FairPoint Cutover Monitoring Status Report The Liberty Consulting Group September 15, 2008

Introduction

The scope statement for the monitoring of FairPoint's cutover status by the Liberty Consulting Group ("Liberty") specifies that Liberty will provide monthly reports of the cutover status to the staffs of the Maine Public Utilities Commission, the New Hampshire Public Utilities Commission, and the Vermont Department of Public Service. Liberty has provided such reports in December 2007 and in January, February, March, April, May, June, July, and August 2008. Because FairPoint is now substantially closer to a demonstration of cutover readiness, the current report provides more detail than past reports on Liberty's evaluation of the information provided by FairPoint of the state of its preparations for cutover and those of its systems developer Capgemini. As explained further in this report, Liberty has concluded that FairPoint has made substantial progress in demonstrating cutover readiness. Despite these material accomplishments, however, significant gaps remain. Liberty therefore concludes that FairPoint has not yet demonstrated it has satisfied all the criteria for cutover readiness.

Liberty's review of FairPoint's cutover readiness focuses on the specific criteria FairPoint developed as part of its Cutover Readiness Verification Plan. Liberty reviewed this plan and provided its comments in a May 21, 2008 draft report, which the state regulatory staffs issued for public comment. Liberty generally concurred at that time with the structure of FairPoint's readiness plan and readiness criteria, but noted that certain gaps remained. Liberty's final report on the FairPoint Cutover Readiness Verification Plan, issued on August 15, 2008, concluded that FairPoint had addressed those gaps in the plan; therefore, Liberty concurred with the FairPoint Cutover Verification Plan and cutover criteria.

Overview of Recent Monitoring Activities

Since the last monitoring report issued August 8, 2008, Liberty engaged in a number of activities in addition to the normal weekly activities that include observing the Tuesday Capgemini and FairPoint project status calls, holding Wednesday conference calls with FairPoint to discuss status, and holding Thursday briefing calls with representatives from the three state regulatory staffs. The additional activities include:

- Attending the Vermont Public Service Board status conference on August 20 in Montpelier, VT
- Meeting with FairPoint and Capgemini representatives at FairPoint offices in Manchester, NH on August 21 to discuss systems status and testing

- Observing the FairPoint Wholesale Cutover Collaborative meetings held via webex on August 13.
- Observing the FairPoint Wholesale User Forum and question and answer review sessions held via webex on August 27 and September 4
- Meeting with FairPoint and Capgemini representatives at the Capgemini offices in Atlanta, GA to review the results of live systems tests, to observe business simulations, and to discuss the status of cutover readiness from August 25-28 and September 2-5
- Observing trials of FairPoint training courses in Portland, ME on August 19 and in Manchester, NH on August 26 and August 28
- Touring the FairPoint training facility in White River Junction, VT on August 27.

Liberty also completed and issued the Review of FairPoint's Cutover Readiness Verification Plan on August 15.

Analysis of FairPoint's Cutover Readiness Status

In this report, Liberty examines whether FairPoint has demonstrated it has yet met each of the criteria for readiness defined in FairPoint's Cutover Readiness Verification Plan. As noted in Liberty's August 15, 2008 report, this plan specifies that FairPoint must demonstrate readiness in five different areas:

- Tests of FairPoint's new Capgemini-developed operational support systems, which will replace the Verizon systems
- Tests of FairPoint's ability first to correctly accept the data extracted from Verizon's systems as will be necessary to operate FairPoint's business and second to convert that data into a form that can be used by the new operational support systems
- Demonstration of the existence and documentation of the key business processes that must operate successfully at cutover
- Demonstration that key staff positions that are necessary at cutover are filled
- Demonstration that training of the FairPoint staff in the new systems and processes will be successfully completed by cutover.

The remainder of this section considers each of these five components of FairPoint's cutover readiness in turn.

Liberty has based the analysis described in this report principally on data and other information on status that FairPoint and Capgemini provided on September 9. Capgemini and FairPoint continued to update some information through September 12. Liberty has based its analysis on information that is as current as possible. However, FairPoint and Capgemini have provided a large volume of information to Liberty just prior to the date of this report. Liberty has not been able to verify some of this late arriving information sufficiently to warrant its inclusion in the analysis and presentation in this report. The bulk of the analysis in this report is therefore based on information as of September 9. The report notes when Liberty was also able to use more current information.

1. Operational Support System Testing.

In cooperation with FairPoint, Capgemini has been conducting a series of tests of the operational support systems it has developed for FairPoint. These tests consist of four separate sub-components: functional testing, user acceptance testing (UAT), CLEC testing, and performance testing. In each of these areas, Capgemini has developed a set of test cases of specific transactions that the operations support systems must be capable of executing. Liberty addresses each of these four sub-components below.

a. Functional Testing.

The principal focus of functional testing is on the system test cases, which involve tests of linked systems, including test cases for end-to-end system processes. Liberty has also monitored the status of the lower-level product and integration test cases, which test individual applications, such as retail billing, or smaller subsets of linked applications. As noted in Liberty's August 8 report, Capgemini has indicated that it has successfully completed these lower-level tests.

Capgemini has developed a core set of 1,157 system test cases that represent a wide range of transactions that FairPoint will need to be able to conduct when it cuts over from the Verizon systems to the newly developed systems at cutover. There are some additional tests that Capgemini and FairPoint are conducting besides this core set of test cases to fill in a few gaps that remain in the test coverage. These additional tests are as follows:

- E911 automatic line identification ("ALI") database updates driven by business transactions
- Transactions involving some additional types of large business customer or "enterprise system group" ("ESG") products such as PBX trunks and DDS services
- Additional wholesale transactions, including mechanized line testing ("MLT"); line loss reporting; daily usage feeds ("DUF"); and orders for an enhanced extended loop ("EEL"), line sharing, and line splitting
- Execution of test cases using in-service network elements to test the updating of switch translations based on service order activity, polling of switches for billing usage records, launching of MLT tests, and network element surveillance and alarm monitoring using FairPoint's live network
- Testing of the systems for the ability to collect the data and to create the required regulatory retail and wholesale performance reports, including the wholesale performance assurance plan ("PAP").

Five criteria govern the determination of cutover readiness in FairPoint's Cutover Readiness Verification Plan associated with system testing:

i. 100 percent of tests are executed
ii. There are no open severity 1 defects and no open severity 2 defects without acceptable business workarounds

iii. The cumulative effect of defects (for all severity levels) across all testing (system, UAT, CLEC) resulting in necessary workarounds must be quantified and must not exceed 50 incremental headcount
iv. All open defects have been assigned target fix dates
v. Required workarounds are subsequently tracked under method and procedure development.

Liberty's analysis of the status of each of these five criteria follows.

i. *Have 100 percent of the tests been executed?*

The following table shows Capgemini's report of the status of the 1,157 core system test cases as of September 9.

Core System Test Case Execution Status
(As of September 9)

Functional Domain	Planned Test Cases	Executed Test Cases	Passed Test Cases	Failed Test Cases
Billing and Collection	101	101 (100%)	101	0
Retail Ordering and Service Fulfillment (less complex)	304	304 (100%)	302	0
Retail Ordering and Service Fulfillment (more complex)	30	30 (100%)	30	0
Wholesale Ordering and Service Fulfillment	534	534 (100%)	521	12
Plant and Construction	62	62 (100%)	62	0
Service Assurance (Maintenance and Repair)	112	112 (100%)	112	0
Support Systems (Finance, Human Resources, Supply Chain Management)	14	14 (100%)	14	0
Total	1,157	1,157 (100%)	1142	12

The table above shows that Capgemini has executed the core 1,157 system test cases. Almost all of these test cases have passed. The only exceptions are for wholesale and retail ordering and provisioning transactions. As shown in the table, 13 of the 534 wholesale test cases have not yet passed. Of these 13 test cases, 12 have failed. The remaining test case is in the "passed with exception" status; that is, the testers identified a

defect in the execution, but were able to complete the test case. Once the defect is fixed, this test case will need to be rerun until it successfully passes. Similarly, 302 of the 304 of the retail ordering and provisioning test cases have passed and none have failed. The remaining two are in 'passed with exception" status.

In order to verify this status, during the period between August 25 and September 5, Liberty observed live at the Capgemini offices in Atlanta a small sample of system test cases designated as passed. Liberty noted in its August 8 report that the Liberty team made a similar visit to observe live test cases in July. The sample of test cases Liberty has observed includes a range of different types of both retail and wholesale transactions. During the more recent visit, Liberty also observed the re-execution of some of the test cases observed during the July visit and which had unexpected or incorrect results. In addition to observing live tests cases, Liberty obtained and reviewed test artifacts, such as screen shots and other output, from a larger sample of additional test cases.

Liberty found that most of the test cases examined either live or through examining test artifacts were successful and produced correct results. In addition, Liberty did find that the defects that were causing intermittent failures of test cases as noted in the August 8, 2008 monitoring report have been successfully resolved. However, Liberty's latest review of test cases found some issues with billing results for some test cases that were designated as "passed." In particular, Liberty found cases where retail customer bills were not accurately produced or contained inconsistent or misplaced information. Capgemini subsequently corrected most of these issues and presented the results to Liberty. In addition, Liberty only received billing results based on a robust set of usage types and billing rates on September 12, and has not had time to analyze this information. Given this observation of problems with a small number of the test case results examined, Liberty is concerned that the output of the systems may not yet be completely stable because of the many software changes Capgemini is making in the systems currently to address open defects and implement change requests (CRs). Liberty notes that as Capgemini introduces these changes into the systems, it performs "regression" testing to assure that the changes have been implemented properly and without affecting other functionality. However, there has recently been a particularly high volume of those changes and associated retesting.

In addition to the core test cases, Liberty examined the status of the additional required system test cases. The following table provides the status of these tests:

Additional System Test Execution Status
(As of September 11)

Test Domain	Planned Tests	Execution Status	Execution Success
E911 Database Updates	72 scenarios	All 72 executed	All 72 passed
Additional ESG Products	Scenarios for 23 products	0 executed	0 passed

Additional Wholesale Tests	• MLT • Line Loss Reports • DUF • 6 test cases for EEL, Line Sharing, and Line Splitting Orders	• Executed • Executed • Executed • 0 executed	• Passed • Passed • Passed • 0 passed
Live Network Tests:			
• Network Alarm Monitoring – Routers	• 44 tests	• 44 executed (100%)	• 44 passed (100%)
• Network Alarm Monitoring – Other Network Elements	• Not yet determined.	• 0 executed (0%)	• 0 passed (0%)
• Switch Translations	• 23 tests	• 17 executed (74%)	• 17 passed (74%)
• Switch Usage Polling	• 48 tests	• 0 executed (0%)	• 0 passed (0%)
Regulatory Performance Reporting Tests	380 test cases	190 executed (50%)	164 passed (43%)

Significantly, FairPoint has successfully completed the E911 database update tests. This accomplishment is important because it demonstrates FairPoint's capability to successfully update the E911 database based on customer orders. The test cases involved covered a wide variety of both retail and relevant wholesale transactions, including the provision of left-in or "soft" dial tone upon disconnection. The test cases also tested the E911 database update capability in all three states. Furthermore, during the review of live test cases, Liberty observed the successful transmission of the E911 database update information to Intrado, which is FairPoint's supplier for managing the E911 database in Maine and for updating the E911 databases in New Hampshire and Vermont.

It is not, however, clear at present when Capgemini will complete the testing of the additional ESG test cases. The 23 products involved include various forms of Centrex, private line services, and ISDN services that have not yet been fully tested. Some services such as PBX trunks, Digital Data Service, and SONET at various OC levels have not yet been tested at all. Capgemini indicated that it will be testing some of the ESG products during the business simulation testing occurring in September, but has not yet specified when the other ESG products will be tested.

Some wholesale testing also remains to be performed. It is not clear when the test cases involving EEL, Line Sharing, and Line Splitting tests will be completed. Liberty witnessed the successful: (a) entering of requests for an MLT test from the CLEC webGUI interface, (b) the communication of this request to the system FairPoint is using to conduct the MLT test, and (c) the systems response back to the requestor via the webGUI. However, FairPoint has not yet executed any trials of the ability to successfully

launch an MLT test for either wholesale or retail customers with the live network using FairPoint's new systems. Capgemini has also indicated that they have successfully tested DUF and line loss reporting. Liberty examined a sample DUF file using "mocked up" data and found the resulting records to be structurally correct. However, because the data was not based on live call usage data polling from FairPoint switches, Liberty was not able to assess the DUF completeness, accuracy, or timeliness.

FairPoint has successfully executed 44 network monitoring and alarm condition tests; however, all these tests were associated with DSL service routers only. FairPoint has not yet executed tests of the ability to monitor status and alarms on other network elements, such as switches, transport facilities, and the signaling network elements. Based on the latest status received from FairPoint on September 11, the plans for testing these network elements and arranging for the necessary network connectivity are still under development. FairPoint has also indicated that the connectivity needed to test some of these network elements will not be available until the end of October.

On September 11, FairPoint provided Liberty with samples of the results from its switch translations testing. As of the writing of this report Liberty has not resolved outstanding questions with FairPoint regarding the breadth of the tests and the outcome of one of the tests that has been executed.

Capgemini has also not completed the testing of its systems for regulatory performance reporting. Liberty has reviewed the architecture and development status of these reporting systems with Capgemini and FairPoint. Liberty believes that the architecture is sound. Capgemini has reported that the development is essentially complete and testing is underway. However, those tests will not be complete for several weeks.

Liberty also notes that Capgemini has been conducting the system tests without using a complete set of converted data. In particular, Capgemini has used the "Mock 7" version of the data converted from the extract of data Verizon provided in February. Mock 7 does provide the complete (or nearly complete) converted data for a number of processes, such as wholesale and much of retail billing; however, there are some missing data components, particularly for some network and customer data. These gaps should not undermine the integrity of the functional system testing, but Liberty has noted in observing live testing that it does occasionally lead to unexpected results that require interpretation. In addition, Capgemini has not yet introduced the full set of products and the actual rates for the products in its testing, but will be doing so during September and October. This information is included in a "product catalogue" that contains all the relevant product data. Liberty reviewed the structure of this product catalogue and found it to be sound. Liberty also concluded that sufficient product information has been included in the system testing to conduct this testing reliably. Capgemini will be conducting regression testing using the existing system test cases as it introduces both the full converted data set and full product catalogue over the next few weeks.

In summary, although Capgemini has executed all the core system tests, Capgemini and FairPoint have not yet completed the additional functional testing that is necessary to

demonstrate adequately its cutover readiness. The work that remains to be completed before a readiness declaration is made includes

- Completion of live network tests, including testing of MLT
- Completion of testing for 23 additional complex business products
- Completion of EEL, Line Sharing, and Line Splitting test cases
- Completion of regulatory performance reporting test cases.

Therefore FairPoint has more tests to complete before it has demonstrated that it has satisfied this cutover criterion.

ii. *Are there no severity 1 defects and no severity 2 defects without manual workarounds?*

There are significantly fewer open defects now than at the time of Liberty's last monthly report on August 8. This is expected because Capgemini has completed the majority of the testing and has been devoting its resources to fixing defects and retesting. Capgemini reports that as of September 10, there were 20 open defects associated with the core 1,157 system tests. This is a substantial reduction in the number of defects from the time of Liberty's August 8 report. Capgemini also reports that none of these defects are severity 1 or severity 2 defects, and all have assigned fix dates. Liberty has reviewed each of these defects with Capgemini and FairPoint and agrees with the designation of their severity levels.

However, Liberty notes that the defects Capgemini has counted for the system test cases correspond to defects in the systems as originally designed. As indicated in the August 8, 2008 monthly monitoring report, Liberty found that testing has uncovered the need for changes in the system design, and FairPoint has issued a number of change requests ("CRs") to address these needs. Many of these CRs concern improvements in system execution but are not essential for the proper execution of the business transactions. Examples of such non-essential improvements are changes in the layout of the computer screens that service representatives view while creating customer orders so that the necessary information is easier to retrieve. However, Liberty has noted that a small number of the CRs concern missing functionality that is essential to have at cutover. Examples of such missing functionality are automation of some steps in the ordering and provisioning of complex orders, the ability to identify loops with load coils without a field dispatch, automation of the process to determine the need for additional DSL equipment, and automation of bill claim tracking. Because such functionality is necessary, Liberty believes such CRs must be counted as "defects" in assessing the cutover acceptance criteria.

Liberty reviewed the 468 CRs open as of September 3 and identified 108 that appear to be essential and should be counted in the list of defects for the purpose of assessing the cutover acceptance criteria. Because these CRs have not been treated as defects, none have been classified by severity level, although a number have been designated as "critical" by FairPoint. Liberty reviewed these 108 CRs with FairPoint, and determined, based on further clarification, that not all will require system development. On September

11, FairPoint provided Liberty with dates when it expects the CRs to be completed. Some are not planned to be completed until after cutover. FairPoint also provided high-level descriptions of the manual workarounds required for all these CRs.

As a result, based on the information that Liberty has not, it appears that FairPoint has satisfied the criterion for those defects detected through testing completed to date, even including the impact of the CRs. However, testing is not yet complete. Functional testing must be completed before it can be determined whether FairPoint has met this criterion.

iii. *Does the cumulative effect of manual workarounds across all operational support system testing require additional workforce with equivalent headcount of no more than 50?*

FairPoint and Capgemini have estimated that approximately four full-time equivalent (FTE) additional employees would be necessary to address any workarounds for the currently open active defects uncovered during system, UAT, and CLEC testing. However, the 50 FTE constraint in this cutover criterion must consider the manual workarounds that would be necessary if the CR-related system development needed for cutover is not ready by that time. On September 11 and 12, Liberty received estimates from FairPoint of the workarounds that would be necessary. FairPoint estimates that these workarounds will require approximately 103 additional FTE. Even in the event that all the CR-related development that is scheduled to be completed between now and the end of November is actually completed by then, FairPoint estimates it will require an additional 65 FTE to manually support the functionality that will still be missing at that time. This means that FairPoint will need to complete CRs, fix other identified software defects, and test these changes before it can satisfy the 50 FTE constraint in this cutover criterion.

iv. *Do all defects have assigned target fix dates?*

Capgemini has shown Liberty the planned fix dates for all the defects identified from system testing. As noted, FairPoint has also designated dates when the critical CRs would be resolved. However, not all functional testing is complete. Functional testing must be completed before it can be determined whether FairPoint has met this criterion.

v. *Have all manual workarounds been incorporated into methods and procedures development and tracked?*

Capgemini and FairPoint provided information on September 12 indicating that FairPoint is ready to develop methods and procedures for manual workarounds for the existing defects and CRs, should that prove necessary by cutover for those that are not fixed and tested by that time. However, FairPoint has not yet completed the documentation of those manual workarounds. In addition, functional testing is not complete and additional defects may be identified; as a result, Liberty cannot at this time determine whether this criterion has been satisfied. Functional testing must be completed before it can be determined whether FairPoint has satisfied this criterion.

vi. *Conclusions for Functional Testing*

In summary, Capgemini has made substantial progress in functional software testing. However, significant issues remain, including:

- Incomplete execution of functional tests. This includes scenarios for 23 complex business products; tests of EEL, Line Sharing, and Line Splitting; and live network tests, some of which are not scheduled to complete until late October
- Missing components in the system design discovered during testing that need to be addressed through software enhancements that remain to be accomplished. Furthermore, manual workarounds to provide this functionality without systems will require more than 50 additional FTE
- Indications that the testing may have been affected by the large volume of system change activity, thereby obscuring the results.

b. User Acceptance Testing.

The purpose of User Acceptance Testing (UAT) is to examine whether the FairPoint users of the systems can successfully complete their required business transactions. UAT is based on a subset of the test cases used in the functional testing, but the test cases are executed by FairPoint users rather than by the Capgemini testing team. There are two forms of UAT: "silo" UAT, which tests individual applications, and integrated UAT, which tests linkages between applications. Included in the silo UAT was testing for financial, human resources, and supply chain management functions. Because of their lack of connection to many of the other processes, these functions were not included in the integrated UAT. Silo UAT is complete, and integrated UAT was completed the week of September 8.

UAT has the same acceptance criteria as system testing. Liberty's analysis of the status of each of these criteria follows.

i. *Have 100 percent of the tests been executed?*

The following table shows Capgemini's report of the status of the integrated UAT tests as of September 9.

User Acceptance Test Execution Status
(As of September 9)

Functional Domain	Planned Test Cases	Executed Test Cases	Passed Test Cases	Failed Test Cases
Billing and Collection	18	18 (100%)	18	0
Retail Ordering and Service Fulfillment (less complex)	128	128 (100%)	128	0

Retail Ordering and Service Fulfillment (more complex)	9	9 (100%)	9	0
Wholesale Ordering and Service Fulfillment	145	145 (100%)	145	0
Plant and Construction	60	60 (100%)	60	0
Service Assurance (Maintenance and Repair)	40	40 (100%)	40	0
Total	400	400 (100%)	400	0

There is one fewer UAT test case than reported in Liberty's August 8 monitoring report. This occurred after Capgemini noted that there was a duplicate retail ordering test case.

As can be seen from the table, FairPoint and Capgemini have successfully executed all the UAT test cases. Furthermore, as of September 9, all these test cases have passed, including the wholesale test cases. (The test cases that are still failing for functional testing were not within the subset used for UAT.)

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

ii. *Are there no severity 1 defects and no severity 2 defects without manual workarounds?*

Capgemini reports that there are currently no open defects associated with UAT testing. However, UAT testing uncovered some of the missing system functionality addressed in FairPoint's CRs. Thus, the same considerations apply to UAT. In particular, FairPoint has defined workarounds for the missing functionality needed for cutover, In addition, because UAT is now complete, there is no more testing to reveal defects for this test area.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

iii. *Does the cumulative effect of manual workarounds across all operational support system testing require additional workforce with equivalent headcount of no more than 50?*

Because this criterion applies jointly to system, UAT, and CLEC testing, the same remarks and conclusions that Liberty had for system testing apply to UAT. (See p. 9 above.) FairPoint will need to complete CRs, fix other identified software defects, and test these changes before it can satisfy the 50 FTE constraint in this cutover criterion.

iv. *Do all defects have assigned target fix dates?*

Although there are no official open defects related to UAT, the same considerations Liberty raised for functional testing regarding CRs apply to UAT. (See p. 9 above.) All these have target fix dates.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

v. *Have all manual workarounds been incorporated into methods and procedures development and tracked?*

As noted in the discussion of functional testing, Capgemini and FairPoint provided information on September 12 indicating that FairPoint is ready to develop methods and procedures for manual workarounds for the existing defects and CRs, should that prove necessary by cutover for those that are not fixed and tested by that time. However, FairPoint has not yet completed the documentation of those manual workarounds. Liberty is awaiting the completing of that documentation before concluding whether FairPoint has demonstrated that it has satisfied this criterion.

vi. *Conclusions for User Acceptance Testing*

In summary, FairPoint and Capgemini have made considerable progress with the UAT testing since the time of Liberty's August monitoring report, with completion of the UAT testing. Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied all but two of the UAT cutover acceptance criteria. The exceptions occur because FairPoint has identified missing functionality in the original software design that will be critical to be in place for cutover and the manual workarounds to provide this functionality will require more than 50 additional FTE and need to be documented.

c. CLEC Testing.

The principal manner in which Capgemini and FairPoint have been testing wholesale transactions is through the internal testing (in the functional and UAT testing). The purpose of the CLEC testing is to provide wholesale users the opportunity to interact with the systems to assure that they are able to use them based on FairPoint's system specifications. For those users requiring electronic bonding functionality, the CLEC testing also is being used to certify that the electronic-bonded customers are able to connect to the FairPoint systems and successfully transmit and receive transactions in the correct format. CLEC testing uses a more limited set of test cases than functional or UAT testing.

CLEC testing began with internal testing by Capgemini and FairPoint of the test cases that were to be made available to the CLECs. In June, CLEC testing entered "Phase 3," in which FairPoint opened the testing to all CLECs desiring to participate. "Phase 3A" testing began in the middle of June with NeuStar testing the electronic bonding (EDI)

functionality and with volunteer CLECs testing the webGUI functionality. FairPoint has indicated that carriers and vendors (other than NeuStar) that are interested in using the electronic bonding functionality have elected to delay their testing and certification process, given the pending implementation of updated industry standard ASOG and LSOG business rules. Testing with the new business rules (Phase 3B) is expected to start late in September. Recently, one carrier that does business in Maine, GWI, has indicated that it does not want to delay EDI testing until that time. GWI considers the use of EDI to be essential to its business and wants to determine whether it is capable of successfully executing EDI transactions with FairPoint before FairPoint issues its irrevocable notice of cutover readiness.

FairPoint and Capgemini started the first round of Phase 3 testing with the CLECs in June, but later suspended the testing to: (a) fix defects that were preventing successful completion of the tests, (b) update the data used in the testing, and (c) add some additional scenarios to the test case list. The current test case list contains 85 test cases: 40 ordering, 22 pre-ordering, and 23 trouble administration scenarios. Testing using 82 of the new set of scenarios resumed in late August. NeuStar conducted EDI testing using 55 of the test scenarios (38 ordering and 17 pre-ordering) and 14 CLECs scheduled to conduct webGUI testing using the larger set of scenarios. (Liberty is not aware that any CLECs have requested an electronic bonded interface for trouble administration.) Three of the 85 test scenarios contained defects, which made them unavailable for immediate testing. FairPoint has informed Liberty, however, that as of September 9 all 85 test case scenarios were made available to the CLECs. CLECs conducting the webGUI testing are selecting which of the 85 available scenarios they plan to use in the testing based on their business needs. Several CLECs have requested FairPoint to make available a number of additional scenarios beyond the 85. FairPoint is considering including these scenarios, but does not plan to do so until testing after the conversion to the updated ASOG and LSOG business rules is complete (toward the end of September). The CLECs have also asked for the testing they perform to be less constrained in order to allow them better to define the specific test cases they would like to run.

CLEC testing has the same acceptance criteria as system testing. Liberty's analysis of the status of each of these criteria follows.

i. *Have 100 percent of the tests been executed?*

The following table provides Capgemini's and FairPoint's report of the status of CLEC EDI testing as of September 9.

Status of CLEC EDI Testing
(As of September 9)

	Planned Test Cases	Executed Test Cases	Passed Test Cases
Phase 3A Pre-Ordering (EDI)	17	17 (100%)	12
Phase 3A Ordering (EDI)	38	38 (100%)	21

Only NeuStar has been involved in the conduct of these tests, and NeuStar is not executing all the ordering and pre-ordering test cases that FairPoint has included in its test case list. FairPoint has indicated to Liberty that it has executed all these scenarios internally. However, given the concerns raised by GWI and although they have only been raised recently, Liberty is concerned that not all the scenarios relevant to EDI have been executed by external parties. Furthermore, GWI has asked FairPoint to provide specific additional EDI scenarios to run that are not in the current test case list.

Status of CLEC GUI Testing
(As of September 9)

FairPoint has scheduled GUI testing to continue until September 12; therefore, as of September 9, Liberty did not have the final results of the GUI testing. However, not all CLECs who wished to conduct GUI testing have completed their testing. Furthermore, some CLECs have asked FairPoint to provide additional specific test case scenarios that have been identified by the CLECs as important to their business. Liberty examined these proposed test scenarios, and observed that Capgemini has executed many, but not all of them, in its internal testing.

The CLECs have also indicated that they would like to test the MLT functionality and the receipt of DUF and line loss reports. Liberty addressed the Capgemini internal testing of these functions in the functional testing section above. FairPoint has sent mocked-up DUF files to some CLECs for testing.

Therefore, additional EDI and GUI testing will need to be completed before FairPoint has demonstrated it has satisfied this cutover criterion.

ii. *Are there no severity 1 defects and no severity 2 defects without manual workarounds?*

Capgemini reports that although there are four open defects associated with CLEC testing, none are severity 1 or severity 2 defects.

The CLECs have raised concern about the lack of some functionality in the FairPoint systems that they previously had access to under the Verizon systems. In particular, the CLECs have noted the following functionality is missing:

- Estimated time to repair (the FairPoint systems currently provide only a standard repair interval with no commitment that this appointment will be met)
- Provisioning intervals based on Verizon's "SMARTS clock" or the equivalent
- Access to automated trouble history prior to the cutover (the data on trouble history to be extracted from the Verizon systems)
- Automated vertical feature (voicemail, Caller ID, etc.) verification.

Liberty notes that FairPoint's systems also currently do not provide any of these functions for retail customers.

At this point, Liberty is not aware of any severity 1 or severity 2 defects without manual workarounds associated specifically with CLEC testing. However, testing is not complete. CLEC testing must be completed before it can be determined whether FairPoint has demonstrated that is has satisfied this criterion.

iii. *Does the cumulative effect of manual workarounds across all operational support system testing require additional workforce with equivalent headcount of no more than 50?*

Because this criterion applies jointly to system, UAT, and CLEC testing, the same remarks and conclusions that Liberty had for system testing apply to CLEC testing. (See p. 9 above.) FairPoint will need to complete CRs, fix other identified software defects, and test these changes before it can satisfy the 50 FTE constraint in this cutover criterion.

iv. *Do all defects have assigned target fix dates?*

Capgemini has shown Liberty the target fix dates for all the defects arising from CLEC testing to date. However, testing is incomplete.

Liberty therefore concludes that CLEC testing must be completed before it can be determined whether FairPoint has met this criterion.

v. *Have all manual workarounds been incorporated into methods and procedures development and tracked?*

As noted in the discussion of functional testing, Capgemini and FairPoint have provided information indicating that the manual workarounds have been incorporated into the development of methods and procedures, but the documentation is not yet complete. In addition, the CLECs have not yet completed CLEC testing. CLEC testing must be completed before it can be determined whether FairPoint has met this criterion.

vi. *Additional Considerations.*

In addition to specific concerns about the EDI and GUI testing, Liberty notes that the CLECs have raised some additional concerns with FairPoint about its wholesale policies and procedures. Many of these concerns involve the manner in which transactions will be processed during the cutover period. For several days after cutover, the FairPoint systems will not be available for use while Capgemini and FairPoint “stand up” the new systems, convert the data that Verizon has extracted, and place the data in the new systems. During this “quiet” or “blackout” period, FairPoint will have to complete any transactions such as provisioning and trouble administration manually, without systems support. This restriction applies to both wholesale and retail transactions. The CLECs have been asking a number of questions about the precise process FairPoint is planning to use both for ordering and trouble administration during the quiet period. FairPoint has attempted to

answer these questions; however, several CLECs are still concerned that their questions have not been fully addressed.

vii. *Conclusions for CLEC Testing*

In summary, FairPoint and Capgemini have made progress with the CLEC testing since the time of Liberty's August monitoring report. However, Liberty concludes that the CLEC testing cutover readiness acceptance criteria have not yet all been met. Although NeuStar has executed all the scenarios it identified for testing through EDI, not all scenarios have been tested for EDI by a CLEC or other external party. At least one CLEC, GWI, expressed concern that it has not been afforded the opportunity to perform EDI testing. In addition, because CLEC testing was suspended and just resumed late in August, not all CLECs who have expressed interest in continuing to participate in the testing of the GUI interface have completed testing.

The CLECs have raised the following additional concerns:

- The CLECs have not been able to run all the test cases they believe they need
- The CLECs would like to have the testing be less constrained
- The CLECs have raised concerns about the lack of some functionality in the new FairPoint systems that they had in the Verizon systems
- The CLECs have raised concerns about the quiet period that they do not believe have been addressed by FairPoint.

It is very important for FairPoint to resolve the outstanding questions that the CLECs have raised. In addition, FairPoint should work to demonstrate to the entire wholesale user community that FairPoint's systems are ready to accurately process their transactions and that FairPoint has taken all reasonable steps necessary to assure that the impact of cutover on their businesses will be minimized.

d. Performance Testing.

The purpose of performance testing is to assure that the systems will be able to function properly under the full volume of expected transactions. Performance testing began with initial testing at the application level, known as Application Performance Testing (APT), which was successfully completed earlier in the year. Capgemini is now nearing completion of Integrated Performance Testing (IPT), which tests the performance of the applications linked together as they will operate during the processing of business transactions.

Performance testing has three acceptance criteria:

i. 100 percent of tests are executed.
ii. There are no open severity 1 defects and no open severity 2 defects without acceptable business workarounds.
iii. All open defects have been assigned target fix dates.

Liberty's analysis of the status of these acceptance criteria follows.

i. *Have 100 percent of the tests been executed?*

The following table provides Capgemini's report of the status of performance testing as of September 9.

Status of Performance Testing
(As of September 9)

Planned IPT Test Cases	Executed IPT Test Cases	Passed Test Cases	Failed Test Cases
200	200 (100%)	193	7

Capgemini has executed the 200 test cases, and all but seven have passed. The ones that have failed are associated with minor defects in a few specific application interfaces.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

ii. *Are there no severity 1 defects and no severity 2 defects without manual workarounds?*

Capgemini has provided Liberty with a description of the open defects. Although there are eight open defects associated with performance testing, none are severity 1 or severity 2 defects.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

iii. *Do all defects have assigned target fix dates?*

Capgemini has shown Liberty the target fix dates for all defects.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

In summary, performance testing has progressed well. A few tests that remain to be successfully completed, but none are associated with significant defects.

e. Summary of Operations Support System Testing Status and Conclusions.

Capgemini have completed most of the operations support system testing successfully. Specifically,

- User acceptance testing is complete
- The core functional testing is complete except for the need to resolve of a few minor defects

- Performance testing is also complete except for the need to resolve of a few minor defects.

However, some tests remain to be completed. In particular, FairPoint has not yet completed

- Functional testing involving
  - 23 complex (ESG) products
  - EEL, Line Sharing, and Line Splitting
  - Live network testing
  - Regulatory performance reporting
- CLEC testing for both EDI and GUI functionality.

In addition,

- Testing has revealed missing functionality in the systems design that will be needed in some form (automated or through a manual process) at cutover
- Manual workarounds for this missing system functionality combined with that for other software defects will require more than 100 additional full time equivalent employees
- Liberty has observed testing results that indicate that the systems may be affected by the large volume of system change activity, thereby obscuring the testing results
- CLECs have raised a number of issues regarding the functionality of the CLEC interface and FairPoint's policies and plans.

Liberty therefore concludes that FairPoint has not yet been able to demonstrate that it is meeting all the acceptance criteria for operations support systems testing.

2. Data Conversion.

Data conversion testing involves the testing of automated procedures for converting the data extracts from Verizon's source systems into the new FairPoint systems. The Verizon data extract that is being used for this testing was received by FairPoint on February 29.

Data conversion has four acceptance criteria:

i. 100 percent of tests are executed.
ii. There are no open severity 1 or severity 2 defects without acceptable automated or manual data correction tasks defined.
iii. Required manual data correction tasks are subsequently tracked under method and procedure development.
iv. Target systems capacity use not to exceed 70 percent as measured after loading converted data.

Liberty's analysis of the status of these acceptance criteria follows.

i. *Have 100 percent of the tests been executed?*

The following table shows Capgemini's report of the status of data conversion testing as of September 9:

Status of Data Conversion Testing
(As of September 9)

Planned Test Cases	Executed Test Cases	Open Severity 1 Defects	Open Severity 2 Defects
323	323 (100%)	0	0

The 323 test cases include not only the original 302 planned by Capgemini but also 21 additional data conversion test cases suggested by Liberty.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

ii. *Are there no severity 1 defects and no severity 2 defects without acceptable data correction tasks?*

Capgemini reports that as of September 10 there are 10 open defects associated with data conversion testing. None of the defects are severity 1 or severity 2 defects. Liberty has reviewed these defects with Capgemini and concurs with the severity level classification. The defects are associated with errors in the creation of a small number of individual fields in the data loaded into the application software. This situation occurs for various reasons, such as differences between the data structure in the FairPoint and Verizon systems and occasional missing or duplicate fields in the Verizon data. Liberty's review of these defects indicates that they affect a relatively small amount of data and can be addressed through either automated or manual processes, usually using other Verizon-supplied data as the basis for correcting the missing data.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

iii. *Have all manual data correction tasks been incorporated into methods and procedures development and tracked?*

Capgemini and FairPoint have provided information to Liberty showing that the manual data correction tasks required for the data conversion defects if they are not fixed by cutover have been identified and documented.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

iv. *Is usage of the target system capacity after loading converted data 70 percent or less?*

Capgemini and FairPoint have shown Liberty that there are 48 terabytes of available storage in the target systems and that only 20 terabytes will be required for data conversion and other cutover requirements.

Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

v. *Summary of Data Conversion Status and Conclusions.*

Capgemini has nearly completed data conversion testing. There remain only 10 minor defects to resolve. Capgemini has identified and documented the data correction tasks required for the data conversion defects if they are not fixed by cutover. In addition, the FairPoint systems have sufficient capacity to accept the converted data and operate properly. Therefore, based on the information Liberty has at this time, Liberty concludes that FairPoint has demonstrated they have met all the cutover acceptance criteria for data conversion.

3. Business Processes

There is one cutover readiness acceptance criterion for business processes:

i. 100 percent of key policies, processes, scripts, and methods and procedures are documented, reviewed, and approved by FairPoint senior management or their designees.

Liberty's analysis of the status of this criterion follows.

i. *Has FairPoint completed documentation and internal approval of 100 percent of the key policies, processes, scripts, and methods and procedures?*

FairPoint has continued to make progress in identifying and documenting its key business processes. The FairPoint cross-departmental teams formed to inventory the processes have now identified additional key policies, processes, scripts, and methods and procedures besides those noted in Liberty's August report. The number of such documents is now 897, as compared to 673 at the time of Liberty's August report.

FairPoint reports that it has documented and obtained internal approval for all 897 key policies, processes, scripts, and methods and procedures. Liberty reviewed a sample of these documents and provided comments to FairPoint. Liberty's review of this sample indicates that they are of variable quality and completeness. Liberty has recommended that a number of those that have been approved be rewritten and reevaluated. Liberty is continuing to review these business process documents. As of September 5, Liberty had reviewed 110 documents (12 percent of the total) that FairPoint indicated were in final approved form. Liberty found over half of them (57 percent) to be deficient in some way. Liberty has also identified and noted to FairPoint key processes that are missing. Some of these missing processes were identified by Liberty as part of live test cases observations. The execution of some of the business scenarios associated with these test cases require

manual processes to complete, and Liberty found some of these processes either to be undocumented or their documentation to be incomplete or inadequate. Examples of the processes exhibiting these deficiencies include some of the provisioning processes for complex orders and the application of taxes to bills.

The FairPoint cross-departmental teams have also begun executing business simulation testing based on the processes identified and using the new Capgemini-developed systems. FairPoint is using this testing to verify both the manual and automated process steps and to assure that the logic in the newly developed systems is consistent with FairPoint's business processes and policies. Liberty observed some of the business simulation sessions and found that they are providing very valuable information to FairPoint. Nevertheless, they are proceeding slowly. Some, like those for E911 and wholesale, have not yet begun. FairPoint plans to continue to conduct this business simulation work until cutover, which Liberty agrees is advisable. However, Liberty is concerned that the simulations that have already been performed are still uncovering a number of defects and missing features in the systems and processes. Many of these defects and missing features are minor or not critical to the business, but many of the more significant ones appear to have the potential to affect the accuracy of such functions as order processing, trouble administration, and billing.

Liberty notes that FairPoint engaged a third party to perform a review and analysis of its business process documentation. This independent review began on September 8; Liberty agrees that this review will be valuable for improving the quality of FairPoint's business process documentation. However, despite the fact that FairPoint has made strong progress over the last month, Liberty does not believe that the quality and completeness of the business process documentation is sufficient for FairPoint to demonstrate compliance with the business process cutover criterion at this time.

ii. *Summary of Status and Conclusions on Business Processes.*

FairPoint has expended a large amount of effort in the last two months to identify and document its key business processes. However, Liberty's analysis indicates that there is more to do in assuring that all key business processes have been identified and that the documentation is complete and accurate. Liberty's review of a sample of business process documents that had been designated as complete indicated that more than half were still inadequate. Therefore, FairPoint has not yet demonstrated it has satisfied the cutover readiness criterion for business processes.

4. Staffing.

There is one cutover readiness acceptance criterion for staffing:

- 100 percent of key positions are filled.

Liberty's analysis of the status of this criterion follows.

i. *Has FairPoint filled 100 percent of the key staff positions?*

FairPoint has identified 238 key positions out of a total of 1,060 positions that were open on June 1. This is eight more key positions than FairPoint had identified at the time of Liberty's August monitoring report.

As of September 5, FairPoint had filled 564 of the 1,060 open positions (53 percent). At the same time, FairPoint had filled 101 (42 percent) of the 238 key open positions, leaving 137 yet to be filled. The status of these 137 positions is as follows:

Hired associates who are trained or in training	19
Associates identified for transfers	35
Management position offers accepted	15
Additional positions to fill by the end of Sept.	68
Total	137

FairPoint plans to fill 201 additional open positions that it has not designated as key positions by the end of September. Some of these additional positions will be filled through internal transfers.

In total, FairPoint expects to have a total of 176 internal transfers (both into key and into other open positions). These transfers will cause other positions to be vacated. Some of these vacated positions are also key positions. FairPoint has identified 35 such vacated positions as key, and has indicated that it plans to refill them by the end of September. However, Liberty notes that 90 of these vacated positions that will need to be refilled are for splice-service technicians and outside plant technicians to fill by internal transfers. FairPoint has not designated any of these 90 positions as key. In light of the recent history of service problems in northern New England in the last few years, Liberty believes this designation needs to be reevaluated.

ii. *Summary of Status and Conclusions on Staffing.*

FairPoint has made significant progress in staffing, and has plans to complete the staffing of key positions by the end of September. Nevertheless, many key positions remain unfilled currently, and Liberty believes that some additional key positions will still need to be refilled. Furthermore, Liberty believes that the number of key positions that will require refilling is larger than FairPoint is currently projecting. Liberty also notes that it is necessary to fill these positions by the time FairPoint provides evidence of its readiness for cutover in order to have enough time for system and job function training in the new position before cutover. Therefore, FairPoint has not yet demonstrated it has satisfied the cutover readiness criterion for business processes.

5. Training.

There are four cutover readiness acceptance criteria for staff training:

- 100 percent of train-the-trainer courses executed and the results approved.
- Final version of training documentation delivered, reviewed and approved.
- Planned training courses are completed with 90 percent of students demonstrating proficiency.
- The remaining training courses have time allotted to absorb additional training if needed.

Liberty's analysis of the status of these criteria follows.

i. *Has FairPoint completed 100 percent of the train-the-trainer courses with approved results?*

FairPoint established "train-the-trainer" sessions for Capgemini to provide information on FairPoint's new systems to the trainers supplied by UIT (the contractor FairPoint has hired to conduct the staff training). FairPoint planned and has successfully conducted the 13 of these sessions that were planned. The trainers and course developers are obtaining additional information through "test teaches," which are early trials of the course materials and through participation in the business simulations FairPoint is conducting. Based on the information Liberty has at this time, it appears FairPoint has demonstrated that it has satisfied this criterion.

ii. *Has FairPoint completed the final version of training documentation and has this documentation been reviewed and approved?*

Liberty has reviewed a sample of the training documentation that FairPoint has developed. The training materials appear to be generally adequate to serve their purpose; however, most still have portions under development. This is not surprising because the systems are just now reaching a relatively stable condition as the majority of the systems testing has now been accomplished and the large backlog of defects are being fixed. In addition, the trainers and course developers are using the business simulations and test teaches to complete the development of the materials, and these sessions are still in the early stages of their progress. Given the status of training documentation, it appears that FairPoint has not yet demonstrated that it has satisfied this cutover criterion.

iii. *Has FairPoint completed all training courses planned to date with 90 percent proficiency demonstrated by the students?*

FairPoint has conducted a few trial sessions of some of the course material (test teaches); however, most courses have not yet been trialed. Some of the trials are not planned until October. Liberty attended portions of the test teaches for customer service representatives, for network operations center employees, and for outside plant engineers. Liberty found these courses to be well constructed and the instructors to be generally knowledgeable and effective. However, Liberty has no direct information on how well the students were able to absorb the material. In addition, the number of such course that have been conducted so far is too small for Liberty to make a conclusive judgment of

their effectiveness. Therefore, it appears that FairPoint has not yet demonstrated that it has satisfied this cutover criterion.

iv. Do the additional courses have time allotted to absorb additional training as needed?

FairPoint is planning 366 training sessions; however, the training materials are not yet complete for these sessions. Liberty does not believe it is reasonable to conclude that there will be enough time to complete the planned training sessions successfully before a cutover at the end of November. FairPoint gave Liberty its most recent training schedule on September 11. According to this schedule, some training is scheduled to begin as early as September 18, despite the incomplete state of the training materials. FairPoint indicates that it can address any missing components in later "waves" of testing closer to cutover, during which it can retrain employees who took the earlier courses. However, FairPoint's plan does not allow for all business functions to follow this waved approach, and it appears to Liberty that the schedule for training is unrealistically short. Liberty believes that FairPoint's approach to training is fundamentally sound, and that it should not be compromised by rushing through the execution of the training. Therefore, it appears that FairPoint has not yet demonstrated that it has satisfied this cutover criterion.

v. *Summary of Status and Conclusions on Training.*

In summary, FairPoint has been doing a good job in planning for training; the trainers they have hired through UIT appear to be professional and well-informed. The early versions of the training materials Liberty has reviewed appear to be adequate, although they still represent works in progress. However, training necessarily occurs at the end of a long process, after completion of initial system development, process development, system and process testing, and defect fixing. Given the delays in completing these prerequisites, FairPoint has not yet demonstrated that it has met the cutover readiness criteria for testing.

Overall Conclusions

FairPoint has made substantial progress in its cutover readiness over the last two months and a number of the cutover criteria have been satisfied. These include:

- Completion of user acceptance testing
- Completion of the core functional testing except for a small number of defects that remain to be fixed
- Completion of performance testing except for a small number of defects that remain to be fixed.

In addition, FairPoint has made progress in identifying and documenting key business processes, developing a staffing plan, and developing training materials.

However, in Liberty's judgment, a significant number of requirements still remain to be satisfied, particularly in the areas of business processes, staffing, and training. In addition, although Capgemini has made substantial progress in developing, testing, correcting, and stabilizing the operations support systems, Liberty believes that material systems issues remain to be resolved as well. The remaining open issues include:

- Tests of functionality that have not yet been executed
- Incomplete CLEC testing and other CLEC issues that remain to be resolved
- Functionality that is needed for cutover (but not included in the original systems design) that has not yet been developed and some not even planned to be completed for cutover. Furthermore, manual workarounds to provide this functionality will require more than 100 FTE
- Inadequate and incomplete business process documentation
- Incomplete staffing of key positions
- Incomplete training materials and insufficient time remaining before the end of November to complete these materials and conduct the training.

FairPoint and Capgemini have accomplished a great deal to date and have come close to the goal of demonstrating readiness for cutover. However, much progress has happened recently, which means that there has been uncomfortably little time for those involved to take stock of where they are and what might be missing. Liberty believes that all the piece parts of this very complicated development have yet to completely come together. As a result, FairPoint has not yet adequately demonstrated its readiness to issue an irrevocable notice of readiness for cutover.