

**FairPoint Cutover Monitoring
Status Report
The Liberty Consulting Group
November 12, 2008**

Introduction

As part of the transaction through which FairPoint Communications Inc. (“FairPoint”) assumed ownership of the wireline business of Verizon Communications Inc. (“Verizon”) in northern New England, Verizon agreed to continue to provide access to Verizon’s operations support systems and other centralized services through a Transition Services Agreement (“TSA”). Starting a number of months before the close of this transaction, FairPoint’s systems vendor, Capgemini, has been developing and testing operations support systems, and FairPoint has been developing and testing business processes, and hiring and training personnel, to replace the systems and processes Verizon has been providing under the TSA. The staffs of the Maine Public Utilities Commission, the New Hampshire Public Utilities Commission, and the Vermont Department of Public Service (“Staffs”) have engaged the Liberty Consulting Group (“Liberty”) to monitor FairPoint’s progress in preparing to “cutover” from Verizon’s systems and processes and to provide an on-going assessment of FairPoint’s readiness to cutover. The scope statement for the monitoring engagement specifies that Liberty will provide monthly reports of the cutover status to the Staffs. Liberty has previously provided such reports in December 2007 and in January, February, March, April, May, June, July, August, September, and October 2008.

Since the close of the FairPoint-Verizon transaction, FairPoint has made several revisions in its projected cutover date. The latest revision, announced on September 15, 2008, projected that FairPoint would cutover from Verizon’s systems at the end of January 2009. The terms of the TSA with Verizon require FairPoint to provide an irrevocable notice of readiness to cutover at least 60 days prior to the cutover date, which means a cutover readiness notice by late November in order to meet a January cutover date.

Liberty’s review of FairPoint’s cutover readiness focuses on the specific criteria FairPoint developed as part of its Cutover Readiness Verification Plan.¹ Liberty’s October monthly monitoring report concluded that FairPoint had not yet demonstrated it had satisfied all the criteria for cutover readiness, but was making substantial progress in doing so, and appeared to be on track for demonstrating cutover readiness by November if the current momentum continued.

¹ 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.

In this report, Liberty offers its conclusion that FairPoint has continued to make progress, and has satisfied the cutover criteria in all but a few areas, which are CLEC testing, business process development, and training. Furthermore, Liberty believes that the status of business process development and training is sufficiently advanced that the lack of full satisfaction of the related cutover readiness criteria does not constitute a significant impediment to FairPoint's declaring cutover readiness. FairPoint may also be able to demonstrate sufficient satisfaction of the CLEC testing cutover criteria in a few more weeks, with continued diligence by FairPoint and full cooperation from the wholesale customers.

Overview of Recent Monitoring Activities

Since the last monitoring report issued October 10, 2008, Liberty has continued to monitor FairPoint's progress through frequent communications with FairPoint and examination of data and other information FairPoint has provided. As part of this examination, Liberty observed business simulations run by FairPoint personnel, with assistance from Capgemini, at the Capgemini offices in Atlanta, GA from October 27 through October 30. Liberty also responded to questions related to cutover status at the Vermont Public Service Board workshop on October 16, and has held weekly briefing calls with the Staffs. Liberty also participated in FairPoint Wholesale User Forum sessions, held on October 22, October 30, and November 7 via webex.

Analysis of FairPoint's Cutover Readiness Status

Consistent with the approach taken in the September and October monitoring reports, Liberty examines in this report whether FairPoint has demonstrated it has met each of the criteria for readiness defined in FairPoint's Cutover Readiness Verification Plan. As noted in Liberty's August 15, 2008 Cutover Readiness Verification Plan Assessment, 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: (a) to correctly accept the data extracted from Verizon's systems as will be necessary to operate FairPoint's business, and (b) 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.

Liberty concluded in its Cutover Readiness Verification Plan Assessment that the overall cutover readiness verification plan and criteria would be sufficient to indicate that

FairPoint has followed the steps necessary to significantly reduce the customer-affecting issues that may arise as a result of the cutover process. Nevertheless, Liberty noted that no verification process or monitoring process can guarantee that there will be no impacts on customers during or after the cutover. In fact, this transition is of such magnitude and complexity that some issues are very likely to arise as a result of the cutover.

The analysis in this report is based on information provided to Liberty as of November 10.

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. Capgemini has developed a set of test cases of specific transactions that the operations support systems must be capable of executing in each of these four areas.

In an effort to help the testing proceed expeditiously, Capgemini has created a number of different testing “environments,” each of which included separate instances of the software subject to testing and placed on separate processors with varying capacities. This approach has allowed Capgemini to simultaneously conduct tests of various types, including both operations support system tests and tests of the routines for converting the data to be transferred from Verizon at cutover. Despite the possible advantages of this approach, its implementation requires great care. It requires Capgemini to maintain uniform versions of the software during testing despite the frequent introduction of changes to add missing functionality and to correct defects identified through the testing process. In addition, two other types of changes that occurred during the testing process have affected the testing environments. First, Capgemini gradually introduced a more complete set (“mock”) of the underlying data converted from the test data extracts received from Verizon’s systems. Second, Capgemini gradually introduced a more complete version of the “product catalogue,” which contains all the characteristics (*e.g.*, Universal Service Order Codes, terms and conditions, and prices) of the products that FairPoint offers. While these changes were happening, different testing environments were often using different data mocks and product catalogue versions, which made it difficult to compare the results of tests run in different environments. Finally, some of the testing environments, such as that used for CLEC testing, were intentionally designed to restrict access only to a subset of the operations support system applications and data. In the case of CLEC testing, Liberty observes that some of these restrictions have hampered the effectiveness and efficiency of the testing.

Liberty’s past monthly reports have noted cases of inconsistent testing results. In particular, Liberty has made live observations of test cases considered successfully passed by Capgemini, although producing incorrect results. Liberty considers one cause of these observed incorrect results to be the complexity of maintaining consistency in the various testing environments in the midst of a very large system development and defect

correction effort, which generated frequent software changes. A development effort of this size and complexity certainly necessitates maintaining different versions of the software. However, it appears that Capgemini may have erred on the side of too much complexity by introducing such a large number of different testing environments that must be kept consistent.

Another possible source of the difference Liberty has occasionally found between reported and observed testing results is the large number of developers and testers on the Capgemini team. This team size is a necessary by-product of the size and complexity of this effort. Liberty has uncovered a few instances in which a tester failed to note that some testing results were incorrect, and improperly found the test to be passed, despite the testing review process Capgemini has introduced. FairPoint's on-going business simulation testing of its systems and processes is serving as a good second check to identify some of these testing errors.

In assessing the results of testing, Liberty has relied principally on results reported by Capgemini and FairPoint. However, Liberty has also observed samples of test cases run live or copies of the output of test cases. Liberty did so in order to assess the accuracy of the reported testing results. This was one means through which Liberty has uncovered the discrepancies noted above. The number of discrepancies Liberty has observed has decreased significantly over time and Liberty's latest observations have uncovered no errors. However, it is important to note that the number of test cases that Liberty has been able to observe is necessarily limited. Therefore, Liberty's recent observations are no guarantee that the reported results are completely free of errors, although Liberty believes that the number of such errors is likely to be small.

It is also important to emphasize that it is not feasible for Capgemini and FairPoint to test every possible scenario. The key question is whether a set of tests has been run successfully which is sufficient to minimize the likelihood of significant failures after cutover. Liberty understands that FairPoint plans to continue testing until a few weeks before cutover. At that time, the systems will need to be frozen in order to be prepared for production. This continued testing should further reduce the probability of serious failures at cutover.

Liberty addresses in more detail each of the four sub-components of operational support systems testing below.

a. Functional Testing.

Functional testing consists of a hierarchy of test cases, beginning with unit, product, and integration test cases, which test individual applications (*e.g.*, retail billing) and pairs of linked applications. Liberty's earlier monthly reports have noted that Capgemini successfully completed testing at these levels by early August.

At the highest functional testing level are the system test cases, which involve tests of several linked systems, including test cases for end-to-end system processes. Capgemini

developed a core set of 1,157 system test cases representing 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. In addition to this core test case set, Capgemini and FairPoint are conducting additional tests to fill remaining gaps in the test coverage. These additional tests are:

- E911 automatic location 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 Centrex, PBX trunks and DDS services
- Additional wholesale transactions, including: mechanized loop testing (“MLT”) using the wholesale user interface; 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 connection with functional testing in FairPoint’s Cutover Readiness Verification Plan:

- 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 (functional, 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?*

On September 16, Capgemini reported that it had completed the testing of the core system test cases with all passing, as shown in the following table.

***Core System Test Case Execution Status
(As of September 16)***

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%)	304	0
Retail Ordering and Service Fulfillment (more complex)	30	30 (100%)	30	0
Wholesale Ordering and Service Fulfillment	534	534 (100%)	534	0
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%)	1,157	0

As noted above, Liberty observed a small sample of the system test cases live at the Capgemini offices in Atlanta. Liberty also examined test artifacts, such as screen shots and other output, provided by Capgemini from an additional sample of test cases. Through these means, Liberty has made a detailed examination of the results of approximately five percent of the system test cases. In the past, Liberty's observations had revealed a few cases of inconsistency in functional test case results and some retail billing issues. In order to update its assessment of this situation, Liberty performed a review of testing and billing results during the last week of October at Capgemini's offices in Atlanta. Liberty observed FairPoint personnel conduct business simulations of various different scenarios of retail and wholesale ordering and provisioning, repair, network monitoring, and billing and collections. These tests produced satisfactory results.

Liberty also found that FairPoint and Capgemini are conducting various types of additional testing besides the original functional tests noted in the table above to assure the accuracy of the billing. These types include:

- Observations of bills produced based on call usage data recently polled from a sample of FairPoint's switches in each of the three states
- Comparisons between bills produced using Verizon's current systems and FairPoint's new systems
- Detailed comparisons between the billing tables and FairPoint's tariffs and contracts
- Detailed comparisons between the taxation requirements and taxes shown on the bills

- Detailed comparisons between the bills and other regulatory requirements, such as the separation between basic and non-basic (or regulated and non-regulated) charges.

This additional round of testing has occasionally revealed minor billing errors that FairPoint has been able to quickly correct. Moreover, the number and significance of the errors is significantly less than Liberty observed in the past. Liberty believes that current testing results together with the continuing testing work that the FairPoint team will perform until cutover is sufficient to minimize the number of billing errors after cutover.

In addition to the core test cases, Liberty reviewed the status of the additional required functional test cases. The following table provides the status of the tests that do not require live network access:

***Additional Functional Test Execution Status
(As of November 7)***

Test Domain	Planned Tests	Execution Status	Execution Success
E911 Database Updates	72 scenarios	72 executed (100%)	72 passed (100%)
Additional ESG Products	63 scenarios	63 executed (100%)	63 passed (100%)
Additional Wholesale Tests	MLT	4 executed (100%)	4 passed (100%)
	Line Loss Reports	1 executed (100%)	1 passed (100%)
	DUF	3 executed (100%)	3 passed (100%)
	Line Sharing	1 executed (100%)	1 passed (100%)
	Line Splitting	1 executed (100%)	1 passed (100%)
	EEL	4 executed (100%)	4 passed (100%)
Regulatory Performance Reporting Tests	Wholesale	181 executed (100%)	181 passed (100%)
	Retail, Financial, and Other	171 executed (100%)	171 passed (100%)

This table shows that Capgemini has successfully executed all of these additional functional tests, and all have passed.

In addition to the tests noted in the table above, FairPoint has been conducting tests using in-service network elements. These tests include MLT testing of in-service lines, updating of switch translations based on service order activity, polling of switches for billing usage records, and verifying FairPoint's ability to perform surveillance and alarm

monitoring for various critical network elements. Liberty's October monitoring report discussed Liberty's review of the full set of live network test scenarios. Liberty concluded that they provide a robust set of tests, particularly when coupled with the functional testing that Capgemini has conducted using network equipment in a laboratory environment (*e.g.*, vendor laboratory test switches, routers, and multiplexers). The tests conducted to date include tests of the most critical functions, and these tests have been successful. There remain a few tests that are scheduled for completion during November; they involve the alarm monitoring of network elements that are less commonly found in FairPoint's network and testing of the security level access to these network elements by FairPoint's employees.

In summary, Capgemini and FairPoint have executed a sufficient set of functional tests, and thus FairPoint has satisfied this cutover criterion. There are a few live network test scenarios that FairPoint has scheduled to run during November. Liberty believes that FairPoint should continue to conduct these tests, but they are not necessary for demonstrating cutover readiness.

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

There are currently five open defects, none of which are severity 1 or severity 2 defects, and all of these have manual workarounds identified. Capgemini found these defects during regression testing after completion of the functional testing shown in the table on p. 6. In addition to these five defects, testing uncovered the need for certain additions to or modifications of the systems' functionality that were not included in the original design. FairPoint is addressing the need for these modifications by issuing change requests ("CRs"). Many of the CRs address improvements in system execution and usability, but are not essential for the proper execution of the business transactions. However, some CRs are essential; they will either need to be completed or have manual workarounds in place by cutover.

FairPoint reviewed the critical CRs and scheduled for earliest implementation those for which the manual workarounds would require the largest number of additional full-time equivalent (FTE) employees. The CRs designated for completion by October 31 are complete and tested. The completion of these CRs will allow FairPoint to avoid an additional 58 FTE employees. While in Atlanta during the last week of October, Liberty witnessed the successful testing of several of them. Liberty's observations included two particularly critical CRs: the implementation of improved flow-through for ESG product ordering and provisioning and the implementation of functionality to provide estimated time to repair for both retail and wholesale customers.

The following table shows the status of the remaining critical CRs:

***Critical Change Request Status
(As of November 4)***

Projected Implementation Date	FTE Required for Manual Workarounds	Development Status	Manual Workaround Defined?
After January 30, 2009	40	Under Development	Yes
Implementation Date Under Evaluation	4	Implementation Date Under Evaluation	Yes
Total	44		

Taking into account both the defects in the systems as designed and the CRs, there are no existing severity 1 defects and no severity 2 defects without defined manual workarounds. Thus, FairPoint has satisfied this evaluation 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?*

To determine whether this criterion is satisfied, it is necessary to combine the impact of the manual workarounds associated with defects in the systems as designed and the impact of the manual workarounds associated with the missing functionality critical for cutover (the critical CRs). FairPoint has estimated that slightly more than one FTE would be necessary for manual workarounds to address the five open defects associated with the systems as designed. As noted in the table above, the remaining CRs to be completed will require the use of an additional 44 FTE for manual workarounds. Thus, FairPoint has satisfied this cutover criterion based solely on the status of functional (and UAT) testing. However, as noted below, CLEC testing is not yet complete. The results of remaining CLEC testing could affect the status of this criterion, since it applies to all operational support system testing.

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

All the existing open defects and critical CRs have target fix dates, and, as noted above, functional testing is sufficiently complete, although FairPoint appropriately intends to continue testing until shortly before cutover. Thus, FairPoint has satisfied this cutover criterion.

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

All of the existing open defects and critical CRs have defined manual workarounds, and have been documented. Thus, FairPoint has satisfied this cutover criterion.

- vi. *Conclusions for Functional Testing*

Capgemini and FairPoint appropriately plan to continue various additional functional testing until shortly before cutover. Liberty believes that they have already executed a sufficient set of functional tests and with sufficient success so that FairPoint has met all the cutover criteria for functional testing, with the possible exception of the criterion on acceptable manual workarounds as discussed below in CLEC testing.

b. User Acceptance Testing.

The purpose of User Acceptance Testing (UAT) is to examine whether the FairPoint system users can successfully complete 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. Capgemini and FairPoint completed UAT during 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?*

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Liberty has obtained no additional information since then to change this conclusion. The results of UAT testing are summarized in the following table:

***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

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Liberty has obtained no additional information since then to change this conclusion.

- 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?*

This criterion applies jointly to functional, UAT, and CLEC testing. As discussed for functional testing (See p. 9 above.), FairPoint has satisfied this cutover criterion based solely on the status of functional and UAT testing. However, CLEC testing is not yet complete and the results of remaining CLEC testing could affect the status of this criterion.

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Liberty has obtained no additional information since then to change this conclusion.

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

As noted for functional testing, all of the existing open defects and critical CRs have defined manual workarounds, and have been documented. Thus, FairPoint has satisfied this cutover criterion.

- vi. *Conclusions for User Acceptance Testing*

FairPoint has satisfied all the UAT cutover acceptance criteria, with the possible exception of the criterion on acceptable manual workarounds, which is discussed below under CLEC testing.

c. CLEC Testing.

The purpose of the CLEC testing is to provide wholesale users the opportunity to interact with the new FairPoint systems to determine whether they are able to use them based on FairPoint's system specifications. FairPoint provides two forms of interface to the wholesale customers: (a) an electronic bonding interface, including the use of Electronic Data Interchange (EDI) for pre-ordering transactions; and (b) a webGUI interface. For those users requiring electronic bonding, the CLEC testing 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.

Capgemini and FairPoint have conducted extensive internal testing of wholesale transactions using the webGUI interface as part of the functional and UAT testing described above, but their testing of the EDI interface has been more limited. The requirements for electronic bonding are more stringent than those for the webGUI interface. Unless the electronic bonding message formats are correct and consistent between the wholesale user and FairPoint interfaces and all the expected fields are populated, the request messages from the wholesale user and the response and status messages from FairPoint will not be interpreted correctly. This can cause fallout, leading to failure of the transactions or the inability to interpret a response or status message. Thus, although it is important that all wholesale users have an opportunity to test transactions that are most important to their normal business operations, this is particularly true for electronic bonded users.

As noted above, Capgemini has created a number of different testing environments. The environment provided for CLEC testing is used only for this type of testing. Liberty notes that this testing environment is significantly less flexible and complete than those used for the other testing, such as internal Capgemini and FairPoint functional and UAT testing. The environment limits testing to the wholesale interface and the back-end FairPoint systems used for initial order entry and for trouble ticketing. None of the subsequent processing to complete provisioning, initiate billing, update databases, or complete the processing of trouble tickets is included in the CLEC test environment. The rationale for this is that FairPoint has thoroughly internally tested, and continues to test, this back-end processing, as described above.

More importantly, however, the source “test bed” data that can be used for the CLEC testing is highly restricted, and flexibility in running the test scenarios is very limited. For example, only a few customer accounts are available for testing and certain types of “negative” transactions, in which a CLEC would intentionally enter incorrect data and expect the transaction to reject, are constrained so that the correct reject message is not returned to the CLEC. FairPoint has worked within the confines of this restrictive CLEC testing environment to remove as many of these constraints as possible as the testing has proceeded. Nevertheless, the CLEC testing environment inevitably continues to constrain the testing.

External CLEC testing began in June. Partly because the interfaces available at that time were developed in accordance with industry standard Access Service Ordering Guidelines (“ASOG”) and Local Service Ordering Guidelines (“LSOG”) business rules that will be out of date by cutover, only NeuStar, which provides a wholesale interface as a service for CLECs, initially chose to test the EDI functionality. Later, one CLEC that maintains its own interface began EDI testing. Several CLECs volunteered to test the webGUI functionality. This testing continued until mid-September, except for a suspension for most of August in order 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.

When FairPoint published the list of CLEC test scenarios for this first round of testing, a few CLECs,² most importantly two that use the EDI interface, informed FairPoint that the test cases provided for CLEC testing did not include important scenarios typical for the operation of their business, and these CLECs proposed additional scenarios. FairPoint promised to look at the additional test scenarios and to make some available to the CLECs in future testing.

On October 13, FairPoint made testing available to both electronic bonded and webGUI users with the new LSOG 9.12.1 and ASOG 37 business rules. This new round of testing began with a set of 85 test cases, which had been used in the earlier testing. This set of test cases includes 40 ordering, 22 pre-ordering, and 23 trouble administration scenarios. Since then, FairPoint has made available 17 additional test cases selected by FairPoint from the test scenarios requested by the CLECs.

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 wholesale users do not execute all test cases that are made available to them. Instead they choose which ones they will execute among those offered by FairPoint based upon their individual business needs. FairPoint reports that as of November 6, nine wholesale users had chosen to execute test cases using the webGUI interface, and 86 of the 102 available test cases were executed by at least one webGUI tester. Seven wholesale users had chosen to execute test cases using the EDI interface, and 70 of the 102 available test cases were executed by at least one EDI tester.³ Two wholesale users have been executing test cases with both interfaces.

Although not all of the 102 available CLEC test cases have been executed by every CLEC, it appears that the wholesale users that have participated in the testing were able to execute all of the CLEC test cases offered by FairPoint that they wished to execute.⁴ However, several users have indicated that they still have not been able to run test cases that are crucial to their business. Liberty believes that this situation is particularly significant for EDI users for two reasons: (1) Capgemini and FairPoint have engaged in limited internal EDI testing, because they have used the webGUI interface to initiate transactions and receive status messages during their internal functional and UAT testing, and (2) it is important for EDI transactions to be precisely correct because of the lack of

² Liberty knows of four carriers that suggested additional scenarios to FairPoint, two of which are EDI users.

³ Twenty-three of the 102 test cases made available to the CLEC are trouble administration test cases. Because none of the wholesale users engaged in CLEC testing have indicated that they intend to use electronic bonding for trouble administration, none of the 23 trouble administration test cases will be tested using the electronic bonding interface.

⁴ All but one of the 102 test cases offered by FairPoint have been tested by at least one CLEC, either with the webGUI interface or through EDI. Liberty observed the one test scenario not chosen by the CLEC testers during its end of October observations of FairPoint's business simulation testing and found it to execute successfully.

human intervention during an EDI transaction. Hence, Liberty cannot conclude that FairPoint has satisfied this cutover criterion at the present time.

In order to satisfy this criterion, Liberty believes FairPoint must:

- Add and allow the CLECs to execute additional test cases that would provide coverage of the scenarios that are most important for EDI users; this could be accomplished through the addition of seven new test cases which some EDI users have recommended and indicated would meet their business needs and which Liberty understands FairPoint intends to introduce
- Internally test or provide a means for CLECs to test all forms of EDI response messages, including those that can originate in the back-end systems, such as rejects, jeopardy notices, provisioning completion notices, billing completion notices, and design layout records
- Provide evidence to Liberty that the CLEC testing scenarios sufficiently mirror the historical range of wholesale transactions in the northern New England states.

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

Some of the failures that CLECs have experienced in the execution of CLEC testing scenarios have resulted from errors not related to software defects, such as tester error and testing environment failures. However, the CLEC testing has uncovered some software defects. As of November 9, there were eight open defects, none of which are severity 1 or 2 defects, and FairPoint reports that all of these defects have been fixed and are ready for retesting by the CLEC testers.

FairPoint's reports, however, are at odds with reports from some wholesale users who reported testing results directly to Liberty, and Liberty has been unable to resolve these discrepancies in reported results. Because of these discrepancies, Liberty is unable to conclude that there are no additional defects remaining to be fixed. In addition, because the CLECs have not yet had an opportunity to retest the defects that FairPoint claims have been fixed and because not all tests critical to EDI users have been completed, it is possible that more defects will be uncovered. Therefore, Liberty cannot conclude that FairPoint has satisfied this cutover criterion at this time.

The non-facilities based CLECs receive from FairPoint daily files of call usage by their customers (DUF billing files), which they must be able to process successfully in order to properly bill their customers. FairPoint states that it has successfully tested its ability to create these DUF files. However, a number of CLECs have expressed concern about the format of the test DUF files received from FairPoint. FairPoint indicates that it is working on these issues with the individual CLECs that have expressed concerns. At this time Liberty is unable to assess whether FairPoint has resolved all of the DUF issues raised by the CLECs. However, because of the importance of the DUF files to the CLECs that receive them, any remaining DUF defects should be included in the list of defects that FairPoint must correct.

Liberty's September monitoring report noted that CLECs have identified that FairPoint's systems lack certain functions that are currently available through the Verizon systems. In particular, the CLECs have noted that the following functions are missing in the new FairPoint systems:

- 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
- Capability to perform bulk downloads of loop qualification information.

Since September, FairPoint has either introduced CRs to add these functions or provided other means to accomplish them. As noted in the discussion of functionality testing, FairPoint has already successfully completed the introduction and internal testing of the estimated time to repair function. The other CRs are scheduled to be completed after the planned January cutover, but FairPoint will provide workarounds until these CRs are complete. FairPoint has also opened a CR to resolve an issue that was identified by the CLECs during testing which allowed one CLEC to open trouble reports on a customer's line belonging to a different CLEC. This CR is scheduled to be implemented and tested by mid-November.

Some CLECs have recently raised objections to FairPoint's proposed hot cut process, indicating that some aspects of the process will cause problems, particularly for EDI users. In particular, FairPoint's proposed process will generate two firm order confirmations, with the second intended to be the notice to the CLEC that FairPoint is ready to proceed with the hot cut conversion. The EDI users claim receipt of a FOC as a notice of hot cut readiness is not a standard EDI process, will cause them to make significant changes in the programming of their systems, and could create other problems. The CLECs also say that the proposed FairPoint hot cut process does not include important features currently available with the Verizon process, such as the lack of a means for CLECs to provide FairPoint a notice of readiness for a scheduled hot cut. FairPoint has indicated to Liberty that it is revising the planned hot cut process to address the concerns raised by the CLECs. Liberty agrees that changes are necessary to meet the needs of the CLEC customers.

CLECs have also raised a concern about FairPoint's lack of ability to "push" the daily line loss reports to the CLECs. FairPoint has proposed to post each CLECs line loss report on the FairPoint portal requiring the CLECs to manually "pull" this data each day to obtain their report. FairPoint has indicated that this "pull" process will be an interim solution and it will provide an automated "push" of the report to the CLECs post cutover. FairPoint has not yet provided a date when this functionality will be made available. Liberty believes that the "pull" solution is an acceptable interim response to the concern; however, FairPoint should provide the CLECs a date when it will be able to "push" the reports to the CLECs.

Liberty believes that FairPoint has provided solutions to and acceptable temporary workarounds for all but one of the missing functions that CLECs have noted. The one remaining issue is for FairPoint to modify its proposed hot cut process to address the concerns CLECs have raised.

- 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?*

This criterion applies jointly to functional, UAT, and CLEC testing; therefore, the results of all this testing must be taken into account in determining the status of this criterion. Because CLEC testing is not yet complete, the possible impact of CLEC testing on this criterion cannot yet be determined. Therefore, Liberty cannot conclude that FairPoint has met this criterion at this time.

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

FairPoint has indicated that all defects have been fixed. However, given the discrepancies in the CLEC and FairPoint reported results and the fact that retesting of these defects by the CLECs and testing of additional test cases is incomplete, it is possible additional defects will be identified.

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

For the reasons given above, Liberty cannot conclude that FairPoint has met this criterion at this time.

- vi. *Additional Considerations.*

As Liberty has noted in earlier monitoring reports, the CLECs have raised some additional concerns about FairPoint's wholesale policies and procedures. However, these issues are not directly related to the cutover readiness criteria. Currently, the issue which is of interest to the largest number of CLECs appears to be how to treat orders during the "dark period" surrounding cutover. This will be the period during which Verizon's systems have been shut off and the FairPoint systems are not yet up and running. FairPoint has proposed a voluntary embargo of orders that would be due to complete during the dark period, and has offered to allow CLECs to enter orders into the webGUI that would be queued for processing after the conclusion of the dark period when FairPoint's systems come online. The main CLEC concern about queuing orders is that the lack of availability of certain pre-ordering information from the Verizon systems would cause some queued orders to reject once they are processed by FairPoint after cutover, thereby introducing significant delays in the order processing. Also, there is concern that orders placed into Verizon's systems before cutover would fail unless they can be completed by the start of the cutover period when Verizon's systems go off line.

FairPoint has requested an ordering embargo to address this issue. However, this embargo must be voluntary, because Verizon refuses to assist in facilitating the embargo by rejecting orders that have a due date during the dark period. Instead, Verizon has stated that it will accept all orders from the CLECs and will treat any that are due after cutover as “in-flight” orders.

As noted in the October monitoring report, FairPoint has issued a draft Cutover Communications Plan in an attempt to address concerns raised about the conduct of wholesale processes immediately before, during, and immediately after cutover. The CLECs have provided detailed comments on this plan and FairPoint is in the process of revising the plan for distribution to the CLECs.

vii. *Conclusions for CLEC Testing*

The CLEC testing cutover readiness acceptance criteria have not yet been met. Additional testing remains to be performed and there are discrepancies between CLEC and FairPoint reported results that must be resolved. However, FairPoint is working diligently to address the open issues, resolve the discrepancies, and make additional test cases available to address these concerns. To address the incompleteness of the CLEC testing, FairPoint should:

- Add and allow the CLECs to execute additional test cases that would provide coverage of the scenarios that are most important for EDI users
- Internally test or provide a means for CLECs to test all forms of EDI response messages, including those that can originate in the back-end systems, such as rejects, jeopardy notices, provisioning completion notices, billing completion notices, and design layout records
- Provide evidence to Liberty that the CLEC testing scenarios sufficiently mirror the historical range of wholesale transactions in the northern New England states.

In addition, FairPoint should:

- Modify its hot cut process to address the concerns raised by the CLECs, providing an acceptable workaround by cutover and a more permanent solution after cutover
- Assure that all defects are correctly identified and have assigned fix dates or acceptable workarounds, including those associated with the DUF files.

These additional tasks should be straightforward for FairPoint to accomplish, and Liberty understands that FairPoint is already working to complete them. With continued diligence and full cooperation from the wholesale customers, Liberty believes that it is feasible for FairPoint to accomplish these tasks and satisfy the CLEC testing cutover criteria in a few more weeks.

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, known as Application Performance Testing (APT), at the application level.

FairPoint completed this initial testing successfully 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?*

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion, although two test cases were still failing. Capgemini has continued the performance testing since that time; the following table shows that all of the 200 test cases have now passed.

***Status of Performance Testing
(As of November 4)***

Planned IPT Test Cases	Executed IPT Test Cases	Passed Test Cases	Failed Test Cases
200	200 (100%)	200	0

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Further testing has not revealed any change in this status.

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Further testing has not revealed any change in this status.

In summary, FairPoint has met all the criteria for performance testing.

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

FairPoint has satisfied all the operations support system testing cutover criteria, except those related to CLEC testing. Most importantly, FairPoint has not yet been able to provide sufficient testing for electronic bonded users. However, FairPoint appears to be

working diligently to resolve this and other CLEC issues, and it is possible that FairPoint could resolve these issues and complete CLEC testing within a few more weeks.

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.

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 must not 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?*

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. At that time all the planned data conversion test cases had been executed with no open severity 1 or 2 defects, as noted in the following table:

***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

Since that time, Capgemini has continued data conversion preparations. It has converted a new data extract obtained from Verizon at the end of September as a dry run for the cutover conversion. This work is still in progress; however, it appears to be going well.

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

There is currently only one open data conversion defect. This defect is not a severity 1 or 2 defect. Thus, Liberty's conclusion in the September monitoring report that this criterion is satisfied has not changed.

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Liberty has obtained no additional information since then to change this conclusion.

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

Liberty's September monitoring report concluded that FairPoint has satisfied this criterion. Liberty has obtained no additional information since then to change this conclusion.

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

FairPoint has satisfied all the criteria for data conversion testing. There remains only one minor defect to resolve. In addition, Capgemini is engaged in a dry run of the data conversion activity that will take place at cutover using a new extract from Verizon.

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?*

Liberty's September monitoring report noted that FairPoint had documented and obtained internal approval for the key policies, processes, scripts, and methods and procedures. However, Liberty also noted flaws in the documentation, and that FairPoint had engaged consultants to review, analyze, and propose improvements in the documentation.

Since the September monitoring report, FairPoint has continued the review of and revisions to the 903 key business process documents.⁵ As of November 4, FairPoint reported that all of these 903 documents had undergone revisions and been approved by senior management. FairPoint has also continued to execute business simulation testing based on the process documentation. Liberty observed the execution of a sample of business simulations during the visit to Atlanta during the last week of October. Liberty

⁵ This number is slightly different from the number reported in the October monitoring report, because of the elimination of some duplication and combination of some of the documents.

found them to provide both a very useful cross check of the process documentation and an excellent means to continue to test the new operations supports systems through execution of transactions by FairPoint personnel.

Liberty has been reviewing a sample of the revised business process documents. They show substantial improvement over the documents that existed in early September. Nevertheless, Liberty still has found non-trivial errors in 20 percent of those sampled. Liberty has provided feedback to FairPoint regarding these errors; FairPoint has responded with corrected documents. FairPoint has noted to Liberty that it will continue to update the documents as it reviews them in the context of business simulation testing and other internal reviews between now and cutover. Liberty has seen examples of other documents (besides those sampled by Liberty) for which errors were found through these internal reviews and corrected by FairPoint.

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

At this point, Liberty cannot conclude that FairPoint has fully met this cutover criterion because of the continuing updating of the business processes. However, Liberty believes that the process FairPoint is using to continually update and correct the documents is the correct approach and more realistic than what was contemplated when this cutover criterion was originally proposed. At that time, it was then assumed that all the business process documentation would be frozen at the time of cutover readiness. Liberty believes that at this point, more than two and one-half month before the planned cutover date, it is appropriate to consider whether the documentation is sufficiently complete and accurate and the process of correction and improvement has been sufficiently institutionalized. Liberty's conclusion is that this is the case and that the technical failure to meet this criterion should not be an impediment to declaring cutover readiness.

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?*

Liberty's September monitoring report noted that 137 of the 237 key positions FairPoint has identified, remained to be filled. FairPoint projected that these open positions would be filled by the end of September. FairPoint was in the process of filling many of these key positions and some of the other open positions with internal transfers. However, some of these transfers caused other key positions to be vacated. FairPoint identified 35 key positions that would be vacated by these transfers. Liberty observed that an additional 90 splice-service and outside plant technician positions would be vacated, and pointed out that many of these positions will also need to be refilled, particularly in light

of the recent history of service problems in northern New England over the last few years.

The following table shows the staffing status:

Status of Staffing

	Total	Filled As of August 31	Filled As of October 3	Filled As of November 3
Key Positions	237	96 (41%)	233 (98%)	237 (100%)
Total Positions	1,063	553 (52%)	815 (77%)	878 (83%)
FairPoint-Designated Key Positions to Backfill	35	--	18 (51%)	35 (100%)
Splice-Service and Outside Plant Technician Positions to Backfill	90	--	30 (33%)	90 (100%)

FairPoint has completed filling the key open positions, including the additional positions that Liberty identified in September. In addition, FairPoint has filled 83 percent of all open positions.⁶

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

FairPoint has demonstrated that it has satisfied the cutover criterion for staffing. All the key positions are filled.

5. Training.

There are four cutover readiness acceptance criteria for staff training:

- i. 100 percent of train-the-trainer courses executed and the results are approved.
- ii. The final version of training documentation has been delivered, reviewed and approved.
- iii. Planned training courses are completed with 90 percent of students demonstrating proficiency.
- iv. 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?*

⁶ Liberty notes that on November 7, when FairPoint announced its third quarter 2008 financial results, it also announced a hiring freeze. This information is too new for Liberty to assess its significance. However, it is important to note that this announcement does not affect the positions designated as key positions because they are already filled.

Liberty's September monitoring report concluded that FairPoint has met this criterion. Liberty has obtained no additional information since then to change this conclusion.

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

FairPoint's current training schedule calls for "waves" of training for many of the business functions. This waved approach calls for high-level overviews and systems training early in the training schedule and more extensive training closer to cutover. Most of the "waved" courses include two waves of training, but a few have three waves. A total of 40 separate courses cover training on the new systems; 15 of these are waved and 25 are not. There are an additional 11 job training courses for new employees. The following table shows the status of systems training materials:

***Status of Systems Training Documentation
(As of November 4)***

Course Type	Number of Courses	Number with Final Documentation Reviewed and Approved
Wave 1	15	7 (47 %)
Wave 2	15	0 (0 %)
Wave 3	3	0 (0 %)
Non-waved	25	3 (12 %)

Liberty has reviewed seven of the ten completed courses materials, finding them to be sufficient to provide students with a working knowledge and practical experience with the new systems that will be needed for their job functions. However, some documentation is incomplete. Therefore, FairPoint has not yet demonstrated satisfaction of this cutover criterion.

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

FairPoint's training schedule calls for a total of 336 training sessions. These are scheduled to take place between now and the currently scheduled cutover at the end of January. Earlier monitoring reports discussed Liberty's observation of a live trial version of the courses. Liberty found them to be well conducted. However, none of the final courses has yet been completed to date. Therefore, FairPoint has not yet demonstrated satisfaction of this cutover criterion.

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

Liberty's October monitoring report concluded that the current training schedule appears to allow sufficient time for retraining, assuming the main waves of training follow the schedule. Liberty has no additional information that suggests a change to this conclusion.

v. Summary of Status and Conclusions on Training.

Liberty's September monitoring report noted that 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. In spite of this handicap, FairPoint continues to do a good job in planning for training, adjusting the schedule, as needed, to coordinate with the completion of the systems and process documentation and testing. FairPoint has not yet been able to demonstrate satisfaction of two of the four training criteria; however, Liberty does not believe that this status represents a significant impediment to cutover readiness. Given FairPoint's approach to training and the quality of the training Liberty has observed to date, Liberty believes that FairPoint should be able to complete adequate training of its employees by the end of January.

Overall Conclusions

FairPoint has demonstrated satisfaction of the cutover readiness criteria in all areas except CLEC testing, business process documentation, and training. However, Liberty believes that the status of business process development and training is sufficiently advanced to support a conclusion that the lack of complete satisfaction of these cutover readiness criteria does not constitute a significant impediment to FairPoint's declaring cutover readiness. There is further work that FairPoint must complete in order to satisfy the CLEC testing cutover readiness criteria. However, with continued diligence by FairPoint and full cooperation from the wholesale customers, Liberty believes that it is feasible for FairPoint to demonstrate sufficient satisfaction of the CLEC testing cutover criteria in a few more weeks.

It is important to emphasize that no verification process or monitoring process can guarantee that there will be no impacts on customers during or after the cutover. The transition of the operations support systems and business processes from Verizon to FairPoint is of such magnitude and complexity that some issues are very likely to arise as a result of the cutover. Nevertheless, with the exception of CLEC testing, which is close to completion, Liberty believes FairPoint has completed the necessary steps to demonstrate cutover readiness. Furthermore, FairPoint prudently intends to continue the testing and checking of its systems and processes even after it has satisfied the cutover readiness criteria.