technical assistance and help desk support is inadequate. Instead, the FCC found that "Bell Atlantic provides efficient competitors a meaningful opportunity to compete by enabling them to understand how to implement and use all of the OSS functions available to them." (*FCC Approval Order* ¶ 127)

1. Handbooks And Documentation

First, the FCC noted that Bell Atlantic produces a separate three volume handbook for resellers and purchasers of UNEs, both of which are available on CD-ROM with word search capability. *(Id.)* Volume I in each series ("Getting Started") provides basic information to CLECs regarding doing business with Bell Atlantic. Volume II ("Electronic Interface Guide") addresses the interfaces available

to CLECs for obtaining access to Bell Atlantic's OSS, and provides information for obtaining the technical specifications. Volume III ("Business Rules") provides information about Bell Atlantic products and how to order them. Volumes I and III of the UNE handbook are updated in March each year. The corresponding resale volumes are updated in September. Volume II of both series is updated twice a year in March and September. Both handbook series are available via the Internet at Bell Atlantic's website. Further, although ZTEL stated that it was difficult for a CLEC to keep current with the updates, it was apparently unaware of its ability, via the web site, to update its CD-ROM version of the handbook. (OSS Aff. ¶ 181) This capability was introduced for CLECs in September 1999. This capability also addresses AT&T's expressed need for "automatic updates."

BA-MA uses the same CLEC handbooks, system documentation and training materials/Sessions as BA-NY. In addition, Bell Atlantic provides CLECs with extensive technical documentation enabling CLECs to program their systems for the use of EDI, including the *Bell Atlantic Pre-Order EDI Guide*, *Bell Atlantic North Pre-Order Documentation*, and *Bell Atlantic North Order EDI Guide*. Further, Bell Atlantic provides CLEC with associated training relating to the use of the Web-GUI system for pre-order and ordering transactions. (OSS Aff. ¶ 179)

Second, the FCC observed that documentation is updated for each release and is also made available on Bell Atlantic's web site: "[t]hus, competing carriers have access to complete, up-to-date business rules and ordering codes." (*FCC Approval Order* ¶ 127) Although MCI complained that the documentation is changed too frequently, Bell Atlantic must respond to industry needs that are both broad in scope and dynamic in nature. New and revised documentation needs arise for many reasons. For example, these needs can be driven by a CLEC's feedback based upon its reported operational uncertainty or experience. Documentation may be changed in these circumstances so that all CLECs in

Bell Atlantic can benefit from this valuable feedback. As a supplier to all of these CLECs, not only MCI, Bell Atlantic remains committed to communicating all changes, regardless of the size or impact, to CLECs in a timely fashion. (OSS Aff. ¶ 182)

AT&T claimed at the Technical Sessions that the technical documentation contains errors in version after version, and that Bell Atlantic does not correct these errors. (AT&T Aff. ¶ 82) AT&T's arguments are both outdated and inaccurate. The FCC specifically noted that Bell Atlantic responded to problems identified by KPMG in its New York review, thereby "resulting in more accurate documentation" for CLECs to use in Massachusetts as well as New York. (*FCC Approval Order* at n. 364) Hewlett Packard Consulting ("HPC") – a non-telecommunications provider – reviewed BA-NY's documentation as part of the KPMG test in New York, and used it to construct the interface employed during the test to submit transactions to BA-NY. HPC concluded that the documentation was adequate for these purposes. (*See* HPC Final Report, Overview §1.4 at 3 (April 20, 1999)) In addition, HPC made a number of suggestions for improving the documentation and making it more useful to CLECs. Bell Atlantic incorporated these suggestions into the documentation available to CLECs. KPMG's Massachusetts test includes a review of technical documentation, and KPMG will separately report its findings to the Department

AT&T also complained that there were mismatches between Bell Atlantic business rules and EDI specifications. (AT&T Aff. ¶ 88) When AT&T raised this same issue in New York, Bell Atlantic acknowledged that there likely were a limited number of such mismatches – caused in part by distinctions between the industry groups which published Ordering and EDI standards. (OSS Aff. ¶ 185) These "mismatches" were of far less consequence than AT&T was inclined to acknowledge. In any event, many of the AT&T "mismatch" claims were already resolved by the time they were raised in

this proceeding. *(Id.)*

Nevertheless, Bell Atlantic developed the Integrated Documentation Application ("IDA"). IDA uses the LSOG Industry Standard Guidelines as its baseline, and candles the Bell Atlantic Business Rules against those guidelines. In addition, IDA enforces consistency in naming conventions between the Business Rule form/field combinations and the Interface Specification, whether it is EDI or CORBA in the case of pre-order. Change logs are automatically generated by the application so that the CLEC is made aware of *each* change that is made to a new version of the Business rules and or Interface Specification and the logs record, where appropriate, the Change request associated with the log entry. (OSS Aff. ¶ 186)

In order to respond to the CLEC request to more easily associate the Business rule directly to the Interface Specification rather than work with two separate documents (the Rule and the Spec), IDA produces a document that combines the Business Rule with the Specification in a side-by-side format in a single document. This further simplifies the CLECs' task of programming their systems to communicate with Bell Atlantic. Bell Atlantic believes it is the first in the industry to produce such a document. (OSS Aff. ¶ 187)

Finally, AT&T itself has argued to the FCC that Bell Atlantic publishes accurate and comprehensive EDI specifications. (Declaration of Nancy Dalton and Sarah DeYoung on behalf of AT&T Corp., ¶82, attached to *Comments of AT&T Corp., in Opposition to Southwestern Bell Telephone Company's Section 271 Application for Texas*, CC Docket No. 00-4, filed January 31, 2000)[62] Together with the fact that KPMG and CLECs have successfully built their own side of the

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[62] "Unlike Bell Atlantic, SWBT has failed to publish accurate and comprehensive, SWBT-specific EDI interface documentation. While Bell Atlantic (and other BOCs) publish customized EDI specifications, SWBT does not." *Id*.

interface using Bell Atlantic's documentation and that, as described above, Bell Atlantic's documentation has become more accurate, this demonstrates that AT&T's claims about Bell Atlantic's documentation are without merit. In addition, KPMG and HPC have utilized Bell Atlantic documentation during the Massachusetts KPMG test. BA-MA expects that this will confirm the quality of BA-MA's documentation. (OSS Aff. ¶ 188)

There is no evidence that any alleged problems with Bell Atlantic's system documentation have impaired the ability of CLECs to develop their interfaces. KPMG and CLECs have successfully built their own side of the interface using Bell Atlantic's documentation. (OSS Aff. ¶ 188) This documentation has continued to improve since that time. Now, KPMG and HPC are utilizing Bell Atlantic documentation during the Massachusetts test. KPMG will separately report its findings concerning the quality of BA-MA's documentation to the Department.

2. Training/Reference Guides

The FCC also gave weight to the fact that that Bell Atlantic conducts regular training courses for competing carriers. (*FCC Approval Order* ¶ 127) Bell Atlantic has continued these same efforts in 2000. In 1999, Bell Atlantic provided training to 1,278 CLEC students. In the 1st Quarter of this year, CLECs have sent more than 300 representatives through Bell Atlantic training. (OSS Aff. ¶ 192) Bell Atlantic has already conducted four "suitcased" courses at CLEC premises this year, and three more are being planned. In addition, Bell Atlantic conducted free GUI training Sessions during the first part of this year in conjunction with the LSOG 4 release. *(Id.)*

Bell Atlantic has divided the training curriculum into the following distinct modules: Basic (Non-Complex) Products and Services; Directory Listings; Complex Products; RETAS for Resellers; RETAS for CLECs; BA-North UNEs; and BA-South UNEs. (OSS Aff. ¶ 190) In addition, Bell

Atlantic will develop other training offerings for a CLEC upon request. The courses and curriculum offered provide CLEC employees with the training and skills needed to master the complexities of telecommunications and to communicate effectively with Bell Atlantic. Similarly, as discussed above, Bell Atlantic conducts monthly workshops to educate CLECs on ways to improve their order quality and order flow-through. *(Id.)* Overall, the training program enables both resellers and facilities-based CLECs to conduct business successfully with Bell Atlantic.

3. Help Desk Support

Finally, the FCC noted that Bell Atlantic's Systems Support Help Desk ("BASS Help Desk") provides a single point of contact for CLEC to report system outages and software problems and is a means to ensure that problems are resolved as quickly as possible. (*FCC Approval Order* ¶ 127) The FCC favorably noted that Bell Atlantic has put in place various processes to evaluate the performance of its help desk agents and to revise, as necessary, the tools available to them for analyzing information and resolving problems. *(Id.)* Moreover, the FCC indicated that Bell Atlantic made positive changes to publish on its web site a comprehensive and descriptive list of the different support features available to competing carriers, including the time of day these support functions are available, in response to earlier KPMG reported concerns. *(Id.)*

The identical BASS Help Desk, which the FCC found beneficial to CLECs in New York, is used by BA-MA to support CLECs in Massachusetts. (OSS Aff. ¶ 194) The BASS Help Desk answers incoming calls from the CLECs/Resellers regarding the Bell Atlantic Web GUI or the Bell Atlantic OSS interfaces to CLEC/Reseller provided applications. (OSS Aff. ¶ 194) The BASS Help Desk serves CLECs and Resellers operating throughout the 14 state Bell Atlantic region. The BASS Help Desk can be reached 24 hours per day, 7 days a week. (OSS Aff. ¶ 197) Information about the

BASS Help Desk is contained in both the Resale and CLEC Handbook Series, Volume II, Section 5.3. Currently, the BASS help desk is staffed with 20 service agents and six managers**.** The BASS Help Desk agents are provided with tools and training to enable them to retrieve and analyze information from various systems to resolve CLEC issues. (OSS Aff. ¶ 195-196) They are also trained to route certain CLEC inquiries to other Bell Atlantic groups, by setting up a "technical bridge," established to handle specific functions, *e.g.*, EDI programming or Service Order tracking. (OSS Aff. ¶ 202)

One of the primary tasks of the BASS Help Desk is to alert CLECs whenever there is a reported OSS outage. In support of the new notification process referenced by the FCC, Bell Atlantic established a Paging and Notification Control Desk to ensure timely notifications of systems outages to all identified CLEC contacts. The C2C standard for this notification is within 20 minutes of the BASS help desk being notified of an outage condition. A review of BA-MA's Average Notification of Interface Outage metric through February 2000 shows that notification was provided in less than 20 minutes in three out of the five reported months. (OSS Aff. ¶ 199) Thereafter, the Help Desk keeps CLECs appraised of the status of restoration efforts, and subsequently advises them when the outage condition has been cleared. (*Id.*)

The BASS Help Desk is also available to respond to various system inquiries from CLECs. Procedures for call handling, notification, escalation, and resolution conform to ISO 9002 standards. (OSS Aff. ¶ 198) The BASS Help Desk answers inquiries ranging from "how do I", "where do I" type of questions to reports of system outages. (Record Request No. 120) As detailed in the OSS Affidavit, more than 78% of the trouble tickets called into the BASS Help Desk during the month of March did not involve either system outages or slow response times. (OSS Aff. ¶ 202) In fact, a great

many of the Help Desk contacts could be considered customer service rather than trouble tickets. (OSS Aff. ¶ 203)

Many of the CLECs/Resellers calls to the BASS Help Desk could be avoided for example, by CLEC representatives attending Bell Atlantic training and referencing the various documentation provided by Bell Atlantic. (OSS Aff. ¶ 203)

Calls to the Help Desk are distributed to the first available representative by means of an automatic call distributing system. (OSS Aff. ¶ 195) Many CLEC inquiries are closed out on the initial call, notably those that simply ask "How do I … ?" Other inquiries require more detailed research and in such circumstances the Help Desk personnel contact the appropriate Bell Atlantic Subject Matter Experts ("SMEs") to resolve the issue. (OSS Aff. ¶ 200)

The BASS Help Desk support function has evolved over time since it was initiated in November 1998. As indicated by the FCC, KPMG favorably reviewed the Help Desk function as part of its New York review. KPMG will again review this CLEC support function in the ongoing Massachusetts review and will separately report its findings to the Department.

IV. SERVICE PERFORMANCE MEASUREMENT

Three significant events have occurred with respect to service performance measurements since the Technical Sessions were held in this proceeding last year. The first is the FCC's approval of BA-NY's Section 271 application. In granting its approval, the FCC repeatedly noted and emphasized the value of the C2C service measurements developed in New York through a lengthy and open collaborative process. (*See, e.g., FCC Approval Order* ¶ 431, 437)[63]

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[63] The C2C process began in New York in June 1997 and continued over the next two and a half years through a process of discussion, negotiation and, where possible, consensus to develop metrics and associated standards. (Measurements Aff. ¶ 8, n.1) As recognized by the FCC, the C2C metrics and standards were

Second, the Department subsequently adopted those same performance measurements for use by BA-MA in Massachusetts. In a Letter Order issued on January 14, 2000 ("Metrics Letter Order"), the Department ruled that it would use the C2C Guidelines to evaluate BA-MA's compliance with the Section 271 checklist, including all future modifications, deletions, and modifications made to those Guidelines by the New York PSC. The Department directed BA-MA to file C2C reports for the preceding six months and to continue filing reports and updates to the metrics until further notice.[64]

Finally, BA-MA filed a Performance Assurance Plan with the Department on April 25, 2000, which is a comprehensive self-executing remedy plan to ensure BA-MA's post-Section 271 compliance. BA-MA's PAP is substantially the same as the New York Performance Assurance Plan, which the FCC found would provide, together with other regulatory and legal remedies, a meaningful incentive for BA-NY to continue providing quality service to CLECs following Section 271 authorization and thereby ensure that the New York local exchange marketplace remains open to competition. (*FCC Approval Order* ¶ 433) The Department is also addressing that proposal in this proceeding.

BA-MA has presented a comprehensive set of performance data for the period from July 1999 through February 2000 in Exhibit B1 of the Measurements Affidavit. These measurements cover the full range of performance areas: Pre-Ordering, Ordering, Provisioning, Maintenance and Repair, Network

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developed through a process where CLECs had full participation. The New York PSC issued orders in the collaborative proceeding establishing interim metric guidelines in February 1998 and permanent metric guidelines in February 1999, June 1999, November 1999 and, most recently, February 2000. The New York PSC orders also require that Bell Atlantic and the participating CLECs continue the collaborative process in a working group in order to develop new metrics and performance standards as the marketplace evolves.

[64] In addition, BA-MA will continue to file wholesale performance results for provisioning and maintenance with the Department in accordance with the *Consolidated Arbitrations*. Currently, approximately 30 CLECs receive CLEC-specific *Consolidated Arbitrations* performance reports. BA-MA will also provide these reports each month on an ongoing basis.

Performance, Billing and Operator Services.[65] As detailed in the discussion of the individual checklist items above, BA-MA's performance for CLECs is strong. The performance reports bear this out. Where BA-MA performs in a parity process – that is, BA-MA is doing the same type of work for CLECs and its retail operations – it is neither surprising nor alarming that the results are sometimes better for the CLEC customers and sometimes better for BA-MA's retail customers. For those measurements where the performance standard is not parity, BA-MA is subject to some very high absolute service expectations – 95% in most instances, and occasionally even higher. (Measurements Aff. Exhibit B1) In these cases, BA-MA can be providing grade "A" service to the CLECs – 91% or 92% – and still "miss" the near-perfect C2C service standard.

Although BA-MA inevitably misses some metrics, both the New York PSC and the FCC recognized in reviewing comparable BA-NY data that a missed metric was not a failure of BA-NY to meet its obligations under the Act. Instead, a missed metric is a flag that the underlying process or performance needs to be examined to understand whether there is a problem. In some cases, the problem may reside in the formulation of the metric itself, rather than a performance issue. (*See, e.g.*, Measurements Aff. ¶¶ 82, 123) BA-MA managers review these performance reports regularly so that measurement or performance issues can be addressed in a timely way. (Measurements Aff. ¶ 122)

Moreover, both the New York PSC and the FCC understood that not all measurements are of equal importance. Just as BA-NY did in its application to the FCC, BA-MA has grouped the primary performance measurements – those adopted in the New York Performance Assurance Plan – into

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[65] For each metric, BA-MA provides a brief description of the metric and its particular function and the C2C standard that has been established in the Measurements Affidavit Exhibit A. Next, BA-MA presents the specific performance results for that metric and compares those results to the established standard. Finally, BA-MA describes those factors affecting the results such as data collection issues, definitional changes, and spikes in volume.

service families based on the competitive checklist areas to which they relate. (Measurements Aff. Exhibit F) A review of the results shows that BA-MA has delivered strong performance in numerous areas, and has delivered good results overall in every area. This is not to say that there is no room for improvement. In fact, BA-MA has identified some improvement plans in this filing. However, BA-MA's performance, as indicated by the measurements, coupled with the other data presented by BA-MA in this proceeding, fully satisfies the criteria set forth by the *FCC Approval Order*.

Respectfully submitted,

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