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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Michigan	)))))))))	CC Docket No. 97-137

Joint Reply Affidavit of J. Russell Gates and Rod Thomas on Behalf of Ameritech Michigan

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REPLY AFFIDAVIT OF J. RUSSELL GATES
and ROD THOMAS
ON BEHALF OF AMERITECH MICHIGAN

STATE OF ILLINOIS)
) ss.
COUNTY OF COOK)

I. Qualifications

A. J. Russell Gates

1. My name is J. Russell Gates. I am a partner in the Chicago office of Arthur Andersen LLP. I serve as the Director of Arthur Andersen's Computer Risk Management Practice for North and South America, and I am a member of the firm's worldwide Computer Risk Management Executive Team. The Computer Risk Management practice ("CRM") assists clients in understanding and managing business risks associated with their use of information technology. Specifically, CRM professionals specialize in aspects of

information technology security and management, and in the control and operating integrity of computer applications.

2. I joined Arthur Andersen in 1978 after receiving a Bachelor of Science degree in accounting from Bowling Green State University. I have worked in Arthur Andersen's information system audit group since its inception in 1981. From 1982 to 1988, I directed all information systems audit activities in Arthur Andersen's Cleveland office. From 1988 to 1991, I directed aspects of the software development and integration activities of the firm's Advanced Computer Audit Techniques group, which was responsible for developing and deploying application systems and audit tools for Arthur Andersen professionals worldwide. I have directed all aspects of the firm's Computer Risk Management practice in Chicago since its inception in 1991.

3. From 1993 to 1995, I was also responsible for Arthur Andersen's Business Systems Consulting practice in Chicago and the Central Region, which encompasses Illinois, Indiana, Kansas, Minnesota, Missouri, Ohio, and Wisconsin. In addition to my office and regional management responsibilities, I personally assisted companies ranging in size from $100 million to $1 billion in selecting and deploying financial systems to support business operations, and in identifying and addressing operational issues in their information systems and related business processes.

4. In my current position, I am an integral member of numerous Arthur Andersen financial audit teams, assisting our independent auditors in their analysis and evaluation of complex computer systems applications and controls, and with the establishment and implementation of effective audit plans including the integration of information systems

auditing. I also provide advice to the firm's clients with regard to implementing efficient and effective information processes and controls.

5. I am a member of Arthur Andersen's telecommunication industry team. I provide services to a number of telecommunications clients. Over the last five years, I have either directly supervised, or served as a quality assurance partner, on audit work that Arthur Andersen performs for TDS-Telecom, MFS, Independent Cellular, PT Telecom (Indonesia), McCaw Communications, and Ameritech. I also serve a number of large clients in the manufacturing and transportation sectors, including Biggs & Stratton, Cummins Engine, and Illinois Central Railroad.

As part of my involvement in the independent financial statement audit of Ameritech, I have directly supervised all of Arthur Andersen's work relating to our understanding of the primary business systems that support Ameritech's revenue generation cycle. This work included an analysis of key aspects of order receipt, service provisioning, and customer installation. Our work also included identification of process points where transaction errors are identified and corrected by Ameritech personnel. Over the past several years, our firm has also evaluated systems and controls related to message processing and intercarrier billing.

6. I have directly overseen large-scale audit projects in the telecommunications industry, as well as reviews of electronic interfaces in other industries, including: (a) an analysis of the overall integrity of the revenue process for the Custom Business Services unit at Ameritech; (b) an audit of revenue processing integrity and security and control of the overall processing environment at a large nationwide cellular provider; (c) a

comprehensive review of the business controls and operational readiness of Ameritech's internal financial system conversion; (d) an extensive review of business controls over a large Electronic Data Interchange (EDI) application for a $2 billion manufacturer with over 100 trading partners; (e) a comprehensive review of a client/server based vendor processing system for a billion dollar manufacturer, focusing on security, application processing, database administration and change management control processes; (f) a review of system interfaces, access controls, and database management for the order processing and distribution system of a $200 million manufacturer; and (g) a review of system interfaces, balancing and controls over the integrity of information processing and accounting for a billion dollar drug store chain.

7. I am a member of the Information Security and Control Association, the American Institute of Certified Public Accountants, and the Illinois CPA Society. I co-authored Arthur Andersen's Computer Risk Management Information Security Framework™, a tool for assisting organizations in implementing information and network security policies, processes, organization, and technologies. I am currently responsible for an independent study, to be published this fall, on how organizations define and manage their business risks related to information technology. This study will include a specific focus on interbusiness interfaces and client/server deployment. In addition, I have overall responsibility for defining Arthur Andersen's offerings in the field of electronic commerce assurance, which concerns integrity for business-to-business information exchange through private networks and the Internet.

B. Rod Thomas

8. My name is Rod Thomas. I am a partner in the Computer Risk Management group in the Chicago office of Arthur Andersen. In my current position, I am responsible for directing computer audit, security, control, and system integrity-related engagements throughout Arthur Andersen's Central Region. I manage the implementation and evaluation of computer applications and information systems integrity and security, and I direct internal control reviews of computer processing environments. Such engagements have included Business Process/Technology Risk Assessment and Improvement; Information Security Assessment, Improvement and Implementation; Business Continuity Planning; and Computer Data Acquisition and Analysis. I also manage the design, development, and implementation of computer-assisted audit techniques on behalf of the firm's independent auditors.

9. Prior to my association with Arthur Andersen, I spent 15 years (6 years as a partner) in the Information Technology Assurance Services practice of Coopers & Lybrand ("C&L"). At C&L, I directed all information technology consulting services provided by the firm's business assurance division through eleven offices in eight southwestern states. I was one of six Regional Managing Partners responsible for developing and implementing U.S. strategy for C&L's Information Technology Assurance Services practice.

10. Prior to joining C&L, I spent approximately five years in various information systems management and staff positions at two Fortune 500 companies, International Systems and Controls (ISC) and Pennzoil Company.

11. As supervisor of Programming and Systems at ISC, I:

- Established a distributed processing network for ISC and its subsidiaries, utilizing intelligent remote job entry terminals and IBM mainframe computer systems;
- Supervised all phases of analysis, programming, implementation and documentation of new application systems, including evaluation of computer hardware and software available in the marketplace;
- Procured and installed computing equipment and developed and implemented various application systems;
- Developed user documentation and training/education for the business users of the aforementioned application systems;
- Planned, scheduled and supervised training for the department's programmers and analysts and directed their work, including job assignment, project control, documentation and preparation of materials to accomplish assigned tasks; and
- Developed and implemented programming and systems documentation standards.

12. As a Systems Project Leader and Computer Programmer at Pennzoil Company, I:

- Managed application system projects;
- Developed various application systems and subsystems;
- Created new application system programs and related application system, user and operational documentation; and
- Trained and supported system users.

13. I have served as the National Vice Chairman - Practice, Systems/Management Advisory Services Section of the American Accounting Association. I am currently serving as a

member of the American Institute of Certified Public Accountants' Computer Audit Sub-Committee. I have also been a guest speaker on various Information Technology and System Integrity issues for such organizations as the Financial Executives Institute, the Information Systems Audit and Control Association and the Bank Administration Institute. I am a Certified Information Systems Auditor, with 24 years of experience in all aspects of electronic data processing, including management, systems development, programming, communications networks, controls and security. I have been awarded the Certificate in Data Processing ("CDP") from the Institute for Certification of Computer Professionals, and am a Certified Public Accountant.

14. I have provided technology risk management services to numerous clients in the telecommunications and utilities industries, including MFS, TDS - Telecom, U.S. Cellular, American Paging, Aerial Communications, Commonwealth Edison, Peoples Gas, Wisconsin Electric, Wisconsin Public Service, Wisconsin Gas, Northern Illinois Gas and Northern Indiana Public Service Company. I have also directed comparable work in other industries, including banking and financial services like First Chicago NBD, Old Kent Financial Corporation, and The Northern Trust.

II. Purpose of Affidavit

15. As described in Ameritech's application, filed with this Commission on May 21, 1997, a joint team of systems professionals from Arthur Andersen and Andersen Consulting (the "Andersen team") conducted a review of Ameritech's operation support system ("OSS") interfaces during March and April of 1997. Both of us were members of that team, which

concluded that Ameritech's OSS interfaces were operationally ready and had sufficient capacity to handle forecast demand through the end of the year, and that the ordering guides provided to carriers to facilitate their use of the interfaces satisfied industry criteria for such documentation. Since the completion of that analysis, we have continued to monitor the operational performance of Ameritech's OSS interfaces.

16. The purpose of our affidavit is to discuss our analysis of specific OSS operational issues raised in this docket by the Department of Justice ("DOJ"), by Competitive Local Exchange Carriers ("carriers" or "CLECs") and by other commenters. During May, June and July 1997, we directed an Andersen team of information systems professionals in assessing the investigations performed and actions taken by Ameritech in response to these issues. Our conclusions herein are based on the following procedures performed by the Andersen team in the course of that review, including:

- Review and analysis of filings before this Commission and before state regulatory bodies in Michigan and Illinois;
- Discussions with key Ameritech management personnel;
- Review of Ameritech records documenting the internal and carrier-to-carrier testing of OSS interfaces;
- Review of Ameritech records documenting Ameritech's investigations of and responses to OSS operational issues, including modifications to electronic programming logic; and
- Independent analysis of processing data that we extracted and compiled directly from Ameritech's electronic OSS interface systems.

17. The major OSS functions, as listed by the FCC at 47 CFR § 51-319(f)(1), are as follows:

- Pre-ordering;
- Ordering;
- Provisioning;
- Repair and Maintenance; and
- Billing.

These functions are common to resale services and unbundled network elements.

18. The continued increase in commercial use of Ameritech's OSS interfaces, further carrier-to-carrier testing of those interfaces, and the successful results of that testing and use confirm our initial conclusion that Ameritech's OSS interfaces are operationally ready. At a global level, Ameritech is successfully processing carrier transactions in rapidly increasing volumes. Where specific issues have arisen, Ameritech has worked to identify and resolve them, and it has procedures in place to do so on an ongoing basis.

19. In commenting on Ameritech's application, certain parties have raised operational issues with respect to the Ameritech interfaces. These are described in greater detail below; however, they can be summarized into the following broad categories:

- Ameritech system edit protocols that properly flagged certain EDI ordering transactions for rejection or for manual review and processing; and
- "Bugs" in the Ameritech systems, which Ameritech has investigated, identified, and taken appropriate steps to resolve. Further, Ameritech has established appropriate procedures -- including special task forces, daily conference calls

among appropriate OSS personnel, and a database for tracking and recording the resolution of OSS issues -- to identify and resolve such problems in the future.

20. Upon careful consideration and investigation of the operational performance of Ameritech's OSS interfaces, including the facts pertinent to comments challenging our conclusions contained in the May 21, 1997 application, as detailed below, we reiterate and reaffirm our conclusion that the Ameritech interfaces are operationally ready. In fact, Ameritech's ongoing efforts to investigate and resolve such issues -- which the Andersen team reviewed -- simply bolster our initial conclusion as to Ameritech's operational readiness.

III. Operational Readiness

21. Before discussing the operational readiness of Ameritech's OSS interfaces, a general observation is in order. The DOJ and certain carriers have criticized the scope of our review, arguing that we should have assessed not only the operational status of Ameritech's OSS interfaces, but also of the "legacy" systems behind those interfaces (which serve CLECs and Ameritech retail operations alike). (DOJ Eval. at A-7 n.11; AT&T Connolly Aff. ¶ 188; MCI Comments at 20.) The Ameritech legacy systems have been operating for years and process information in the same manner whether it comes from an Ameritech service representative, or from a CLEC via an electronic interface. For example, "3E" errors (described in Section III.E.1 below) occur for wholesale and retail operations alike. While we agree that their potential double billing impact to CLECs is very important, Ameritech must address these items in the exact

same manner, and with the same urgency, regardless of their origin. Moreover, where specific issues have been identified in practice with respect to the interaction between the interfaces and legacy systems, we have reviewed the cause and resolution of those issues, as detailed below. Considering these factors, we determined it was most appropriate to focus our assessment on the interfaces through which the CLECs conduct business with Ameritech.

A. Pre-Ordering

22. USN is using Ameritech's EDI pre-ordering interface to retrieve customer service records ("CSRs"). Schedule 1 shows the volume of pre-order usage, and also shows that the rate of CSR retrievals has steadily increased. Approximately 750 CSRs were retrieved each business day in June.

23. As noted in the initial application, USN also performed carrier-to-carrier testing of the other sub-functions available on Ameritech's pre-ordering interface (telephone number reservation and due date negotiation). The Andersen team reviewed the results of this testing as part of its overall assessment that Ameritech's pre-ordering interface was operational and available. The DOJ expresses concern regarding the details of MFS' carrier-to-carrier testing of the pre-ordering interface. (DOJ Eval., at App. A-7 through A-8.). MFS and Midcom have now completed carrier-to-carrier testing of all pre-ordering sub-functions. Both carriers have conducted customer acceptance testing for full use of the interface, and both have executed CSR requests, telephone number reservations, and due date negotiations. These volumes appear on Schedule 1. Schedule

2 presents an updated version of the matrix (which was included in Ameritech's application as Schedule 3 to the affidavit of Robert H. Meixner) of internal testing, carrier-to-carrier testing, and actual usage of all Ameritech OSS interfaces.

B. EDI Ordering

24. Several commenters assert that Ameritech's EDI ordering interface is not operational, due to certain performance issues. We respond in detail to those criticisms below, but it is important to keep such comments in the proper perspective. The volume of EDI ordering has rapidly increased across the Ameritech region and in Michigan, as shown by Schedules 3 and 4. The carriers using Ameritech's EDI ordering interface as of June 30 are shown on page 2 of Schedule 2.

The Andersen team compiled the data on these schedules (and the other processing analyses attached to this affidavit, with the exception of Schedule 8, which was prepared jointly by Ameritech and AT&T) by directly accessing the source data in Ameritech's electronic interface systems. Schedules 3 through 5 depict system usage for the months of May and June. (Data for the preceding months was analyzed in Ameritech's application.)

25. Overall EDI ordering volumes increased from approximately 21,000 in the months of March and April of 1997 to over 79,300 in the two-month period shown here. See Schedule 3, p. 2. Ameritech received over 9,100 orders in the week of June 2, nearly 10,500 orders in the week of June 9, and almost 23,500 orders in the week of June 23.

Id. Ameritech's ability to process these volumes confirms our conclusion as to the operational readiness of Ameritech's EDI ordering interface.

26. Notwithstanding their continued, and increasing, usage of Ameritech's EDI interface, some carriers have raised specific issues with respect to certain operational aspects of the EDI interface. The DOJ's Evaluation raises some of the same issues. We address these issues in turn below, and conclude that they do not change our conclusion as to the readiness of Ameritech's OSS interfaces.

1. Manual Review

27. Ameritech's EDI ordering interface processes the majority of orders electronically. For the months of May and June, 49,328 of the 79,335 total orders received electronically were processed electronically. See Schedule 3. This represents 71% of processed orders (received orders minus rejected orders). See Schedule 3, p. 2; see also Schedule 5.

28. Because of the nearly infinite number of possible data permutations that can be present in any customer order, and because of the effort and cost required to anticipate and program each permutation, it is not reasonable to expect that an interface between computer systems can be designed and implemented to electronically process every piece of every single transaction. Ameritech's OSS are thus designed to flag certain orders, after some initial level of electronic processing, for manual review by Ameritech service representatives.

29. Nonetheless, the incidence of manual review has been steadily decreasing over the past two months. For example, the 29% percent level of manual review for May and June

represents a substantial improvement from the corresponding 39% level for the first three months of 1997, even though the overall volume of orders increased significantly.

30. Ms. Bryant of AT&T contends that Ameritech "under-reports the incidence of manual processing." Bryant Aff. ¶ 136. She maintains that Ameritech's "electronic processing" statistics include orders that were initially reviewed manually by Ameritech personnel, who determined that the orders had to be rejected and returned to the CLECs because they contained incomplete or improperly formatted information. (See also DOJ Eval. at A-15 n.22.)

Ms. Bryant's assertion is not consistent with our understanding of Ameritech's processing statistics. The orders described by Ms. Bryant (which are typically under 5% of orders received) are not classified as "electronically processed," but are instead included among order rejections. We believe that this treatment is reasonable, because the orders could not even be completed manually without further information from the CLEC and, accordingly, are rejected. More importantly, Ameritech's classification has no effect on the net percentage of orders reported as electronically processed, which excludes both those orders that are manually processed as well as those that are rejected.

31. The percentage of manual review increased during the week of June 16, 1997, when it reached 46% of all orders received. See Schedule 3, p. 2; see also Schedule 5. The actual volume of manually reviewed orders, however, remained roughly constant. See Schedule 3, p. 1. Overall order activity (manual plus electronic) decreased, due primarily to a decrease in AT&T orders. AT&T orders typically flow through electronically at a higher rate than those of other carriers, whose orders are generally more complex. As a

result, the decrease in volume fell disproportionately on electronically processed orders, and the percentage of manual review increased.

32. Ameritech's general procedure, with respect to manual review, is to identify those transaction types that comprise the largest categories of manual review and then add programming logic to the interface or establish "work-around" solutions where it is feasible and cost-beneficial. To this end, Ameritech personnel review daily processing statistics, similar to the type we have attached in chart form to this affidavit, and closely monitor those statistics to ensure that there are no unusual or customer-impacting trends. Ameritech personnel also participate in daily conference calls to discuss the previous day's data to determine if there are any new or significant recurring issues. Members of the Andersen team also participate in these calls as part of our review.

We believe that it would be inefficient and unnecessarily costly to mechanize every single aspect of Ameritech's interaction with requesting carriers. Furthermore, the incremental costs of such inefficient mechanization would likely have to be passed on to those carriers. For example, manual review is appropriate in the cases of certain incomplete or inaccurate submissions as well as orders for which processing is complex. We note that the DOJ generally agrees with Ameritech's cost-benefit approach. (See DOJ Eval. at App. A-2.)

33. Schedule 6 illustrates transactions that required manual review, by category, in the months of May and June. As Schedule 6 shows, the following transaction types account for the bulk of manual review for that period: (a) "1PE Status"; (b) "Account Split or

Combine"; and (c) "Pending Activity Detected." The following discussion describes Ameritech's response in those areas.

a. "1PE" Status

34. When an order comes to Ameritech via an electronic interface, the interface's programming logic determines whether Ameritech's downstream system can electronically process the order. (These interface edits are described in greater detail in point III. B. 2. below.) "1PE" status occurs because Ameritech's service order processing sytstem edits determine that manual review is required on an order that the interface thought could be processed electronically. (1PE has also been referred to as "1P.") To illustrate: Ameritech's OSS interface may expect that 100% of a particular type of standard order will be processed electronically. However, there will be occasions where complete electronic processing is not possible given certain conditions in the order. For example, Ameritech Customer Information System Service Order Negotiation ("ASON") will not permit a "/" (that is, a slash) in certain remark fields. Therefore, the order is held in 1PE status until the condition is corrected.

35. Where such orders recur in a sufficient volume to warrant the addition of a generic OSS interface edit to deal with the matter electronically, Ameritech has made the appropriate edit additions. In the example cited in the previous paragraph, Ameritech added a new edit to the OSS interface that allows the acceptance of a "/" in the remark field to improve order processing. The edit automatically places a valid code in the field where a "/" is found. In recent months, Ameritech implemented over 15 such OSS interface modifications.

Ameritech Industry Information Services ("AIIS") maintains a tracking database that documents the performance of each step in Ameritech's investigation and resolution of 1PE items as well as any additional edits implemented to address them. With the assistance of this tracking database, we obtained and reviewed documents from AIIS personnel that demonstrated the implementation of these edit procedures. For a sample of edit procedures implemented by AIIS, we reviewed documentation showing the nature of the edit and of the transactions addressed, observed that the edits were appropriate to the transactions involved, and verified that the edits were, in fact, put in place by reviewing change request forms submitted to programming personnel and by reviewing programming logs.

36. Ameritech reviews 1PE orders on an ongoing basis, and where appropriate, has implemented electronic edit procedures to address individual transaction types. Ameritech also has procedures in place to carry out these reviews and implements new edit procedures where appropriate on an ongoing basis.

b. <u>Account Split/ Combine</u>

37. Account "splitting" occurs when a reseller obtains some, but not all, of a customer's telephone lines, while the balance remains with the original carrier. Account "combining" occurs when the reseller's order specifies more telephone numbers than are in the customer's present records, or where the customer orders new service or additional lines. Ameritech has made a cost-benefit decision to manually review these types of orders (which presently constitute about 9% of all orders received electronically) for the present time. Ameritech has informed us that it is currently in the process of developing

additional software upgrades, with a scheduled implementation date of September 1997, which will allow more of these transactions to be processed electronically.

c. **Pending Activity Detected**

38. Ameritech's systems identify orders received for accounts that have other pending orders already placed against them. These orders are reviewed manually in order to ensure the proper sequencing of multiple orders against an account -- in other words, to ensure that the end result is consistent with what the customer wants.

39. As Schedule 6 shows, the relative volume of orders in this category increased for the week of June 16, 1997, causing a commensurate increase in the incidence of manual review as a whole. Ameritech is monitoring the level of activity in this category to determine whether further action is necessary, or whether that week's results were simply an aberration caused by fluctuations in the mix of orders received.

d. **Other**

40. This category consists of miscellaneous items not included in the major categories of manual review described above. As described above, Ameritech personnel monitor these items on an ongoing basis in order to identify any that require correction or for which fully electronic processing would be cost-beneficial.

e. **Summary, Analysis, and Conclusions**

41. With the above data in mind, we have evaluated the comments made by the DOJ and by various commenting carriers.

42. The DOJ states that "[m]anual processing that results in the practical unavailability of services or elements at foreseeable demand levels . . . has a direct bearing on compliance

with the competitive checklist and the Commission's rules." (DOJ Eval. at A-3.) Based on Ameritech's ability to process increasing levels of CLEC orders, and based on our analysis of the rate of manual review, we do not believe that manual review has resulted in "practical unavailability" of Ameritech services or elements. As a result, the incidence of manual review does not affect our opinion as to Ameritech's operational readiness. We believe Ameritech's ordering function to be operational even under the DOJ's approach.

43. Several commenting parties have asserted that the rate of manual review, and Ameritech's cost-benefit decision to review certain orders manually, mean that Ameritech's systems are not operational. (AT&T Comments at 24 & Connolly Aff. ¶¶ 113-38; MCI Comments at 21 & King Aff. ¶¶ 79-91, 143.) According to AT&T's Susan Bryant, for example, "AT&T firmly believes that end-to-end automation in the transmission and processing of AT&T's resale service orders is necessary . . . ." Bryant Aff. ¶ 125. Such observations are not consistent with our experience with and observation of electronic interfaces. In any complex system that involves interfaces between either internal or external systems, it is a common practice to validate incoming data, and to correct such data through manual review. And, as will be discussed below, Ameritech has plans in place to ensure sufficient manpower for order processing through the end of this year.

2. Order Rejections

44. Ameritech's EDI ordering interface contains specific edit functions designed to detect incomplete or improper data (such as invalid classes of service or Uniform Service Order

Codes, or duplicate order numbers) in orders submitted for processing. These orders are rejected and returned to the submitting carrier for review and correction. This sort of edit process is common to electronic business-to-business interfaces. Nevertheless, several commenters assert that order editing and rejection makes Ameritech's ordering function unavailable. (See, e.g., AT&T Connolly Aff. ¶¶ 159-65.)

45. The rate of order rejection is a function of the quality of orders submitted and the quality and quantity of the edit functions in the interface. Thus, the rejection rate does not necessarily measure or reflect a system's operational readiness. The rate of rejections, however, has decreased substantially from the beginning of the year. The 12% region wide rejection rate for the months of May and June, see Schedule 3, p. 2, has decreased from the corresponding 17% rate for the first three months of 1997. Most notably, the rate of rejection for the week of June 23 is only 6%. See Schedule 3, p. 2; see also Schedule 5. This sort of reduction is to be expected, as Ameritech continues to work with requesting carriers to assist them in properly formatting and submitting orders, and as those carriers continue to gain experience through commercial use.

46. AT&T and the DOJ, relying on April order processing data, assert that rejected orders are not returned for correction for over six days per order (DOJ Eval. at A-18.). Our review of Ameritech processing statistics shows, however, that the reason for the increased processing time in April was not order rejection, but the sudden increase in demand near the end of the month, which caused order processing in general to be slower. In May of 1997, the return time for rejected orders decreased to under 4 days. And in June of 1997,

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after Ameritech increased its manual resources to adjust to the increased volume of activity (see below), it returned rejected orders, on average, within 1.87 days.

47. Schedule 7 identifies the principal reasons for order rejection. The two leading reasons are: (a) the availability of primary interexchange and intermediate carriers (PIC, LPIC, and 2PIC); and (b) order received where the order number already exists. The reasons for rejection of these types of orders are discussed below.

a. Invalid PIC, LPIC, or 2PIC

48. Ameritech receives some orders for which the PIC (primary interexchange carrier) or LPIC (intraLATA or intermediate carrier) portion of the order is not completed, for which 2PIC is simply not available, or for which the carrier has selected itself as the LPIC notwithstanding the fact that no LPIC carrier other than Ameritech may be selected in that area. In certain Michigan exchanges, for example, 2PIC has not yet been implemented, and Ameritech Michigan must be designated as the LPIC on the carrier order.

49. Schedule 7 shows that this category of rejections increased during the week of June 9. And, as depicted at page 2 of Schedule 3, this was a primary reason that the overall rate of rejections increased to 19%. See also Schedule 5. Further investigation showed that the increases were mainly attributable to AT&T's submission of a large number of orders for which it did not designate Ameritech as the LPIC in Michigan exchanges that require such a designation. Thus, the rejection rate for Michigan in that week was higher than the region wide average. Compare Schedule 4 with Schedule 3.

b. Order Number Already Exists

50. Until February of 1997, if AT&T or any other carrier sent Ameritech an order that was rejected, the order could not be retransmitted using the same order number. Ameritech's processes required the carrier to attach a different order number to the resubmitted order. This enabled Ameritech to keep track of orders and calculate the number of rejects. Without different order numbers, the second order would effectively replace the original order, and the original rejection data would be lost. We understand that Ameritech explained this to AT&T and that AT&T requested Ameritech to "version" a rejected order that is being retransmitted, (*i.e.* to call it "order 1234, version 2" rather than give it a new order number). In an effort to accommodate AT&T, Ameritech developed a "versioning" feature and made it available to AT&T in February, 1997.

51. The rate of duplicate order submissions increased during the week of June 16, 1997. The increase is attributable to a number of duplicate orders -- with the same order number, version number, and content -- submitted by AT&T. This sort of occurrence illustrates exactly why interface edits are necessary and helpful to all parties.

C. Provisioning

1. Modified Due Dates

52. Certain carriers have complained that Ameritech has modified the due dates of carrier orders. (See, e.g., AT&T Comments at 25 & Bryant Aff. ¶ 87.) The DOJ has found that some of the reasons for these modifications are valid, but expresses concern that such modifications affect the utility of Ameritech's performance measures. (DOJ Eval. at A-