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IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996

Docket No. T-00000A-97-0238

QWEST'S POST-WORKSHOP BRIEF REGARDING CAPACITY TEST ISSUES

Qwest Corporation ("Qwest") respectfully submits this brief regarding the Final Report Capacity Test, Version 1.0 (the "Report"), and related issues raised at the Capacity Test workshop.

I. INTRODUCTION

The purpose of the Capacity Test was to validate that Qwest's operational support systems ("OSS") and processes for pre-ordering and ordering transactions can handle estimated volumes projected one year from the date the Capacity Test was run.

Cap Gemini Ernst & Young ("CGE&Y") executed the Capacity Test[1] in two phases. In the first phase, CGE&Y instructed the Pseudo-CLEC to submit pre-ordering and ordering transactions to Qwest's OSS in the volumes that were expected to occur twelve months in the future (the "Twelve Month Test"). The success criteria for this test required Qwest to meet certain performance metrics at volumes projected to occur six months from the date the test

[1] The Capacity Test was conducted as part of the Arizona Corporation Commission's ("Commission" or "ACC") test of Qwest's operational support systems (the "OSS Test" or the "Test").

was run.[2] For volumes projected to occur nine and twelve months from the date of the Capacity Test, Qwest could pass even if it did not meet those performance metrics so long as Cap Gemini Ernst & Young ("CGE&Y") determined that Qwest's procedures for scaling up its systems and staff were capable of handling projected future volumes. Thus, meeting performance benchmarks was an absolute requirement only at the sixth month level.

In the second phase of the Capacity Test, CGE&Y instructed the Pseudo-CLEC to submit pre-ordering and ordering transactions to Qwest's OSS in increasing increments up to 150% of the volume projected for the busiest hour twelve months in the future (the "Stress Test").[3] There were no success criteria for the Stress Test.

Qwest passed both phases of the Capacity Test. Indeed, Qwest met the benchmarks in the Twelve Month Test, despite the fact that CGE&Y actually submitted more transactions than were planned. Moreover, Qwest actually met the benchmarks during the Stress Test except for a sixteen minute period during which CGE&Y bombarded Qwest's OSS with a full 70% more pre-order transactions than planned -- a colossal 220% of the volume that was not expected to materialize for a full year into the future.[4] Even during the sixteen minute period when Qwest did not meet the benchmarks, Qwest's systems continued to successfully process transactions.

The Capacity Test also included CGE&Y's analysis of Qwest's procedures for scaling its systems and staff.[5] Qwest passed these evaluations.[6]

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[2] System Capacity Test Detailed Plan at n. 3-4.
[3] Test Standards Document 5.2.2.4.
[4] Capacity Test Workshop Transcript Vol. I 154:16-155:1. *Also compare* planned preorder transaction volumes in Detailed Test Plan section 5.2.1 with actual preorder transaction volumes set forth in the Report at section 4.1.3.1.
[5] MTP sections 6.10 & 6.11.
[6] Report at 7-9.

Despite Qwest's stellar performance, the CLECs raise a handful of issues regarding the results of the Capacity Test, implying that the results are not valid. The CLECs have failed to produce any competent evidence to question the Capacity Test results.

II. CGE&Y SATISFIED THE MTP AND TSD REQUIREMENTS IN PERFORMING THE CAPACITY TEST.

A. MTP and TSD Requirements for the Capacity Test

The Master Test Plan ("MTP") and the more detailed Test Standards Document ("TSD") set forth requirements for the Capacity Test.

The MTP describes the purpose of the Capacity Test as follows:

> The Capacity Test will validate that Qwest's OSS Systems and processes for pre-order and ordering transactions can predictably handle loads equal to or greater than those projected by the various CLEC participants for estimated volumes projected one year from the date of the running of the Capacity Test.[7]

The MTP further provides that CGE&Y, as Test Administrator, was required to determine the parameters involved in conducting the capacity tests of the Qwest systems with CLEC and Qwest input.[8] These parameters included the transaction volumes, which CGE&Y was required to determine using projected volumes provided by both Qwest and the CLECs.[9] CGE&Y was also required to determine the specific hour-by-hour volume requirements.[10]

The TSD requires that a detailed plan specifying the scope, approach, entrance, exit, and execution requirements for the Capacity Test be provided and reviewed with the CLECs, Qwest,

[7] MTP section 6.1.
[8] MTP section 6.2.
[9] MTP sections 1 & 6.1.
[10] MTP section 6.4.

and the Pseudo-CLEC.[11] The TAG created a Capacity Test Subcommittee comprised of CLEC, Qwest, Pseudo-CLEC representatives, ACC Staff, and Doherty Company, Inc ("DCI") representatives, Staff's consultants, to discuss and decide the technical details relating to the Capacity Test. "Subcommittee" is something of a misnomer as applied to the group that engaged in extensive discussions to work through the details of how the Capacity Test would be run because the CLEC, Qwest, Pseudo-CLEC representatives, ACC Staff, and DCI representatives that participated in the Capacity Subcommittee were essentially the same representatives that participated in TAG meetings; the primary difference was that CLEC, Qwest, and Pseudo-CLEC also designated technical personnel to participate in the Capacity Subcommittee meetings.

The Capacity Subcommittee engaged in many hours of discussion over the course of approximately thirty meetings beginning in April 2000 and continuing through July 2001 to determine the details for the execution of the Capacity Test. These details were memorialized in the System Capacity Test Detailed Plan ("Detailed Test Plan"), which is appended to the Report. The TSD further tasked CGE&Y with amending and finalizing the Detailed Test Plan as needed.[12] The TSD does not require TAG approval of the Detailed Test Plan, but provides only that the plan be reviewed with the CLECs, the Pseudo-CLEC, and Qwest prior to conducting the Capacity Test.[13] This requirement was met because all versions of the Detailed Test Plan not only were reviewed by the CLECs, the Pseudo-CLEC, and Qwest, but the CLECs, the Pseudo-CLEC, and Qwest actually discussed and developed the Detailed Test Plan in the Capacity Subcommittee meetings.

[11] TSD section 5.2.4, 5.2.2.4(a).
[12] TSD section 5.2.4.
[13] TSD section 5.2.2.

CGE&Y has conducted the Capacity Test in compliance with all of those requirements.

B. When properly analyzed, the Operational Readiness Test Results are consistent with the Twelve Month Test Results.

1. The ORTs were designed to detect and fix problems with LSRs and pre-order queries.

The CLECs base their primary attack on the Capacity Test on their argument that there is an unexplained difference between the results of the Operational Readiness Test (the "ORT") that occurred on July 16, 2001 and the Twelve Month Test. This argument is based on a faulty comparison of the data.

As an initial matter, the purpose of the ORT was different than the purpose of the Capacity Test.[14] The Capacity Test's primary purpose was to validate the capacity of Qwest's OSS to process typical commercial LSRs, not to evaluate the functionality across extensive LSR types.[15] Accordingly, the MTP mandated that the Capacity Test should be run primarily with "clean (error-free) LSRs to ensure that the focus is on transaction volumes and not functionality."[16] While the ORT was not required by either the MTP or TSD, the Capacity Subcommittee determined that operational readiness testing was appropriate for the Capacity Test in order to verify that all of the components for the test, were in place and working sufficiently to enable the test to proceed.[17] In particular, the ORTs were designed to eliminate test account and script errors.[18]

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[14] Capacity Test Workshop Transcript Vol. I 195:21-22.
[15] MTP section 6.3.
[16] MTP section 6.5.
[17] Detailed Test Plan section 7.2.
[18] Capacity Test Workshop Transcript Vol. I 84:14-18.

The ORTs proved to be very valuable in ensuring that the test accounts were properly established so that the planned volumes could be achieved.[19] Indeed, while CGE&Y had planned to conduct three ORTs, it actually conducted five to attain the desired results.[20] CGE&Y learned from each execution of the ORT.[21] Errors were identified and fixed, and the ORT process was repeated until CGE&Y determined that the Capacity Test could be run.[22]

2. AT&T's analysis of ORT and Twelve Month Test results is flawed.

After the Twelve Month Test was run, AT&T attempted to compare the results from that test with the results that had been obtained in the July 16, 2001 ORT. At the workshop, AT&T produced graphs purporting to compare data from the July 16 ORT to data from the Twelve Month Test August 10 Capacity Test for EDI[23] and GUI[24] response times and FOC intervals.[25]

Response times. AT&T believed that its comparison showed substantial differences in response times for the ORT and the Twelve Month Test,[26] claiming that the ORT results are "strangely higher" than the Twelve Month and IRTM results.[27] AT&T concluded that these results indicate that IRTM underreported what was experienced by the Pseudo-CLEC.[28] As explained below, AT&T's analysis places undue weight on atypical results that were caused by errors in test account information.

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[19] Capacity Test Workshop Transcript Vol. I 180:16-25.
[20] Capacity Test Workshop Transcript Vol. I 81:17-25.
[21] Capacity Test Workshop Transcript Vol. I 195:4-8.
[22] Capacity Test Workshop Transcript Vol. I 84:18-24.
[23] Capacity Test Workshop Transcript Vol. I 197:23-199:14; *see also* AT&T Exhibit 3-6.
[24] Capacity Test Workshop Transcript Vol. I 200:22-23; see also AT&T Exhibit 3-7.
[25] Capacity Test Workshop Transcript Vol. II 215:7-8; *see also* AT&T Exhibit 3-8.
[26] *See* Capacity Test Workshop Transcript Vol. I 93:16-25.
[27] Capacity Test Workshop Transcript Vol. I 201:5-8.

AT&T provided its analysis to CGE&Y and requested that CGE&Y investigate the perceived differences.[29] The analysis AT&T provided to CGE&Y was also submitted at the workshop as AT&T Exhibits 3-6 and 3-7. CGE&Y complied with AT&T's request and issued a data request to Qwest seeking information regarding the differences AT&T alleged. Qwest's response to that data request directly addresses those alleged differences.[30]

In its response and at the workshop, Qwest explained that the differences were largely attributable to a significant number of unusually long response times during the ORT. Because there were relatively fewer transactions in the ORT, the results were skewed by the number of unusually long response times.[31] As discussed above, the ORTs detected many issues relating to test accounts that resulted in long response times. In accordance with the MTP mandate to primarily use error-free transactions in the Capacity Test, the test account information used for the pre-order transactions was fine-tuned over the course of the ORTs to reduce the number of long response times due to test account information errors. Thus, there were fewer test account errors submitted during the Twelve Month Test and more iterations of error-free test account information to attain the necessary volumes. Therefore, in addition to reducing the number of unusually long response times experienced during the ORT when the Twelve Month Test was run, the number of shorter response times was greatly increased due to the larger volumes in the Twelve Month Test. When the longer response times are

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[28] Capacity Test Workshop Transcript Vol. I 200:3-6.

[29] Capacity Test Workshop Transcript Vol. I 196:23-197:5.

[30] The text of Qwest's response is attached hereto as Exhibit A and the analysis Qwest provided as part of its response is attached as Exhibit B. This material was discussed at a TAG meeting. Capacity Test Workshop Transcript Vol. I 196:4-10.

[31] Capacity Test Workshop Transcript Vol. I 202:17-203:5.

excluded from the ORT results, the results for the ORT and the Twelve Month Test are very similar.[32] *See* Exhibit B.

FOC intervals. AT&T's exhibit comparing FOC intervals for the Twelve Month Test shows clusters of FOCs returned in 20 seconds and in one minute:[33] at the 20 second mark, AT&T's shows 400 FOCs, and at the one minute mark, AT&T shows 452 FOCs.[34] AT&T contrasted those figures with the ORT results, which AT&T claimed showed no FOCs returned in less than one minute, and 374 LSRs returned at the one minute mark.[35] AT&T concluded from its analysis that the Twelve Month Test results were "dramatically improved" over the ORT results.[36] AT&T's analysis is flawed.

A review of the transaction reports CGE&Y produced from the Twelve Month Test[37] and the ORT[38] reveals that CGE&Y calculated FOC intervals differently in each case. In the results for the Twelve Month Test, CGE&Y calculated FOC return times by subtracting the LSR issue time from the FOC receipt time. However, for the GUI, the LSR issue time was measured in hours, minutes and seconds, but the FOC receipt time was measured in hours and minutes. As a result of this difference in measurement increment, FOCs that were returned in less than a minute appeared to have been received before they were issued. For example, if an LSR was issued at 1:00:01 and the FOC was returned at 1:00:48, the return time would have been captured only as 1:00 and; 1:00:01 is subtracted from 1:00, would

[32] Capacity Test Workshop Transcript Vol. I 196:4-10, 202:25-203:5.
[33] Capacity Test Workshop Transcript Vol. II 215:17-20; *see also* AT&T Exhibit 3-8.
[34] Capacity Test Workshop Transcript Vol. II 215:21-23; *see also* AT&T Exhibit 3-8.
[35] Capacity Test Workshop Transcript Vol. II 215:23-25.
[36] Capacity Test Workshop Transcript Vol. II 217:13-18.
[37] See Transaction Report for Arizona Capacity Testing_W_revisionsv3.
[38] See Transaction Report for Arizona Capacity Testing 071601-2A, index items CT1 and CT3, on the Supporting Documentation CD supplied by CGE&Y and in the placed with the supporting documentation provided for the parties' review.

produce a negative value.[39] Therefore, for FOC intervals that were actually less than a minute, this information appeared to show that the LSR issue time and the FOC receipt time were the same. CGE&Y rounded these times to one minute.

For the ORT results, on the other hand, CGE&Y rounded all results up or down to the nearest minute for both GUI and EDI, except when such rounding would produce a zero or negative interval. If the calculation would result in such an interval, the time was indicated as one minute.

AT&T failed to account for this rounding in its analysis. Using its flawed comparison, AT&T claimed that the data from the ORT showed 374 FOCs returned at the one minute mark and none returned in less than a minute. However, if the FOC intervals from the ORT are calculated used the same methodology CGE&Y used for the Twelve Month Test, the results are much more comparable, showing that 248 FOCs were returned in less than one minute, and 145 FOCs returned in one minute.

3. The CLECs' complaint regarding the three week interval between the ORT and Twelve Month Test is a red herring.

Finally, the CLECs complain that CGE&Y did not wait three weeks between the ORT and the Twelve Month Test, as provided in the Detailed Test Plan.[40] This argument has no merit.

The Detailed Test Plan states as follows:

> The System Capacity Test shall not be executed until at least three weeks after the start of the Operational Readiness Test. *This is necessary to give all involved parties sufficient time to conduct root cause analysis of any anomalies that may be discovered that are related to the test components and to rectify any flaws in test design, test tools or testing methodology.*[41]

[39] *See* Capacity Test Workshop Transcript Vol. I 20:1-11.
[40] Capacity Test Workshop Transcript Vol. I 104:23-105:15.
[41] Detailed Test Plan section 7.4 (emphasis added).

As the provision plainly states, the three week period was intended to provide the parties with sufficient time to conduct root cause analysis for issues discovered during the ORT before the Capacity Test itself was run. This provision was included in the Detailed Test Plan at the Pseudo-CLEC's request because it believed it may need three weeks between the ORT and the actual Capacity Test.[42] However, this concern was no longer applicable because, as discussed above, extensive root cause analysis had been performed throughout the five ORTs that were conducted. Thus, the three week interval was no longer necessary.

Nonetheless, AT&T claimed at the workshop that the three week period was needed because it was somehow intended to maintain blindness.[43] The TSD provides that fairness and blindness concerns would best be served if neither the CLECs nor Qwest knew in advance the actual dates on which the Capacity Test would be performed.[44] As Qwest aptly noted at the workshop, running the test within the three week period despite the provision in the Detailed Test Plan actually added an element of blindness because neither Qwest nor the CLECs expected it.[45] AT&T's curious claim should be rejected.

C. CGE&Y's conclusion that IRTM is an adequate tool for gauging pre-order response times is supported by the evidence.

In the Report, CGE&Y concludes as follows:

> Data from the 12-month Capacity Test reflect that IRTM is an adequate tool for gauging pre-order response time intervals Qwest's OSS are providing to the CLECs. Once the timeout exclusion is applied to EDI results from the Stress Test, Stress Test results also support this conclusion.[46]

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[42] Capacity Test Workshop Transcript Vol. I 105:24-106:12.
[43] Capacity Test Workshop Transcript Vol. I 106:13-22.
[44] TSD section 5.2.2.
[45] Capacity Test Workshop Transcript Vol. I 106:23-25.
[46] Report at 7.

CGE&Y's conclusion is based on its comparison of IRTM results to Pseudo-CLEC results during the Twelve Month and Stress Tests.[47]

At the workshop, the CLECs attacked this conclusion on two grounds. First, they claimed that IRTM does not reflect the CLECs' experience. Second, they claimed that an unrelated IRTM outage during the Stress Test calls IRTM's adequacy into question. Both of these arguments fail.

200 second timeout. The CLECs' first claim is premised primarily upon the faulty premise that IRTM measurements do not reflect a CLEC's actual experience because, while it is possible under extremely limited circumstances for Qwest's systems to provide a valid response that exceeds 200 seconds, Qwest excludes response times that exceed 200 seconds from its results for reporting purposes in accordance with the Performance Indicator Definition ("PID"). Thus, according to the CLECs, Qwest's IRTM results -- as reflected in its PID reports -- do not reflect lengthy response times that the CLECs may actually experience. This argument must be rejected because the circumstances under which a CLEC can experience response times in excess of 200 seconds are rare and, in any event, the issue does not relate to any legitimate Capacity Test issue or to IRTM's ability to capture these longer response times.

Qwest's business process layer has a mechanism that will time out a transaction when the response time exceeds 200 seconds. Thus, under normal conditions, if a CLEC does not receive a response to a pre-order query within 200 seconds, the time out mechanism will terminate the transaction. However, the PID provides that timed out transactions are excluded from reported results. Thus, even though IRTM records all response times,

[47] *See* Report at 28-29.

regardless of length,[48] Qwest excludes IRTM results that exceed 200 seconds from its PID calculations because the business process layer mechanism times out transactions that exceed 200 seconds.

During the Stress Test, the Pseudo-CLEC received valid pre-order responses in more than 200 seconds. Under normal circumstances, the time out mechanism in the business process layer would have timed out these transactions at 200 seconds -- before a response could be sent in greater than 200 seconds. However, because of the extreme volumes generated for the Stress Test and the fact that the Pseudo-CLEC sent those volumes in bursts, transactions queued up in the EDI interface, but outside of the threshold of the business process layer at the peak of the Stress Test.[49] The EDI interface, by its very design, does not have a time out mechanism.[50] Because these transactions were queued for a period of time in the interface before they entered the business process layer, the processing time for a transaction once it entered the business process layer may be less than 200 seconds -- so the transaction was not timed out by the business process layer -- but the aggregate of the time spent queued prior to entering the business process layer plus the processing time in the business process layer could exceed 200 seconds.

The queuing that occurred during the Stress Test was caused by the tremendous volumes -- as much as 220% of the projected volume for the entire CLEC community a year into the future -- that were submitted in bursts by the Pseudo-CLEC. Those volumes will not be encountered in Qwest's normal production environment because Qwest scales its systems

[48] Capacity Test Workshop Transcript Vol. I 144:12-15.
[49] Capacity Test Workshop Transcript Vol. I 141:10-21.
[50] Capacity Test Workshop Transcript Vol. I 141:10-11.

to meet projected demand for six months in the future. Thus, in the real world, Qwest's OSS will not be bombarded by 220% of volumes projected for an entire year in the future.

The only other circumstances under which transactions queue -- and therefore may possibly exceed the 200 second threshold -- are when either IRTM or the CLEC experiences an outage. Because IRTM outages are extremely rare,[51] longer response times caused by such an outages are, likewise, extremely rare. The remaining circumstance that may cause transactions to queue is when a CLEC's side of the interface experiences an outage. Qwest should not be held accountable for long response times that are caused by a CLEC's outage.

The crux of this CLEC concern appears to be that a transaction that is not timed out, but actually receives valid response that exceeds 200 seconds, may be reported as a time out in Qwest's PID results.[52] This issue bears no relationship to the adequacy of IRTM as a measurement tool.

IRTM outage. During the third hour of the Stress Test, IRTM experienced an outage that prevented it from recording response times.[53] CGE&Y issued IWO2119 and, in response, Qwest explained that the outage was coincidental and unrelated to the Stress Test.[54] At the workshop, AT&T nonetheless claimed that this outage calls into question IRTM's adequacy as a measurement tool. This claim is baseless.

IRTM generates and submits transactions to Qwest's OSS, just as a CLEC does, and records the response times.[55] Like a CLEC, IRTM sits outside of Qwest's firewall.[56] Given this configuration, it is not possible for IRTM to be impacted by the volumes of transactions

[51] Capacity Test Workshop Transcript Vol. I 143:17-144:21.
[52] Capacity Test Workshop Transcript Vol. I 143:4-7.
[53] Capacity Test Workshop Transcript Vol. I 147:23-148:6.
[54] Capacity Test Workshop Transcript Vol. I 148:3-6.
[55] Capacity Test Workshop Transcript Vol. I 149:21-150:7.

processed by Qwest's interfaces, just as a CLEC's systems are not impacted by the volumes of transactions processed by Qwest's interfaces.[57] Thus, there is no relationship between the outage and the Stress Test volumes.

The CLECs further claimed that the IRTM outage somehow impacted the quality of the data comparison CGE&Y performed. IRTM's response time data was available for CGE&Y's comparison for the entire Twelve Month Test and all but one hour of the Stress Test. As discussed above, the IRTM outage occurred during the third hour of the Stress Test, when the Pseudo-CLEC received the longest response times. As detailed above, these longer response times were caused by the enormous transaction volumes required for the Stress Test, which were submitted by the Pseudo-CLEC in bursts. These enormous, bursty volumes from a single CLEC would not occur in Qwest's production environment because no single CLEC would be generating volumes at the level projected for the entire community, as the Pseudo-CLEC did for purposes of the Stress Test.[58] Instead, many CLECs would be generating lesser volumes in a more evenly distributed pattern than the intense burstiness that occurred during the Stress Test. Thus, period for which IRTM data is not available is not representative of any realistic CLEC experience. The absence of this data is simply not significant, particularly when the data for the remainder of the Capacity Test is available. Moreover, even during the period for which IRTM data is not available, CGE&Y successfully continued to collect the necessary data regarding the response times received by the Pseudo-CLEC.

[56] Capacity Test Workshop Transcript Vol. I 150:2-3.
[57] *See* Capacity Test Workshop Transcript Vol. I 149:23-150:13.
[58] Capacity Test Workshop Transcript Vol. I 141:22-142:3.

Finally, AT&T suggested that the differences between the IRTM data and the Pseudo-CLEC data are statistically significant and, therefore, indicate that IRTM does not adequately reflect the CLECs' experience.[59] The transaction times at issue here are short -- some are only one or two seconds -- and the differences between the IRTM and Pseudo-CLEC data are even shorter.[60] With these very quick transactions, any difference may result in a large percentage, but have no practical impact because a 1.5 second difference is virtually imperceptible to a customer service representative.[61] Statistical significance does not have any practical meaning in this context. AT&T's argument should be rejected.

D. The CLECs' remaining arguments provide no basis upon which to question CGE&Y's findings.

Finally, the CLECs attempted to undermine CGE&Y's findings that Qwest successfully passed the Capacity Test by raising a variety of issues based on isolated circumstances and occasionally bizarre positions. Two examples of such arguments are set forth below.

AT&T kicked off the workshop by insisting that CGE&Y agree to modify its Report "to say that Cap calculated a response time and it did *not* calculate PO-1."[62] The basis for AT&T's position was that the PO-1 measurement is calculated using the IRTM model and CGE&Y did not use a model.[63] Thus, while CGE&Y properly complied with the MTP, TSD, and Detailed Test Plan provisions by collecting data and calculated pre-order response times pursuant to PO-1, "technically, they were not calculating and collecting PO-1

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[59] Capacity Test Workshop Transcript Vol. I 160:17-22.
[60] *See* Report, Table 4.1.3.1f, at 35.
[61] Capacity Test Workshop Transcript Vol. I 158:9-21.
[62] Capacity Test Workshop Transcript Vol. I 22:5-27:6 (emphasis added).
[63] Capacity Test Workshop Transcript Vol. I 23:10-14.

results."[64] Never in any Capacity Subcommittee or TAG meeting over the course of the past two years did AT&T ever make this hypertechnical distinction. This new position represents yet another instance where AT&T has sandbagged the parties by conjuring up a baseless eleventh hour argument, despite AT&T's admission in the Retail Parity workshop that it had a responsibility to raise any such issues during the testing process.[65]

Similarly, WorldCom questioned CGE&Y about a Fetch-n-Stuff configuration change Qwest made. CGE&Y explained that 79 orders -- representing only 1.6% of all LSRs processed during the test -- that were expected to receive an FOC did not receive an FOC because of a problem with Fetch-n-Stuff.[66] CGE&Y issued IWO 1143 and Qwest described the change it made in its response. WorldCom and AT&T pressed CGE&Y to explain how it verified that Qwest's Fetch-n-Stuff configuration change remedied the problem, implying that CGE&Y is required to independently verify each component of Qwest's IWO response.[67] CGE&Y explained that a flow-through eligible order may fall to manual handling for many reasons; so long as one of those reasons caused the fall out, the mere fact that orders fell out for manual handling does not indicate that there was a systemic software or configuration problem.[68] This particular change related to a tuning change in the UNIX operating system that did not constitute a software error.[69] Thus, CGE&Y exercised its professional judgement in evaluating and accepting Qwest's explanation of the problem and resolution.[70]

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[64] Capacity Test Workshop Transcript Vol. I 23:3-6.

[65] Retail Parity Evaluation Workshop Transcript Vol. I 44:9-14 (AT&T witness admits that "if any of the parties have a complaint with how the test is being run or the results of the test, we've had an obligation to share those complaints so that at the end of the process, we'll have gone through it and tempered the results to make them as defensible as possible").

[66] Capacity Test Workshop Vol. I 116:21-117:2.

[67] Capacity Test Workshop Vol. I 116:14-17, 117:3-4.

[68] Capacity Test Workshop Vol. 119:3-15.

[69] Capacity Test Workshop Vol. I 122:4-14.

[70] Capacity Test Workshop Vol. I 118:11-14, 122:10-14.

Moreover, CGE&Y stated that it has monitored the retesting efforts in the Functionality Test and determined that the issue has not recurred.[71] If the issue does recur, or if any other unexplained fallout occurs during retesting, CGE&Y will issue an IWO.[72] Finally, even if the Fetch-n-Stuff problem had not been fixed, the fall out of 80 orders does not indicate a Capacity Test volume-related problem because Qwest's ISC can easily process 80 orders that have fallen out for manual handling with existing resources.[73] Again, this argument provides no valid basis upon which to question the Capacity Test results.

E. The CLECs did not challenge CGE&Y's conclusion that Qwest passed the system and staff scalability analyses.

As part of the Capacity Test, CGE&Y was charged with reviewing and evaluating Qwest's processes, procedures, and planning tools for managing its ability to scale its OSS to accommodate larger workloads and its ability to adjust its workforce to meet future CLEC order volumes requiring manual handling.[74] CGE&Y concluded that Qwest has adequate, well-documented processes and procedures in place to maintain its system capacity and adequate forecasting procedures to identify the need for additional work force within a sufficient time frame to allow for training and placement.[75] The CLECs did not raise any substantial concerns regarding CGE&Y's findings. Thus, Qwest successfully passed the scalability analyses.

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[71] Capacity Test Workshop Vol. I 117:5-11.
[72] Capacity Test Workshop Vol. I 123:19-24.
[73] Capacity Test Workshop Vol. I 117:17-19.
[74] Report at 7-8.
[75] Report at 7-9.

IV. CONCLUSION

In conclusion, CGE&Y complied with the MTP and TSD requirements in performing and reporting on its evaluation for the Capacity Test. The data provide ample support for CGE&Y's finding that Qwest passed the Capacity Test.

DATED this 15th day of November, 2001.

Respectfully submitted,

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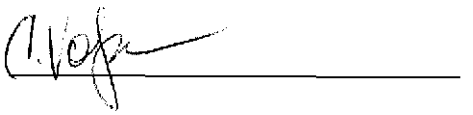


EXHIBIT A

RESPONSE TO DATA REQUEST 226:

Qwest concludes that when analyzed and viewed properly response times are not significantly different during the ORT than during the 12 Month capacity test. Qwest's analysis is provided below.

This response to the data request is provided in 2 parts: (1) comparison of selected data from the 7/16 ORT and the 12 month test; and (2) a more holistic comparison of the trends in data from the ORT, the 12 month test, stress test, and published monthly figures (preliminary in the case of August).

Please take note of the following 2 items:

1. The ORT being used for comparison was the test carried out on 7/16/2001.

2. The figures and charts attached to this request from AT&T are examples of data and not the full scope.

1. ORT vs 12 Month Capacity

The apparent discrepancies between the 7/16 ORT and the 12 Month tests are as follows:

1. Direct comparisons between ORT results and 12 Month test results cannot be made because outlier results formed a significant proportion of the results from the ORT. The proportion was significant because the number of transactions was small. Removal of the outliers brings the overall results in line with both the monthly published results and the 12 month test. Outliers formed a significantly smaller proportion of the 12 Month test evident from the detailed PO-1 results. For example, the removal of only one such data point from the EDI Facility Availability Query during the ORT removes the significant variance, and reduces the average to 16.8 from 23.6. The following are the key examples.

Media Query	% Outliers	Result Improvement
EDI Facility Availability	11%	23.6 -> 16.8
EDI Service Availability Query	30%	24.4 -> 13.1
EDI Appointment Availability Query	9%	11.8 -> 3.9

*Note: For analysis purposes, outliers have been defined as those 2X the benchmark.

While outliers account for the majority of any variance, analysis for this Data Request has provided further explanations as to why differences may occur.

2. System enhancements that improved response times were implemented between the time of the ORT in July and the execution of the 12 Month test. Continuous improvement is ongoing for all transaction types. An example that has shown significant improvement is:

- Service Availability Query (SAQ), software release (CPS release 5.0) and architecture improvement.

Refer to the attached IRTM comparisons to see the overall variations achieved through performance improvements.

3. After the 7/16 ORT and the attempted capacity test on the day of the Code Red virus attack, Qwest made certain load balancing adjustments to ensure the number of sockets used and transaction receipt rates did not cause problems for the test transaction generator. Qwest does not believe this change reduced response times per se, but it would improve return transaction flow. This change followed documented normal practice.

4. The response times presented for the 12 month test do not include the additional window time and it is assumed that the ORT results did likewise.

2. Holistic Comparison of Response Trends

Qwest has analyzed the pre-order transaction performance figures from the final ORT for the Capacity Test, the corresponding figures for both the 12 Month test and the Stress test, and compared them with the published monthly figures for the periods during which they were performed. To enable a comparison between consistently available data, the results from IRTM have been used. The conclusion of this analysis is that overall the figures are as expected. The attached spreadsheet presents the figures and charts to support this conclusion.

A number of points are to be noted regarding the data shown in the attachment:

1. Variations must be expected when looking at short time periods (individual days) rather than longer time periods (months).

2. An outlying data point can skew the average for the day while over the month these flatten out in the average.

3. All figures from the ORT, the 12 Month test, and the monthly published figures are within the published benchmarks.

4. In general, the results captured by IRTM during the ORT on 7/16 are consistent with the trends in the monthly IRTM figures of July and August.

5. Specific variances that are not explained by the monthly trend are illustrated below:

Media Query Explanation

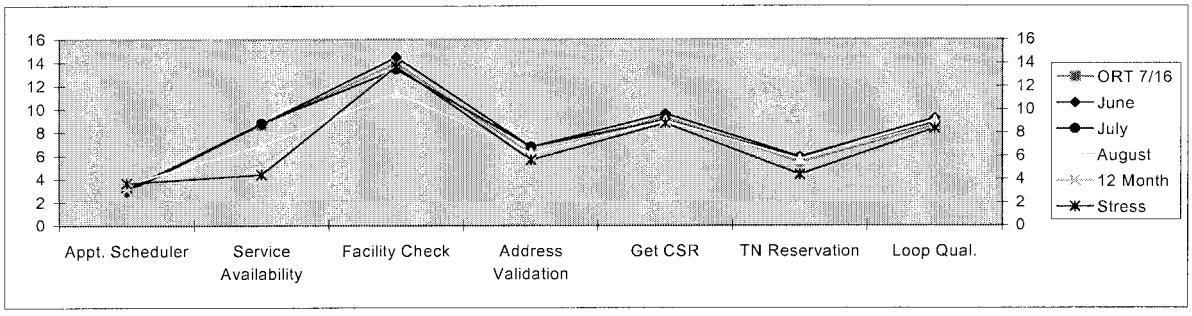
EDI Service Availability The results are consistent because the software release that improved response times was implemented on 8/4. More than 10 % of monthly results were for dates before improvements were made. This meant that the improvement is seen in its entirety during the test, but is only included for the proportion of the month it was implemented for the August published results. EDI Facility Check There is a high standard deviation in the ORT as a result of the low number of transactions. EDI Get CSR There is a high standard deviation in the ORT as a result of the low number of transactions.

EXHIBIT B

IMA

Query	ORT 7/16	June	July	August	12 Month	Stress	Compare ORT to July	Compare ORT to 12 Month
Appt. Scheduler	3.19	2.95	3.09	3.55	**3.13**	**3.65**	Consistent	Consistent
Service Availability	8.69	8.75	8.79	6.9	**5.26**	**4.39**	Consistent	Lower in line with the monthly trend. *
Facility Check	13.96	14.49	13.44	11.41	**13.74**	**13.69**	Consistent	Consistent
Address Validation	6.19	6.75	6.78	6.2	**5.45**	**5.65**	Consistent	Lower in line with the monthly trend. *
Get CSR	9.29	9.63	9.04	8.99	**8.8**	**8.8**	Consistent	Consistent
TN Reservation	5.43	5.89	5.82	5.69	**4.64**	**4.38**	Consistent	Lower in line with the monthly trend. *
Loop Qual.	8.57	9.23	8.87	9.04	**8.01**	**8.36**	Consistent	Consistent

* Variations are to be expected when comparing parts of single days to full months. The figures do not show significant variances overall.
Note: The August figures are preliminary only.



EDI

Query	ORT 7/16	June	July	August	12 Month	Stress	Compare ORT to July	Compare ORT to 12 Month
Appt. Scheduler	6.29	6.34	5.45	5.94	**5.86**	**7.24**	Consistent	Consistent
Service Availability	14.35	12.65	12.24	9.25	**8**	**9.79**	Consistent	Consistent since SAQ software release did not occur on 8/1 (8/4 implementation), lowering result for specific test days compared to the average
Facility Check	17.1	15.67	14.26	11.25	**14.67**	**11.5**	Consistent, but with too few data points to rely on ORT result.	Consistent
Address Validation	6.49	6.15	5.63	4.92	**4.31**	**5.41**	Consistent	Consistent
Get CSR	9.5	8.06	7.54	6.95	**6.86**	**6**	Consistent, but with too few data points to rely on ORT result.	Consistent
TN Reservation	3.52	3.73	3.12	3.55	**3.24**	**4.27**	Consistent	Consistent
Loop Qual.	11.62	11.76	9.86	9.23	**8.28**	**11**	Consistent	Consistent, in line with trend and continuous improvement

* Variations are to be expected when comparing parts of single days to full months. The figures do not show significant variances overall.
Note: The August figures are preliminary only.