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ISSUES IN POST-ENTRY PERFORMANCE PLANNING FOR REGIONAL BELL OPERATING COMPANIES

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TABLE OF CONTENTS

TABLE OF CONTENTS – *continued*

Page

SECTION

APPENDICES

FOREWORD

The market-opening provisions of the Telecommunications Act of 1996 have forced several significant new matters to the states. Among these is the continuing regulation of the provision of wholesale services by the Incumbent Bell Operating Companies. A post entry performance plan is one method suggested by the Federal Communications Commission as a means to assure that markets remain open. This report addresses some unique issues that are presented by these plans. These issues include novel methods of regulatory review, enforcement and remedies, classic issues of performance measurement, and the need for flexibility.

Sincerely,

Raymond W. Lawton, Ph.D.
Director, NRRI
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Introduction

Performance plans in telecommunications are an emerging area of concern for all states that are served by a Regional Bell Operating Company (RBOC). As a result of a series of decisions by the Federal Communications Commission (Commission or FCC) the performance plan, while not legally required, has nonetheless become a touchstone to the Commission's approval of an application for interLATA voice and data line of business relief. The use of a performance plan and some of the other concepts inherent in the move to performance plans, however, is not unique to the RBOC efforts to lift the business restrictions. Rather, these plans are bringing to the fore some fundamental changes in way federal and state regulatory commissions address problems in the developing competitive telecommunications markets.

This report identifies some of the important issues associated with the development of these performance plans. It is not a comprehensive review of the various plans that have been developed although it relies on them for guidance. Instead, this report is a collection of short discussions of the basic questions presented by performance plans. The goal is to introduce the reader to some of the problems and concepts associated with these plans.

The central problem addressed in this report is the treatment of the RBOCs performance under the resale, unbundled network element, and interconnection requirements contained in the Telecommunications Act of 1996. All incumbent providers are required to provide these services in a non-discriminatory manner, but the RBOCs face an added requirement of a special section (Section 271) that prohibits their provision of interLATA telecommunications services until they demonstrate compliance with the market-opening requirements and further demonstrate that their applications are in the

public interest. In demonstrating that an application is in the public interest, the RBOCs have relied on wholesale performance plans. Work in New York and Texas has served as a model for the kinds of plans that satisfy this public interest review. It also is evident that these models will affect a national discussion. The following essay looks at the FCC's public interest analysis and the role that the performance plans takes in that analysis.

A larger set of issues, however, underlies the use of the performance plans. In one regard, the plans mark a transition to an alternative form of regulation. The third section of this report reviews the alternative regulatory model that underlies performance plans, self-regulation, and tries to fit it into the continuum of regulatory philosophies.

The remaining sections of the report address some of the common issues inherent in a performance plan. The fourth section addresses the fundamental problem of measurement. Plans are built on the ability to measure variables that are critical to the goal of opening and sustaining markets. This section thus looks at some of the key issues in the design and application of performance measures.

The fifth section then turns to the means of encouraging the desired behavior. The basic approach of performance plans is to impose damages or fines on the incumbent for inadequate performance. This approach raises two kinds of concerns. First, the level of monetary recovery and to whom it is paid varies with the goals of the payment structure. Fines are different from damages. Second, monetary awards do not address a deeper issue of incentives: there are likely to be a variety of motivations for compliance, and monetary penalties may not be a complete approach.

The last section addresses the question of change. Performance plans must operate in a complex and changing environment. Flexibility, therefore, is an important element of an effective plan. This section thus looks at elements in the New York and Texas approaches for the explicit and implicit manner in which they deal with complexity.

It is apparent that the efforts to develop effective plans are operating outside many of the traditional structures used by commissions to regulate dominant firm behavior.

Thus, they provide an opportunity to explore the manner in which commissions are addressing important new issues as they attempt to implement the goals of the Telecommunications Act of 1996.

The Legal Genesis of Performance Plans: Section 271's Public Interest Requirement

The need for performance plans has arisen in the context of applications for relief from the interLATA restrictions on the Regional Bell Operating Companies contained in Section 271 of the Telecommunications Act of 1996. The Act itself makes no specific provision for the use of a performance plan to assure the Bell Company's continuing compliance with the requirements of Section 271. The FCC, however, has indicated through a series of decisions that such a plan is an important element in satisfying the Commission that the market will remain open.

Statutory Provisions

For an RBOC to secure relief from the interLATA restriction contained in Section 271 of the Telecommunications Act of 1996, it must satisfy three requirements. First, it must satisfy either "Track A" or "Track B" and the fourteen point competitive check list.[1] Second, it must demonstrate compliance with the separations requirements found in Section 272.[2] Third, it must demonstrate that "the requested authorization is consistent with the public interest, convenience, and necessity,"[3] the public interest requirement. As demonstrated in the Commission's decisions in applications under Section 271, the public

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[1] 47 U.S.C. § 271(d)(3)(A). Track A requires an applicant to show that it has entered one or more binding agreements to provide access and interconnection to a nonaffiliate for residential and business customers. Track B permits an applicant to satisfy the interconnection and access requirements through a statement of generally available terms if the applicant has not received a request for access and interconnection.

[2] Id. § 271(d)(3)(B).

[3] Id. § 271(d)(3)(C).

interest requirement provides the justification for some sort of post-approval performance assurance regime.

There is little in the conference report accompanying the Telecommunications Act of 1996 to explain what was intended by the public interest requirement. The relevant provisions appeared in the Senate version of the bill that went to conference, and the conference report provides a one-sentence explanation in the description of the Senate bill as to what was intended: "[T]he Senate notes that the Commission's determination of whether the provision of the requested interLATA services is consistent with the public interest, convenience, and necessity must be based on substantial evidence on the record as a whole."[4]

The underlying Senate report provides more detail on what the Senate's approach intended, but the focus related to a provision that apparently did not survive the conference process. The report noted that the intent was to rely on the traditional meaning of the public interest standard as contained in the Communications Act of 1934 and that there was no intent to change that standard.[5] It goes on to state, however, that Senate intended to require greater scrutiny of the Commission's decisions under this section by including the "substantial evidence" standard as opposed to an "arbitrary and capricious" standard.[6] The rationale for the higher standard appeared to be a distrust of agency decision making: the Senate report states that the goals were to prevent "abuse" of the standard and to "reduce litigation and intervention by the courts by requiring the FCC to clearly articulate the evidence underlying any decision to grant or deny an application."[7] Whatever the

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[4] H.R. Conf. Rep. No. 104-458, 104 Cong., 2d Sess. 145 (1996).

[5] S. Rep. No. 104-230, 104th Cong., 1st Sess. 44 (1995).

[6] Id.

[7] Id.

concerns might have been, this aspect of the Senate's approach did not survive the legislative process.[8]

On the other hand, the Senate report gives a flavor of the general direction of the public interest requirement that was intended. The apparent intent was to permit the Federal Communications Commission to exercise its review authority under the broadly defined public interest standard (though apparently subject to more detailed support in the record).

Not surprisingly, the public interest requirement of Section 271 essentially leaves the agency with alternatives. There is a spectrum of possibilities for determining the public interest, convenience and necessity, and apart from the possibility of limited judicial review, the Commission fills the section with content. To that end, it is important then to assess the Commission's view of the public interest requirement.

The FCC's Interpretation of the Public Interest Requirement

The FCC's interpretation of the public interest requirement is contained in its Section 271 decisions. One decision denying relief[9] and two decisions approving requests detail findings the Commission relies upon in its evaluation of the public interest. In these decisions, the FCC focused on three factors—competition, a forward-looking

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[8] Whether the distinction was even meaningful is a separate question. "In facing the problem of whether there might be a significant difference between the arbitrary and capricious standard and the substantial evidence standard, Judge Friendly on one occasion wrote that 'the controversy is semantic in some degree, at least in the context of informal rulemaking ... [and lacks] dispositional importance. ... [T]he two criteria do tend to converge.'" Christopher F. Edley, Jr., Administrative Law: Rethinking Judicial Control of Bureaucracy 112 (1990), quoting Associated Indus v. Dept. of Labor, 487 F.2d 342, 350 (2d Cir. 1973).

[9] The second *BellSouth-Louisiana* decision also contains a brief discussion of the public interest analysis, but it is a summary of the *Ameritech Michigan* points. In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order CC Docket No. 98-121 (1998).

performance plan, and the lack of a pattern of discrimination—to conclude that the public interest requirement was satisfied.

Ameritech Michigan: Setting the Framework of the Public Interest Findings

In its 1997 *Ameritech Michigan* order rejecting the Bell Company's request, the FCC went to some lengths to outline the elements of a successful application. Even though the Ameritech application was deficient on the checklist items, the Commission nonetheless advised states and companies on the elements of the public interest standard.[10]

The Commission began its discussion with the philosophical structure guiding its approach. In rejecting several more narrowly defined theories offered by the parties that ranged from demonstrations of fully developed competition to the apparent effects on long distance competition,[11] it imported both its traditional approach to the public interest standard as developed by the application of other provisions in the communications statutes and the particular goals established by the 1996 Act.[12] Moreover, in rejecting the notion that checklist compliance alone would be sufficient to satisfy the Act, the Commission shifted the focus from the current condition of competition to the likelihood that markets would remain open into the future.[13] With this focus on traditional issues, the state of current competition, and the probable state of competition, the Commission then suggested several factors that it would consider relevant to the public interest analysis. It is

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[10] Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Service)In Michigan, Memorandum Opinion and Order, CC Docket No. 97-137 (Fed. Comm. Comm'n Aug. 19, 1997) (hereinafter as *Ameritech Michigan*).

[11] Id. ¶¶ 382-390.

[12] Id. ¶ 385.

[13] Id. ¶ 390.

important to note, however, that no one factor is controlling; the Bell Company's success in one area could be offset by problems in another.[14] Further, the Commission's discussion was intended to be illustrative, not determinative. The Commission left open the possibility that other issues not discussed in its advisory opinion could affect the public interest analysis.[15]

The best evidence that the public interest was being served was evidence of real competition in the market. Robust competition in both residential and business segments of the market across various platforms and geographically dispersed through large and small scale operations was the apparent ideal.[16] On the other hand, the lack of competition would not be fatal to an application if the RBOC provided the means for other companies to access Bell services by providing an open arrangement (an apparent reference to a statement of generally available terms).[17]

Second, the Commission's forward-looking emphasis was further realized in its promotion of performance monitoring. It sought to encourage two results: compliance with access and interconnection standards and benchmarking RBOC wholesale performance.[18] It also noted the importance of a self-executing mechanism for enforcement of these plans so as to avoid costly and time-consuming litigation.[19] In a similar vein, the opinion encouraged reporting requirements, detailed performance standards, as well as a self-executing enforcement plan.[20]

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[14] Id. ¶ 391.

[15] Id. ¶ 398.

[16] Id. ¶ 391.

[17] Id. ¶ 392.

[18] Id. ¶ 393.

[19] Id. ¶ 394.

[20] Id. ¶ 399.

Third, the Commission noted several factors that might affect the current or future competitive environment that might be relevant. Some of these the RBOC might have some ability to affect. For example, the company might adopt optional payment plans for non-recurring charges.[21] Alternatively, it might be adversely impacted by a showing that it engaged in a pattern of discrimination or anticompetitive behavior.[22] Other factors such as state laws or regulatory decisions could also affect adversely the competition within a state and might be used to demonstrate that the lack of competition was not the result of Bell Company activities.[23]

Although the *Ameritech Michigan* decision established a reference for the public interest analysis and provided a strong indication of the direction the Commission would like to take, it did not have real effect because it was advisory. The actual test of the approach would arise once a company had successfully navigated the shoals of Track A, the competitive checklist, and the section 272 requirements. The New York Bell Atlantic application, followed by the Texas Southwestern Bell application, provided the next extensions.

BANY and SWBT: Testing the Framework

The public interest analysis the Commission used in the *Bell Atlantic New York* (*BANY*) and *Southwestern Bell of Texas* (*SWBT*) cases focused on three factors. First, the Commission placed an emphasis on a demonstration that the market is open for competition. Second, it looked favorably on a detailed performance assurance plan. Third, it reviewed the record for a pattern of discrimination. The focus of each of these

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[21] Id. ¶ 395.

[22] Id. ¶ 397.

[23] Id. ¶ 396.

inquiries was whether the Commission believed that the competitive environment will remain open to competition following Section 271 approval.

Competition: The first factor that the Commission looked at was whether the market is open to competition. Both local and long distance competition were considered.[24] The Commission rejected a market test for competition. Further, it required some showing that the lack of competition in the local market was a function of the Bell company's behavior.[25] In the long distance market, the Commission did not need a demonstration that Bell entry would produce substantial additional benefits to consumers, relying instead on the belief that additional competition would enhance benefits as long as the local market is subject to entry.[26]

Monitoring and Enforcement: FCC analysis of performance monitoring was more detailed. The Commission stated that it encourages the use of performance monitoring and post-entry enforcement plans.[27] If this approach is used, the Commission reviews the plan for five elements.[28] First, a substantial amount must be placed at risk. In both *BANY* and *SWBT*, the amounts at risk were set at 36 percent of net revenues

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[24] Application of Bell Atlantic New York for Authorization under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295 (Fed. Comm. Comm'n 1999) at ¶¶ 427 & 328 (hereinafter as *BANY*); Application of Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of Texas, Memorandum Opinion and Order, CC Docket No. 00-65 (Fed. Comm. Comm'n 2000) at ¶¶ 419 (hereinafter as *SWBT*).

[25] BANY ¶ 427.

[26] Id. ¶ 428.

[27] Id. ¶¶429 & 430; SWBT ¶ 420.

[28] BANY ¶ 433.

calculated from federal filings.[29] (As detailed elsewhere, the method of determining payments differs.)

The penalties, however, were not intended as a stand-alone method of preventing economic breach[30] on the part of the Bell Company. The Commission thus looked to its own enforcement authority, interconnection agreements, and other legal actions to assure that incentives were set to promote compliance with performance standards.[31] The Commission further noted that increasing the size of the penalties in critical areas was important, especially since the total was distributed among enforcement of several measures.[32]

Second, the penalties must be tied to effective performance measures. These measures should be well-defined and comprehensive. Further, there should be an opportunity to expand the measures as needed.[33]

Third, the plan should provide a detailed structure for enforcement.

Fourth, the remedies should be self-executing. Waivers should be narrowly defined and subject to time limits to avoid extended litigation and its related costs.[34] Further there should be the possibility of revision if it appears that the dispute resolution process is being abused.[35]

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[29] Id. ¶ 436; SWBT ¶ 424. In New York, this amount was subsequently increased to account for concerns arising after the approval of the Section 271 application. In Texas, the amount may vary from year to year, but a floor of $225 million is imposed on the penalty structure.

[30] Economic breach occurs when it is more economic to breach the agreement than to comply. For a discussion of the economic breach problem in contracts, see Richard A. Posner, Economic Analysis of Law 105-08 (3d ed. 1986).

[31] BANY ¶ 435.

[32] BANY ¶ 437; SWBT ¶ 422.

[33] BANY ¶¶ 438 & 439; SWBT ¶ 425.

[34] BANY ¶ 441; SWBT ¶ 427.

[35] SWBT ¶ 427.

Fifth, the plan should provide for data validation and auditing. In addition to audits done as part of operational support testing, the Commission encouraged initial audits as done in New York,[36] annual reviews as done in New York,[37] and methods for improving the process as noted in the *Texas* opinion.[38]

Pattern of Discrimination: The final factor the Commission reviewed as part of its public interest analysis was anything that might demonstrate that the Bell company will frustrate the introduction of competition once it has Section 271 approval. In this regard the FCC focused on whether a pattern of discrimination exists.[39] Individual instances without the demonstration of a pattern would not be sufficient. Moreover, the Commission rejected competitors' arguments that the process should be used to force the Bell Company to open existing contracts to competitors through a "fresh look."[40]

Summary

The FCC's analysis of the public interest requirement has a forward-looking focus. It measures competitive impact not by existing market share, but rather by looking at the ability of a new entrant to access needed facilities without interference from the incumbent. Evidence of robust competition might be useful to the applicant, but it is not necessary. A performance assurance plan is a useful adjunct to the public interest analysis if it can provide additional support that the incumbent has the proper incentives to continue

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[36] BANY ¶ 442.

[37] Id.

[38] SWBT ¶ 428.

[39] BANY ¶ 444; SWBT 431.

[40] SWBT ¶ 433.

providing opportunities for entry. Finally, the analysis of other factors focuses on whether there are indications of incumbent behavior that establish a pattern of frustrating entry.

The focus on an effective performance plan presents an interesting challenge to state commissions. First, it is clear that the FCC is relying on state enforcement.[41] More importantly, the plan, as opposed to actual competition, may be the major indicator that the market will remain open. Finally, the very structure of the approved plans is significantly different from the basic, or historic, approach to monitoring markets used by state commissions. Thus, use of performance plans presents commissions with several novel problems, some of which are discussed in the next sections of this report.

[41] In the Matter of Joint Application by SBC Communications Inc. et al. For Provision of In-Region, InterLATA Services in Kansas and Oklahoma, Memorandum and Order, CC Docket No. 00217, ¶ 269 & n.828 (Jan. 22, 2001) ("These mechanisms are generally administered by state commissions and derive from authority the states have under state law or under the federal Act.).

Regulatory Structure: Moving to Self-Enforcing Plans

An explicit factor in the FCC's treatment of performance plans in its various orders is the notion that the plans be self-effecting. For regulators (and arguably the parties themselves), this notion may be somewhat foreign. Traditionally agencies have sought to impose their public policy analysis through rules and decisions requiring some sort of enforcement action by the agency to "right the wrong" if one is committed by a regulated entity. In the performance plans, however, a different conception is used. Instead of after-the-fact intervention, the agencies have approved plans establishing agreed-to payments to competitors and, in some cases, predetermined levels of fines to be paid to the state for substandard performance. This approach is materially different from either traditional or more political conceptions of the agency's role, but it appears to be an outgrowth of attempts to reconcile competing theories of those conceptions through various forms of self-regulation. As with any policy choice, however, it is a reconciliation that comes with some concerns that may mitigate its success.

The Administrative Law Problem and the Various Solutions

Expertise versus Accountability

Within the literature of administrative law, two themes have emerged to explain the agency role. One conception of the agency is that of "expert." In this role, the agency applies specialized experience and expertise to complex political problems, the solutions to which are not easily susceptible to tidy legislative solutions. The second conception is that of "political facilitator." In this role, the agency becomes a surrogate for the legislature

by assuring that both the parties who are regulated and the intended beneficiaries have an open forum to express and argue their views. Inherent in administrative law is a tension between technical requirements of reasoned decision making and political demands within a democracy for participation and expression of popular will in the outcomes of that process.[42] Not surprisingly these alternative themes have strongly influenced the methods by which an agency accomplishes its tasks.

Traditional Model

The traditional model of an administrative agency focuses on its legal characteristics and its function as an expert. The traditional model resolves the tension between administrative discretion and political demands by defining the task of the agency within narrow statutory guides. Three principles are important. First, the action of the agency is benchmarked against its statutory authority, and actions outside that authority are not permissible. The statutory authorization defines the necessary accommodation. Second, the agency's procedures must be designed to assure that the agency complies with its substantive mandate. In this regard, basic due process rights assure that the agency does not interfere with personal or property rights unless supported by substantial evidence determined by an impartial factfinder, after a hearing, and based on a record. Finally, the process must afford an opportunity for judicial review as a final check on administrative discretion. Under this constrained model, the agency operates as "a mere transmission belt for implementing legislative directives in particular cases."[43]

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[42] See generally Bruce A. Ackerman et al., The Uncertain Search for Environmental Quality 1-3 (1974). Christopher Edley divides the problem into three issues: expertise, fairness, and politics. Christopher Edley, Jr., Administrative Law: Rethinking Judicial Control of Bureaucracy passim (1990).

[43] Richard B. Stewart, The Reformation of American Administrative Law, 88 Harv. L. Rev. 1667, 1675 (1975).

The policy underlying this model is the perception of the agency as an expert system.[44] As described by James Landis, the expert agency responds to a demand for institutions "to maintain a continuing concern with and control over the economic forces which affect the life of the community."[45] In place of the inexpert judge, the agency brings flexibility and expertise. The very narrowness of the assigned task assures professionalism. Indeed, this professionalism modifies and reduces the level of judicial review.[46]

This civics book explanation of agency activities retains some appeal. A recent book concerning the treatment of science by federal agencies began with a similar assertion of the agency's role as an expert in the governmental process.

> The modern administrative agency developed largely in response to the increased technological challenges posed by the twentieth century. In fact, agencies were largely created to deal with the technical details and complex technological and scientific aspects associated with the ever-expanding federal juggernaut, especially following 1932 and Franklin Roosevelt's "New Deal." They were staffed with experts who could understand the complexities necessary to the day-to-day implementation of laws that Congress did not have the expertise or institutional competence to handle.[47]

Notably, however, much of the activity that an agency must do is to meld that competence into policy, often in areas for which Congress and states have provided only the broadest

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[44] Thomas K. McCraw, Prophets of Regulation 213-14 (1984).

[45] James M. Landis, The Administrative Process 8 (1938).

[46] Id. at 98-100 & 144.

[47] David L. Faigman, Legal Alchemy: The Use and Misuse of Science in the Law 153-54 (1999).

notions of guidance.[48] The alternative models of agency action make more explicit that political role.

Reform or Representational Model

An overtly political response to the traditional approach is suggested by the reform or representational model of agency action. Two important principles ground the reform representational model. First, the agency serves as a forum for affected parties to advance their views. Thus, the model assumes broad rights to initiate and intervene, to participate in hearings, and to appeal based on minimal standing requirements.[49] Second, it assumes that the agency will accommodate multiple views in its decision making process.[50] As Richard Stewart summarized the model, "[T]he problem of administrative procedure is to provide representation to all affected interests; the problem of substantive[51] policy is to reach equitable accommodations...; and the problem of judicial review is to ensure that agencies provide fair procedures for representation and reach fair accommodations."

Counter-Reformation Model

Any good reformation foments a counter-reformation,[52] and this is true in the area of administrative law as well. The opening the administrative process in the 1960-70s

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[48] In his discussion of the complexities of policy development in several areas involving federal administrative agencies, for example, Faigman identifies the political element that often supercedes the technical one. His discussion details the conflicting roles that administrative agencies face in acting as experts and policy makers. Id. at 153-89.

[49] Stewart, supra note 43, at 1723-56.

[50] Id. at 1756-60.

[51] Id. at 1759.

[52] Jacques Barzun, From Dawn to Decadence 271-72 (2000).

provoked a response that sought to return administrative process to its "expertise" conception. Responding to perceived over-regulation and irrational policies in favor of classes of beneficiaries, the counter-reformation sought to reduce the influence of the regulated beneficiaries by closing standing requirements and to use greater judicial scrutiny to secure more reasoned decision making on the part of the agencies.[53]

The first, limits on standing before agencies, indirectly affected the influence that potential beneficiaries might have before the regulated entities.

> If one accepts the logic of the reformation, the move to restrict access to judicial review reduces the influence of regulatory beneficiaries. The reformation expanded standing to ensure that agencies paid attention to the arguments and data submitted by citizen groups. If an agency ignores this input, a judge could determine the agency had failed to take a "hard look" at the problem before it. When citizen groups can sue, they can use the threat of seeking review as leverage in bargaining with the agency (and with the regulated entities) concerning a regulatory outcome. To the extent that the courts now prevent such groups from suing, their influence is thereby diminished.[54]

The second, rationalization of decision making, is more direct. Rather than relying on the policy interpretations offered by various parties, agencies are directed to provide reasoned analysis of the benefits and risks of various policies and to do so in sufficient detail as to survive a hard look by the courts as to the fit of facts and policy choices.[55] These requirements tend to shift the focus of regulation to economists and risk analysts and increase the cost of adopting and supporting new regulations. While some have

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[53] Sidney A. Shapiro, Administrative Law after the Counter-Reformation: Restoring Faith in Pragmatic Government, 48 Kan. L. Rev. 689, 687 (2000).

[54] Id. at 720.

[55] Id. at 707-17.

sought to roll-back the counter-reformation by attacking its factual and political choices,[56] others have sought an alternative that seeks to avoid or reconcile the conflict between the choices of expertise and representation.

Reconciliation Model

The alternative of reconciliation is premised on the validity of claims from both camps in the prior struggle.

> On the one hand, [those seeking a third way] oppose a restoration because they accept many of the criticisms of regulation posed by the counter-reformation. On the other hand, they oppose the counter-reformation's procedural solutions because they recognize, along with the restoration, that these solutions can impede activist government favored by a majority of citizens.[57]

The solution then is to look outside the traditional litigation model for a model that will provide rational responses that are nonetheless responsive to political interests. The "reconciliationists" resolve this problem through various forms of cooperative efforts designed to provide rational and necessary regulation.[58] Collaborative processes, negotiated rule making, and various forms of self-regulation are the means of carrying out those goals.

Alternative Self-Governance Regimes

If one accepts the notion that self-regulation may be a potential approach to the governance question for a problem, the next issue is to determine the appropriate flavor of the approach to use. The range of choices is significant.

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[56] Id. at 721-28.

[57] Id. at 728.

[58] Id. at 731.

Using several factors to identify different approaches, Margot Priest has identified five models.[59]

Codes of Conduct: Parties agree to adopt certain behaviors voluntarily and with little or no government supervision.

Statutory Self-Regulation: Authority is delegated to the industry to develop industry regulation. The legislature often provides for some form of reporting and other forms of accountability such as public board membership.

Firm-Defined Regulation: A firm is required by legislation or rule to adopt firm-specific procedures to regulate itself. Public involvement may vary, but government provides some monitoring of the company's efforts.

Supervised Self-Regulation: The government establishes an oversight body that supervises self-regulation. The government body remains responsible for the supervision and provides adjudicative functions.

Regulatory Self-Management: While the government sets the rules for the firm or industry, the latter is responsible for the implementation of the program.

As opposed to other methods of regulation, there are advantages and disadvantages to the use of self-regulation. On the one hand, it may be a practical way to extend the states' resources; politically it is attractive since it affords an opportunity to government to impose regulation with most of the costs borne by the regulated parties.[60]

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[59] Margot Priest, The Privatization of Regulation: Five Models of Self-Regulation, 29 Ottawa L. Rev. 233 (1997). Her work is summarized in Figure 1.

[60] Id. at 268-69.

	Example	Govt Involvmnt	Source of Power	Public Involvmt	Account-ability to Govt	Rule Making	Adjudicatn	Sanctions	Offenses	Coverage	Judicial Review
Codes of Conduct	GAP Sourcing Guidelines	None	Contract	Low	Usually none	Consensual	Usually none	None	None	Voluntary	No
Statutory Self-Reg	Bar Associatn	Govt creation	Legislative delegation	Varies	Annual reports	Internal	Internal	Fines	Usually internal	May be compulsory	Yes
Firm-Defined Reg	Clean Water Act	Govt creation	Legislation and employee contracts	Limited	Govt and firm monitoring	Firm level rules	Made at the firm level	May escalate to fines	Legal	Legislation defines; Rules tailored to firm	Yes
Supervised Self-Reg	Stock Exchange Broker Rules	Govt creation	Oversight body	Public member-ship	Annual report and monitoring	Internal	Through agency to courts	May escalate to fines	Internal and legal	Company and Regulatory	Yes
Regulatory Self-Mgmt	Canadian Auto Dealer Rules	Govt creation	Legislative delegation	None	Govt monitors performance and conduct	Govt initiated	Internal dispute resolution	Internal	Govt states; org. may enforce	Covered companies	No

Figure 1. Alternative models of self regulation. (Source: Margot Priest, "The Privatization of Regulation: Five Models of Self-Regulation," 29 Ottawa L. Rev. 233 (1997).

Further it allows greater flexibility and avoids the potentially slower political processes.[61] On the other hand, these approaches are susceptible to challenges that they constitute a facade of regulation and are prone to cronyism.[62] These claims in turn could lead to charges of under-regulation and reduced accountability.[63] Point of view thus becomes critical.

[61] Id. at 269.

[62] Id. at 271-72.

[63] Id. at 272-73.

> Take a factor such as costs. The reduced cost to government of self-regulation may be an advantage to politicians and general taxpayers; it may not be an advantage to bureaucrats who wish to increase their ambit of influence. Reducing government costs may increase costs to industry and may disproportionately affect a segment of the industry based on size, product, region or other factors. The cost of regulation may be passed on to consumers, which may also disproportionally affect certain classes of consumers.[64]

Whose ox is getting gored obviously will be important.

Priest also notes the importance of related factors to the success of a self-government effort. She notes that changes in liability rules, the imposition of duties of care to conform to rules, peer pressure, rewards, and a wide range of sanctions can serve to enhance the effectiveness of self-regulation.[65] Notably, most of these require some sort of legislative or judicial assistance. That assistance ironically appears inconsistent with the intention of all companies to self enforce.

Self Regulation

As Priest has noted, there are a variety of models of self- or limited regulation from which to choose. They range from a completely voluntary model represented by codes of conduct to the significantly defined models of regulatory self management. The approaches taken by both New York and Texas to performance plans for their incumbent Bell Companies fall basically into the model of self-regulation set out by Ayers and Braithwaite.[66]

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[64] Id. at 274.

[65] Id. at 293-95.

[66] Ian Ayers and John Braithwaite, Responsive Regulation (1992). See Appendices 1 and 2 for versions of the New York and Texas plans. Due to the dynamic nature of these plans, some features may

(continued...)

First, the plans rely on *company-specific rules*. Rather than industry wide rules, the approach is to devise rules specific to the individual company.

Second, there is *government approval of the company specific rules*. Each state went through an extended process of collaboration followed by state commission endorsement of the rules operating within the plans.

Third, *enforcement costs are internalized*. In each situation, the company is responsible for monitoring and distributing the results of the monitoring. Further, the plans are self-executing; thus, each company is responsible for reviewing and enforcing its own plan.

Fourth, *the plans contain provisions for outside observation*. In each case, the incumbent must make the data available to its wholesale customers and to the regulator.

Fifth, *there is a process for auditing the results*. In New York, for example, this process was further enhanced by replication of the data by the state regulator.

Finally, there are provisions for *enforceable sanctions*. Indeed, the whole plan in each state is built around the notion that there are predictable sanctions for less than acceptable performance. Moreover, the FCC retained the authority to challenge the ability of the companies to use the relief from the interLATA restriction if performance deteriorated to unacceptable levels.

Strengths and Weaknesses of Supervised Self-Regulation

As with any policy approach, there are debatable strengths and weaknesses to the move toward supervised self-regulation. Strengths arise out of the match of facts and incentives. Weaknesses are apparent in the potential for capture and evasion. Together they make a case for careful study as these practical policy experiments move forward.

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[66] (...continued)
have changed since the author received these versions.

In the view of Ayers and Braithwaite, the strengths of self-regulation are derived from its flexibility and alignment of goals and incentives. Rules are designed for the company, and the plans can be designed to be flexible and responsive to changes in the business environment. Likewise, the plans can be made comprehensive with respect to the particular companies to which they are addressed. Incentives are improved since the company must internalize enforcement and monitoring costs, and the regulated entity may set as its goal the successful implementation and performance of the plan (in lieu of its evasion of governmentally-imposed requirements).

That said, the approach is not a panacea for all that ails the traditional regulatory approach. First, it results in an increased number of regulatory "rules." Each company has its own set, and different interpretations may develop. The efficiency of monitoring is likely affected as well since the data collection and interpretation are made more remote. Of more general concern is the possibility of co-optation and evasion. With greater day-to-day cooperation expected, there is likely to be at least the perception that the regulated entity has too much control over the information and processes, a perception that will be shared by competitors and the public under the right conditions. Further, other similarly situated companies that are faced with different rules are likely to complain that enforcement standards that are relatively weaker or stronger lead to favoritism toward the company facing the less stringent requirements. While there are methods to mitigate these concerns, none is likely to be totally successful in removing all perceptions of problems.

At a more basic level, there are also concerns with jurisdictional authority to use an approach based on self-regulation. These problems arise in a couple of ways. First, there are procedural constraints that may prove problematic. For example, the process for negotiating an agreement and enforcing it may give rise to ex parte concerns as staff and commissioners are called upon to negotiate and agree to the appropriate standards in a

non-traditional process.[67] Second, there may be significant enforcement problems as commissions may not have the basic subject matter and monetary authority to enforce the resulting plans. As long as the plans remain voluntary, this latter problem is mitigated, but a challenge might prove fatal.

Finally, there is the question of incentives. Ayers and Braithwaite provide a sobering critique of their invention:

> A voluntary program will stop many violations that cost the company money and others that are cost neutral; it will even halt some violations that benefit the company financially in the short term, for the sake of the long-term benefit of fostering employee commitment to compliance. Recommendations that involve consequences beyond the cost neutral or short-term, however, commonly will be ignored.[68]

The role of proper design and implementation, the continuing role of government involvement, and the ability to revert to traditional forms of regulation thus all become relevant inquiries.

Looking Forward

There is increasing pressure from many quarters for state commissions to devise more effective regulatory approaches to market activities. Some is driven from the federal reliance on the states to assure that the implementation of the Act is effective. Some of this pressure results from the regulated companies, and particularly the competitors which face the need for more timely responses to critical problems. Whether the self-regulation approaches devised to address these concerns will be successful is an empirical and policy question that only time will answer.

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[67] Some states have concluded that state section 271 reviews are not contested proceedings subject to *ex parte* rules. U S WEST Comm. v Montana Dept. of Pub. Serv. Regulation, Case No. BVD 99-12 (Mt. 1st Jud. Dist. Ct. Mar. 12, 1999).

[68] Ayers and Braithwaite, supra note 66, at 106.

Performance Measurements

Performance measurements are at the center of any effective performance plan used to govern the behavior of the dominant carrier. The measurements serve as the metric for assuring that the incumbent provides wholesale service to the new entrants under sections 251 and 252 of the Act in a non-discriminatory manner. In this aspect, the measures take on the nature of service quality measures; thus, the literature on service quality is helpful in that it points to traditional factors that are important to the party that takes the service. Getting to an effective set of measures, however, requires more than an understanding of the end user's needs. Additionally, care must be taken to describe, implement, and update those measures.[69] Thus, the necessary use of performance measures implies a significant regulatory commitment until such time as the performance plan becomes unnecessary.

The Objectives of Performance Measurements

In the context of the post-section 271 performance plans, the effort is to assess the continuing compliance of the incumbent with the requirements of sections 251 and 252 for the provision of services to the entrants. Under those sections, the incumbent is required to provide non-discriminatory service. As the FCC has detailed this requirement, the incumbent must provide service either in parity with the same services that the incumbent provides to itself or in such a manner as to provide a competitor a meaningful opportunity to compete in those instances in which the provision of the service to the entrant does not

[69] A separate and very important issue is the statistical approach to measuring non-discrimination. For purposes of this report, however, it is assumed that the parties have a method for effectively making that determination.

have an analogue in the retail service.[70] Although the FCC has provided substantial input on what these performance standards should consider,[71] it left to the states the critical role of determining performance measure definitions and expectations as to parity requirements or benchmarks for those measures for which parity was not appropriate. These efforts appear to require the states to address several issues: scope and definition; data collection; and data assessment.

Scope and Definition

Performance measurements in the context of performance plans focus on the needs of the end user. In this sense they are similar to the quality of service requirements commissions are familiar with in the retail area. "Quality of service measurements help the telecommunications service or network provider to gauge customers' perceptions of service."[72] In the retail area, the goal is to identify those areas of customer concerns and determine whether the monopoly provider is serving those interests appropriately.[73] Because there is no market check on the provision of service by a monopoly provider to its wholesale customers, clearly there is an incentive to degrade the wholesale provision of service since degradation increases the costs of the retail competitor.[74] The competitors

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[70] Frank P. Darr, Third Party Testing of Operational Support Systems: Background and Related Materials 3-8 (1999).

[71] The FCC Notice of Proposed Rulemaking provided some guidance on the various factors that the Commission thought were important, but the proceeding ultimately did not result in rules. In the Matter of Perfomrance Measurements and Reporting Requirements for Operations Support Systems, Interconnection and Operator Services and Directory Services, Notice of Proposed Rulemaking, CC Docket No. 98-56 (Apr. 17, 1998). The FCC has detailed the requirements further in the various section 271 orders.

[72] Martin P. Clark, Networks and Telecommunications 636 (2d ed. 1997).

[73] See Vivian Witkind Davis et al., Telecommunications Service Quality (1996).

[74] Cite to NRRI report; my dominance report. Peter Drucker makes a similar point on the need for performance measurement within the organization as a basis for checking behavior in situations in which

(continued...)

themselves have tried to capture this relationship between quality of service and the user experience in the preamble to their proposal for performance standards:

> A measurement plan, capable of monitoring for discriminatory behavior, must incorporate at least the following characteristics: 1) it permits direct comparisons of the CLEC [Competitive Local Exchange Company] and CLEC industry experience to data of the ILEC [Incumbent Local Exchange Company] through recognized statistical procedures; 2) it accounts for potential performance variations due to differences in service and activity mix; 3) it measures not only retail services but experiences with UNEs and OSS interfaces; and 4) it produces results which demonstrate that non-discriminatory access to OSS functionality is being delivered across all interfaces in a broad range of resold services, unbundled elements and interconnection capabilities.[75]

This statement seems to be largely consistent with the notion that it is the quality of service provided to the end user that the performance measures are intended to address.

In general, three aspects of the customer experience are important: speed of response; accuracy of response; and dependability.[76] These elements then must be applied to the various components of the wholesale experience.

- Customer service focuses on the helpfulness of the incumbent's staff in providing timely and accurate responses.
- Service availability focuses on access to critical systems such as gateway availability.

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[74] (...continued)
market sanctions do not work. Peter F. Drucker, Management: Tasks, Responsibilities, Practices 158 (1973).

[75] Local Competition Users Group, Service Quality Measurements (ver. 7.0) 3-4 (Aug. 28, 1998).

[76] Katherine Brown, Performance Measurements: Improving a Valuable Tool, Speech to Qwest Regional Oversight Committee (Apr. 3, 2000) at 3-4; Clark, supra note 72, at 640.

- Measures concerning the provisioning and alteration of service focus on the incumbent's timely response to orders.
- Service reliability focuses on the availability of services once they are installed.
- Other quality measures focus on the availability and quality of the services provided and the timeliness and accuracy of billing.[77]

The goal is to focus on the end user's desired outcomes.[78]

These measures do not dictate to the incumbent how the measures are to be met. In this regard, performance measures are not internal controls. An internal control system, as its name suggests, identifies those factors that are important to the company in defining its effort at providing service. In this sense, internal controls provide internal focus, direction, and common understanding.[79] Internal controls obviously share some common features with performance plans, however, and thus may be useful as an analogy. For example, both are forms of bureaucratic rather than market control.[80] Similarly, they both rely on defined measuring processes, detailed collection of information, reporting, and accountability.[81] Two distinctions are important. First, performance measures look at the customer experience compared to that provided by the incumbent to itself; internal controls are self-imposed. Second, they are artifacts created because the law requires non-discriminatory service; internal controls reflect business needs of the company to satisfy its various political and economic constituencies.

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[77] Id. at 642-46.

[78] Harry P. Hatry, Performance Measurement 17-18 (1999). Hatry states, "Quality indicates how well a service was delivered, based on characteristics important to customers." Id. at 17. He identifies a similar set of actors: timeliness, convenience, accuracy, condition and safety of facilities, customer satisfaction with a particular item, customer satisfaction with overall service. Id.

[79] Richard Y. Chang and Paul DeYoung, Measuring Organizational Improvement 6-7 (1995).

[80] Charles W. L. Hill and Gareth R. Jones, Strategic Management 357 (2d ed. 1992).

[81] Chang and DeYoung, supra note 79, at 8-11.

Design and Selection of Measures

The design of performance measures occurs within the context of a particular system. Thus, the starting point requires a review of inputs, outputs, desired outcomes, and overall productivity.[82] One method of identifying the various elements is to prepare a causal model.[83] From this model, the evaluator will determine the relevant criteria for measurement. These criteria might include relevance to objectives, importance, simplicity, ability and cost to collect the relevant data, uniqueness of indicator, and comprehensiveness.[84]

In selecting particular indicators, several concepts are important. First, "[o]utcomes are not the same as indicators. Each outcome to be tracked must be translated into one or more outcome indicators."[85] Second, care must be taken in providing specific wording; reliance on area experts is often necessary.[86] Third, the data may define what can be measured, and the measure therefore should properly reflect that limitation.[87] Fourth, data should be collected at an appropriate level of disaggregation.[88] This idea is particularly important in the area of telecommunications if the delivery of multiple products might obscure differences among those products. Fifth, measurements need not be quantitative. Some aspects of the business may not be susceptible to measurement. In those cases,

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[82] Hatry, supra note 78, Ch. 2.

[83] Id. at 23.

[84] Id. at 58.

[85] Id. at 56. For example, the desired outcome may be timely provisioning of order confirmations. Indicators might include a statement of the acceptable interval in terms of minutes, hours, or days.

[86] Id.

[87] Id.

[88] Id. at 103-04.

some effort should be made to consider qualitative factors.[89] Finally, the measures need to focus on what is really important.

> A major potential criticism of performance measurement systems is that they focus attention on the indicators being measured. If important outcome characteristics are neglected, this can lead to misallocation of a program's resources and effort. The system needs to include a comprehensive set of indicators. This includes indicators that track undesirable outcomes.[90]

The old saying that managers manage what is measured brings out the essence of this concern and applies equally well in the regulatory context.

The translation of these criteria results in a comprehensive set of measures that address availability, timeliness, and quality of the wholesale transaction. The breadth of these factors is demonstrated in the various approaches such as those suggested by the FCC,[91] and those that have been tested or implemented.[92]

Assessing the Results of Performance Measurement[93]

The Department of Justice in its section 271 reviews has set out three basic and understandable criteria for assessing the results of performance measurement. First, the

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[89] Id. at 65-69. In those cases in which quantitative data are not available, it may be appropriate to substitute qualitative reports. "Programs should provide as much evidence as possible to backup qualitative statements." Id. at 69-70.

[90] Id. at 57.

[91] Notice of Proposed Rulemaking, supra note 71.

[92] The Appendix contains performance measures adopted in New York, Texas, and the Qwest region.

[93] For a more general discussion that expands on the criteria suggested by the Department of Justice in section 271 cases, see Hatry, supra note 78, at 223.

results should be meaningful.[94] This criterion is logically related to the suggestion above that the results should reflect what is important to the objective.

Second, the measurements should be accurate.[95] This notion may seem obvious, but it is important to remember that the collection of this information presents some significant problems for the incumbent. Apart from the incentives to overstate the success of competitors' experiences, there is the very real physical problem of converting systems to do things they were not designed to do. Audits of the performance measures, therefore, are appropriate.[96]

Third, the results should be reproducible. "Such controls permit ongoing audits and data reconciliation between the BOC and the CLEC [competitive local exchange company] and other appropriate parties, which is a critical check on the entire performance measures process."[97] As noted in a following part of this report, a performance plan might provide for just such auditing and data replication.[98] These checks are necessary to assure the continued integrity of the data and the collection process.[99] This assessment will not and should not be an attempt to assure perfection in the system. "It is important for the assessment process to respect the fact that no performance measurement system is–or ever will be– perfect. The most important question is whether the performance data are sufficiently complete, accurate, and

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[94] Brown, supra note 76, at 4-7.

[95] Id. at 8.

[96] In a related context, Hatry has suggested that care should be taken in the use of new measures in setting benchmarks for performance. Hatry, supra note 78, at 128. Competitors may raise a similar concern: to the extent that the information being collected is new to all parties, setting performance benchmarks without some experience may be risky. The benchmark may be set too low, slowing entry, or too high, generating unwarranted payments.

[97] Brown, supra note 76, at 9.

[98] See text accompanying notes 133-143 infra.

[99] Hatry, supra note 78, at 226.

consistent to document performance and support decision-making at various organizational levels. If the answer to this is positive, the system can be considered adequate."[100]

[100] Id. at 228.

Damages and Fines for Discriminatory Performance

As noted above, embedded in the performance plans are performance expectations in the form of performance measures. If the goals are not met, both the public and the wholesale customers fail to receive the expected benefits. Thus, the performance plan should provide incentives and disincentives designed to encourage the fulfilment of customer and public expectations. Policy implementation, however, can take many paths.

Damages and penalties fall into a broad category of concerns raised by policy implementation. Damages remedies traditionally have sought to compensate the injured party. Penalties, on the other hand, may have several goals including overall justice and deterrence. A deeper view of the regulatory goals, however, is needed to understand how damages and penalties can be used as part of a more complicated structure to encourage and support the goals of a performance plan.

Plan Penalty Structures[101]

The complexity of the narrower question of identifying appropriate remedies is suggested by a review of the New York and Texas performance plans. While they both contemplate payments to injured competitors, Texas also recognizes payments to the states for aggravated situations. Further, they take different approaches in developing payments to the competitors. These approaches begin to highlight the differences in outcomes generated by plan elements based on damages versus those using a more punitive approach to checking sub-standard performance.

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[101] The New York Plan is attached as Appendix 1. The Texas Plan is attached as Appendix 2.

New York Plan

The New York plan provides predefined remedies addressing several different concerns. These include methods of entry remedies to address problems that occur across an entry approach, critical measures which apply specific penalties to identified measures thought particularly important to competition, and several specialized remedies to deal with particular interests.

The method of entry remedies identify four typical entry strategies and provide for penalties if the weighted quality of service is substandard. The categories are unbundled network elements, resale, interconnection, and collocation. An annual cap of $75 million in bill credits is provided. The cap is divided among the four categories based on relative importance, and up to one-twelfth of each portion is payable each month.

To determine if payment is due, a complicated process is used. First, each measure in a particular method of entry is assigned a value of 0, -1, or -2. The values are assigned by either looking at the deviation from parity, using a calculation of permutation values that are converted to equivalents for Z scores, or through either absolute values or a table for absolute standards when the number of observations is less than 20. Scores for each measure are then weighted for relative importance. The weighted average of these scores within a method of entry is then compared against a table that contains a minimum and maximum value and the allocation of the amount assigned to the method of entry is determined. CLECs receive credits based on relative purchase share (market share) of various components of the entry strategies.

Twelve critical measures receive special treatment under the plan because of their importance to competitors. Up to $75 million is allocated for these critical measures. Measuring substandard performance is done the same way as that provided for methods of entry measures. If more than one measure is included then the submeasures are weighted using the weights from the methods of entry. Payments can occur in two situations. First, those CLECs receiving substandard performance receive bill credits if

the aggregate score is -1 or lower for a measure. Second, if a CLEC receives substandard performance for two months, the CLEC receives a credit even if the aggregate score for the measure is greater than -1.

The plan contains several measures that are described called Special Provisions. These are all relatively straightforward and deal with remedies for failures in flow through performance, non-flow through performance, hot cuts, and order management. The plan allocates $58 million for these measures.

Texas Plan

The Texas plan provides for two different types of payments. Tier 1 damages are paid to individual CLECs receiving substandard performance. Tier 2 assessments are payments to the state for continued poor performance. Each measure within a tier is assigned a relative level of importance and is treated as a high, medium or low violation, and a penalty is calculated on that basis.

Damages are paid on an occurrence basis. The number of occurrences are adjusted to balance Type 1 statistical errors. A table sets out the amount of damages to be assigned for per occurrence and per measure.

Tier 1*:* Several steps are used to calculate a CLECs damages. An appropriate statistical test (Z, modified Z, permutation or benchmark) is used to determine the out of compliance data points. The performance measures that are not in compliance are ranked by high, medium, and low importance, and within each grouping by the number of data points. Then a table is used to remove items, starting with the low importance items. (This step is used to limit the effect of Type 1 statistical errors.) The remaining items are multiplied by the damage amount.

Tier 2*:* Assessments are calculated in basically the same manner as is used for Tier 1 but are based on three consecutive months of data that show non-compliance. Payments are set by a second table and are paid to the state.

For a couple of items there is a general assessment to which the cap does not apply. These are for late and incomplete reports. Additionally late payments to the CLECs carry interest at the state's highest legal rate.

The plan contains some amendments that permit a damages calculation without reductions for randomness. These calculations are applied to unbundled network elements, digital subscriber line, collocation, and trunk blockage and installation.

The Texas plan also makes clear that the provisions paid to the CLECs are intended as liquidated damages. By its terms, the plan provides that the payments are to be treated as liquidated damages because the amounts of actual damages are difficult of calculation.

Alternative Rationales for Remedies

The plans' penalty provisions demonstrate alternative goals. On the one hand, the Tier 1 payments in Texas and the base structure of New York (which makes all payments to the CLECs) suggest that the plans have a compensatory goal. To the extent that CLECs are damaged by substandard performance by the ILEC, the incumbent will pay compensation in the form of liquidated damages. On the other hand, there appears to be a more punitive aspect of the performance plans as well. In particular, the Tier 2 remedy in Texas (which provides for payments to the state) indicates an attempt at punishment rather than compensation. It is the public that recovers. The designs of the two plans suggest more complexity than the simple formula suggested by the FCC's threshold for approving the plans that stresses deterrence. Thus, a better understanding of these plans is tied to the policies underlying compensation and damages as means to secure desired outcomes.

Private Remedies: Damages

As a general statement, the goal of damages is compensation. "The stated goal of the damages remedy is compensation of the plaintiff for legally recognized losses."[102] Compensation seeks to place the injured party in a position it would have been in but for the injury. Particularly in the case of contracts, the goal is to allow the injured party to recover its expected benefit of the bargain. This benefit may be measured in several ways such as the difference in what is promised and what is received, the value of the product not received, or the lost profits.[103]

The parties may also set the expectations for damages as a part of their agreement. This agreement can include a determination of the amount of damages that might be paid. Referred to as liquidated damages, this provision may be either a set figure for a breach or a formula.[104] Often (as suggested by the Texas' plan's provision for damages), the parties agree that the amount of damages is difficult to determine and use liquidated damages as a means to reduce the transactions costs of establishing the actual loss.[105] On the other hand, a liquidated damages remedy need not be exclusive.[106]

One critical limitation constrains the potentially oppressive use of liquidated damages. Given the relative bargaining power of parties in nearly any transaction, it is likely that a strong buyer or seller could insert a liquidated damages provision that exceeds

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[102] Dan B. Dobbs, Law of Remedies 210 (2d ed. 1993). Similarly, Fischer states, "The common practice is to award a sum of money to compensate the plaintiff for the 'damages' sustained." James M. Fischer, Understanding Remedies 5 (1999).

[103] The Uniform Commercial Code contains an organized discussion of remedies that reflects these concepts. See UCC §§ 2-703 to 2-718. The courts are directed to use the remedy that best matches the situation so as to satisfy the expectations of the injured party. UCC § 2-703, comment 1. Nearly all states have adopted these provisions to govern contracts for the sale of goods.

[104] Dobbs, supra note 102, at 812.

[105] Id. at 812-13.

[106] Fischer, supra note 102, at 758-59.

the expected loss from non-performance. The courts in their application of contract remedies, however, have long sought to avoid the assessment of penalties; the modern economic rationale for this approach is to avoid wasteful investment in attempts to avoid breach.[107] This policy of avoiding penalties has carried into the assessment of liquidated damages provisions.[108]

Private Remedies: Punitive Damages

The suggestion of penalties raises the possibility of punitive damages as a constraint on behavior as well. Punitive damages are awarded to an injured party if the conduct of the injuring party exhibited serious misconduct, malice, or reckless disregard of the interests of others.[109] Unlike compensatory damages, punitive damages when awarded to a private plaintiff seek to further an alternative goal such as punishment or deterrence.[110] For example, a court may issue a punitive damages award as a means of exacting justice in a particular case.[111] Alternatively, the goal may be to deter behavior by eliminating all profit from the activity. In an individual tort case involving a defective product, for example, a court may award punitive damages to extract the profits that would otherwise be earned because only a fraction of similarly injured parties seeks recovery.[112]

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[107] Id. at 752.

[108] Id.; Dobbs, supra note 102, at 812.

[109] Dobbs, supra note 102, at 311-12. See, generally, Fischer, supra note 102, at 694-718.

[110] Dobbs, supra note 102, at 311-12.

[111] Id. at 318-22.

[112] Id. at 322-24.

Recent Supreme Court decisions provide a constitutional check on punitive damages. In assessing punitive damages, courts and juries must be guided by stated criteria. Thus, the assessment must include a review of the defendant's conduct, the ratio of the compensatory damages to the punitive damages, and the difference between the damages and comparable civil penalties. Failure to satisfy these requirements may violate due process rights.[113]

Public Remedies: Fines and Other Sanctions

An alternative to private remedies is a public check on behavior in the form of incentives or fines or other civil or criminal sanctions. Although government may seek to provide incentives for behavior that it would like to encourage, it is likely to fine that behavior it seeks to limit. When government does seek to penalize behavior, two issues are likely to arise.[114] First, government needs to determine if the penalty is effective in producing the desired results. Second, it must determine if the penalty is just or fair. Proper remedies need to satisfy both criteria.

Government works through more than sanctions to achieve publicly desired outcomes. Information, facilitation through the removal of barriers, incentives, and penalties all play a role in government's attempts to direct private behavior.[115] When government attempts to constrain behavior, moreover, it may either set a price for

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[113] BMW of North America v. Gore, 517 U.S. 559 (1996). The Court anticipated the result in *Gore* in Pacific Mutual Life Ins. Co. v. Haslip, 499 U.S. 1 (1991).

[114] John Brigham and Don W. Brown, Introduction, in Policy Implementation: Penalties or Incentives 9 (John Brigham and Don W. Brown, eds. 1980).

[115] George I. Balch, The Stick, the Carrot, and other Strategies, in Policy Implementation: Penalties or Incentives 44-46 (John Brigham and Don W. Brown, eds. 1980).

undertaking that behavior (e.g., the purchase of pollution credits) or sanction it more directly through fines, the loss of benefits, or imprisonment.[116]

The complexity of the existing plans thus reflect the differences in goals. Private remedies such as damages seek to right the relationship or expectations between the affected parties. Penalties, either public or private, seek to express community opinions about the behavior and to constrain it through removing the benefit of the non-compliant behavior. There is no economic breach if the awards are set properly.

Remedy Plans as One Element of a Larger Solution for Performance

The use of damages or penalties, however, must be considered as part of a larger picture. The issues of effectiveness and fairness themselves present a question about both the damages and penalties in a narrow context and how they fit into the set of commission activities that might be used to direct the incumbent's behavior.

The narrow question raises the issue of effectiveness and fairness of the remedies themselves. Whether a performance plan's provisions for fines are effective might first be assessed from an economic perspective. This relatively narrow approach would measure if the fines are set at sufficiently high level so that the gains from improper behavior are removed. In such an approach, one would attempt to measure the potential gains and set the fine so that the fine is greater than the expected benefits from the malfeasance.[117] The fine would be set so that it captured the costs of the criminal act and the probability of punishment. Thus, if the expected benefit of a violation were $5 and the probability of

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[116] Robert Cooter, Prices and Sanctions, 84 Colum. L. Rev. 1523 (1984).

[117] Richard Posner, The Economic Analysis of the Law 205-206 (1986).

enforcement near one hundred percent, a fine of $5 should deter the behavior. As the probability of detection and punishment decreased, the necessary fine would increase.[118]

This economic model is subject to several limitations. First, it may be nearly impossible to assess the level of benefits caused by illegal behavior. In the context of telecommunications, for example, failure to maintain systems as required by the Act might result in both immediate and significantly delayed injuries such as customer reluctance due to neighbors' poor experiences. The delayed injuries, remote in time, may nonetheless, delay the entry benefits sought through the Act.

Second, the model suggests a nearly infinite level of penalties for violations that are difficult to detect. Practically, setting fines too high may result in wasteful efforts directed at either avoiding the possibility of a large fine or hiding the behavior.[119]

Third, the real question may not be the effectiveness of the particular measure, but its relative effectiveness when compared to alternative approaches. Government may adopt alternative regulatory strategies that are tied to the type of problem.[120] For example, government might provide tax breaks and research and development support for infrastructure to CLECs as an alternative to opening the incumbent's systems through the carrots and sticks of the Act. The choice between the two regulatory approaches would present a more accurate determination of effectiveness than simply assessing whether the threat of a fine or other sanction motivated the desired behavior.

Fourth, the use of the model fails to account for the common understanding that more than fines direct behavior. Company managers are sensitive to their good reputations. Many are sensitive to their social responsibility. Thus, the rule itself may lead

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[118] Id. at 207.

[119] Id. for a similar argument. See, also, Ayers and Braithwaite, supra note 66, at 25.

[120] Balch, supra note 115, at 44-46.

to the desired behavior.[121] As a former Internal Revenue Service commissioner noted, "If a person is an economic being and figures the odds, then there is every incentive to cheat. That is, of course, putting aside honor, duty and patriotism."[122]

This notion of alternative rationales for compliance fits nicely with the second issue of whether the penalty is fair. The economic assessment questions only effectiveness: too small a fine and it is ineffective in deterring the undesired conduct; too high a fine and it provokes wasteful behavior in either compliance costs or costs of evasion. A political assessment must also be made, one that is not encompassed in the economic one. That assessment rests on a determination that the behavior sought to be restrained is deserving of punishment, that it is wrong or unjust.[123] "[V]iewing coercion versus noncoercion as only alternative techniques obscures the moral and ethical dimension of human affairs and the role of rule making and punishment as important sources of a moral consciousness, something that the 'ethics' of economic transactions cannot provide."[124] In making that assessment, then, government is making a moral judgment. Punishment is social restitution.[125]

The Larger Enforcement Issue and a Tiered Approach to Enforcement

The broader question, however, is whether the use of damages and penalties is a complete solution in itself. From the perspective of policy development, a range of tools is available. Incentives to encourage desired behavior and disincentives to discourage

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[121] Ayers and Braithwaite, supra note 66, at 22.

[122] Wall St. J., Apr. 10, 1984.

[123] Max Neiman, The Virtues of Heavy-Handedness in Government, in Policy Implementation: Penalties or Incentives 26 (John Brigham and Don W. Brown, eds. 1980).

[124] Id. at 33.

[125] Brigham and Brown, supra note 114, at 13.

certain behavior are both relevant. Moreover, they may be in keeping with the more complicated motivations of the corporate actors than is suggested by a model built only on disincentives.

In section 271 and its implementation, examples of both the carrot and the stick are evident. On the one hand, section 271 is a form of carrot: an RBOC is permitted to enter the interLATA business if it demonstrates compliance with the section's requirements to make its infrastructure available to competitors, to establish sufficient separations between competitive and non-competitive businesses, and to demonstrate compliance with the public interest. The stick, on the other hand, is contained both in section 271's explicit terms that permit a termination of the section 271 approval if the requirements are violated and the lesser threats contained in the performance plans such as that of Texas that provides for fines paid to the state treasury if the company grossly misses performance requirements.

In their study of self-regulation, Ayers and Braithwaite also suggest the need to look beyond economic rationality to better understand the approaches regulators can use to encourage desired results. Economic rationality can explain some behavior, but it is incomplete in measuring the motivations of various actors subject to regulation.[126] Based on fieldwork and other efforts that Ayers and Braithwaite summarize, they believe that there is also a strong element of social responsibility guiding corporate actors that operates in parallel with strong economic motivations.[127] As a result, a mixed set of regulatory strategies is needed.

> [B]usiness actors exploit a strategy of persuasion and self-regulation when they are motivated by economic rationality. But a strategy

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[126] Posner and other law and economics scholars have argued that the measure of a theory is not necessarily the realism of its assumptions but rather its ability to explain or predict outcomes. Posner, supra note 117, at 206. Presumably, if the realism of its assumptions is improved, the predictive power of the theory should, although not necessarily, improve as well.

[127] Ayers and Braithwaite, supra note 66, at 24.

> based mostly on punishment will undermine the good will of actors when they are motivated by a sense of responsibility. This will be true of any version of responsibility that is construed by actors as a more noble calling than making money. When actors see themselves as pursuing a higher calling, to treat them as driven by what they see as baser motivation insults them, demotivates them[.][128]

The authors go on to note that the danger of a purely punitive approach is that it frustrates the attempt to use self-regulation. "When punishment rather than dialogue is in the foreground of regulatory encounters, it is basic to human psychology that people will find this humiliating, will resent and resist in ways that include abandoning self-regulation."[129] Policy is thus frustrated by poorly designed plans.

The solution to the problem of balancing the competing motivations is in developing a variety of tools to seek the desired outcomes. In particular, persuasion may be used to legitimize later regulatory action. "By cooperating with firms until they cheat, regulators avert the counter productivity of undermining the good faith of socially responsible actors. By getting tough with cheaters, actors are made to suffer when they are motivated by money alone; they are given reason to favor their socially responsible, law-abiding selves over their venal selves. In short, they are given reason to reform[.]"[130]

In a tiered approach, the remedy plan is only one part of a regulatory strategy. Ayers and Braithwaite, for example, describe an enforcement pyramid by which the regulator begins with attempts at moral suasion, moves to warning, and brings out penalties, suspensions, and revocation for persistent levels of non-compliance.[131] In general the regulator will seek to use persuasion to set the regulatory table. If the company

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[128] Id. at 24-25.

[129] Id. at 25.

[130] Id. at 27.

[131] Id. at 35-51.

comes into compliance, persuasion has worked. Failure to comply, however, may lead to warnings, low level penalties, suspension, and ultimately revocation. Tied to an attitude that demonstrates that the agency is willing to use the tools available to it, the agency can then create an environment in which the value of cooperation returns better results for the regulated firm than the alternatives.[132]

The implications of this approach are both profound and straight-forward. Securing effective regulation requires a range of credible tools, but the use of the more punitive should be tempered. Penalty provisions should seek to deter behavior, but should be used only when real digressions from the regulatory mandate are detected. This approach is especially important when the whole program is premised on self-regulation since self-regulation relies on the cooperative attitude of the regulated company. By the same reasoning, self-regulation does not become a rationale for the regulator's abandoning the field. Cooperation is a product of moral suasion and the appeal to higher motives, but it may be frustrated by economic calculations leading to non-compliance. Graduated and probable retaliation makes the cooperative response more compelling to the regulated company.

In practice, the beginnings of such an approach are reflected in the current practice in telecommunications regulation under the performance plans. The plans themselves set some expectations for behavior. The reporting mechanisms create an early warning system identifying when compliance is not being achieved. Actual penalties, either in increased damages paid to competitors under a New York-style plan or fines paid to the state under a Texas-style plan, occur only after a higher level of failures occurs. Moreover, the FCC has noted that the plans are part of a larger enforcement structure that carries the ultimate sanction of section 271 revocation. Thus, the basic structure is in place for a graduated approach.

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[132] Id. at 44-47.

The other component of this strategy is the application of graduated and credible responses. When faced with minor or significant deviations, commissions will have to shape their responses to the problem. The credible response may fall at different points on the pyramid. The point is that the response must be perceived by the parties as consistent with the competing goals of cooperation and constraint. This political role is not new for commissions, and when relying on increased of self-regulation it may grow in importance.

Plan Flexibility

Importance of Flexibility

Reliance on self-enforcing mechanisms for post-271 performance or compliance more generally with the requirements of section 251 also must address the question of change. Computer systems, in particular, are subject to upgrades, while the various services that are being monitored are subject to change as well. A requirement and a strength of performance plans is that they be able to adapt to new systems, new requirements, and better understanding.

In its review of performance plans in section 271 reviews, the FCC has indicated its view that self-enforcing plans adapt. In the *Oklahoma/Kansas* decision, the FCC noted the importance of review and revision of the plans so that they "provide a meaningful incentive to provide nondiscriminatory performance in the future."[133] Thus, the plans approved in the section 271 context contain elements for modification the FCC feels are important to their effectiveness.

The ability to adjust to new circumstances may also be one of the strengths of a self-regulation approach. First, individualistic plans can be adjusted quickly and more frequently. "Consensus can be reached more quickly within one firm than it can across all the firms in an industry."[134] Also supporting the ability to change quickly is that the approach is not necessarily tied to strong precedent. Neither the existing rules' effects on the plan's subject-firm or the rules' effects on other similarly situated companies would be

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[133] In re Joint Application by SBC Communications Inc. et al for Provision of In-Region InterLATA Services in Kansas and Oklahoma, Memorandum and Opinion, FCC No. 01-29 (released Jan. 22, 2001).

[134] Ayers and Braithwaite, supra note 66, at 111.

of much significance.[135] Second, change management affords an opportunity for innovation.[136] This benefit is likely to be important in telecommunications markets in which product change and regulatory requirements are in flux.

Thus, the FCC has indicated the importance of change management in its review of state public interest reviews under section 271, and one of the benefits of self regulation is that it affords the opportunity for flexible and innovative responses.

Elements for Modifying Plans

In practice, performance plans implement change management in several predictable ways. The New York and Texas approaches to change management contain some explicit and important supporting provisions. The more predictable method is the periodic review. Other provisions, however, may have the effect of introducing changes into the plans. Among these are provisions for audits, waivers and exceptions, and show cause proceedings. Together, these provisions provide a framework for adjusting the plans to new circumstances.

Periodic Reviews: One of the more obvious ways in which a commission might adjust a plan is through periodic reviews. Both the Texas and New York plans provide for conforming the plan to practice over time.

As approved by the New York commission, the New York plan provides for annual reviews. These reviews cover measures and the weights assigned them under the plan's formulas, the distribution of dollars, the possibility of geographically deaveraging the plan's measures, data clustering, small sample size procedures, and bill credit calculations.

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[135] Id. One important caveat should be noted. If similar terms are adopted by different companies, a common understanding may develop around the common language of these plans and the manner in which they are implemented. Parties looking to pre-existing plans for language may want to address explicitly the effect of changes in other regions on their own agreements.

[136] Id. at 111-12.

Despite this laundry list of potential topics, however, the plan also states that any relevant topic concerning the plan can be addressed in a review. The review commences six months before an anniversary of section 271 approval. Any changes occur with commission pre-approval.[137]

The Texas performance plan provides for six month reviews. During these reviews, the parties are tasked to discuss additions, deletions, or modifications of measures, modification of standards, and the revision of penalties. The stated goal of the reviews is two-fold: first, to capture intended performance and avoid duplicative measures; second, to reduce the total number of measures by fifty percent. The first review was scheduled to commence six months after the plan was adopted by a CLEC and approved by the Texas commission. Any changes to the plan are adopted by agreement or through an arbitration award.[138]

Audits: An audit is a second way that the implementation of the plan may change. Through an audit, the incumbent carrier may determine that the processes it is using are inaccurate. As a result, there may be changes in performance measure design, data collection, data reporting, or other matters relating to the implementation of the performance plan.[139]

The New York plan provides for annual audits for selected portions of the plan. It also provides two other checks on data production. First, the New York staff committed to replicate the performance results provided by Bell Atlantic for six months and retained the

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[137] New York Performance Assurance Plan at 19-20.

[138] Texas 271 Agreement, Attachment 17, sections 6.4 & 6.5.

[139] The author's work on the Qwest OSS test is relevant to this assertion. One of the important features of that test is the detailed audit of the performance measures. The auditors have identified several concerns with the measures that have been translated into substantive changes in the procedures and reporting performed by Qwest. See http://www.nrri.ohio-state.edu/oss/exceptions.htm. Similar changes could be expected as a result of the periodic audits of performance measures and their implementation in performance plans.

option to recommend that replication continue. Second, the CLECs retained a right to challenge the performance results provided by Bell Atlantic. If a CLEC made such a challenge, Bell Atlantic was required to hire an independent auditor. Final responsibility for the costs of the audit fell to Bell Atlantic if the auditor found material errors; otherwise, the CLEC paid.

The Texas performance plan provides for more limited auditing. It states that the ILEC and CLEC will attempt to resolve a problem with data through negotiation and failing that, after forty-five days, the CLEC may seek an independent audit at the CLECs expense. The ILEC will reimburse the CLEC if the auditor identifies a problem. The CLEC, however, may assert this right to an audit only once a year.

Exceptions, Waivers, and Show Cause Proceedings: While broad classes of problems are likely, there may also be instances that are not anticipated. For example, performance may be excused due to some form of impossibility of performance such as flood or fire that is not the result of the fault of the party seeking the excuse. Similarly, the performance plans provide for the treatment of unforeseen circumstances due to several classes of problems.

The New York plan provides that Bell Atlantic may petition for an exception or waiver in three situations. First, it allows waivers if data cluster in defined ways. For example, this waiver is permitted to avoid tripping a measure repeatedly due to the loss of a single facility. Second, it allows exceptions if the payment is the result of CLEC behavior. Third, a waiver is possible if the incumbent shows that it failed to perform measures subject to benchmark standards if the failure was due to an act of God.[140]

The Texas plan also provides for several exclusions. It contains four circumstances that may result in suspending penalties: Acts of God; CLEC behavior that is contrary to the agreement or state law; conflicts with CLEC equipment that could not be avoided by the

[140] New York Performance Assurance Plan at 17-19.

incumbent (this exception may be used only three times a year by the incumbent); and a demonstration of CLEC bad faith such as dumping orders on the incumbent.[141]

The Texas plan also contains an additional feature, a petition to show cause, that might limit or increase the amount the incumbent pays a CLEC. The incumbent may file to limit payments exceeding $3 million in a month if it can demonstrate that payment in such a case would be unjust and if it has escrowed the amount in excess of $3 million cap. The CLEC may file to increase the payment if the incumbent misses 20 percent of the measures reported to the CLEC for three consecutive months but penalties are less than $1 million if it can demonstrate that the results of the plan are unjust.[142]

Fast Track Changes: The New York plan also provides that the New York commission can make changes in the distribution of penalties on a fifteen-day notice. This provision was important in the first quarter of 2000 when Bell Atlantic apparently was losing orders submitted by CLECs. Pursuant to the notice procedure, the New York commission reassigned amounts for some of the key measures affected by lost orders.[143]

Summary

An inherent problem in any enforcement scheme is its ability to adjust to changed circumstances. A common complaint about telephone regulation in particular is that it fails to meet the changing needs of a dynamic market. One solution to that problem is to make the regulatory process more responsive to the contractual needs of the parties. As seen in the performance plans, the parties and state commissions have sought to provide some flexibility to deal with the more traditional problems that might affect enforcement such as

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[141] Texas 271 Agreement, Attachment 17, sections 7.1 and 7.2.

[142] Id., section 7.3.1.

[143] New York Performance Assurance Plan at 5.

acts of God, but have also gone beyond that to address the modification of the plans themselves. While there is some danger that the parties may seek to tie each other up in exceptions, this approach appears logical as a starting point in these dynamic markets.

Conclusions

A performance plan designed to assure continuing compliance with the requirements of Section 271 presents several serious questions for commissions. On a basic level, a state commission will be concerned with the continuing vitality of the commitments an incumbent made so that it can enter the interLATA market. In that regard, the commission will be making reasoned assessments of the appropriate regulatory tools such as investigations, audits, and penalties to pursue that outcome.

On a broader level, this research suggests that performance plans are part of a larger transitional process in the way regulation is approached. The competition between expertise and democratic values that has so bedeviled the debate about regulation does not necessarily disappear, but it is significantly reformed when commissions pursue models based on collaboration with the regulated industry, notice to the intended beneficiaries, preset standards and penalties, and defined change processes.

At this broader level, this research suggests that commissions should consider the alternative regulatory tools available to them. The notion that behavior is motivated by non-economic factors carries with it the seeds of a broader set of tools such as moral suasion. Processes are then designed to create common understandings and goals. It is in this way that effective regulation takes place. Moreover, these processes may have broader application. As various parts of the network industries become more subject to competitive pressures, the models found in performance plans and their economic and political rationales may emerge over other industries. Performance plans in telecommunications thus may provide a preview of changes in other industries.

APPENDIX 1

NEW YORK PLAN

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William D. Smith
Counsel

April 7, 2000

BY HAND

Honorable Debra Renner
Acting Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223

Re: Cases 97-C-0271 and 99-C-0949 – Compliance Filing – Performance Assurance Plan

Dear Acting Secretary Renner:

Enclosed please find an original and twenty (20) copies of the Compliance Filing of New York Telephone Company, d/b/a Bell Atlantic - New York ("BA-NY"), for the Performance Assurance Plan (the "PAP"), which is being filed pursuant to the "Order Amending Performance Assurance Plan."[1] As noted in that Order (March 9 Order at 6, n. 2), the Commission has issued a number of orders directing that modification be made to the Performance Assurance Plan,[2] including a subsequent order that required further refinements to the Performance Assurance

[1] *See* Cases 97-C-0271 and 99-C-0949, "Order Amending Performance Assurance Plan" (issued March 9, 2000) (the "March 9 Order").

[2] *See* Cases 97-C-0271 and 99-C-0949, "Order Adopting the Amended Performance Assurance Plan and Amended Change Control Plan" (issued November 3, 1999) (the "November 3 Order"); and Cases 00-C-0008, 00-C-0009 and 99-C-0949, "Ordering Directing Improvements to Wholesale Service Performance" (issued February 11, 2000) (the "February 11 Order").

Plan.[3] The annexed Performance Assurance Plan reflects each of the modifications that the Commission has directed. The amendments that have been made, according to each of the orders, are as follows:

A. The November 3 Order

1. Section II(B) has been modified to delineate the amount of bill credits available for reallocation. (November 3 Order at 7, n.9.)

2. Section II(F) has been modified to indicate that BA-NY will provide each CLEC the underlying data, in a usable format, that was used to calculate BA-NY's performance for the CLEC. (*Id.* at 30.)

3. Section II(J) has been modified to indicate that CLECs will be compensated for lost interest if BA-NY does not prevail on a waiver request. (*Id.* at 24). This section has also been modified to indicate that the Commission will resolve waiver exception requests prior to the scheduled payment period and that waiver petitions must be filed within 45 days of the last day of the month in which the challenged event occurred. CLECs will have 10 days to serve and file replies to BA-NY requested exceptions. (*Id.*)

4. Section II(A)(2) has been modified to indicate that the collocation measures encompass cageless collocation. (*Id.* at 26.)

5. Appendix A has been modified to raise the weight of the M&R Average Response Time metrics from 1 to 5. (*Id.* at 26.)

6. Appendix A has been modified to include OR-5-03 "% Flow Through Achieved" as a measure under the Resale and UNE Modes of Entry. (*Id.* at 30.)

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[3] *See* Cases 00-C-008, 00-C-0009 and 99-C-0949, "Order Directing Market Adjustments and Amending Performance Assurance Plan" (issued March 23, 2000) (the "March 23 Order").

7. Section II(K)(1) has been modified to indicate that the annual review will not be subject to limitation and that any topic legitimately related to the PAP may be raised during the annual review. (*Id.* at 31.)

B. The February 11 Order

1. Beginning with the March 2000 data, the weights within the Resale and UNE Mode of Entry Ordering Domains (Appendix A) will be modified. (February 11 Order at 3.)

a. The weights for the following metrics have been doubled:

OR-1-02 "% On Time LSRC - Flow Through - POTS";

OR-1-04 "% On Time LSRC < 10 lines (No Flow Through) POTS";

OR-1-06 "% On Time LSRC >= 10 Lines - Flow Through - POTS";

OR-2-02 "% On Time LSR Reject - Flow Through - POTS";

OR-2-04 "% On Time Reject < 10 Lines (No Flow Through)";

OR-2-06 "% On Time LSR Reject >= 10 Lines (No Flow Through) - POTS"; and

OR-4-02 "Completion Notice - % On Time - POTS and Specials."

b. The weights for the metrics listed below for the UNE Mode of Entry measures (Appendix A) have been reduced to 0:

OR-1-04 "% On Time LSRC < 10 Lines (Electronic - No Flow Through Complex)";

OR-1-06 "% On Time LSRC > 10 Lines (Electronic) – Complex";

OR-2-04 "% On Time LSR Reject < 10 Lines (Electronic – No Flow Through Complex"); and

OR-2-06 "% On Time LSR Reject > 10 Lines (Electronic) - Complex."

c. The weight of OR-6-03 "% On Time Accuracy" is reduced to 10.

2. In the Critical Measure section (Section II(A)(2) and Appendix B), Measure No. 3, OR-6-03 "% On Time Accuracy LSRC," has been replaced with the metrics that were doubled in the MOE categories listed above in section B(1)(a), and the bill credits allocated to Measure No. 3 have been allocated according to the weight of each measure. (*Id.*)

C. The March 9 Order

1. In the Critical Measure section, Critical Measure No. 4b, "% Missed Appointment – Complex,"[4] has been deleted, and a new Critical Measure No. 12 consisting of the following measures related to the provisioning of DSL Services has been included (March 9 Order at 5-6):

a. PO-8-01 "Manual Loop Qualification Response Time" and PO-8-02 "Engineering Record Request Response Time";

b. PR-4-14 through PR-4-18 – Missed Appointment metrics for DSL Services; and

c. PR-6-01 "Installation Troubles for DSL capable loops reported within 30 days."

2. The DSL Critical Measure No. 12 bill credits will be funded from the other Critical Measures and each of the twelve Critical Measures set forth in Appendix B will be allocated the amount of $354,167 per month. PO-8-01, PO-8-02 and PR-6-01 have each been allocated 12.5% of the available bill credits in Appendix B and the five PR-4 submetrics have been allocated 62.5% of the available bill credits in Appendix B. (*Id.* at 6.)

3. The Critical Measures section has been modified to indicate that all bill credits in this section are at risk each month; and that any bill credits assigned to a submetric

[4] Critical Measure No. 4b included PR-4-04 "% Missed Appointment – Dispatch – Complex" and PR-4-05 "% Missed Appointment No Dispatch – Complex."

which has no activity or is under development will be divided proportionately among the submetrics in that Critical Measure. (*Id.* at 6.)

D. The March 23 Order

1. Measure OR-4-02, which appears in the Resale and UNE MOE categories, has been replaced with a new measure for billing completion notices: OR-4-09 "% SOP to Bill Completion Notice Sent Within 3 Business Days." (March 23 Order at 4.) (A copy of the measure is included in Appendix I.) The measure has a standard of 95%.

2. Section II(E) has been modified to add three new Special Provisions for the three measures that were included in the Federal Communications Commission Order and Consent Decree.[5] (March 23 Order at 4.) A total of $24 million has been allocated to these new measures. The new measures and bill credit monthly allocation are as follows:

a. "% Missing Notifier Trouble Ticket PONs Cleared within 3 Business Days" - $1 Million;

b. "% Order Confirmations/Rejects Sent Within 3 Business Days" - $0.5 Million; and

c. "% SOP to Bill Completion Notice Sent within 3 Business Days" - $0.5 Million.

3. Each of the new Special Provision measures will record the combined performance for the Resale and UNE MOEs, with an equal weighting to Resale and UNE orders. A 90% performance standard will be applied to each. (*Id.*) The new measure "% Missing Notifier Trouble Ticket PONs Cleared within 3 Business Days" will also be subject to the requirement that no more than 5% of the orders resubmitted may be rejected as duplicates. (*Id.*)

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[5] *In the Matter of Bell Atlantic - New York Authorization Under Section 271 of Communications Act to Provide In-Region, InterLATA Service in State of New York*, File No. EB-00-IH-0085, Acct. No. X32080004, Order (rel. March 9, 2000).

That is, both standards must be satisfied each month, *i.e.*, the 90% standard for Cleared Trouble Tickets and the 5% standard for the rejection of resubmitted orders as duplicates.

Respectfully submitted,

William D. Smith

cc: All Active Parties (By E-mail and U.S. Mail)

PERFORMANCE ASSURANCE PLAN

BELL ATLANTIC - NEW YORK

APRIL 2000

TABLE OF CONTENTS

PAGE

APPENDICES TO PERFORMANCE ASSURANCE PLAN

PERFORMANCE ASSURANCE PLAN

I. INTRODUCTION

To ensure that Bell Atlantic - New York ("BA-NY") provides high-quality service to Competitive Local Exchange Carriers ("CLECs") after BA-NY has gained entry into the long distance market pursuant to Section 271 of the Telecommunications Act of 1996 (the "1996 Act"), the commitments set forth in this Performance Assurance Plan (the "Plan" or "PAP") will take effect after BA-NY's entry into that market.[1] The actions include, *inter alia*, the adoption of carrier-to-carrier service measurements and standards, scoring mechanisms to determine whether CLECs are receiving non-discriminatory treatment (including statistical methodologies), bill credits for unsatisfactory performance, monthly reporting requirements, and provisions for annual reviews, updates and audits. Also included are provisions for a Quality Assurance Program for BA-NY's measures and an Exceptions Process that will allow BA-NY to obtain, subject to Commission approval, modifications to reported service results. Under this Plan, BA-NY will issue bill credits to CLECs if it provides unsatisfactory performance. The amount of the bill credits under this Plan will total no more than $208 million annually.[2]

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[1] After BA-NY obtains long distance entry, the Public Service Commission (the "Commission") will retain the first line of authority for enforcing these commitments. The Federal Communications Commission (the "FCC") will have authority for preventing BA-NY from future marketing in long distance should post-entry developments so warrant.

[2] BA-NY recognizes that interconnection agreements between BA-NY and the CLECs remain an essential part of the statutory scheme under the 1996 Act. Although the performance provisions of those agreements will be in effect during the term of the agreements, BA-NY will engage in good faith negotiations on new performance provisions when the current interconnection agreements expire. Where an existing interconnection agreement with a CLEC in New York State incorporates performance standards and remedies, such standards and remedies will not be unilaterally withdrawn by BA-NY. Such standards and remedies will continue to be offered by BA-NY in subsequent negotiations with those CLECs upon expiration of the existing agreements and similarly will be negotiated in good faith with other CLECs who request negotiation of such terms and conditions.

II. PROVISIONS OF THE PLAN

A. Measures, Methods of Analysis and Standards

1. Measures

The measures and standards in this Plan have generally been taken directly from the Guidelines for Carrier-to-Carrier Performance Standards and Reports developed in Case 97-C-0139 and cover the areas of Pre-order, Ordering, Provisioning, Maintenance and Repair, Billing and Network Performance. These measures and standards were developed after more than two years of collaborative meetings with CLECs and were initially approved by the Commission on February 16, 1999 and modified on June 30, 1999.[3] The measures have also been reviewed by the Department of Justice. Accordingly, these measures and standards represent the interests of a broad body of stakeholders.

2. Methods of Analysis

Primarily, two interrelated methods will be used to monitor BA-NY's wholesale performance to CLECs on the performance measurements. The first method is designed to measure BA-NY's overall Section 271 performance in four categories that correspond to the methods or modes CLECs use to enter the local exchange market: Resale; Unbundled Network Elements ("UNEs"); Interconnection (Trunks); and Collocation.[4] This is referred to as the Mode of Entry ("MOE") measurements method, and a total of $75 million in annual bill credits will be available to CLECs if BA-NY provides the maximum allowable unsatisfactory performance in

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[3] *See* Case 97-C-0139, *Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies*, "Order Adopting Inter-Carrier Service Quality Guidelines (issued February 16, 1999); Case 97-C-0139, *Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies*, "Order Establishing Permanent Rule" (issued June 30, 1999). *See also* Case 97-C-0139, *Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies*, "Order Establishing Additional Inter-Carrier Service Quality Guidelines and Granting in Part Petitions for Reconsideration and Clarification" (issued February 16, 2000).

[4] The collocation measures encompass cageless collocation.

all four MOE categories. (*See* Appendix A.) The MOE measurements provide a mechanism to measure the overall level of BA-NY's service to the entire CLEC industry in the four areas.

The second method will measure BA-NY's performance in twelve critical areas, on both a CLEC-specific and a CLEC-aggregate basis. The critical measures are: (1) Response Time OSS Interface; (2) OSS Interface Availability (Prime Time); (3) % On Time LSR and Completion Notice Metrics[5]; (4a) % Missed Appointment - BA - Total - EEL; (4b) % Missed Appointments; (5) % Missed Appointments - BA - No Dispatch - Platform; (6) % On Time Performance Hot Cut (adjusted for misses due to late FOCs); (7) % On-Time Performance - UNE LNP; (8) % Repeat Reports within 30 days; (9) Mean Time to Repair; (10) % Final Trunk Groups Blocking; (11) Collocation; and (12) DSL Metrics.[6] This is referred to as the Critical Measures measurements method. The Critical Measures are a subset of the measures included in the MOE measurements, and a total of $75 million in annual bill credits will be available to CLECs if BA-NY provides the maximum allowable out of parity performance on all twelve Critical Measures. (*See* Appendix B.) The Critical Measures cover BA-NY's service in areas

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[5] Critical Measure No. 3 includes the following measures:

OR-1-02 "% On Time LSRC - Flow Through - POTS";
OR-1-04 "On Time LSRC < 10 lines (No Flow Through) POTS";
OR-1-06 "% On Time LSRC >= 10 Lines - Flow Through - POTS";
OR-2-02 "% On Time LSR Reject - Flow Through - POTS";
OR-2-04 "% On Time Reject < 10 Lines (No Flow Through)";
OR-2-06 "% On Time LSR Reject >= 10 Lines (No Flow Through) - POTS"; and
OR-4-02 "Completion Notice - % On Time - POTS and Specials."

[6] Critical Measure No. 12 includes the following measures:

PO-8-01 "Manual Loop Qualifications Response Time";
PO-8-02 "Engineering Record Request Response Time";
PR-4-14 "% Completed On Time - 2 Wire xDSL (DD-2 Test & Serial Number)";
PR-4-15 "% Completed On Time - 2 Wire xDSL (DD-2 Test Total)";
PR-4-16 "% Completed On Time - 2 Wire xDSL (No DD-2 Test & Serial Number)";
PR-4-17 "% Completed On Time - 2 Wire xDSL (No DD-2 Test & 800 # Provided)";
PR-4-18 "% Completed On Time - 2 Wire xDSL (No DD-2 Test & No 800 # Provided)"; and
PR-6-01 "Installation Troubles for DSL Capable Loops Within 30 days."

critical to the CLECs and provide a mechanism to assure that CLECs on an individual basis are receiving non-discriminatory service. All bill credits in this section are at risk each month. Any bill credits assigned to a submetric that has no activity or is under development will be divided proportionally among the submetrics in that Critical Measure.

In addition, this Plan contains two "Special Provisions" sections that focuses on a number of measures that have been viewed as measuring key aspects of BA-NY's performance after it gains entry into the interLATA market. In order to assure that BA-NY will provide satisfactory service in these key areas, *e.g.*, flow through, hot cuts and ordering, BA-NY has made $58 million in addition to the $150 million available for bill credits for these measures. In addition, $24 million in unused bill credits will be available for certain UNE measures. (*See* Section II(E)(1)(b) *infra.*)

3. Standards

Each measure will be evaluated according to one of two standards. For the measures where a BA-NY retail analogue exists, a "parity" standard will be applied.[7] For those measures where no retail analogues are available, an absolute standard has been specified as a surrogate to determining whether BA-NY is providing non-discriminatory service to the CLECs. The metrics with absolute standards are displayed in Appendix C.

B. Distribution Of The $150 Million Among Measurements

1. The $150 Million Distribution

$75 million in annual bill credits have been attributed to the MOE measures and have been distributed to each of the MOE categories in amounts that reflect the importance of that MOE to the local exchange competition. Each month one-twelfth (1/12) of the annual amount

[7] The parity measures in the Plan fall into two categories: Measured variables and Counted variables. Measured variables are metrics of means or averages, such as mean time to repair. Counted variables are metrics of proportions such as percent measures.

will be available for bill credits. (*See* Appendix A.) An analogous principle has been applied to the Critical Measures bill credits. (*See* Appendix B.)

2. Reallocation Of Potential Bill Credits

The Commission will have the authority to reallocate the monthly distribution of bill credits between and among any provisions of the Plan and the Change Control Assurance Plan. The Commission will give the Company 15 days notice prior to the beginning of the month in which the reallocation will occur. Any reallocation will be done pursuant to Commission order.

Bill credits of $218 million are available for shifting to areas deemed critical during the course of the year. The funds consist of:

$75 Million – Mode of Entry;

$75 Million – Critical Measures;

$58 Million – Special Provisions; and

$10 Million – Change Control Assurance Plan.

3. The Change Control Assurance Plan

A separate plan has been proposed for the Change Control process. Under the Change Control Assurance Plan, $10 million in bill credits will be available to CLECs for unsatisfactory performance on four Change Control metrics. However, under that Plan if the bill credit amounts due CLECs in any one plan year exceed $10 million, BA-NY will use funds available for bill credits under the MOE categories to pay CLECs for bill credits owing for Change Control measures, up to an additional $15 million. Bill credits for Change Control measures will be given priority over bill credits for MOE measures. The MOE monthly caps will not apply to the Change Control bill credits, but will continue to apply to the MOE measures.

C. MOE Scoring And Bill Credit Calculations

1. Scoring

As noted, the measures and standards for the MOE measurements have been placed into four categories: Resale, UNE, Interconnection (Trunks) and Collocation. Since the 1996 Act requires that BA-NY provide interconnection "that is at least equal in quality" to that provided to itself, and "non-discriminatory access" to unbundled elements, each month BA-NY will apply statistical tests, which are outlined in Appendix D, to BA-NY and CLEC performance data to develop Z scores, t scores or equivalent permutation scores for the measures.[8] These statistical scores will be converted into a performance score for each MOE measure as follows:

Statistical Score	Performance Score
Z <= -1.645	-2
-1.645 < Z <= -0.8225	-1
-0.8225 < Z	0

For small sample sizes of measures with a parity standard, the Permutation Test will be applied to obtain the statistical scores, which will be converted into a performance score. (*See* Appendix D.) For small sample sizes of measures with an absolute standard of 95%, a small sample size table will be applied to obtain the performance scores. Measures with absolute standards will be given a performance score of 0, -1, or -2 depending on the performance for that measure. (*See* Appendix C.)

Thus, for each of the measures within the four MOE categories, BA-NY's performance will be graded 0 (no discrimination), -1 (discrimination in question), or -2 (discrimination probable). Each measure with a performance score of -1 in a given month will be subject to change, depending upon the score for that measure in the next two months. Should BA-NY

[8] The statistical methodologies set forth in Appendix D were taken from the New York State Carrier-to-Carrier Guidelines Performance Standards and Reports in Case 97-C-0139.

maintain a performance score of 0 for the next two months, then the score in the original month will be changed from -1 to 0. The 0 would then be used in conjunction with all of the other metrics in that MOE category to determine an aggregate score. A score of -2 in a given month will not be subject to change based upon performance in subsequent months.

The performance score for each metric will then be weighted, based upon the importance of the metric in determining whether that MOE is open to competition. (*See* Appendix A, which lists the weights for the MOE measurements.) The weighted scores will then be aggregated (averaged) by each MOE category (Resale, UNE, Interconnection and Collocation), producing an overall weighted score for each of the four categories.

2. Bill Credit Calculations

If BA-NY's overall (aggregate) performance score in the four categories falls below a minimum score in any given month, wholesale price reductions in the form of bill credits will be implemented and remain in effect for one month.[9] If an overall score falls to the maximum score or below, the maximum wholesale price reduction will be implemented. Scores between the minimum and maximum scores will also be entitled to credits pursuant to a credit table for each MOE category. (Credit Tables with the range of scores between the minimum and maximum and the applicable rates appear in Appendix A.) The bill credits payable to the CLECs will be determined each month by dividing the amount from the table in Appendix A by the actual monthly volumes of the CLEC units in service. The measurement units for each of the MOEs is as follows:

1. UNE – Lines in service at end of month;
2. Resale – Lines in service at end of month;
3. Interconnection (Trunks) – Minutes of use in month; and

[9] The intent is that the minimum score for each MOE category corresponds to the threshold at which there is a 95% certainty that parity does not exist.

4. Collocation – Cages completed during month.[10]

The maximum scores represent the maximum allowable out of parity condition, which would significantly limit a mode of entry as a competitively viable option. The minimum and maximum performance scores and the start point percentages are as follows:

	Minimum	Maximum	Start Point % [11]
UNE	-.190	-.670	20%
Resale	-.191	-.670	20%
Interconnection	-.301	-1.000	20%
Collocation	.000	-1.200	20%

Should BA-NY provision performance at one half the difference (*i.e.*, the midpoint) between the minimum and maximum scores in any one of the four MOE categories for three consecutive months, the amounts in the credit tables in Appendix A for that same three-month period will be doubled for the applicable MOE category. (The midpoints for the MOEs are delineated in Appendix A.) The amounts in Appendix A will remain doubled until such time as BA-NY achieves a score of one quarter (or greater) the difference between the minimum and maximum scores in that category in any given month. In addition, performance at the maximum score for three consecutive months in any one of the four MOE categories will result in an extension of the original duration of the UNE-P offering set forth in the Pre-filing Statement (at 8-11) for two years for every geographic area.

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[10] For the purpose of this Plan:

1. Lines in service for UNE means UNE-Platform lines, all types of loops and IOF.
2. Lines in service for Resale means Resale lines plus circuits.
3. Trunks – minutes of use per month.
4. Collocation arrangements completed: all arrangements including (a) physical, (b) virtual and (c) other collocation arrangements provided under tariff.

[11] The "Start Point %" indicates the amount of monthly bill credits that will be due to CLECs if BA-NY trips the minimum score. For example, if BA-NY were to score -.191 on the UNE MOE in a month, then 20% of the $3,750,000 monthly amount would be due. (*See* Appendix A.)

Appendix E provides a detailed step-by-step description of how the MOE performance scores and bill credits will be calculated and distributed to the CLECs.

3. The Domain Clustering Rule

Domain Clustering will provide CLECs with an additional layer of protection under the MOE mechanism. The term Domain refers to four service quality measures (*i.e.*, Pre-Order Ordering, Provisioning, and Maintenance and Repair)[12] that are included in the UNE and Resale MOEs. Under the Domain Clustering Rule, each Domain will be reviewed each month. If 75% or more of the respective Ordering, Provisioning, or Maintenance and Repair Domain weights are tripped, the higher of the clustering overlay or overall market score will be used to determine the market adjustments for the UNE and Resale MOEs. The same rule will apply to the Pre-Order Domain, except that the clustering overlay would be effective if all Pre-Order response time measures failed at the -2 level, in which case 75% would be used in the overlay calculations. The Domain Clustering methodologies are set forth in detail in Appendix E.

D. Critical Measures Scoring And Bill Credit Calculations

1. Scoring

BA-NY's performance in twelve measurement categories is critical to the CLECs' ability to compete in the New York local exchange market. Should BA-NY performance miss the applicable performance standards for even *one* of these twelve categories, the eligible CLECs will be entitled to bill credits. (*See* Appendix B.) The statistical tests and performance scoring mechanism described in the MOE section also apply to these measures.[13]

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[12] The domains do not include billing.

[13] To the extent that a Critical Measure contains more than one measure, the weights from Appendix A will be used to determine the amount of bill credits available for the individual measure.

Like the MOE scoring, each Critical Measure with a performance score of -1 in a given month will be subject to change, depending upon the score for that measure in the subsequent two months. Should BA-NY maintain a performance score of 0 for those two months, then the score in the original month will be changed from -1 to 0. A score of -2 in a given month, however, will not be subject to change based upon performance in subsequent months.

2. Bill Credit Calculations

For each Critical Measure, BA-NY's performance for all CLECs during a given month will be averaged. Should the resulting performance score in any one category fall to -1 or below or to a Z or t score of -0.8225 or below ("Sub-Standard Performance"),[14] 50% of the maximum bill credits for that measure will be payable to the eligible CLECs. The eligible CLECs are all those CLECs that received Sub-Standard Performance during that month (the "Aggregate Rule"). In addition, should any CLEC receive Sub-Standard Performance for two consecutive months, bill credits for that CLEC will be implemented for the two month period, notwithstanding the fact that all CLECs on average may have received satisfactory performance during the two months (the "Individual Rule").[15]

For performance scores between -1 and -2, or Z or t scores between -0.8225 and -1.645, the bill credits will increase by ten incremental amounts and the amounts payable to each CLEC will be in direct proportion to the amount of service that CLEC receives from BA-NY compared

[14] The Permutations Test will be used to derive Z and t scores for measures with small sample sizes.

[15] If all CLECs on average received an aggregate score below -1 for both months, the individual CLEC with the below average score would be entitled to bill credits for the Critical Measure in question under the Aggregate Rule. Likewise, if all CLECs on average received an aggregate score below -1 for the first of the two months and an aggregate score above -1 for the second month, the individual CLEC with Sub-Standard Performance during both months would be entitled to receive bill credits pursuant to the Aggregate Rule for the first month and pursuant to the Individual Rule for the second month. A CLEC is only entitled to receive bill credits under the Individual Rule if it receives a score of -1 or less in a Critical Measure category and the CLEC group on average received a score greater than -1 for the Critical Measure.

to the other CLECs who received Sub-Standard Performance pursuant to the Critical Measure. For example, under Critical Measure No. 8, "% Repeat Reports within 30 days," the percent of bill credits for an unsatisfactory score would be calculated by determining the number of lines a CLEC had compared to other CLECs that received Sub-Standard Performance. If a score falls to the maximum level, the maximum bill credits will be implemented for the Critical Measure in question.

Appendix F provides a detailed step-by-step description of how the Critical Measures scores and bill credits will be calculated and distributed to the CLECs.

E. Special Provisions

1. UNE Measures

A number of key measures have been identified that measure aspects of BA-NY's performance on service quality on UNE items that are viewed as essential for CLECs during the first year after BA-NY's entry in the interLATA market. Accordingly, additional funds will be made available for these measures under the subparagraphs described below.

a. Flow Through Measures For UNEs

BA-NY will make an additional $10 million per year available for potential bill credits, which will be paid on a quarterly basis, for the following flow through UNE metrics measured on a cumulative quarterly basis: OR-5-01 "% Flow Through - Total" and OR-5-03 "% Flow Through Achieved." Under this section a performance standard of 80% will apply to OR-5-01 and a performance standard of 95% will apply to OR-5-03. If at the end of any quarter BA-NY has not achieved one of these two performance standards, it will distribute $2.5 million in bill credits. The first point of assessment will be upon BA-NY's entry in to the interLATA market, and any bill credits due under this section will be distributed at that point in time based upon performance during the three calendar months preceding entry into the interLATA market. The

bill credits will be available to all CLECs purchasing UNEs. Any amounts due will be credited based on the CLEC's lines in service.[16] The scoring methodology for this measure is set forth in more detail in Appendix H.

b. UNE Ordering Performance

An additional $2 million per month, or $24 million per year, will be made available for bill credits for four non-flow-through UNE performance measures:

OR-1-04 "% On Time LSRC < 10 lines (Electronic) – POTS";
OR-1-06 "% On Time LSRC ≥ 10 lines (Electronic) – POTS";
OR-2-04 "% On Time LSR Reject < 10 lines (Electronic) – POTS"; and
OR-2-06 "% On Time LSR Reject ≥ 10 lines (Electronic) – POTS."

Funding for these additional bill credits will come from any unused funds in a month or the six prior months. $500,000 in bill credits per metric will be distributed under this section to all CLECs ordering UNEs based on the CLEC's lines in service if performance is less than 90% on the respective measures. These credits will be distributed like the bill credits under Critical Measures, Aggregate Rule. (*See* Appendix H.)

c. Additional Hot Cut Performance Measures

An additional $24 million in new funds for bill credits will be made available for service quality related to two Hot Cut Performance Measures: PR-4-06 "Missed Appointment - % on Time Performance - Hot Cut" and PR-6-02 "Installation Quality - % Installation Troubles Reported Within 7 Days." Bill credits will be paid under this section if either of two events occurs:

(a) If for any two consecutive months BA-NY fails to achieve either 90% on-time performance for Hot Cuts or has a greater than a 3.00% rate for I-codes for hot cuts, BA-NY will distribute $1 million in bill credits to the affected

[16] Lines in service will equal: UNE-P, UNE Loops, IOF, and EEL Loops.

CLECs. These credits will be distributed like the bill credits under Critical Measures, Aggregate Rule. If BA-NY fails to meet either of these measures in the first month, but meets them in the second month, no bill credits will be due.

(b) If for any one month BA-NY fails to achieve 85% on-time performance for Hot Cuts or scores greater than a 4.00% rate for I-codes for hot cuts, BA-NY will distribute $2 million in bill credits to the affected CLECs for that month. These credits will be distributed like the bill credits under Critical Measures, Aggregate Rule. (*See* Appendix H.)

2. Electronic Data Interface Measures

In order to ensure that the Electronic Data Interface ("EDI") between BA-NY Operational Support Systems ("OSS") and the CLEC systems is providing non-discriminatory service, $24 million in additional funds will be made available for the measures described below.

a. % Missing Notifier Trouble Ticket PONs Cleared Within 3 Business Days

The new measure is defined as the percent of EDI missing notifier trouble ticket PONs cleared within 3 business days from the day of receipt of the trouble ticket. The elapsed time begins with receipt at the Bell Atlantic Systems Support Help Desk of a trouble ticket for the EDI missing notifiers (*i.e.*, order acknowledgement, order confirmation, order rejection, work completion, and billing completion notices) with the PONs in questions enumerated with the appropriate identification. The ticket is considered cleared when Bell Atlantic has either requested the CLEC to resubmit the PON or communicated the current status of the PON and provided the delayed status notifier to the CLEC. Tickets received after 5 P.M. and trouble ticket clearances sent after 5 P.M. will be considered effective on the following business day. Performance shall be reported for the week in which the trouble ticket was received. This measure has a standard of 90% and $1 million in additional bill credits are available per month for CLECs if this is not satisfied. In addition, this measure is subject to the requirement that no

more than 5% of the orders resubmitted by CLECs at BA-NY's request are rejected as duplicates. BA-NY must satisfy both standards to avoid the payment of bill credits. (*See* Appendix I.)

b. % Order Confirmations/Rejects Sent Within 3 Business Days

This new measure is defined as the percent of orders confirmed or rejected by Bell Atlantic within 3 business days of receipt as a percent of total LSRs received.[17] $0.5 million per month in additional bill credits will be available for this measure. (*See* Appendix I.)

c. % SOP To Bill Completion Within 3 Business Days

This measure is defined as the percent of orders provisioning complete in BA-NY's Service Order Processor ("SOP") that have BCN notices within 3 business days. The source of this information is the DCAS PON Master File. The start time is when physical completion of the order has been entered into SOP. The end time is when the BCN is time stamped in DCAS. $0.5 million in additional bill credits will be available for this measure. (*See* Appendix I.)

F. Monthly Reports

In order to ensure that there is timely information regarding BA-NY's performance, BA-NY will report its performance on a monthly basis. Each month a 6-page report will be made available to all CLECs providing service in New York.

A sample copy of the report appears in Appendix G. The first three pages will provide information regarding the MOE measures and will include:

1. BA-NY actual performance to its retail customers where such measures exist and to its CLEC customers for each metric;

[17] This is a measure of completeness not timeliness. Order confirmation/reject timeliness standards are 90% or 95% within a range of 2 hours to 3 business days depending on order type and whether the measure is included in the MOE on Special Provisions sections.

2. The number of observations for BA-NY and the CLECs for each measure (where applicable);

3. The BA-NY standard deviation (where applicable);

4. The sampling error (where applicable);

5. The appropriate statistical scores (where applicable)[18] or the difference between BA-NY's and the CLECs' actual performance on the measure (where applicable);

6. A performance score for each measure;

7. The weight for each measure;

8. The weighted performance score; and

9. An aggregation of the performance scores, weighted performance scores, and aggregate bill credits, if any, due under each MOE.

The fourth page will provide a listing of the Critical Measures and the bill credits, if any, that are due for these measures on a CLEC-wide basis. The fifth and sixth pages address the Special Provisions and the Change Control Measures. The seventh page will provide a summary of the total bill credits, if any, due the CLEC industry. The final page will provide the amount, if any, due to the individual CLEC for the MOE and Critical Measures.[19] The monthly report will be provided within 25 days of the end of each month.

BA-NY will continue to provide a separate report on all measures established in the Carrier-to-Carrier ("C2C") proceeding (Case 97-C-0139), allowing for additions, deletions and other modifications ordered by the Commission. In addition, to the extent allowed by law, BA-NY will make available CLEC-specific C2C electronic reports enabling those receiving the reports to evaluate performance at greater levels of detail, including but not limited to residential

[18] A Permutations Test will be applied to small sample sizes to obtain a probability. The probability will be converted to a Z or t score, which in turn will be converted to a performance score.

[19] The computer model that will be used to calculate the MOE and Critical Measures bill credits will be posted on BA-NY's TISOC Website.

and business, geographic and class of service performance. The C2C reports will be made available to any CLEC requesting the reports.

BA-NY will provide to each CLEC in a usable format the underlying data used to calculate BA-NY's performance for that CLEC at the same time BA-NY submits it monthly report. Such reports must also be filed with the Department's Staff.

G. Bill Credits Payment

Should BA-NY's performance not meet the standards set forth above for the MOE and Critical Measure measurements, CLECs will receive bill credits for those MOE categories or Critical Measures scores that fall below the respective minimum levels. To the extent warranted, bill credits will appear on each CLEC's bill four months after the month in which the unsatisfactory performance has occurred. If the bill credits exceed the balance due BA-NY on the CLEC's bill, the net balance will be carried as a credit on to the CLEC's next month's bill.

BA-NY will issue checks in lieu of outstanding bill credits to CLECs that discontinue taking service from BA-NY.[20]

H. Term Of Performance Assurance Plan

This plan will become effective the day BA-NY gains entry into the interLATA market. At such time as BA-NY eliminates its Section 272 affiliate, the parties will reconvene for purposes of reevaluating the appropriateness of the standards, measurements and corrective actions set forth in this Plan. Until such time as a replacement mechanism is developed or the Plan is rescinded, this Plan, as it may be modified before such time by the Commission and BA-NY, shall remain in effect. (*See* Section II(J), *infra.*)

[20] BA-NY will be specifically prohibited from recovering revenue losses attributable to the Performance Assurance Plan and the Change Control Assurance Plan.

I. Quality Assurance Program

BA-NY will establish a Carrier-to-Carrier Service Quality Assurance Program after adoption of this Plan. BA-NY will formulate a Quality Assurance Program for wholesale services that leverages the successful experience gained from a similar program used in the retail environment. These procedures are being introduced to provide oversight in a systemic way and to further continuous improvement in service quality reporting activities. Sampling and analysis techniques will be employed for all Domains to ensure accuracy of measurements reporting and work document accuracy. Wholesale services will be segregated along Resale, UNE Loop, and UNE-Platform categories and disaggregated further into appropriate subdivisions of wholesale products.

J. Exceptions and Waiver Process

Recognizing that C2C service quality data may be influenced by factors beyond BA-NY's control, BA-NY may file Exception or Waiver petitions with the Commission seeking to have the monthly service quality results modified on three generic grounds. The first involves the potential for "clustering" of data, and the effect that such clustering has on the statistical models used in this Plan. The requirements of the clustering exception are set forth in Appendix D.

The second ground for filing exceptions relates to CLEC behavior. If performance for any measure is impacted by unusual CLEC behavior, BA-NY will bring such behavior to the attention of the CLEC and attempt to resolve the problem. Examples of CLEC behavior which may influence performance results include order quality; actions that cause excessive missed appointments; incorrect dispatch identification, resulting in excessive multiple dispatch and repeat reports; inappropriate X coding on orders, where extended due dates are desired; and delays in rescheduling appointments when BA-NY has missed an appointment. If such action

negatively influences BA-NY's performance on any metric, BA-NY will be permitted to petition for relief. The petition, which will be filed with the Commission and served on the CLEC, will provide appropriate, detailed documentation of the events, and will demonstrate that the CLEC behavior has caused BA-NY to miss the service quality target. BA-NY's petition must include all data that demonstrates how the measure was missed. It should also include information that excludes the data affected by the CLEC behavior. CLECs and other interested parties will be given an opportunity to respond to any BA-NY petition for an Exception. If the Commission determines that the service results were influenced by inappropriate CLEC behavior, the data will be excluded from the monthly reports.

The third ground for filing Waivers relates to situations beyond BA-NY's control that negatively affect its ability to satisfy only those measures with absolute standards. The performance requirements dictated by absolute standards establish the quality of service under normal operating conditions, and do not necessarily establish the level of performance to be achieved during periods of emergency, catastrophe, natural disaster, severe storms, or other events beyond BA-NY's control.

BA-NY may therefore petition the Commission for a waiver of specific performance results for those metrics that have performance targets dictated by absolute standards, if the Company's performance results do not meet the specific standard. This waiver process shall not be available for those metrics for which BA-NY's wholesale performance is measured by comparison to retail performance (parity metrics).

Any petition pursuant to this provision must demonstrate clearly and convincingly the extraordinary nature of the circumstances involved, the impact that the circumstances had on BA-NY's service quality, why the Company's normal, reasonable preparations for difficult situations proved inadequate, and the specific days affected by the event. The petition must also

include an analysis of the extent to which the parity metrics (retail and wholesale) were affected by the subject event, and must be filed within 45 days from the end of month in which the event occurred.

The Commission will determine which, if any, of the daily and monthly results should be adjusted in light of the extraordinary event cited, and will have full discretion to consider all available evidence submitted. Insufficient filings may be dismissed for failure to make a *prima facie* showing that relief is justified.

The resolution of a waiver exception request will occur prior to the scheduled payment period. To facilitate this, any petition seeking a waiver shall be filed within 45 days of the last day of the month in which the challenged event occurred. CLECs will have 10 days to serve and file replies to BA-NY requested exceptions.

BA-NY will compensate CLECs for lost interest while an unsuccessful waiver is under review.

K. Annual Review, Updates And Audits

1. Annual Review And Updates

Each year the Commission Staff and BA-NY will review the Performance Assurance Plan to determine whether any modifications or additions should be made. During this review, Staff and BA-NY will determine, among other things, whether: (1) measures and weights should be modified, added or deleted; (2) modifications should be made to the distribution of dollars at risk among the four MOE and Critical Measures categories; (3) geographic deaveraging should be adopted for reporting metric results; (4) the clustering and CLEC behavior exceptions included in Appendix D should be modified; (5) small sample size procedures should be

modified; and (6) the methodologies used to calculate the bill credits should be modified.[21] All aspects of the Plan, however, will be subject to review.

The annual review will not be subject to limitation, and any topic legitimately related to the Plan will be reviewed. All disputes will be resolved by the Commission. Nothing in the Performance Assurance Plan can or will diminish Commission jurisdiction over BA-NY service.

The annual review process will be initiated no more than six months before the anniversary date of BA-NY's entry into the long distance market pursuant to Section 271. The parties to Case 97-C-0271 will be given an opportunity to comment on any proposed modifications to the Performance Assurance Plan prior to formal Commission action. Any modifications to the Plan will be implemented as soon as is reasonably practical after Commission approval of the modifications.

2. Audits

Each year, and at least four months prior to the annual review, the Staff will conduct an audit of selected portions of the Plan to assess whether BA-NY is accurately recording and reporting CLEC and BA-NY service quality data. In addition, during the first six months after the Plan has been adopted, Staff will continue its Metric Replication project to assure that the data reported in the monthly reports accurately reflects the service quality being provided to these CLECs.[22] At the end of this six-month period, Staff will make a recommendation based on its assessment of BA-NY's internal controls and actual metric replication results whether the

[21] In particular, during the first annual review, the methodology used to calculate amounts due to CLECs under the Individual Rule for bill credits under the Critical Measures category will be analyzed to determine whether the rule provides for an appropriate distribution of bill credits.

[22] Metric Replication evaluates BA-NY's metrics process by attempting to recreate its performance metrics using filtered data from BA-NY's target databases. The target databases include, *inter alia,* NORD, SORD, DCAS, Sentinel, CAFÉ and NAMS. Replication relies on mathematical techniques to verify and validate BA-NY's performance and reporting of the metrics. The objective is to recreate BA-NY's performance metrics using the technical definitions verified and validated in the C2C proceeding.

metric replication project should be continued. The replication effort may be extended, as necessary, until the Commission's requirements for quality reporting from BA-NY are satisfied.

In addition, CLECs upon a showing of good cause will have the right to challenge the accuracy of the data and/or scores related to any measure BA-NY reports in the monthly summary reports. (*See* Appendix G.) In the event of such a challenge, BA-NY will employ an independent outside auditor that will conduct a review of the challenged material. If the outside auditor finds that no material errors were made in the reporting of the data and/or scores, the CLEC initiating the audit will be responsible for paying all costs associated with the audit. If the CLEC's claim is sustained, BA-NY will be responsible for the payment of such costs.

III. FULLY INTEGRATED DOCUMENT

The terms and provisions of this Plan are submitted in their entirety to the Commission for approval. This Plan represents a fully integrated statement of the commitments BA-NY will undertake, including the payment of bill credits for unsatisfactory performance under the measures. It is not offered to the Commission for approval on a piecemeal basis.

APPENDIX A

TABLE OF CONTENTS

APPENDIX A – MODE OF ENTRY

1. Measures and Weights

Table A-1-1: Resale

Table A-1-2: Unbundled Network Elements

Table A-1-3: Interconnection Trunks

Table A-1-4: Collocation

Note: **BOLD** indicates Critical Measure

Table A-1-1: Resale - Mode of Entry Weights

PO	Pre-Ordering	Weight
1-01	**Customer Service Record**	**15**
1-02	**Due Date Availability**	**5**
1-03	**Address Validation**	**5**
1-04	**Product and Service Availability**	**5**
1-05	**Telephone Number Availability and Reservation**	**5**
1-06	**Facility Availability (Loop Qualification)**	**5**
2-02	**OSS System Availability – Prime**	**20**
3-02	% Answered within 30 Seconds – Ordering	10
3-04	% Answered within 30 Seconds – Repair	10
OR	**Ordering**	
1-02	% On Time LSRC - Flow Through - POTS	40
1-04	% OT LSRC <10 Lines (Elec.- No Flow Through) – POTS	10
1-04	% OT LSRC <10 Lines (Elec.- No Flow Through) – Specials	5
1-06	% On Time LSRC >= 10 Lines (Electronic) – POTS	10
1-06	% On Time LSRC >= 10 Lines (Electronic) – Specials	5
2-02	% On Time LSR Reject - Flow Through – POTS	30
2-04	% OT LSR Reject<10 Lines (Elec.-No Flow Through)-POTS	30
2-04	% OT LSR Reject<10 Lines (Elec.-No Flow Through)-Specials	5
2-06	% On Time LSR Reject >=10 Lines (Electronic) – POTS	10
2-06	% On Time LSR Reject >=10 Lines (Electronic) – Specials	5
4-09	% SOP to Bill Completion Notice Sent Within 3 Business Days	30
5-03	% Flow Through Achieved	20
6-03	% OT Accuracy – LSRC	10
PR	**Provisioning**	
3-08	% Completed w/in 5 Days (1-5 lines - No Dispatch) – POTS	10
3-09	% Completed w/n 5 Days (1-5 lines - Dispatch) – POTS	5
4-01	**% Missed Appointment - BA - Total – Specials**	**10**
4-02	Average Delay Days - Total – POTS	10
4-02	Average Delay Days - Total – Specials	10
4-04	**% Missed Appointment - BA - Dispatch – POTS**	**10**
4-05	**% Missed Appointment- BA - No Dispatch - POTS**	**20**
5-01	% Missed Appointment - Facilities – POTS	10
5-01	% Missed Appointment - Facilities – Specials	10
5-02	% Orders Held for Facilities > 15 days – POTS	5
5-02	% Orders Held for Facilities > 15 days – Specials	5
6-01	% Installation Troubles within 30 days – POTS	15
6-01	% Installation Troubles within 30 days – Specials	15
MR	**Maintenance & Repair**	
1-01	Average Response Time - Create Trouble	5
1-03	Average Response Time - Modify Trouble	5
1-04	Average Response Time - Request Cancellation of Trouble	5
1-06	Average Response Time - Test Trouble (POTS only)	5
2-01	Network Trouble Report Rate – Specials	10
2-02	Network Trouble Report Rate - Loop (POTS)	10
3-01	% Missed Repair Appointments – Loop	20
3-02	% Missed Repair Appointments - Central Office	5
4-01	**Mean Time to Repair – Specials**	**20**
4-02	**Mean Time to Repair - Loop Trouble**	**15**
4-03	**Mean Time to Repair - CO Trouble**	**5**
4-08	**% Out of Service > 24 Hours – POTS**	**20**
4-08	% Out of Service > 24 Hours – Specials	10
5-01	**% Repeat Reports w/in 30 days - POTS**	**15**
5-01	**% Repeat Reports w/in 30 days - Specials**	**15**
BI	**Billing**	
1-01	% DUF in 4 Business Days	10
		600

Table A-1-2: Unbundled Network Elements - Mode of Entry Weights

PO	Pre-Ordering	Weight
1-01	**Customer Service Record**	**15**
1-02	**Due Date Availability**	**5**
1-03	**Address Validation**	**5**
1-04	**Product and Service Availability**	**5**
1-05	**Telephone Number Availability and Reservation**	**5**
1-06	**Facility Availability (Loop Qualification)**	**5**
2-02	**OSS Interface Availability – Prime**	**20**
3-02	% Answered within 30 Seconds – Ordering	10
3-04	% Answered within 30 Seconds – Repair	10
OR	**Ordering**	
1-02	**% On Time LSRC - Flow Through - POTS**	**40**
1-04	**% OT LSRC<10 Lines (Elec.-No Flow Through)-POTS**	**10**
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-Specials	5
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-Complex	0
1-06	**% On Time LSRC >=10 Lines (Electronic) – POTS**	**10**
1-06	% On Time LSRC >=10 Lines (Electronic) – Specials	5
1-06	% On Time LSRC >=10 Lines (Electronic) – Complex	0
2-02	**% On Time LSR Reject - Flow Through – POTS**	**30**
2-04	**% OT LSR Reject<10 lines (Elec.-No Flow Through)-POTS**	**30**
2-04	% OT LSR Reject<10 lines (Elec.-No Flow Through)-Specials	5
2-04	% OT LSR Reject<10 lines (Elec.-No Flow Through)-Complex	0
2-06	**% On Time LSR Reject >= 10 Lines (Electronic) – POTS**	**10**
2-06	% On Time LSR Reject >= 10 Lines (Electronic) – Specials	5
2-06	% On Time LSR Reject >= 10 Lines (Electronic) – Complex	0
4-09	**% SOP to Bill Completion Sent Within 3 Business Days**	**30**
5-03	**% Flow Through – Achieved**	**20**
6-03	% OT Accuracy LSRC	10
PR	**Provisioning**	
3-08	% Completed w/in 5 Days (1-5 lines-No Dispatch)-UNE-P/Other	5
3-09	% Completed w/in 5 Days (1-5 lines-Dispatch)-UNE-P/Other	10
4-01	**% Missed Appointment - BA – Total – Specials**	**10**
4-01	**% Missed Appointment - BA – Total – EEL**	**10**
4-01	% Missed Appointment - BA - Total – IOF	10
4-02	Average Delay Days - Total – POTS	10
4-02	Average Delay Days - Total – Specials	10
4-02	Average Delay Days - Total – Complex	10
4-04	% Missed Appointment - BA – Dispatch – Platform	10
4-04	**% Missed Appointment - BA – Dispatch - New Loop**	**10**
4-04	% Missed Appointment - BA – Complex	10
4-05	**% Missed Appointment- BA - No Dispatch - Platform**	**20**
4-05	% Missed Appointment- BA - No Dispatch - Complex	10
4-06	**% On Time Performance - Hot Cut**	**20**
5-01	% Missed Appointment - Facilities – POTS	10
5-01	% Missed Appointment - Facilities – Specials	10
5-02	% Orders Held for Facilities > 15 days – POTS	5
5-02	% Orders Held for Facilities > 15 days – Specials	5
6-01	% Installation Troubles within 30 days - POTS Other	15
6-01	% Installation Troubles within 30 days – Specials	15
6-02	**% Installation Troubles within 7 days – Hot Cut Loops**	**15**

MR	Maintenance & Repair	
1-01	Average Response Time - Create Trouble	5
1-03	Average Response Time - Modify Trouble	5
1-04	Average Response Time - Request Cancellation of Trouble	5
1-06	Average Response Time - Test Trouble (POTS only)	5
2-01	Network Trouble Report Rate – Specials	10
2-02	Network Trouble Report Rate - Loop (POTS)	10
3-01	% Missed Repair Appointments – Loop	20
3-02	% Missed Repair Appointments - Central Office	5
4-01	**Mean Time to Repair – Specials**	**20**
4-02	**Mean Time to Repair - Loop Trouble**	**15**
4-03	**Mean Time to Repair - CO Trouble**	**5**
4-08	**% Out of Service > 24 Hours – POTS**	**20**
4-08	% Out of Service > 24 Hours – Specials	10
5-01	**% Repeat Reports w/in 30 days - POTS**	**15**
5-01	**% Repeat Reports w/in 30 days - Specials**	**15**
BI	**Billing**	
1-01	% DUF in 4 Business Days	10
		695

Table A-1-3: Interconnection - Mode of Entry Weights

OR-	Ordering	Weight
1-12	% On Time Firm Order Confirmations	15
1-13	% On Time Design Layout Record	10
2-12	% On Time Trunk ASR Reject	10
PR-	**Provisioning**	
4-01	**% Missed Appointment - BA – Total**	**20**
4-02	Average Delay Days – Total	10
4-07	**% On Time Performance - LPN only**	**20**
5-01	% Missed Appointment – Facilities	10
5-02	% Orders Held for Facilities > 15 Days	10
6-01	**% Installation Troubles w/in 30 Days**	**15**
MR-	**Maintenance & Repair**	
4-01	**Mean Time to Repair – Total**	**20**
5-01	% Repeat Reports w/in 30 Days	10
NP-	**Network Performance**	
1-03	**# of Final Trunk Groups Blocked 2 Months**	**10**
1-04	**# of Final Trunk Groups Blocked 3 Months**	**20**
		180

Table A-1-4: Collocation - Mode of Entry Weights

NP-	Network Performance	Weight
2-01	% OT Response to Request for Physical Collocation	10
2-02	% OT Response to Request for Virtual Collocation	10
2-05	**% On Time – Physical Location**	**20**
2-06	**% On Time – Virtual Location**	**20**
2-07	**Average Delay Days – Physical**	**20**
2-08	**Average Delay Days – Virtual**	**20**
		100

2. **Mode of Entry: Dollars At Risk – $75,000,000**

	RESALE	UNE	COLLOCATION	TRUNKS
Monthly	$937,500	$3,750,000	$208,333	$1,354,167
Annual	$11,250,000	$45,000,000	$2,500,000	$16,250,000

3. **Minimum and Maximum Bill Credit Tables:**

Table A-3-1: Resale

Table A-3-2: Unbundled Network Elements

Table A-3-3: Interconnection Trunks

Table A-3-4: Collocation

Table A-3-1: Resale

- Maximum of $ 11,250,000 per year
- Maximum Credit Performance Score "X" = -0.670
- Minimum threshold = -0.1908
- Mid-point between minimum and maximum = -0.4304

Score Range		Monthly Dollars:
<	And ≥	
	-0.1908	$0
-0.1908	-0.2160	$187,500
-0.2160	-0.2412	$226,974
-0.2412	-0.2664	$266,447
-0.2664	-0.2917	$305,921
-0.2917	-0.1369	$345,395
-0.1369	-0.3421	$384,868
-0.3421	-0.3673	$424,342
-0.3673	-0.3926	$463,816
-0.3926	-0.4178	$503,289
-0.4178	-0.4430	$542,763
-0.4430	-0.4682	$582,237
-0.4682	-0.4934	$621,711
-0.4934	-0.5187	$661,184
-0.5187	-0.5439	$700,658
-0.5439	-0.5991	$740,132
-0.5991	–0.5973	$779,605
–0.5973	-0.6196	$819,079
-0.6196	-0.6448	$858,553
-0.6448	-0.6700	$898,026
-0.6700		$937,500

Table A-3-2: Unbundled Network Elements

- Maximum of $ 45,000,000 per year
- Maximum Credit Performance Score "X" = -0.670
- Minimum threshold = -0.1904
- Mid-point between minimum and maximum = -0.4302

Score Range		Monthly Dollars:
<	And ≥	
	-0.1904	$0
-0.1904	-0.2157	$750,000
-0.2157	-0.2409	$907,895
-0.2409	-0.2662	$1,065,789
-0.2662	-0.2914	$1,223,684
-0.2914	-0.3166	$1,381,579
-0.3166	-0.3419	$1,539,474
-0.3419	-0.3671	$1,697,368
-0.3671	-0.3924	$1,855,263
-0.3924	-0.4176	$2,013,158
-0.4176	-0.4428	$2,171,043
-0.4428	-0.4681	$2,328,947
-0.4681	-0.4933	$2,486,842
-0.4933	-0.5186	$2,644,737
-0.5186	-0.5438	$2,802,632
-0.5438	-0.5690	$2,960,526
-0.5690	-0.5943	$3,118,421
-0.5943	-0.6195	$3,276,316
-0.6195	-0.6448	$3,434,211
-0.6448	-0.6700	$3,592,105
-0.6700		$3,750,000

Table A-3-3: Interconnection Trunks

- Maximum of $ 16,250,000 per year
- Maximum Credit Performance Score "X" = -1.000
- Minimum threshold = -0.3014
- Mid-point between minimum and maximum = -0.6507

Score Range		Monthly Dollars:
<	And ≥	
	-0.3014	$0
-0.3014	-0.3551	$270,833
-0.3551	-0.4088	$354,167
-0.4088	-0.4626	$437,500
-0.4626	-0.5163	$520,833
-0.5163	-0.5701	$604,167
-0.5701	-0.6238	$687,500
-0.6238	-0.6776	$770,833
-0.6776	-0.7313	$854,167
-0.7313	-0.7850	$937,500
-0.7850	-0.8388	1,020,833
-0.8388	-0.8925	$1,104,167
-0.8925	-0.9463	$1,187,500
-0.9463	-1.0000	$1,270,833
-1.0000		$1,354,167

Table A-3-4: Collocation

- Maximum of $ 2,500,000 per year
- Maximum Credit Performance Score "X" = -1.200
- Minimum threshold = 0
- Mid-point between minimum and maximum = -0.6

Score Range		Monthly Dollars:
<	And ≥	
	0	$0
0.00000	-0.10	$41,667
-0.10	-0.20	$55,556
-0.20	-0.30	$69,444
-0.30	-0.40	$83,333
-0.40	-0.50	97,222
-0.50	-0.60	$111,111
-0.60	-0.70	$125,000
-0.70	-0.80	$138,889
-0.80	-0.90	$152,778
-0.90	-1.00	$166,667
-1.00	-1.10	$180,556
-1.10	-1.20	$194,444
-1.20		$208,333

APPENDIX B

Critical Measures:

		Resale	%	$
		PRE-ORDERING		
1	metric	**Response Time OSS Interface**		**$151,042**
	PO-1-01	Customer Service Record	37.5%	$56,641
	PO-1-02	Due Date availability	12.5%	$18,880
	PO-1-03	Address Validation	12.5%	$18,880
	PO-1-04	Product and Service Availability	12.5%	$18,880
	PO-1-05	Telephone Number Availability and Reservation	12.5%	$18,880
	PO-1-06	Facility Availability (Loop Qualification)	12.5%	$18,880
2	PO-2-02	**OSS Interface Availability - Prime**	100%	**$151,042**
		PROVISIONING		
4b		**% Missed Appointment**		**$151,042**
	PR-4-01	% Missed Appointment - BA - Total - Specials	25.0%	$37,760
	PR-4-04	% Missed Appointment - BA - Total - Dispatch - POTS	25.0%	$37,760
	PR-4-05	% Missed Appointment - BA - Total - No Dispatch - POTS	50.0%	$75,521
		MAINTENANCE		
8		**Mean Time To Repair**		**$151,042**
	MR-4-01	Mean Time To Repair - Specials	33.3%	$50,347
	MR-4-02	Mean Time To Repair - Loop Trouble	25.0%	$37,760
	MR-4-03	Mean Time To Repair - Central Office	8.3%	$12,587
	MR-4-08	% Out Of Service > 24 Hours - POTS	33.3%	$50,347
9		**% Repeat Reports within 30 Days**		**$151,042**
	MR-5-01	% Repeat Reports w/in 30 days - POTS	50.0%	$75,521
	MR-5-01	% Repeat Reports w/in 30 days - Specials	50.0%	$75,521
		Total Dollars at Risk Monthly		**$755,208**
		Total Dollars at Risk Annual		**$9,062,500**

All bill credits in this section are at risk each month. Any bill credits assigned to a submetric that has no activity or is under development will be divided proportionately among the submetrics in the respective critical measures.

Critical Measures:

		UNE	%	$
		PRE-ORDERING		
1	metric	**Response Time OSS Interface**		**$354,167**
	PO-1-01	Customer Service Record	37.5%	$132,813
	PO-1-02	Due Date availability	12.5%	$44,271
	PO-1-03	Address Validation	12.5%	$44,271
	PO-1-04	Product and Service Availability	12.5%	$44,271
	PO-1-05	Telephone Number Availability and Reservation	12.5%	$44,271
	PO-1-06	Facility Availability (Loop Qualification)	12.5%	$44,271
2	PO-2-02	**OSS Interface Availability – Prime**	100%	**$354,167**
		ORDERING		
3		**Ordering Performance**		**$354,167**
	OR-1-02	% On Time LSRC - Flow Through (POTS)	25.0%	$88,542
	OR-1-04	% On Time LSRC <10 lines (No Flow-Through) (POTS)	6.3%	$22,135
	OR-1-06	% On Time LSRC >=10 lines (No Flow-Through) (POTS)	6.3%	$22,135
	OR-2-02	% On Time Reject - Flow Through (POTS)	18.8%	$66,406
	OR-2-04	% On Time Reject <10 lines (No Flow-Through) (POTS)	18.8%	$66,406
	OR-2-06	% On Time Reject >=10 lines (No Flow-Through) (POTS)	6.3%	$22,135
	OR-4-09	% SOP to Bill Completion Sent Within 3 Business Days	18.8%	$66,406
		PROVISIONING		
4a	PR-4-01	**% Missed Appointment - BA - Total - EEL**	100%	**$177,083**
4b		**% Missed Appointment**		**$177,083**
	PR-4-01	% Missed Appointment - BA - Total - Specials	50.0%	$88,542
	PR-4-04	% Missed Appointment - BA - Total - Dispatch - New Loops	50.0%	$88,542
5	PR-4-05	**% Missed Appt. - BA - No dispatch - Platform**	100%	**$354,167**
6		**Hot Cut Performance**	100%	**$708,333**
	PR-4-06	% On Time - Hot Cut (adj. for missed appts. due to late LSRC)		
	PR-6-02	% Troubles within 7 Days - Hot Cut		
		MAINTENANCE		
8		**Mean Time To Repair**		**$354,167**
	MR-4-01	Mean Time To Repair - Specials	33.3%	$118,056
	MR-4-02	Mean Time To Repair - Loop Trouble	25.0%	$88,542
	MR-4-03	Mean Time To Repair - Central Office	8.3%	$29,514
	MR-4-08	% Out Of Service > 24 Hours - POTS	33.3%	$118,056
9		**% Repeat Reports within 30 Days**		**$354,167**
	MR-5-01	% Repeat Reports w/in 30 days - POTS	50.0%	$177,083
	MR-5-01	% Repeat Reports w/in 30 days - Specials	50.0%	$177,083
		Digital Subscriber Line Services		
12		**xDSL Performance**		**$354,167**
	PO-8-01	Avg. Response Time - Manual Loop Qualification	12.5%	$44,271
	PO-8-02	Avg. Response Time - Engineering Record Request	12.5%	$44,271
	PR-4-14-18	% Completed on Time (See note A.)	62.5%	$221,354
	PR-6-01	% Installation Troubles - xDSL Loops	12.5%	$44,271
		Total Dollars at Risk Monthly		**$3,541,667**
		Total Dollars at Risk Annual		**$42,500,000**

Note A: Dollars at risk allocated across PR-4-14 to 18 based on number of orders reported in each measure for measures with missed standards
Note B: All bill credits in this section are at risk each month. Any bill credits assigned to a submetric that has no activity or is under development will be divided proportionately among the submetrics in the respective critical measures.
Note C: For Critical Measure No. 6 "Hot Cut Performance." No allocation of available bill credits is made between the submeasures. If one submeasure warrants an adjustment, the market adjustment percentage is applied to the entire amount of bill credits available. If both submeasures indicate that bill credits are due to CLECs, the lower score will be used to calculate the bill credits due.

Critical Measures

		Collocation	%	$
		NETWORK PERFORMANCE		
11		**Collocation**		**$208,333**
	NP-2-05/6	% On Time - Physical & Virtual	50.0%	$104,167
	NP-2-07/8	Average Delay Days - Physical & Virtual	50.0%	$104,167
		Total Dollars at Risk Monthly		**$208,333**
		Total Dollars at Risk Annual		**$2,500,000**

		Trunks	%	$
		PROVISIONING		
4b		**% Missed Appointment**		**$436,198**
	PR-4-01	% Missed Appointment - BA - Total - Trunks	100.0%	$436,198
7	**PR-4-07**	**% On Time Performance - UNE LNP**		**$436,198**
		MAINTENANCE		
8		**Mean Time To Repair**		**$436,198**
	MR-4-01	Mean Time To Repair - Trunks	100.0%	$436,198
		NETWORK PERFORMANCE		
10		**Final Trunk Group Blocked**		**$436,198**
	NP-1-03	Blocked 2 Months	33.3%	$145,399
	NP-1-04	Blocked 3 Months	66.7%	$290,799
		Total Dollars at Risk Monthly		**$1,744,792**
		Total Dollars at Risk Annual		**$20,937,500**

All bill credits in this section are at risk each month. Any bill credits assigned to a submetric that has no activity or is under development will be divided proportionately among the submetrics in the respective critical measures.

APPENDIX C

Performance Scores for Measures with Absolute Standards:

Metric #'s	Measure	0	-1	-2
PO-1 and MR-1 [1]	OSS Response Time Measures	≤ 4 second difference	> 4 and ≤ 6 second difference	> 6 second difference
PO-2-02	OSS System Availability - Prime	≥ 99.5%	≥ 98 and < 99.5%	< 98%
See Table [2]	Metrics with 95% standards	≥ 95%	≥ 90 and < 95%	< 90%
PO-3	% Answered within 30 Seconds – Ordering & Repair	≥ 80%	≥ 75 and < 80%	< 75%
NP-2-08 NP-2-09	Collocation – Average Delay Days	≤ 6 Days	> 6 and ≤ 15 Days	> 15 Days
NP-1-03 NP-1-04	# of Final Trunk Groups Blocked for 2 and 3 Months	Final Interconnection Trunks meeting or exceeding blocking standard for one month	Any individual Final Interconnection Trunk group exceeding blocking standard for 2 months in a row	Any individual Final Interconnection Trunk group exceeding blocking standard for 3 months in a row

Example: If BA-NY were to perform at 97.0% for PO-2-02- OSS System Availability – Prime, in a month, then the performance score would be –2 for that measure.

[1] Includes PO-1-01, PO-1-02, PO-1-03, PO-1-04, PO-1-05, PO-1-06, MR-1-01, MR-1-03, MR-1-04 and MR-1-06

[2] The list Metrics with 95% Standard appears on the following page.

Table C-1-1: Performance Metrics with 95% Performance Standard:

OR	**Ordering**
1-02	% On Time LSRC - Flow Through - POTS - 2hrs
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - POTS
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - Specials
1-04	% OT LSRC<10 Lines (Elec.-No Flow Through) - Complex
1-06	% On Time LSRC >=10 Lines (Electronic) - POTS
1-06	% On Time LSRC >=10 Lines (Electronic) - Specials
1-06	% On Time LSRC >=10 Lines (Electronic) - Complex
1-12	% On Time Firm Order Confirmations
1-13	% On Time Design Layout Record
2-02	% On Time LSR Reject - Flow Through - POTS
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - POTS
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - Specials
2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through) - Complex
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - POTS
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - Specials
2-06	% On Time LSR Reject >= 10 Lines (Electronic) - Complex
2-12	% On Time Trunk ASR Reject
4-09	% SOP to Bill Completion Notice Sent Within 3 Business Days
5-03	% Flow Through Achieved
6-03	% OT Accuracy LSRC
PR	**Provisioning**
4-06	% On Time Performance - Hot Cut
4-07	% On Time Performance - LNP only
BI	**Billing**
1-01	% DUF in 4 Business Days
NP	**Network Performance**
2-01	% OT Response to Request for Physical Collocation
2-02	% OT Response to Request for Virtual Collocation
2-05	% On Time - Physical Location
2-06	% On Time - Virtual Location

Table C-1-2: Allowable Misses for Small Sample Sizes for Counted Variable Performance Measures with Absolute Standards

A. Allowable Misses:

- If less than 20 items, find volume of items measured in Sample Size Column.
- If the number of misses falls under the Zero weight column, then the performance measure is given a weight of zero and not counted towards the total performance score.
- If the number of misses falls in the "0" column, a performance score of 0 is given the performance metric.
- If the number of misses falls into the "-1" column, the performance score for the metric is –1.
- If the number of misses falls into the –2 column, the performance score is –2.
- "NA" is not applicable

95% Standard:

Sample Size	Zero Weight	0	-1	-2
1	1	0	NA	NA
2	1	0	2	NA
3	1	0	2	3
4	1	0	2	3+
5	1	0	2	3+
6	1	0	2	3+
7	1	0	2	3+
8	1	0	2	3+
9	1	0	2	3+
10	1	0	2	3+
11	1	0	2	3+
12	1	0	2	3+
13	1	0	2	3+
14	1	0	2	3+
15	1	0	2	3+
16	1	0	2	3+
17	1	0	2	3+
18	1	0	2	3+
19	1	0	2	3+
20	NA	≤ 1	2	3+

B. CLEC Exception Process

Each month each CLEC will have the right to challenge the allowable misses or exclusions that BA-NY may exercise pursuant to the small sample size table for performance

measures with absolute standards. If a CLEC exercises this right, it must file a petition with the Commission demonstrating that the exclusion will have a significant impact on the operations of the CLEC's business and that BA-NY should not be allowed to exclude the event pursuant to the above table. BA-NY will have a right to respond to any such challenge by the CLECs. The Timeline for CLEC Exceptions will be the same as the Timeline for BA-NY Exceptions under the small sample size section in Appendix D. If a CLEC's Exception Petition is granted, the appropriate bill credits will be reflected on the CLEC's bill as soon as is practical.

APPENDIX D

STATISTICAL ANALYSIS

A. Statistical Methodologies:

The Performance Assurance Plan uses statistical methodologies as one means to determine if "parity" exists, or if the wholesale service performance for CLECs is equivalent to the performance for Bell Atlantic. For performance measures where "parity" is the standard and sufficient sample size exists, Bell Atlantic will use the "modified Z statistic" proposed by a number of CLECs who are members of the Local Competitors User Group ("LCUG"). A Z or t score of below -1.645 provides a 95% confidence level that the variables are different, or that they come from different processes. The specific formulas are as follows:

Measured Variables:	Counted Variables: [1]
$t = \frac{\overline{X}_{CLEC} - \overline{X}_{BA}}{\sqrt{s_{BA}^2 (\frac{1}{n_{CLEC}} + \frac{1}{n_{BA}})}}$	$Z = \frac{P_{CLEC} - P_{BA}}{\sqrt{P_{BA}(1 - P_{BA})(\frac{1}{n_{CLEC}} + \frac{1}{n_{BA}})}}$

Definitions:

Measured Variables are metrics of means or averages, such as mean time to repair, or average interval.

Counted Variables are metrics of proportions, such as percent measures.

$\overline{X}$ is defined as the average performance or mean of the sample.

S is defined as the standard deviation.

n is defined as the sample size.

p is defined as the proportion, for percentages 90% translates to a 0.90 proportion.

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[1] For metrics where higher numbers indicate better performance, this equation is reversed. These include: % Completed w/in 5 days – (1-5 lines – No Dispatch and % Completed w/in 5 days (1-5 lines – Dispatch)

B. Sample Size Requirements:

The standard Z or t statistic will be used for measures where "parity" is the standard, unless there is insufficient sample size. For measured variables, the minimum sample size is 30. For counted variables, the result of np(1-p) must be greater than or equal to 5. When the sample size requirement is not met, BA-NY will do the following:

1. If the performance for the CLEC is better than the BA-NY performance, no statistical analysis is required.
2. If the performance is worse for the CLEC than BA-NY, BA-NY will use the Permutation Test.
3. If the permutation test shows an "out of parity" condition, BA-NY will perform a root cause analysis to determine cause. If the cause is the result of "clustering" within the data, BA-NY will provide documentation demonstrating that clustering caused the out of parity condition.
4. The nature of the variables used in the performance measures is such that they do not meet the requirements 100% of the time for any statistical testing including the requirement that individual data points must be independent. The primary example of such non-independence is a cable failure. If a particular CLEC has fewer than 30 troubles and all are within the same cable failure with long duration, the performance will appear out of parity due to this clustering. However, for all troubles, including BA-NY troubles, within that individual event, the trouble duration is identical. Another example of clustering is if a CLEC has a small number of orders in a single location, with a facility problem. If this facility problem exists for all customers served by that cable and is longer than the average facility problem, the orders are not independent and clustering occurs.

Finally, if root cause shows that the difference in performance is the result of CLEC behavior, BA-NY will identify such behavior and work with the respective CLEC on corrective action.

C. Bell Atlantic Exceptions Process:

1. A key frailty of using statistics to evaluate parity is that a key assumption about the data, necessary to use statistics, is faulty. As noted, one such assumption is that the data is independent. Events included in the performance measures of provisioning and maintenance of telecommunication services are not independent. The lack of independence is referred to as "clustering" of data. Clustering occurs when individual items (orders, troubles, *etc.*) are clustered together as one single event. This being the case, BA-NY will have the right to file an exception to the performance scores in the Performance Assurance Plan if the following events occur:

a. **Event Driven Clustering: Cable Failure:** If a significant proportion (more than 30%) of a CLEC's troubles are in a single cable failure, BA-NY may provide data demonstrating that all troubles within that failure, including BA-NY troubles were resolved in an equivalent manner. BA-NY also will provide the repair performance data with that cable failure performance excluded from the overall performance for both the CLEC and BA-NY . The remaining troubles will be compared according to normal statistical methodologies.

b. **Location Driven Clustering: Facility Problems:** If a significant proportion (more than 30%)of a CLEC's missed installation orders and resulting delay days were due to an individual location with a significant

facility problem, BA-NY will provide the data demonstrating that the orders were "clustered" in a single facility shortfall. Then, BA-NY will provide the provisioning performance with that data excluded. Additional location driven clustering may be demonstrated by disaggregating performance into smaller geographic areas.

c. **Time Driven Clustering: Single Day Events:** If significant proportion (more than 30%) of CLEC activity, provisioning or maintenance, occur on a single day within a month, and that day represents an unusual amount of activity in a single day, BA-NY will provide the data demonstrating that the activity is on that day. BA-NY will compare that single day's performance for the CLEC to BA-NY's own performance. Then, BA will provide data with that day excluded from overall performance to demonstrate "parity."

2. Documentation:

BA-NY will provide all details, ensuring protection of customer proprietary information, to the CLEC and Commission. Details include, individual trouble reports, and orders with analysis of BA-NY and CLEC performance. For cable failures, BA-NY will provide appropriate documentation detailing all other troubles associated with that cable failure.

3. Timeline for Exceptions Process:

The following is an example illustrating the timeline for the Exception Process.

Action	Date
January Performance Reports	February 25th
BA Files Exceptions on January Performance	March 17th
CLEC and other interested parties Files Reply to Bell Atlantic Exceptions	March 27th
PSC Staff Issues Ruling on Exceptions	April 15th
February Performance Reports	March 25th
March Performance Reports	April 25th
Credits Processed for January Performance [2]	By May 1st

[2] If exceptions are filed on February or March performance measures that have –1 performance scores for January, that could be reduced to 0's, then any impact from a PSC rulings would be reflected in future month's bills. (Credit offset).

APPENDIX E

Mode of Entry Bill Credit Mechanism

The following are the steps that will be undertaken to determine whether Bill Credits are due to any CLECs for the MOE categories.

1. For each MOE measure with a "parity" standard: Calculate Z or t score or perform permutation test (for small samples).[1]

2. Convert Z, t or permutation equivalent score to performance score pursuant to the following table:

Statistical Score	Performance Score
≤ -1.645	-2
< -0.8225 and > -1.645	-1
> -0.8225	0[2]

3. For each MOE measure with an absolute standard: Determine Performance Score using performance range for the applicable measure. For small sample sizes, the small sample size table for measures with absolute standards is used. (*See* Appendix C.)

4. Monthly scores will be recomputed after two more months of performance data have been gathered to determine whether any -1 scores in the applicable month have been changed to zeros. For example, BA-NY performance in February and March would be examined to determine whether any -1 scores in January should be changed to 0s. After the 2 additional months performance data have been analyzed a Weighted Performance Score for each measure for each MOE will be calculated and aggregated.

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[1] When "no activity occurs" in a metric the performance measure and its weight will be excluded from performance score.

[2] For report rate measures – regardless of z or t score – if absolute difference is less than 0.1%, the performance score is a 0.

5. If the Aggregate Total Performance Score for a MOE is greater than the minimum value allowable for the applicable MOE (*See* Minimum and Maximum Bill Credit Tables in Appendix A), no bill credits are due to the CLECs that received the particular MOE services in that month. If the value is equal to or less than a minimum value, CLECs will be paid Bill Credits pursuant to the Bill Credit Tables in Appendix A, which will be adjusted to reflect the monthly volumes or units being used by the CLECs.*

6. The MOE Bill Credit Table reflects (1) the range of the aggregate performance scores from the minimum to maximum, (2) the monthly dollars attributable to each score, (3) the aggregate CLEC monthly volumes for the measure, and (4) the corresponding monthly rate that will be paid to each CLEC if BA-NY's performance is at that particular level. The individual CLEC's Bill Credit will be determined by multiplying the CLEC's monthly units in service by the applicable rate for the Aggregate MOE score.

7. For example, assume the first two steps of the UNE Bill Credit Table were as follow:

Score	Mon. $	Mon. Vol.	Mon. Rate
-0.260	$730,263	100,000	$7.30
-0.300	$907,895	100,000	$9.08

Using the above Credit Table, if the Aggregate MOE score was -0.300 and a CLEC had 5,000 UNE lines (at the end of the month), it would entitled to a $45,450 Bill Credit ($9.08 X 5,000 = $45,400).

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* The measurement units for UNEs, Resale and Interconnection are lines in service. For Collocation it is collocation cages installed in the month.

8. The Domain Clustering Rule

The Mode of Entry measures are classified into four key domains: Pre-Order, Ordering, Provisioning and Maintenance. To ensure that competition is not negatively influenced by poor performance on measures in any one of these domains, a Domain Clustering Rule has been established under this Plan. The rule, which applies only to the UNE and Resale MOEs, enables the entire mode of entry performance score to be modified if 75% or more of the total weights for the measures in any of the domains is tripped. For the Pre-Order domain, this percentage is reduced to 66.7%. Under this rule, the lower of the overall MOE score or the Domain score will be used to determine whether any bill credits are due. The domain score will be calculated as follows: First, determine the % of weights tripped, *e.g.*, if a domain contained a number of metrics with a total weight of 80, and 65 of the 80 weights were tripped, the domain percentage would be 81.2%. Since this is greater than 75%, the domain clustering rule will apply,. Next, determine the difference between the minimum and maximum performance scores for the MOE, in which the domain appeared. For example, the minimum score for the UNE MOE is -0.1904 and the maximum score for the UNE MOE is -0.67, therefore, the difference is -0.4796. This figure would be multiplied by the 81.2%. This equals -0.3894. This number (-0.3894) would be added to the minimum score and would result in a domain clustering score of -0.5798. If the MOE score were -0.388, the performance score for the MOE would be replaced with the domain clustering score of -0.5798 based on the Domain Clustering Rule.

APPENDIX F

Critical Measures Performance Scoring

A. The following steps would be taken to determine which CLECs would be entitled to Bill Credits pursuant to the Aggregate Rule, *i.e.,* when aggregate CLEC performance falls below standard for a critical measure.

1. Calculate the total dollars available for Bill Credits per critical measure per month.

An increment table will be developed for each critical measure to determine the Bill Credits available for unsatisfactory performance, *i.e.*, at or less than performance scores of -1. The tables will range from 50% the maximum monthly amount, for –1 performance to 100% of the amount. A sample table appears below for z and t and performance scores where the maximum monthly amount for the measure is $354,167.

Table F-1-1
Allocation of Dollars for Critical Measures
Measures with Statistical Evaluation Standards

Statistical Score		Performance	Increment	Dollars
From	To	Score		
	> -0.8225	0	0%	$0
≤ -0.8225	> -0.9048	-1.0	50%	$177,084
≤ -0.9048	> -0.9870	-1.1	55%	$194,792
≤ -0.9870	> -1.0693	-1.2	60%	$212,500
≤ -1.0693	> -1.1515	-1.3	65%	$230,209
≤ -1.1515	> -1.2338	-1.4	70%	$247,917
≤ -1.2338	> -1.3160	-1.5	75%	$265,625
≤ -1.3160	> -1.3983	-1.6	80%	$283,334
≤ -1.3983	> -1.4805	-1.7	85%	$301,042
≤ -1.4805	> -1.5628	-1.8	90%	$318,750
≤ -1.5628	> -1.6450	-1.9	95%	$336,459
≤ - 1.645		-2.0	100%	$354,167

Table F-1-1

Allocation of Dollars for Critical Measures
Measures with 95% Standards [1]

% Performance		Performance	Increment	Dollars
From	To	Score		
	≥ 95.0	0	0%	$0
< 95.0	≥ 94.5	-1.0	50%	$177,084
< 94.5	≥ 94.0	-1.1	55%	$194,792
< 94.0	≥ 93.5	-1.2	60%	$212,500
< 93.5	≥ 93.0	-1.3	65%	$230,209
< 93.0	≥ 92.5	-1.4	70%	$247,917
< 92.5	≥ 92.0	-1.5	75%	$265,625
< 92.0	≥ 91.5	-1.6	80%	$283,334
< 91.5	≥ 91.0	-1.7	85%	$301,042
< 91.0	≥ 90.5	-1.8	90%	$318,750
< 90.5	≥ 90.0	-1.9	95%	$336,459
< 90.0		-2.0	100%	$354,167

2. **The aggregate performance score would be used to determine the amount of Bill Credits available for CLECs who received unsatisfactory performance.**

   Pursuant to the above table **$177,084** would be available if the aggregate z-score equaled -.823 and the performance score equaled -1.*

3. **Determine which CLECs qualify for the market adjustment.**

   For measures where the statistical score is used, the cutoff point for qualification is BA-NY's score on the critical measure +/- one sampling error (based upon the BA sampling error). Each CLEC's performance is compared to the cutoff point. Performance equal to or less than the cutoff qualifies for Bill Credits. For example, if BA-NY's performance score was .13 and the sampling error was .03, all CLECs with scores equal to or greater than .16 would qualify.

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[1] For Performance Measures with other % standards, the range of performance will be similarly distributed in 10 even increments.

* When calculating a market adjustment for metrics that use absolute standards (generally a 95% standard) all CLECs at the -1 level or less would qualify. The calculation of the dollars is similar to the z-score method.

4. **Calculate the individual market adjustments for qualified CLECs.**

   a. Determine each CLEC's allocated weight. Multiply the CLEC's score on the measure by the volume of its service to be credited.

   b. Determine each CLEC's weighted share. Aggregate the amounts from step a and divide each CLECs share by this total to determine each CLEC's weighted share.

   c. Determine each CLEC's dollar share. Multiply the CLEC's weighted share by the total amount available for market adjustment.*

B. The following steps will be taken to determine whether any CLECs would be entitled to Bill Credits pursuant to the Individual Rule, i.e., for CLECs who receive a performance score ≤ -1 for two consecutive months:

   1. Determine if any CLECs qualify for Bill Credit Adjustment. CLECs qualify for a Bill Credit if they received a final score equal to or less then -.8225 for z and t scores or equal to or less than -1 for absolute scores on any of the measures included in the critical measurements for the applicable month.

   2. Determine each CLECs Bill Credit Adjustment base. The CLECs individual z or t or performance score is used as a starting point to determine the monthly amount available for bill credits to that CLEC.

   3. Calculate Bill Credit Adjustment to apply to the CLECs impacted. The monthly dollars available to the CLEC are converted to a rate assuming that 1/3 of the market would receive a Z or t-score of -.8225 or less or a performance score of -1 or less. This rate is multiplied by the CLEC's volume (*e.g.*, lines in services) to determine the amount to be credit to the CLEC for that critical measure.**

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* Chart 1 provides an illustration of how Bill Credits would be calculated for the Aggregate Rule.

** Chart 2 provides an illustration of how Bill Credits would be calculated for the Individual Rule.

Critical Measure market adj. calc. when the industry Z-score/performance equates to a -1 score.

month 1 - #7 - % Missed Appt - BA - Dispatch - Platform CLEC performance factor 0.3458 Change the factor until the CLEC average measure matches the industry CLEC measure

	Measure		Observations		Sampling				
	BA	CLEC	BA	CLEC	Error	Z-Score			
Industry -----	0.13	0.1572	486915	12169	0.03	-0.823			

BA Measure	0.13
Sampling error	0.03
Qualification cutoff	0.16

CLEC DATA							CLEC Volume	Qualified CLECs	Share	weighted share	$ per CLEC	$/unit	Small Sample (x)
CLEC-1	0.13	0.06	486,915	676	0.14	0.505	13,722	-	-	-	-	-	x
CLEC-2	0.13	0.07	486,915	676	0.14	0.423	13,722	-	-	-	-	-	x
CLEC-3	0.13	0.08	486,915	676	0.14	0.340	13,722	-	-	-	-	-	x
CLEC-4	0.13	0.09	486,915	676	0.14	0.258	13,722	-	-	-	-	-	x
CLEC-5	0.13	0.11	486,915	676	0.14	0.175	13,722	-	-	-	-	-	x
CLEC-6	0.13	0.12	486,915	676	0.14	0.093	13,722	-	-	-	-	-	x
CLEC-7	0.13	0.13	486,915	676	0.14	0.010	13,722	-	-	-	-	-	x
CLEC-8	0.13	0.14	486,915	676	0.14	-0.072	13,722	-	-	-	-	-	x
CLEC-9	0.13	0.15	486,915	676	0.14	-0.155	13,722	-	-	-	-	-	x
CLEC-10	0.13	0.16	486,915	676	0.14	-0.237	13,722	-	-	-	-	-	x
CLEC-11	0.13	0.17	486,915	676	0.14	-0.320	13,722	13,722	2,393	0.102	18,003	1.31	x
CLEC-12	0.13	0.19	486,915	676	0.14	-0.402	13,722	13,722	2,549	0.108	19,184	1.40	x
CLEC-13	0.13	0.20	486,915	676	0.14	-0.485	13,722	13,722	2,706	0.115	20,364	1.48	x
CLEC-14	0.13	0.21	486,915	676	0.14	-0.567	13,722	13,722	2,863	0.122	21,545	1.57	x
CLEC-15	0.13	0.22	486,915	676	0.14	-0.650	13,722	13,722	3,020	0.128	22,726	1.66	x
CLEC-16	0.13	0.23	486,915	676	0.14	-0.733	13,722	13,722	3,177	0.135	23,907	1.74	x
CLEC-17	0.13	0.24	486,915	676	0.14	-0.815	13,722	13,722	3,334	0.142	25,087	1.83	x
CLEC-18	0.13	0.25	486,915	676	0.14	-0.898	13,722	13,722	3,491	0.148	26,268	1.91	x
	CLEC aver.	0.1572	tot.	12169	aver.score	-0.196	247,000	109,778	23,534	1.000	177,084		

Procedure to calculate the market adjustment for z-Scores

1. Calculate the dollars available for market adjustment. For modeling purposes only. Under actual operations the available dollars will be input from the Crit

The aggregate z-score is compared to the increment table to determine the total available

	z-score		increment	dollars	
from	-0.8225	-0.9048	50%	177,084	**177,084** <-----dollars for aggregate z-score of -.823
	-0.9048	-0.9870	55%	194,792	-
	-0.9870	-1.0693	60%	212,500	-
	-1.0693	-1.1515	65%	230,209	-
	-1.1515	-1.2338	70%	247,917	-
	-1.2338	-1.3160	75%	265,625	-
	-1.3160	-1.3983	80%	283,334	-
	-1.3983	-1.4805	85%	301,042	-
	-1.4805	-1.5628	90%	318,750	-
	-1.5628	-1.645	95%	336,459	-
			100%	354,167	-
				total	177,084

2. Determine which CLECs qualify for the market adjustment.

The cutoff for qualification is BA's measure (.13) +/- one sampling error (.03). Each CLECs performance is compared to the cutoff point, performance equal to or less than the cutoff (.13+.03) qualifies.

3. Calculate the individual market adjustments for qualified CLECs.

a. Determine each CLEC's share.
   (CLEC Measure x Qualified CLEC's Volume) For CLEC-11 - (0.17 x 13,722)
b. Determine each CLEC's weighted share.
   Divide the CLEC's share by the sum of all the CLECs' share. For CLEC-11 - (2,393 / 23,534)
c. Determine $ per CLEC.
   Multiply the CLEC's weighted share by the dollars available for market adjustment from step 1. For CLEC-11 - (.102 x $177084)

When calculating a market adjustment for metrics that use absolute standards (generally 95%) all CLECs at the -1 level or less would qualify. The calculation of the dollars and allocation would be similar to the z-score method.

Market Adj. Calc. if a CLEC receives a -1 for two consecutive months and the Critical Measure adjustment does not trip in at least one month.

month 2 - #7 - % Missed Appt - BA - Dispatch - Platfc CLEC performance factor 0.3803 Change the factor until the CLEC average measure matches the industry CLEC measure

	Measure		Observations		Sampling		Small sample size	
	BA	CLEC	BA	CLEC	Error	Z-Score	(x)	
Industry -----	0.13	0.1569	486915	12169	0.03	-0.8134		

If an 'x' is in the small sample size column the Z-score result will likely change under the small sample permutation test.

CLEC DATA							CLEC Volume	Qualified Volume	Small Sample (x)
CLEC-1	0.13	0.05	85,861	676	0.14	0.577	13,722	-	x
CLEC-2	0.13	0.06	85,861	676	0.14	0.486	13,722	-	x
CLEC-3	0.13	0.08	85,861	676	0.14	0.395	13,722	-	x
CLEC-4	0.13	0.09	85,861	676	0.14	0.305	13,722	-	x
CLEC-5	0.13	0.10	85,861	676	0.14	0.214	13,722	-	x
CLEC-6	0.13	0.11	85,861	676	0.14	0.123	13,722	-	x
CLEC-7	0.13	0.13	85,861	676	0.14	0.033	13,722	-	x
CLEC-8	0.13	0.14	85,861	676	0.14	-0.058	13,722	-	x
CLEC-9	0.13	0.15	85,861	676	0.14	-0.149	13,722	-	x
CLEC-10	0.13	0.16	85,861	676	0.14	-0.239	13,722	-	x
CLEC-11	0.13	0.18	85,861	676	0.14	-0.330	13,722	-	x
CLEC-12	0.13	0.19	85,861	676	0.14	-0.421	13,722	-	x
CLEC-13	0.13	0.20	85,861	676	0.14	-0.511	13,722	-	x
CLEC-14	0.13	0.21	85,861	676	0.14	-0.602	13,722	-	x
CLEC-15	0.13	0.23	85,861	676	0.14	-0.692	13,722	-	x
CLEC-16	0.13	0.24	85,861	676	0.14	-0.783	13,722	-	x
CLEC-17	0.13	0.25	85,861	676	0.14	-0.874	13,722	13,722	x
CLEC-18	0.13	0.26	85,861	676	0.14	-0.964	13,722	13,722	x
	CLEC aver.	0.1569		individual score average		-0.194	247,000	27,444	

1. Determine if any CLECs qualify for a market adjustment. for modeling purpose month one is the previous tab - (month 1- CM-industry miss)
CLECs qualify for a bill credit if they had a z-score of -.8225 or less from the previous month (see 'month 1 - CM-industry miss' tab). In this case CLEC 17 and 18 qualify for the 2 month market adjustment.

2. Determine each CLEC's market adjustment base. The CLEC's z-score is used as the assumed market score to determine total available dollars.

CLEC-18

z-score - -0.964 volume - 13722

z-score	increments	dollars	
-0.823			
	50%	177,084	-
-0.905			
	55%	194,792	194,792
-0.988			
	60%	212,500	-
-1.070			
	65%	230,209	-
-1.152			
	70%	247,917	-
-1.235			
	75%	265,625	-
-1.317			
	80%	283,334	-
-1.399			
	85%	301,042	-
-1.481			
	90%	318,750	-
-1.564			
	95%	336,459	-
-1.646			
$33.6m/8/12-->	100%	354,167	-
	total		194,792

CLEC-17

z-score - -0.874 volume - 13722

z-score	increments	dollars	
-0.823			
	50%	177,084	177,084
-0.905			
	55%	194,792	-
-0.988			
	60%	212,500	-
-1.070			
	65%	230,209	-
-1.152			
	70%	247,917	-
-1.235			
	75%	265,625	-
-1.317			
	80%	283,334	-
-1.399			
	85%	301,042	-
-1.481			
	90%	318,750	-
-1.564			
	95%	336,459	-
-1.646			
	100%	354,167	-
	total		177,084

3. Calculate the market rate to apply to the CLECs volume to be credited.

a. The dollars are first converted to a rate assuming 1/3 of the market would be at the -.8225 or less.

b. The market rate is then applied to the individual CLEC's volume to be credited.

Assumed market adjustment dollars		194,792
1/3 market volume	/	82,333
market rate		2.37
CLEC-18 volume		13,722
Bill Credit		$ 32,465

Assumed market adjustment dollars		177,084
1/3 market volume	/	82,333
market rate		2.15
CLEC-17 volume		13,722
Bill Credit		$ 29,514

APPENDIX G

Please note, Appendix G – Performance Measures, is a separate document and has not been included in this report.

APPENDIX H

Special Provisions – UNE Measures

UNE Ordering Performance:

Bell Atlantic-New York will provide an additional $2 million in monthly bill credits for UNE Order Confirmation Performance based on four POTS metrics included in the MOE category. If on-time performance falls below 90% for any month, a credit of $500,000 for each metric missing the standard will be allocated and credited to all CLECs ordering Unbundled Network Elements based on the number of lines in service. Lines in service will equal: UNE-P, UNE Loops, IOF, EEL Loops and Resold Lines. Funding for these credits will be taken from funds that are unused in previous months within a plan year or from the current month. No new funds are available. The metrics and standards are as follows:

Metric #	POTS Electronically Submitted	Threshold
OR-1-04	% On Time LSRC < 10 Lines	< 90%
OR-1-06	% On Time LSRC ≥ 10 Lines	< 90%
OR-2-04	% On Time Reject < 10 Lines	< 90%
OR-2-06	% On Time Reject ≥ 10 Lines	< 90%

FLOW THROUGH:

An additional $10 Million per year is available for flow through performance. Two performance measures each from UNE and Resale from the Carrier to Carrier Performance Reports will be used to measure performance.

Metric #		Threshold
OR-5-01	% Flow Through – Total – Resale	≥ 80%
OR-5-01	% Flow Through – Total – UNE	≥ 80%
OR-5-03	% Flow Through – Achieved – Resale	≥ 95%
OR-5-03	% Flow Through – Achieved - UNE	≥ 95%

For each measure the scores for UNE and Resale will be combined and reviewed on a quarterly basis. If the combined score meets either target, no additional credits are due. If the combined score meets neither metric target for that quarter, then $2,500,000 will be credited to all CLECs operating in New York based on the numbers of lines in service. BA-NY will work with CLECs to improve order quality. If any CLEC, after working with BA-NY, refuses to improve order quality, BA-NY will exclude their orders from the flow through performance measures. Performance will be measured for the first time under this measure upon BA-NY's entry into the InterLATA market. The prior three months will be examined to determine if bill credits are due.

The following table demonstrates the calculation of quarterly flow through performance:

Quarterly Flow Through Performance:

	Month 1	Month 2	Month 3	Quarter Total
Total Orders that Flow Through				
Resale	8500	9000	7500	25000
UNE	15000	18000	17000	50000
TOTAL	23500	27000	24500	75000
Total Orders Processed				
Resale	10000	12000	10000	32000
UNE	25000	21000	22000	68000
TOTAL	35000	33000	32000	100000

Total % Flow Through - Resale/UNE Combined for Quarter: 75%

Total Orders that Flow Through				
Resale	8500	9000	7500	25000
UNE	15000	18000	17000	50000
TOTAL	23500	27000	24500	75000
Total Orders Designed to Flow Through:				
Resale	9000	10000	9000	28000
UNE	18000	19000	18000	55000
TOTAL	27000	29000	27000	83000

Total % Achieved Flow Through - Resale/UNE Combined for Quarter: 90.4%

In this example, neither metric met the performance threshold, therefore $2.5 Million would have been credited to all CLECs purchasing Resale and/or Unbundled Network Elements.

Hot Cut Loop Performance:

An additional $24 Million per year is available for Hot Cut Loop performance. This measure will be composed of two performance metrics: PR-4-06 - % On Time Hot Cut Loop and PR-6-01 - % Installation Troubles within 7 Days – Hot Cut Loop.[1] If either one of these thresholds is missed, additional bill credits will be distributed to the CLECs.

This measure has two tiers of performance standards. One tier will be applied to a two month scenario, the second tier will be applied to a one month scenario. The Tier I threshold is measured based on two consecutive months of performance, while the Tier II threshold is measured based on an individual month's performance. The performance thresholds are contained in the table below:

Metric #		Tier II [2] Threshold	Tier III [3]
PR-4-06	% On Time Hot Cut Loop	< 90%	< 85%
PR-6-01	% Installation Troubles within 7 Days – Hot Cut Loop	≥ 3%	≥ 4%

Under Tier I if BA-NY does not satisfy the above standards for two consecutive moths, it will distribute $1 million to the effected CLECs. Under Tier II if BA-NY does not satisfy the above

[1] These two measures are also included in the Critical Measurements method, and additional bill credits may be due if BA-NY does not satisfy that Critical Measure.

[2] Threshold is measured based on two consecutive months of performance

[3] Threshold is measured based on an individual month's performance

standards for a single month, it will distribute $2 million to the effected CLECs. Below is an example of how this measure would work.

Example:

Metric #		Performance For Month 1	Performance for Month 2	Performance for Month 3	Performance for Month 4
PR-4-06	% On Time Hot Cut Loop	84%	91%	91%	91%
PR-6-01	% Installation Troubles within 7 Days – Hot Cut Loop	2%	3.5%	2%	3.5%
	Credit for the Month	$2 M	$1 M	$0M	$0M

APPENDIX I

SPECIAL PROVISIONS

ELECTRONIC DATA INTERFACE MEASURES

This Special Provision includes three measures to ensure that the Electronic Data Interface between BA-NY's operational support systems and the CLEC systems operate in a non-discriminatory fashion. An additional $24 million per annum in bill credits is available for these three measures.

A. % Missing Notifier Trouble Ticket PONS cleared within 3 Business Days

BA-NY will provide an addition $1 million in bill credits each month for a new measure "% Missing Notifier Trouble Ticket PONS Cleared Within 3 Business Days." If performance falls below 90% for any month on this measure, **or** more than 5% of the orders resubmitted by CLECs related to trouble tickets at BA-NY's request are rejected as duplicates, a credit of $1 million will be allocated to all CLECs using the EDI interface based on the number of lines in service. Lines in service will equal: UNE-P, UNE Loops, IOF, EEL Loops and Resold Lines. Copies of these measures are attached. The measures and standards are as follows:

Measure #		Threshold
PO-9-01	% Missing Notifier Trouble Ticket PONS Cleared within 3 Bus. Days	< 90%
OR-3-02	% Resubmission Rejection	> 5%

B. % Order Confirmation/Rejects Sent Within 3 Business Days

BA-NY will provide an addition $0.5 million in bill credits each month for a new measure "% Order Confirmations/Rejects Sent Within 3 Business Days." This measure applies to Resale POTs and UNE Platform Local Service Requests. If performance falls below 90% for any month, the bill credits will be allocated to all CLECs using the EDI interface based on the number of lines in service as defined above. A copy of the measure is attached. The measure and standard are as follows:

Measure #		Threshold
OR-7-01	% Order Confirmation/Rejects sent within 3 Business Days	< 90%

C. **% SOP To Bill Completion Notice Sent Within 3 Business Days**

BA-NY will provide an additional $0.5 million in bill credits each month for a new measure "% SOP to Bill Completion Notice Sent Within 3 Business Days." A copy of the measure is attached. If performance falls below 90% for any month, the bill credits will be allocated to all CLECs using the EDI interface based on the number of lines in service as defined above. The metric and standard is are follows:

Measure #		Threshold
OR-4-09	% SOP to Bill Completion Within 3 Business Days	< 90%

Function:		
PO-9 Timeliness of Trouble Ticket Resolution		
Definition:		
The percent of EDI missing notifier trouble ticket PONS cleared within 3 business days from the day of receipt of the trouble ticket. The elapsed time begins with receipt at the Bell Atlantic Systems Support Help Desk of a trouble ticket for EDI missing notifiers (i.e., order acknowledgement, order confirmation, order rejection, work completion, and billing completion notices) with the PONS in questions enumerated with the appropriate identification. The ticket is considered cleared when Bell Atlantic has either requested the CLEC to resubmit the PON or communicated the current status of the PON and provided the delayed status notifier to the CLEC. Tickets received after 5 PM and trouble ticket clearances sent after 5PM will be considered effective on the following business day. Performance will be based on the time that the trouble ticket is received.		
Exclusions:		
• The PONs shall be considered to be timely cleared if Bell Atlantic provides the status notifier after 3 business days at the request of the CLEC or because of CLEC system capacity or availability may cause BA to miss the 3 day target. • Out of sequence notifiers. This type of ticket indicates that the CLEC has received one or more notifiers for a PON but not in the sequence expected.		
Performance Standard:		
90% threshold for Special Provisions		
Report Dimensions:		
Company: • CLEC aggregate	Geography: • State	
Products	• EDI Notifier Trouble Tickets	
Sub-Metrics		
PO-9-01	% Missing Notifier Trouble Ticket PONS Cleared within 3 Bus. Days	
Calculation	Numerator	Denominator
	Number of EDI missing notifier trouble ticket PONS in denominator cleared within 3 business days after receipt.	Total number of EDI missing notifier trouble ticket PONS submitted.

Function:

OR-4 Timeliness of Completion Notification

Definition:

Resale & UNE combined:

Completion Notification Response Time:

The elapsed time between the actual order completion in the Service Order System (SOP) and the distribution of the billing completion notification. If multiple orders have been generated from a single CLEC/Reseller request, the measure is taken between completion of the last order associated with the request and the distribution of the completion notification.

Exclusions:

- BA Test Orders
- When the order completion time in the billing system cannot be determined, the order is excluded from the measurements, and the percentage of orders so excluded is reported each month.
- From OR-4-09; Complex Resale Orders

Performance Standard:

OR-4-09: 90% threshold for Special Provision.

Report Dimensions OR-4 Completion Notification

Company:	Geography:
• CLEC Aggregate • CLEC Specific	• State

Sub-Metrics

OR-4-09	% SOP to Bill Completion Within 3 Business Days	
Products	• EDI Orders	
Calculation	**Numerator**	**Denominator**
	Total number orders in denominator for which billing completion notices (BCN) are time-stamped in DCAS within 3 business days of SOP completion.	Number of SOP Completed Orders during the report period.

Function:		
OR-3 Percent Rejects		
Definition:		
Percent Rejects: The percent of orders received (including supplements and re-submissions) by Bell Atlantic that are rejected or queried. (Orders that are queried are considered rejected.) Orders are rejected due to omission or error of required order information. The percent reject measure is reported against all order submitted transactions processed in the Ordering Interface (DCAS or Request Manager), not just those with associated CRIS completions. % Resubmission Rejection: The percent of PONs resubmitted at Bell Atlantic's request in relation to a Trouble Ticket which are rejected by Bell Atlantic's ordering systems and interfaces as being duplicative of PONs already in Bell Atlantic's systems. Note: Edit Rejects – Orders failing "Basic front-end edits"[1] are not placed on Completed PON Master File.		
Exclusions:		
• BA Test Orders		
Performance Standard:		
OR-3-02: > 5% threshold for Special Provision.		
Report Dimensions		
Company: • CLEC Aggregate • CLEC Specific	Geography: • State	
Sub-Metrics		
Products	• EDI Orders	
OR-3-02	**% Resubmission Rejection**	
Calculation	**Numerator**	**Denominator**
	Total PONs resubmitted at Bell Atlantic's request in relation to a Trouble Ticket that are rejected by Bell Atlantic's systems as duplicative of PONs already in Bell Atlantic's systems.	Total PONs resubmitted at Bell Atlantic's request in relation to a Trouble Ticket.

[1] Basic front-end edits – see Glossary to Carrier-to-Carrier Guidelines in Case 97-C-0139.

Function:

OR-7 % Order Confirmation/Rejects Sent Within 3 Business Days

Definition:

The percent of Resale POTS and UNE Platform LSRs confirmed or rejected by BA within 3 business days of receipt as a percent of total LSRs received.

Note: This is a measure of completeness not timeliness.
Source: Master PON File.

Exclusions:

- Canceled orders.
- LSRs that were Supplemented prior to confirmation or rejection.
- Edit Rejects (negative 997s) that would not be eligible for confirmation or rejection.

Report Dimensions

Company:	Geography:
• CLEC Aggregate • CLEC Specific	• State

Performance Standard

Metric OR-7-01: 90% threshold for Special Provison.

Sub-Metrics

OR-7-01	**% Order Confirmation/Rejects sent within 3 Business Days**	
Products	• EDI Orders	
Calculation	**Numerator**	**Denominator**
	Total LSR confirmations plus rejections sent within 3 business days of LSR submission.	Total LSRs received during the reporting period.

Bell Atlantic - NY 271 Backslide Report

Month

UNE

	Pre-Ordering	BA	CLEC	Diff.	Perf. Score	Wgt.	Wgtd. Score
PO-1-01-6020	**Customer Service Record**						
PO-1-02-6020	**Due Date Availability**						
PO-1-03-6020	**Address Validation**						
PO-1-04-6020	**Product and Service Availability**						
PO-1-05-6020	**Telephone Number Availability and Reservation**						
PO-1-06-6020	**Facility Availability (Loop Qualification)**						
PO-2-02-6020	**OSS Interface Availability - Prime**						
PO-3-02-3000	% Answered within 30 Seconds - Ordering						
PO-3-04-3000	% Answered within 30 Seconds - Repair						

OR	Ordering	Observations					
OR-1-02-3320	**% On Time LSRC - Flow Through - POTS - 2hrs**						
OR-1-04-3100	**% OT LSRC<10 Lines (Elec.-No Flow Through)-POTS**						
OR-1-04-3200	% OT LSRC<10 Lines (Elec.-No Flow Through)-Specials						
OR-1-04-3300	% OT LSRC<10 Lines (Elec.-No Flow Through)-Complex						
OR-1-06-3320	**% On Time LSRC >=10 Lines (Electronic) - POTS**						
OR-1-06-3200	% On Time LSRC >=10 Lines (Electronic) - Specials						
OR-1-06-3300	% On Time LSRC >=10 Lines (Electronic) - Complex						
OR-2-02-3320	**% On Time LSR Reject - Flow Through - POTS**						
OR-2-04-3320	**% OT LSR Rej.<10 lines (Elec.-No Flow Through)-POTS**						
OR-2-04-3200	% OT LSR Rej.<10 lines (Elec.-No Flow Through)-Specials						
OR-2-04-3300	% OT LSR Rej.<10 lines (Elec.-No Flow Through)-Complex						
OR-2-06-3320	**% On Time LSR Reject >= 10 Lines (Electronic) - POTS**						
OR-2-06-3200	% On Time LSR Reject >= 10 Lines (Electronic) - Specials						
OR-2-06-3300	% On Time LSR Reject >= 10 Lines (Electronic) - Complex						
OR-4-09-3000	**% SOP to Bill Completion Sent w/in 3 Business Days**						
OR-5-03-3112	% Flow Through - Achieved - POTS & Specials						
OR-6-03-3000	% OT Accuracy LSRC						

PR	Provisioning	BA	CLEC	BA	CLEC	BA Standard Deviation	Sampling Error	Stat. Score	
PR-3-08-3142	% Completed w/in 5 Days (1-5 lines-No Dispatch)-UNE-P/Other								
PR-3-09-3142	% Completed w/in 5 Days (1-5 lines-Dispatch)-UNE-P/Other								
PR-4-01-3200	**% Missed Appointment - BA - Total - Specials**								
PR-4-01-3510	**% Missed Appointment - BA - Total - EEL**								
PR-4-01-3530	% Missed Appointment - BA - Total - IOF								
PR-4-02-3100	Average Delay Days - Total - POTS								
PR-4-02-3200	Average Delay Days - Total - Specials								
PR-4-02-3300	Average Delay Days - Total - Complex								
PR-4-04-3140	% Missed Appointment - BA - Dispatch - Platform								
PR-4-04-3113	**% Missed Appointment - BA - Dispatch - New Loop**								
PR-4-04-3300	**% Missed Appointment - BA - Dispatch - Complex**								
PR-4-05-3140	**% Missed Appointment- BA - No Dispatch - Platform**								
PR-4-05-3300	**% Missed Appointment- BA - No Dispatch - Complex**								
PR-5-01-3100	% Missed Appointment - Facilities - POTS								
PR-5-01-3200	% Missed Appointment - Facilities - Specials								
PR-5-02-3100	% Orders Held for Facilities > 15 days - POTS								
PR-5-02-3200	% Orders Held for Facilities > 15 days - Specials								
PR-6-01-3121	% Installation Troubles within 30 days - POTS Other								
PR-6-01-3200	% Installation Troubles within 30 days - Specials								
PR-6-02-3520	**% Installation Troubles within 7 days - Hot Cut**								
PR-9-01-3520	**% On Time Performance - Hot Cut**								

MR	Maintenance & Repair			Diff.		
MR-1-01-2000	Average Response Time - Create Trouble					
MR-1-03-2000	Average Response Time - Modify Trouble					
MR-1-04-2000	Average Response Time - Request Cancellation of Trouble					
MR-1-06-2000	Average Response Time - Test Touble (POTS only)					

							Stat. Score	
MR-2-01-3200	Network Trouble Report Rate - Specials							
MR-2-02-3112	Network Trouble Report Rate - Loop (POTS)							
MR-3-01-3112	% Missed Repair Appointments - Loop							
MR-3-02-3100	% Missed Repair Appointments - Central Office							
MR-4-01-3200	**Mean Time to Repair - Specials**							
MR-4-02-3112	**Mean Time to Repair - Loop Trouble**							
MR-4-03-3100	**Mean Time to Repair - CO Trouble**							
MR-4-08-3100	**% Out of Service > 24 Hours - POTS**							
MR-4-08-3200	% Out of Service > 24 Hours - Specials							
MR-5-01-3100	**% Repeat Reports w/in 30 days - POTS**							
MR-5-01-3200	**% Repeat Reports w/in 30 days - Specials**							

BI	Billing		
BI-1-02-2030	% DUF in 4 Business Days		

"NA" - no activity "UD" - under development

Totals

Bell Atlantic - NY 271 Backslide Report Month

RESALE

	Pre-Ordering	BA	CLEC	Diff.	Perf. Score	Wgt.	Wgtd. Score
PO-1-01-6020	**Customer Service Record**						
PO-1-02-6020	**Due Date Availability**						
PO-1-03-6020	**Address Validation**						
PO-1-04-6020	**Product and Service Availability**						
PO-1-05-6020	**Telephone Number Availability and Reservation**						
PO-1-06-6020	**Facility Availibility (Loop Qualification)**						
PO-2-02-6020	**OSS System Availability - Prime**						
PO-3-02-2000	% Answered within 30 Seconds - Ordering						
PO-3-04-2000	% Answered within 30 Seconds - Repair						

OR	Ordering	CLEC	Observations
OR-1-02-2320	% On Time LSRC - Flow Through - POTS - 2hrs		
OR-1-04-2100	% OT LSRC <10 Lines (Elec.- No Flow Through) - POTS		
OR-1-04-2200	% OT LSRC <10 Lines (Elec.- No Flow Through) - Specials		
OR-1-06-2320	% On Time LSRC >= 10 Lines (Electronic) - POTS		
OR-1-06-2200	% On Time LSRC >= 10 Lines (Electronic) - Specials		
OR-2-02-2320	% On Time LSR Reject - Flow Through - POTS		
OR-2-04-2320	% OT LSR Rej.<10 Lines (Elec.-No Flow Through)-POTS		
OR-2-04-2200	% OT LSR Rej.<10 Lines (Elec.-No Flow Through)-Specials		
OR-2-06-2320	% On Time LSR Reject >=10 Lines (Electronic) - POTS		
OR-2-06-2200	% On Time LSR Reject >=10 Lines (Electronic) - Specials		
OR-4-09-2000	% SOP to Bill Completion Sent w/in 3 Business Days		
OR-5-03-2000	% Flow Through - Achieved - POTS & Specials		
OR-6-03-2000	% Accuracy - LSRC		

PR	Provisioning	BA	CLEC	BA	CLEC	BA Standard Deviation	Sampling Error	Stat. Score
PR-3-08-2100	% Completed w/in 5 Days (1-5 lines - No Dispatch) - POTS							
PR-3-09-2100	% Completed w/n 5 Days (1-5 lines - Dispatch) - POTS							
PR-4-01-2200	**% Missed Appointment - BA - Total - Specials**							
PR-4-02-2100	Average Delay Days - Total - POTS							
PR-4-02-2200	Average Delay Days - Total - Specials							
PR-4-04-2100	**% Missed Appointment - BA - Dispatch - POTS**							
PR-4-05-2100	**% Missed Appointment- BA - No Dispatch - POTS**							
PR-5-01-2100	% Missed Appointment - Facilities - POTS							
PR-5-01-2200	% Missed Appointment - Facilities - Specials							
PR-5-02-2100	% Orders Held for Facilities > 15 days - POTS							
PR-5-02-2200	% Orders Held for Facilities > 15 days - Specials							
PR-6-01-2100	% Installation Troubles within 30 days - POTS							
PR-6-01-2200	% Installation Troubles within 30 days - Specials							

MR	Maintenance & Repair	Diff.	Stat. Score
MR-1-01-2000	Average Response Time - Create Trouble		
MR-1-03-2000	Average Response Time - Modify Trouble		
MR-1-04-2000	Average Response Time - Request Cancellation of Trouble		
MR-1-06-2000	Average Response Time - Test Touble (POTS only)		
MR-2-01-2200	Network Trouble Report Rate - Specials		
MR-2-02-2100	Network Trouble Report Rate - Loop (POTS)		
MR-3-01-2100	% Missed Repair Appointments - Loop		
MR-3-02-2100	% Missed Repair Appointments - Central Office		
MR-4-01-2200	**Mean Time to Repair - Specials**		
MR-4-02-2100	**Mean Time to Repair - Loop Trouble**		
MR-4-03-2100	**Mean Time to Repair - CO Trouble**		
MR-4-08-2100	**% Out of Service > 24 Hours - POTS**		
MR-4-08-2200	% Out of Service > 24 Hours - Specials *		
MR-5-01-2100	**% Repeat Reports w/in 30 days - POTS**		
MR-5-01-2200	**% Repeat Reports w/in 30 days - Specials**		

BI	Billing	CLEC	Totals
BI-1-02-2030	% DUF in 4 Business Days		

"NA" - no activity "UD" - under development

Bell Atlantic - New York State

271 Backslide Report

Month

Sheet G

INTERCONNECTION (TRUNKS)

OR	Ordering	CLEC	Obs.	Perf. Score	Wgt.	Wgtd. Score
OR-1-12-5020	% On Time Firm Order Confirmations					
OR-1-13-5020	% On Time Design Layout Record					
OR-2-12-5000	% On TimeTrunk ASR Reject					

PR	Provisioning	Observations BA	Observations CLEC	BA Standard Deviation	Sampling Error	Stat. Score	Perf. Score	Wgtd. Score
PR-4-01-5000	**% Missed Appointment - BA - Total**							
PR-4-02-5000	Average Delay Days - Total							
PR-4-07-3540	**% On Time Performance - LNP only**							
PR-5-01-5000	% Missed Appointment - Facilities							
PR-5-02-5000	% Orders Held for Facilities > 15 Days							
PR-6-01-5000	% Installation Troubles w/in 30 Days							
MR	**Maintenance & Repair**							
MR-4-01-5000	**Mean Time to Repair - Total**							
MR-5-01-5000	% Repeat Reports w/in 30 Days							
NP	**Network Performance**							
NP-1-03-5000	**# of Final Trunk Groups Blocked 2 Months**							
NP-1-04-5000	**# of Final Trunk Groups Blocked 3 Months**							
						Totals		

Collocation

NP	Network Performance	CLEC	Obs.	Perf. Score	Wgt.	Wgtd. Score
NP-2-01-2000	% OT Response to Request for Physical Collocation					
NP-2-02-2000	% OT Response to Request for Virtual Collocation					
NP-2-05-2000	**% On Time - Physical Location**					
NP-2-06-2000	**% On Time - Virtual Location**					
NP-2-07-2000	**Average Delay Days - Physical**					
NP-2-08-2000	**Average Delay Days - Virtual**					
					Totals	

xDSL Performance Report (Critical Measure 12)

		BA	CLEC	BA	CLEC	Sampling Error	Stat. Score
PO-8-01	**Manual Loop Qualification**						
PO-8-02	**Engineering Record Request**						
PR-4-14	**% Completed on Time**						
PR-4-15	**% Completed on Time**						
PR-4-16	**% Completed on Time**						
PR-4-17	**% Completed on Time**						
PR-4-18	**% Completed on Time**						
PR-6-01-3300	**% Installation Troubles - xDSL Loops**						

"NA" - no activity "UD" - under development

Month		Bell Atlantic - New York CRITICAL MEASURES - Backslide Report	Resale		UNE		Trunks		Collocation		Total
			%	$	%	$	%	$	%	$	$
		PRE-ORDERING									
1	metric	**Response Time OSS Interface**	0.0%	0	0.0%	0					0
	PO-1-01	Customer Service Record	X	-	X	-					
	PO-1-02	Due Date availability	X	-	X	-					
	PO-1-03	Address Validation	X	-	X	-					
	PO-1-04	Product and Service Availability	X	-	X	-					
	PO-1-05	Telephone Number Availability and Reservation	X	-	X	-					
	PO-1-06	Facility Availibility (Loop Qualification)	X	-	X	-					
2	PO-2-02	**OSS Interface Availability - Prime**	0%	0	0%	0					0
		ORDERING									
3	metric	**% On Time Ordering Notification**			0%	0					0
	OR-1-02	% On Time LSRC - Flow Through - POTS - 2hrs			X	-					
	OR-1-04	% OT LSRC<10 Lines (Elec.-No Flow Through)-POTS			X	-					
	OR-1-06	% OT LSRC >=10 Lines (Electronic) - POTS			X	-					
	OR-2-02	% On Time LSR Reject - Flow Through - POTS			X	-					
	OR-2-04	% OT LSR Rej.<10 lines (Elec.-No Flow Through)-POTS			X	-					
	OR-2-06	% On Time LSR Reject >= 10 Lines (Electronic) - POTS			X	-					
	OR-4-09	% SOP to Bill Completion Sent w/in 3 Business Days			X	-					
		PROVISIONING									
4a	PR-4-01	**% Missed Appointment - BA - Total - EEL**			0%	0					0
4b		**% Missed Appointment**	0%	0	0%	0	0%	0			0
	PR-4-01	% Missed Appointment - BA - Total - Specials	X	-	X	-					
	PR-4-01	% Missed Appointment - BA - Total - Trunks					X				
	PR-4-04	% Missed Appointment - BA - Total - Dispatch - POTS	X	-							
	PR-4-04	% Missed Appointment - BA - Total - Dispatch - New Loops			X	-					
	PR-4-05	% Missed Appointment - BA - Total - No Dispatch - POTS	X	-							
5	PR-4-05	**% Missed Appt. - BA - No dispatch - Platform**			0%	0					0
6		**Hot Cut Performance**			0%	0					0
	PR-4-06	% On Time - Hot Cut (adj. for missed appts. due to late LSRC)			X						
	PR-6-02	% Troubles within 7 Days - Hot Cut			X						
7	PR-4-07	**% On Time Performance - UNE LNP**					0%	0			0
		MAINTENANCE									
8		**Mean Time To Repair**	0%	0	0%	0	0%	0			0
	MR-4-01	Mean Time To Repair - Specials	X	-	X	-					
	MR-4-01	Mean Time To Repair - Trunks					X				
	MR-4-02	Mean Time To Repair - Loop Trouble	X	-	X	-					
	MR-4-03	Mean Time To Repair - Central Office	X	-	X	-					
	MR-4-08	% Out Of Service > 24 Hours - POTS	X	-	X	-					
9		**% Repeat Reports within 30 Days**	0%	0	0%	0					0
	MR-5-01	% Repeat Reports w/in 30 days - POTS	X	-	X	-					
	MR-5-01	% Repeat Reports w/in 30 days - Specials	X	-	X	-					
		NETWORK PERFORMANCE									
10		**Final Trunk Group Blocked**									
	NP-1-03	**Blocked 2 Months**						0			0
	NP-1-04	**Blocked 3 Months**						0			0
11		**Collocation**							0%	0	0
	NP-2-05/6	% On Time - Physical & Virtual							X	-	
	NP-2-07/8	Average Delay Days - Physical & Virtual							X	-	
		Digital Subscriber Line Services									
12		**xDSL**			0%	0					0
	PO-8-01	Avg. Response Time - Manual Loop Qualification			X	-					
	PO-8-02	Avg. Response Time - Engineering Record Request			X	-					
	PR-4-14	% Completed on Time			X	-					
	PR-4-15	% Completed on Time			X	-					
	PR-4-16	% Completed on Time			X	-					
	PR-4-17	% Completed on Time			X	-					
	PR-4-18	% Completed on Time			X	-					
	PR-6-01	% Installation Troubles - xDSL Loops			X	-					
		# of full share measures in category Total	5	0	10	0	4	0	1	0	$ -

Month

Special Provision - UNE Ordering

		% On Time	Observations	Market Adj.
OR-1-04-3100	% OT LSRC<10 Lines (Elec.-No Flow Through)-POTS			
OR-1-06-3320	% On Time LSRC >=10 Lines (Electronic) - POTS			
OR-2-04-3320	% OT LSR Rej.<10 lines (Elec.-No Flow Through)-POTS			
OR-2-06-3320	% On Time LSR Reject >= 10 Lines (Elec.) - POTS			

Total Market Adj.

* For allocation, any UNE Ordering market adjustment is combined with the MOE UNE market adjustment allocation.

Special Provision - UNE Flow Through

PR-5-01-3000 % Flow Through - Total - POTS & Specials				OR-5-03-3112 % Flow Through - Achieved - POTS & Specials			
Month	%	Observations Gross #	Flow-thru	Month	%	Observations Gross #	Flow-thru
Overall				Overall			

Market Adjustment *

* For allocation, any Flow Though market adjustment is combined with the MOE UNE market adjustment allocation.

Special Provision - Hot Cut - Loop Performance

		% On Time Current Mo.	Observations	% On Time Prior Month	Observations
PR-9-01-3520	% On Time Performance - Hot Cut				

		%Troubles
PR-6-02-3520	% Installation Troubles within 7 days - Hot Cut	

Tier I (2 mo) Tier II (1 mo) Total

Market Adjustment *

* For allocation purposes, any Hot Cut market adjustment is combined with the Critical measure market adjustment allocation.

Special Provision - Electronic Data Interface Measures

		% On Time	Observations
OR-9-01	% Missing Notifier Trouble Ticket PONS Cleared within 3 Bus. Days		

		% Reject	Observations
OR-3-02	% Resubmission Rejection		

Market Adjustment

		% On Time	Observations	Market Adj.
OR-7-01	% Order Confirmation/Rejects sent within 3 Business Days			

		% On Time	Observations	Market Adj.
OR-4-09	% SOP to Bill Completion within 3 Business Days			

Total Market Adj.

Change Control Assurance Plan

		% On Time	Observations	Mrkt Adj.
PO-4-01	% Change Management Notices sent on Time (type 3,4,5)			$ -

		Delay Days*		
PO-4-03	Change Management Notice Delay 8 plus Days (type 1-5)			$ -

* Gross number of delay days

		% Test Deck Wgt. Failure	Test Deck Wgt.	
PO-6-01	% Software Validation			$ -

PO-7-04	Delay Hours - Failed/Rejected Test Deck Transactions Transactions failed, no workaround			$ -

Total Market Adjustment	$ -

Bell Atlantic - New York

PAP/CCAP Market Adjustment Summary

Month

	Weighted Score	Market Adjustment
MODE OF ENTRY		
Resale		
Unbundled Network Elements		
Trunks		
Collocation		
Mode of Entry Total		
# **CRITICAL MEASURES**		
1 Response Time OSS Interface		
2 OSS Interface Availability - Prime		
3 % On Time Ordering Notification		
4a % Missed Appointment - BA - Total - EEL		
4b % Missed Appointment		
5 % Missed Appt. - BA - No dispatch - Platform		
6 Hot Cut Performance		
7 % On Time Performance - UNE LNP		
8 Mean Time To Repair		
9 % Repeat Reports within 30 Days		
10 Final Trunk Group Blocked		
11 Collocation		
12 xDSL		
Critical Measure Total		
SPECIAL PROVISIONS		
UNE Ordering		
UNE Flow Through		
UNE Hot Cut Loop		
EDI Measures		
Special Provision Total		
CHANGE CONTROL		
Grand Total		

271 Backslide Market Adjustment Summary - CLEC A

Month

	Weighted Score	Market Adjustment	Number of Units in Market	Market Adjust. Rate	Number of Units for CLEC A	Total Market Adjustment for CLEC A
MODE OF ENTRY						
Resale						
Unbundled Network Elements						
Trunks						
Collocation						

TOTAL MOE $ to CLEC A $0

	CRITICAL MEASURES / EDI Special Provision	
1	Response Time OSS Interface	Resale
1	Response Time OSS Interface	UNE
2	OSS Interface Availability - Prime	Resale
2	OSS Interface Availability - Prime	UNE
3	% Accuracy LSRC	
4a	% Missed Appointment - BA - Total - EEL	
4b	% Missed Appointment - BA - Total - Specials	Resale
4b	% Missed Appointment - BA - Total - Specials	UNE
4b	% Missed Appointment - BA - Total - Trunks	
4b	% Missed Appointment - BA - Total - Dispatch - POTS	Resale
4b	% Missed Appointment - BA - Total - No Dispatch - POTS	Resale
4b	% Missed Appointment - BA - Total - Dispatch - New Loops	UNE
5	% Missed Appointment - BA - No Dispatch - Platform	
6	% On Time Performance / % Troubles Within 7 Days	Hot Cut
7	% On Time Performance - LNP	
8	Mean Time to Repair - Specials	Resale
8	Mean Time to Repair - Loop Trouble	Resale
8	Mean Time to Repair - Central Office	Resale
8	% Out of Service > 24 Hours - POTS	Resale
8	Mean Time to Repair - Specials	UNE
8	Mean Time to Repair - Loop Trouble	UNE
8	Mean Time to Repair - Central Office	UNE
8	% Out of Service > 24 Hours - POTS	UNE
8	Mean Time to Repair - Trunks	
9	% Repeat Reports within 30 Days - POTS	Resale
9	% Repeat Reports within 30 Days - Specials	Resale
9	% Repeat Reports within 30 Days - POTS	UNE
9	% Repeat Reports within 30 Days - Specials	UNE
10	Final Trunk Group Blocked - 2 Months	
10	Final Trunk Group Blocked - 3 Months	
11	Collocation - % On Time - Physical and Virtual	
11	Collocation - Average Delay Days - Physical and Virtual	
12	Avg. Response Time - Manual Loop Qualification	xDSL
12	Avg. Response Time - Engineering Record Request	xDSL
12	PR-4-14 - % Completed on Time	xDSL
12	PR-4-15 - % Completed on Time	xDSL
12	PR-4-16 - % Completed on Time	xDSL
12	PR-4-17 - % Completed on Time	xDSL
12	PR-4-18 - % Completed on Time	xDSL
12	% Installation Troubles - xDSL Loops	xDSL
	Special Provision - Electronic Data Interface Measures	

TOTAL Critical Measure / EDI Special Provision $ to CLEC A $0

CHANGE CONTROL ASSURANCE PLAN

BELL ATLANTIC - NEW YORK

APRIL 2000

TABLE OF CONTENTS

I. INTRODUCTION

The "Order Adopting Permanent Rule" in Case 97-C-0139 added three new metrics related to the Change Control Process to the Carrier-to-Carrier Guidelines.[1] To ensure that New York Telephone Company, d/b/a Bell Atlantic - New York ("BA-NY"), will execute the Change Control process in an expeditious and non-discriminatory manner, BA-NY will undertake the actions set forth in this Change Control Assurance Plan (the "C.C.A.P.") after entry into the long distance market pursuant to Section 271 of the Telecommunications Act of 1996. A total of $25 million in bill credits will be at risk to CLECs if BA-NY provides unsatisfactory service for the four measures in this Plan.

II. THE CHANGE CONTROL MEASURES AND BILL CREDITS

The following measures, which have been taken from the June Order, are included in this Plan:

1. PO-4-01: % Change Management Notices Sent on Time;
2. PO-4-03: Change Management Notice Delay 8 plus Days;
3. PO-6-01: % Software Validation; and
4. PO-7-04: Delay Hours - Failed/Rejected Test Transactions - No Workaround.

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[1] In addition to PO-4 Timeliness of Change Management Notice, which was included in the Guidelines adopted by the Commission in February (*see* Case 97-C-0139, *Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies*, "Order Adopting Inter-Carrier Service Quality Guidelines" (issued February 16, 1999), the Commission adopted PO-5, Average Notification of Interface Outage, PO-6 Software Validation and PO-7 Software Problem Resolution Timeliness. (*See* Case 97-C-0139, *Proceeding on Motion of the Commission to Review Service Quality Standards for Telephone Companies*, "Order Establishing Permanent Rule" (issued June 30, 1999) (the "June Order"), Appendix at 8-12.

Attached hereto as Appendix A is a chart that provides the standards that will be applied to each of the above measures and the total amount of bill credits associated with each standard. If a performance measure is missed according to its standards, bill credits will be paid to all CLECs purchasing Unbundled Network Elements ("UNEs") or resold services. CLECs will receive bill credits on a prorated basis of the total credit determined using Appendix A based on their lines in service. This Plan will use the same mechanisms set forth in the Performance Assurance Plan for determining "lines in service." (*See* C.C.A.P. at 6, n.7.)

Under this Change Control Assurance Plan, BA-NY will retain the right to withdraw any proposed software release prior to the item being put into final production. If BA-NY exercises this right, it will not be deemed to have violated the requirements set forth in PO-4-01, PO-4-03, PO-6-01 or PO-7-04 and will not be subject to the payment of bill credits under those measures.

The initial amount of annual bill credits for all CLECs will be $10 million under this Plan. If, however, the bill credits due to the CLECs under this Plan exceed $10 million in any year,[2] an additional amount of $15 million will be at risk from the bill credit amounts allocated to the Mode of Entry Categories in the Performance Assurance Plan. Thus, a total of $25 million will be available for bill credits for the Change Control measures. Bill credit payments for Change Control measures will be given priority over bill credits for the MOE categories. (*See* P.A.P., Section II(B)(2).)

The Commission will have the authority to reallocate the monthly distribution of bill credits between and among any provisions of the P.A.P. and the C.C.A.P. The Commission will

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[2] The "year" will be measured from the first day of BA-NY's entry into the interLATA market.

give the Company 15 days notice prior to the beginning of the month in which the reallocation will occur. Any reallocation will be done pursuant to Commission order.

III. MONTHLY REPORTS

Each month BA-NY will issue a report on its performance on the above measures to each CLEC providing service in New York.[3] The reports will be CLEC specific and will indicate the scores on the measures, the aggregate amount of bill credits, if any, that BA-NY must provide pursuant to the standards set forth in Appendix A, and the specific amount of bill credits that will appear on the individual CLEC's bill. All CLECs with multiple bill accounts must inform BA-NY as to which of their accounts should receive any bill credits for the Change Control measures.

IV. REVIEWS, UPDATES AND AUDITS

Biannual reviews and updates will occur under this Plan until the Commission determines otherwise. However, BA-NY, after consulting with Staff, may at any time recommend to the Commission modifications, additions, or deletions to the measures in this Plan or the bill credit allocations. CLECs and any other interested parties will be given an opportunity to provide comments on any recommendations. In addition, Staff will have the right from time to time, on 60-days notice to BA-NY, to conduct an audit of data reported in the monthly reports.[4]

V. EXCEPTION PROCESS

BA-NY will have the right to file a petition with the Commission seeking to have the standards contained in Appendix A waived or modified either for future or past periods. The

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[3] BA-NY's performance on the other Change Control metrics will be reported in the monthly C2C reports.

[4] Unlike the most of the measures in the P.A.P., the recording of data for each of the measures in this Plan will be done manually.

Commission shall grant such a request if it determines that the application of one or more of the standards contained in Appendix A would not serve the public interest. The application of one or more parts of Appendix A would not serve the public interest if BA-NY could not, through any reasonable efforts, prevent results that do not satisfy the standards. BA-NY's petition must include all information that demonstrates how the measure was missed. It shall also include a recalculation of the measure with the challenged information excluded from the calculations. CLECs and other interested parties will be given an opportunity to respond to any BA-NY petition for an Exception. In the event the Commission rules in BA-NY's favor, BA-NY will have the right to offset any paid bill credits against any future bill credits that may come due for either the Change Control measures or Performance Assurance Plan measures.

VI. TERM OF PLAN FOR THE CHANGE CONTROL PROCESS

The Change Control Assurance Plan will have the same term as the Performance Assurance Plan. It will remain in effect, as modified from time to time by the Commission, until the Commission rescinds the Performance Assurance Plan or develops a replacement mechanism.

VII. FULLY INTEGRATED DOCUMENT

The terms and provisions of this Plan are submitted in their entirety to the Commission for approval. This Plan represents a fully integrated statement of the commitments BA-NY will undertake, including the payment of bill credits for unsatisfactory performance under the measures. It is not offered to the Commission for approval on a piecemeal basis.

Change Control Performance Assurance Plan Measures

PO-4-01	**% Change Management Notices Sent on Time**			
	Performance Range (Notification and Confirmation for Types 3, 4 and 5 only)	≥ 95%	90 to 94.9%	< 90%
	Performance Credit	$0	$250,000	$500,000
PO-4-03	**Change Management Notice Delay 8 plus Days** (Notification and Confirmation for Type 1, 2, 3, 4 and 5)			
	Performance Credit	$25,000 per day		
PO-6-01	**% Software Validation** (See Note 1)			
	Performance Range	≤ 5%	5.1 to 10%	> 10%
	Performance Credit	$0	$100,000	$1,000,000
PO-7-04	**Delay Hours – Failed/Rejected Test Transactions – No Workaround** (See Note 2)			
	Performance Credit	$50,000 per day Per Release		

Note 1: Measured against releases pursuant to Change Notice Types 3, 4 and 5.

Note 2: PO-7-04 applies to failed Test Deck items executed by BA-NY in PO-6-01 and applies until all errors reported in PO-6-01 are fixed.

APPENDIX 2

TEXAS PLAN

ATTACHMENT 17: Performance Remedy Plan

This Attachment 17: Performance Remedy Plan sets forth the terms and conditions under which SWBT will report performance to CLEC and compare that performance to SWBT's own performance or benchmark criteria, whichever is applicable. This Attachment further provides for enforcement through liquidated damages and assessments.

1.0 SWBT agrees to provide CLEC a monthly report of performance for the performance measures listed in Appendix 1. SWBT will collect, analyze, and report performance data for these measures in accordance with SWBT's Performance Measurement Business Rules, as approved by the Texas Commission. Both the performance measures and the business rules are subject to modification in accordance with section 6.4 below regarding six month reviews. SWBT and CLEC further agree to use this two-tiered enforcement structure for performance measurements provided for in this Attachment. The Commission approved performance measurements shown in Appendix 1 hereto identify the measurements that belong to Tier-1 or Tier-2 categories, which are further, identified as the High, Low and Medium groups as those terms are used below.

1.1 SWBT will not levy a separate charge for provision of the data to CLEC called for under this Attachment. Upon CLEC's request, data files of CLEC's raw data, or any subset thereof, will be transmitted to CLEC. If CLEC's request is transmitted to SWBT on or before the last day of the month for which data is sought, SWBT shall provide the data to CLEC on or before 20th day of the month pursuant to mutually acceptable format, protocol, and transmission media. If CLEC's request is transmitted to SWBT after the last day of the month for which data is sought, SWBT shall provide the data to CLEC within 20 days of receipt pursuant to mutually acceptable format, protocol, and transmission media. Notwithstanding other provisions of this Agreement, the Parties agree that such records will be deemed Proprietary Information.

2.0 SWBT and CLEC agree to use a statistical test, namely the modified "Z-test," for evaluating the difference between two means (SWBT and CLEC) or percentages, or the difference in the two proportions for purposes of this Attachment. SWBT agrees to use the modified Z-tests as outlined below as the statistical tests for the determination of parity when the result for SWBT and the CLEC are compared. The modified Z-tests are applicable if the number of data points are greater than 30 for a given measurement. In cases where benchmarks are established, the determination of compliance is through the comparison of the measured performance delivered to the CLEC and the applicable benchmark. For testing compliance for measures for which the number of data points are 29 or less, although the use of permutation tests as outlined below is appropriate comparison of performance delivered to CLECs with SWBT performance as described in Alternative-1 under the "Qualifications to use Z-Test" heading below is preferred.

3.0 SWBT and CLEC concur that, for purposes of this Attachment, performance for the CLEC on a particular measure will be considered in compliance with the parity

requirement when the measured results in a single month (whether in the form of means, percents, or proportions) for the same measurement, at equivalent disaggregation, for both SWBT and CLEC are used to calculate a Z-test statistic and the resulting value is no greater than the critical Z-value as reflected in the Critical Z-statistic table shown below.

Z-Test:

SWBT agrees with the following formulae for determining parity using Z-Test:

For Measurement results that are expressed as Averages or Means: $z = (DIFF) / \delta_{DIFF}$

Where;
$DIFF = M_{ILEC} - M_{CLEC}$
M_{ILEC} = ILEC Average
M_{CLEC} = CLEC Average
$\delta_{DIFF} = SQRT [\delta^2_{ILEC} (1/ n_{CLEC} + 1/ n_{ILEC})]$
δ^2_{ILEC} = Calculated variance for ILEC.
n_{ILEC} = number of observations or samples used in ILEC measurement
n_{CLEC} = number of observations or samples used in CLEC measurement

For Measurement results that are expressed as Percentages or Proportions:

Step 1:

$$\rho = \frac{(n_{ILEC}P_{ILEC} + n_{CLEC}P_{CLEC})}{n_{ILEC} + n_{CLEC}}$$

Step 2:

$\sigma_{PILEC-PCLEC} = sqrt[[\rho(1-\rho)]/n_{ILEC} + [\rho(1-\rho)]/n_{CLEC}]$

Step 3:

$Z = (P_{ILEC} - P_{CLEC})/\sigma_{PILEC-PCLEC}$

Where: n = Number of Observations
P = Percentage or Proportion

For Measurement results that are expressed as Rates or Ratio:

$z = (DIFF) / \delta_{DIFF}$

Where;
$DIFF = R_{ILEC} - R_{CLEC}$
$R_{ILEC} = num_{ILEC}/denom_{ILEC}$
$R_{CLEC} = num_{CLEC}/denom_{CLEC}$
$\delta_{DIFF} = SQRT [R_{ILEC} (1/denom_{CLEC} + 1/ denom_{ILEC})]$

4.0 Qualifications to use Z-Test:

The proposed Z- tests are applicable to reported measurements that contain 30 or more data points.

In calculating the difference between the performances the formula proposed above applies when a larger CLEC value indicates a higher quality of performance. In cases where a smaller CLEC value indicates a higher quality of performance the order of subtraction should be reversed (i.e., $M_{CLEC} - M_{ILEC}$, $P_{CLEC} - P_{ILEC}$, $R_{CLEC} - R_{ILEC}$).
For measurements where the applicable performance criterion is a benchmark rather than parity performance compliance will be determined by setting the denominator of the Z-test formula as one in calculating the Z-statistic.

For measurements where the performance delivered to CLEC is compared to SWBT performance and for which the number of data points are 29 or less, SWBT agrees to application of the following alternatives for compliance.

4.1 Alternative 1:

For measurements that are expressed as averages, performance delivered to a CLEC for each observation shall not exceed the ILEC averages plus the applicable critical Z-value. If the CLEC's performance is outside the ILEC average plus the critical Z-value and it is the second consecutive month, SWBT can utilize the Z-test as applicable for data sets of 30 or greater data points or the permutation test to provide evidence of parity. If SWBT uses the Z-test for data sets under 30, the CLEC can independently perform the permutation test to validate SWBT's results. SWBT will supply all data required to perform the permutation test, including the complete ILEC and CLEC data sets for the measure, to CLEC upon request. The results of the permutation test will control over the results of the Z-test analysis as applicable for data sets 30 or greater.

For measurements that are expressed as percentages, the percentage for CLEC shall not exceed ILEC percentage plus the applicable critical Z-value. If the CLEC's performance is outside the ILEC percentage plus the critical Z-value and it is the second consecutive month, SWBT can utilize the Z-test as applicable for data sets of 30or greater data points or the permutation test to provide evidence of parity. If SWBT uses the Z-test for data sets under 30, the CLEC can independently perform the permutation test to validate SWBT's results. SWBT will supply all data required to perform the permutation test, including the complete ILEC and CLEC data sets for the measure, to CLEC upon request. The results of the permutation test will control over the results of the Z-test analysis as applicable for data sets 30 or greater.

4.2 Alternative 2:

Permutation analysis will be applied to calculate the z-statistic using the following logic:

Choose a sufficiently large number T.

Pool and mix the CLEC and ILEC data sets

Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set (n_{CLEC}) and one reflecting the remaining data points, (which is equal to the size of the original ILEC data set or n_{ILEC}).

Compute and store the Z-test score (Z_S) for this sample.

Repeat steps 3 and 4 for the remaining T-1 sample pairs to be analyzed. (If the number of possibilities is less than 1 million, include a programmatic check to prevent drawing the same pair of samples more than once).

Order the Z_S results computed and stored in step 4 from lowest to highest.

Compute the Z-test score for the original two data sets and find its rank in the ordering determined in step 6.

Repeat the steps 2-7 ten times and combine the results to determine P = (Summation of ranks in each of the 10 runs divided by 10T)

Using a cumulative standard normal distribution table, find the value Z_A such that the probability (or cumulative area under the standard normal curve) is equal to P calculated in step 8.

Compare Z_A with the desired critical value as determined from the critical Z table. If $Z_A >$ the designated critical Z-value in the table, then the performance is non-compliant.

4.3 SWBT and CLEC will provide software and technical support as needed by Commission Staff for purposes of utilizing the permutation analysis. Any CLEC who opts into this Attachment 17 agrees to share in providing such support to Commission Staff.

5.0 Overview of Enforcement Structure

5.1 SWBT agrees with the following methodology for developing the liquidated damages and penalty assessment structure for tier-1 liquidated damages and tier-2 assessments:

5.2 SWBT will pay Liquidated Damages to the CLEC according to the terms set forth in this Attachment.

5.3 Liquidated damages apply to Tier-1 measurements identified as High, Medium, or Low on Appendix -1.

5.4 Assessments are applicable to Tier-2 measures identified as High, Medium, or Low on Appendix -1 and are payable to the Texas State Treasury.

5.5 SWBT will not be liable for the payment of either Tier 1 damages or Tier 2 assessments until the Commission approves an Interconnection Agreement between a CLEC and SWBT containing the terms of Attachment 17 of this Agreement. Tier 2 assessments will be paid on the aggregate performance for all CLECs that are operating in Texas, unless the CLEC has a payment plan that is not comparable to that in Tier 1 of this Attachment 17: Performance Remedy Plan. For purposes of this paragraph, a payment plan that is not comparable to that in Tier-1 of Attachment 17 is a plan that provides for a separate set of payments relating to performance on specified competition-affecting measures, over and above (or without) liquidated damages payments that are calculated in a fashion analogous to the method of calculation used in Tier-1 of Attachment 17. SWBT agrees that all payment plans in interconnection agreements approved by the Texas PUC as of December 16, 1999, are comparable to Tier 1 of Attachment 17 under this standard.

6.0 Procedural Safeguards and Exclusions

6.1 SWBT agrees that the application of the assessments and damages provided for herein is not intended to foreclose other noncontractual legal and regulatory claims and remedies that may be available to a CLEC. By incorporating these liquidated damages terms into an interconnection agreement, SWBT and CLEC agree that proof of damages from any "noncompliant" performance measure would be difficult to ascertain and, therefore, liquidated damages are a reasonable approximation of any contractual damage resulting from a non-compliant performance measure. SWBT and CLEC further agree that liquidated damages payable under this provision are not intended to be a penalty.

6.2 SWBT's agreement to implement these enforcement terms, and specifically its agreement to pay any "liquidated damages" or "assessments" hereunder, will not be considered as an admission against interest or an admission of liability in any legal, regulatory, or other proceeding relating to the same performance. SWBT and CLEC agree that CLEC may not use: (1) the existence of this enforcement plan; or (2) SWBT's payment of Tier-1 "liquidated damages" or Tier-2 "assessments" as evidence that SWBT has discriminated in the provision of any facilities or services under Sections 251 or 252, or has violated any state or federal law or regulation. SWBT's conduct underlying its performance measures, and the performance data provided under the performance measures, however, are not made inadmissible by these terms. Any CLEC accepting this performance remedy plan agrees that SWBT's performance with respect to this remedy plan may not be used as an admission of liability or culpability for a violation of any state or federal law or regulation. Further, any liquidated damages payment by SWBT under these provisions is not hereby made inadmissible in any proceeding relating to the same conduct where SWBT seeks to offset the payment against any other damages a CLEC might recover;

whether or not the nature of damages sought by the CLEC is such that an offset is appropriate will be determined in the related proceeding. The terms of this paragraph do not apply to any proceeding before the Commission or the FCC to determine whether SWBT has met or continues to meet the requirements of section 271 of the Act.

6.3 SWBT shall not be liable for both Tier-2 "assessments" and any other assessments or sanctions under PURA or the Commission's service quality rules relating to the same performance.

6.4 Every six months, CLEC may participate with SWBT, other CLECs, and Commission representatives to review the performance measures to determine whether measurements should be added, deleted, or modified; whether the applicable benchmark standards should be modified or replaced by parity standards; and whether to move a classification of a measure to High, Medium, Low, Diagnostic, Tier-1 or Tier-2. The criterion for reclassification of a measure shall be whether the actual volume of data points was lesser or greater than anticipated. Criteria for review of performance measures, other than for possible reclassification, shall be whether there exists an omission or failure to capture intended performance, and whether there is duplication of another measurement. Performance measures for 911 may be examined at any six month review to determine whether they should be reclassified. The first six-month period will begin when an interconnection agreement including this remedy plan is adopted by a CLEC and approved by the Commission. Any changes to existing performance measures and this remedy plan shall be by mutual agreement of the parties and, if necessary, with respect to new measures and their appropriate classification, by arbitration. The current measurements and benchmarks will be in effect until modified hereunder or expiration of the interconnection agreement.

6.5 SWBT and CLEC acknowledge that no later than two years after SWBT or its affiliate receives Section 271 relief, the Commission's intention is to reduce the number of performance measures subject to damages and assessments by 50% to the extent there is a smaller number of measures that truly do capture all of the issues that are competition-affecting and customer-affecting.

6.6 CLEC and SWBT will consult with one another and attempt in good faith to resolve any issues regarding the accuracy or integrity of data collected, generated, and reported pursuant to this Attachment. In the event that CLEC requests such consultation and the issues raised by CLEC have not been resolved within 45 days after CLEC's request for consultation, then SWBT will allow CLEC to have an independent audit conducted, at CLEC's expense, of SWBT's performance measurement data collection, computing, and reporting processes. In the event the subsequent audit reinforces the problem identified during the 45 days of consultation period or if any new problem is identified, SWBT shall reimburse a CLEC any expense incurred by the CLEC for such audit. CLEC may not request more than one audit per twelve calendar months under this section. This section does not modify CLEC's audit rights under other provisions of this Agreement. SWBT

agrees to inform all CLECs of any problem identified during the audit initiated by any CLEC.

7.0 Exclusions Limited

7.1 SWBT shall not be obligated to pay liquidated damages or assessments for noncompliance with a performance measurement if, but only to the extent that, such noncompliance was the result of any of the following: a Force Majeure event; an act or omission by a CLEC that is contrary to any of its obligations under its interconnection agreement with SWBT or under the Act or Texas law; or non-SWBT problems associated with third-party systems or equipment, which could not have been avoided by SWBT in the exercise of reasonable diligence. Provided, however, the third party exclusion will not be raised more than three times within a calendar year. SWBT will not be excused from payment of liquidated damages or assessments on any other grounds, except by application of the procedural threshold provided for below. Any dispute regarding whether a SWBT performance failure is excused under this paragraph will be resolved with the Commission through a dispute resolution proceeding under Subchapter Q of its Procedural Rules or, if the parties agree, through commercial arbitration with the American Arbitration Association. SWBT will have the burden in any such proceeding to demonstrate that its noncompliance with the performance measurement was excused on one of the grounds set forth in this paragraph. If a Force Majeure event or other excusing event recognized in the first sentence of this section 7.1 only suspends SWBT's ability to timely perform an activity subject to performance measurement, the applicable time frame in which SWBT's compliance with the parity or benchmark criterion is measured will be extended on an hour-for-hour or day-for-day basis, as applicable, equal to the duration of the excusing event.

7.2 In addition to the provisions set forth herein, SWBT shall not be obligated to pay liquidated damages or assessments for noncompliance with a performance measure if the Commission finds such noncompliance was the result of an act or omission by a CLEC that is in bad faith, for example, unreasonably holding orders and/or applications and "dumping" such orders or applications in unreasonably large batches, at or near the close of a business day, on a Friday evening or prior to a holiday, or unreasonably failing to timely provide forecasts to SWBT for services or facilities when such forecasts are required to reasonably provide such services or facilities; or non-SWBT Y2K problems.

7.3 CLEC agrees that a maximum annual cap of $289 million will apply to the aggregate total of any Tier-1 liquidated damages (including any such damages paid pursuant to this Agreement or to any other Texas interconnection agreement with a CLEC) and Tier-2 Assessments or voluntary payments made by SWBT pursuant to any Texas interconnection agreement with a performance remedy plan. The annual cap will be determined by SWBT, based on the formula of 36% of Net Return as set forth at ¶ 436 and footnote 1332 of the FCC's December 22, 1999 Memorandum Opinion and Order in CC Docket No. 99-295. In no event will the annual cap be greater than $289 million per

year, or less than $225 million. Once the annual cap is established, a monthly cap will be determined by dividing the amount of the annual cap by twelve. CLEC further acknowledges that a maximum monthly cap of $24.08 million ($289 million ÷ 12) for Tier-1 liquidated damages will apply to all performance payments made by SWBT under all SWBT Texas interconnection agreements To the extent in any given month the monthly cap is not reached, the subsequent month's cap will be increased by an amount equal to the unpaid portion of the previous month's cap. At the end of the year, if the aggregate total of Tier-1 liquidated damages and Tier-2 Assessments under all SWBT Texas interconnection agreements equals or exceeds the annual cap, but SWBT has paid less than that amount due to the monthly cap, , SWBT shall be required to pay an amount equal to the annual cap. . In such event, Tier-1 liquidated damages shall be paid first on a pro rata basis to CLECs, and any remainder within the annual cap , shall be paid as a Tier-2 Assessment. In the event the total calculated amount of damages and assessments for the year is less than the annual cap, SWBT shall be obligated to pay ONLY the actual calculated amount of damages and assessments. . The annual cap shall be calculated on the first day of the month following the annual anniversary of Commission approval of the Texas 271 Agreement, using the most recent publicly available ARMIS data. For purposes of applying the cap, the relevant calendar year shall begin on the first day of the month following the month in which the Commission approved the Texas 271 Agreement.

7.3.1 Whenever SWBT Tier-1 payments to an individual CLEC in a given month exceed $ 3 million, or the Tier-1 payments to all CLECs Tier-1 payments in a given month exceed the monthly cap, then SWBT may commence a show cause proceeding as provided for below. Upon timely commencement of the show cause proceeding, SWBT must pay the balance of damages owed in excess of the threshold amount into escrow, to be held by a third party pending the outcome of the show cause proceeding. To invoke these escrow provisions, SWBT must file with the Commission, not later than the due date of the affected damages payments, an application to show cause why it should not be required to pay any amount in excess of the procedural threshold. SWBT's application will be processed in an expedited manner under Subchapter Q of the Commission's Procedural Rules. SWBT will have the burden of proof to demonstrate why, under the circumstances, it would be unjust to require it to pay liquidated damages in excess of the applicable threshold amount. If SWBT reports non-compliant performance to a CLEC for three consecutive months on 20% or more of the measures reported to the CLEC, but SWBT has incurred no more than $ 1 million in liquidated damages obligations to the CLEC for that period under the enforcement terms set out here, then the CLEC may commence an expedited dispute resolution under this paragraph pursuant to Subchapter Q of the Commission's Procedural Rules. In any such proceeding the CLEC will have the burden of proof to demonstrate why, under the circumstances, justice requires SWBT to pay damages in excess of the amount calculated under these enforcement terms.

7.3.2 SWBT should post on its Internet website the aggregate payments of any liquidated damages or assessments.

7.4 With respect to any interconnection agreement, SWBT and any CLEC may request two expedited dispute resolution proceedings pursuant to the two preceding paragraphs before the Commission or, if the parties agree, through commercial arbitration with the American Arbitration Association (AAA); during the term of the contract without having to pay attorneys fees to the winning company. For the third proceeding and thereafter, the requesting party must pay attorneys fees, as determined by the Commission or AAA, if that party loses.

7.5 In the event the aggregate total of Tier-1 damages and Tier-2 assessments under all SWBT Texas interconnection agreements reaches the annual cap within a given year and SWBT continues to deliver non-compliant performance during the same year to any CLEC or all CLECs, the Commission may recommend to the FCC that SWBT should cease offering in-region interLATA services to new customers.

8.0 Tier-1 Damages:

Tier-1 liquidated damages apply to measures designated in Attachment–1 as High, Medium, or Low when SWBT delivers "non-compliant" performance as defined above.

8.1 Under the damages for Tier-1 measures, the number of measures that may be classified as "non-compliant" before a liquidated damage is applicable is limited to the K values shown below. The applicable K value is determined based upon the total number of measures with a sample size of 10 or greater that are required to be reported to a CLEC where a sufficient number of observations exist in the month to permit parity conclusions regarding a compliant or non-compliant condition. For any performance measurement, each disaggregated category for which there are a minimum of 10 data points constitutes one "measure" for purposes of calculating K value. The designated K value and the critical Z-value seek to balance random variation, Type-1 and Type-2 errors. Type-1 error is the mistake of charging an ILEC with a violation when it may not be acting in a discriminatory manner (that is, providing non-compliant performance). Type-2 error is the mistake of not identifying a violation when the ILEC is providing discriminatory or non-compliant performance.

8.2 Liquidated damages in the amount specified in the table below apply to all "non-compliant" measures in excess of the applicable "K" number of exempt measures. Liquidated damages apply on a per occurrence basis, using the amount per occurrence taken from the table below, based on the designation of the measure as High, Medium, or Low in Appendix-1 and the number of consecutive months for which SWBT has reported noncompliance for the measure. For those measures listed on Appendix-2 as "Measurements that are subject to per occurrence damages or assessments with a cap," the amount of liquidated damages in a single month shall not exceed the amount listed in the table below for the "Per measurement" category. For those measures listed on Appendix -2 as "Measurements that are subject to per measure damages or assessment," liquidated damages will apply on a per measure basis, at the amounts set forth in the table below. The methodology for determining the order of exclusion, and the number of

occurrences is addressed in "Methods of calculating the liquidated damages and penalty amounts," below.

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

Per occurrence						
Measurement Group	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6 and each following month
High	$150	$250	$500	$600	$700	$800
Medium	$75	$150	$300	$400	$500	$600
Low	$25	$50	$100	$200	$300	$400

Per Measure/Cap*						
Measurement Group	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6 and each following month
High	$25,000	$50,000	$75,000	$100,000	$125,000	$150,000
Medium	$10,000	$20,000	$30,000	$40,000	$50,000	$60,000
Low	$5,000	$10,000	$15,000	$20,000	$25,000	$30,000

ASSESSMENT TABLE FOR TIER-2 MEASURES

Per occurrence

Measurement Group	
High	$500
Medium	$300
Low	$200

Per Measure/Cap*

Measurement Group	
High	$75,000
Medium	$30,000
Low	$20,000

* **For per occurrence with cap measures, the occurrence value is taken from the per occurrence table, subject to the per measure with cap amount.**

9.0 Tier-2 Assessments to the State:

9.1 Assessments payable to the Texas State Treasury apply to the Tier-2 measures designated on Appendix -1 as High, Medium, or Low when SWBT performance is out of parity or does not meet the benchmarks for the aggregate of all CLEC data. Specifically, if the Z-test value is greater than the Critical Z, the performance for the reporting category is out of parity or below standard.

9.2 For those Measurements where a per occurrence assessment applies, an assessment as specified in the Assessment Table; for each occurrence is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months. For those Measurements listed in Appendix -2 as measurements subject to per occurrence with a cap, an assessment as shown in the Assessment Table above for each occurrence with the applicable cap is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months. For those Tier-2 Measurements listed in Appendix -2 as subject to a per measurement assessment an assessment amount as shown in the Assessment Table above is payable to the Texas State Treasury for each measure that exceeds the Critical Z-value, shown in the table below, for three consecutive months.

9.3 The following table will be used for determining the Critical Z-value for each measure , as well as the K values referred to below based on the total number of measures that are applicable to a CLEC in a particular month. The table can be extended to include CLECs with fewer performance measures. The Critical Z-value for Tier 2 will be calculated in the same manner as for Tier 1.[1]

Critical Z - Statistic Table

Number of Performance Measures	K Values	Critical Z-value
1	0	1.65
2	0	1.96
3	0	2.12
4	0	2.23
5	0	2.32
6	0	2.39
7	0	2.44
8	1	1.69
9	1	1.74
10-19	1	1.79
20-29	2	1.73

[1] This sentence is added to clarify the manner in which Critical-Z value is calculated.

30-39	3	1.68
40-49	3	1.81
50-59	4	1.75
60-69	5	1.7
70 –79	6	1.68
80 – 89	6	1.74
90 – 99	7	1.71
100 – 109	8	1.68
110 –119	9	1.7
120 – 139	10	1.72
140 – 159	12	1.68
160 – 179	13	1.69
180 – 199	14	1.7
200 – 249	17	1.7
250 – 299	20	1.7
300 – 399	26	1.7
400 – 499	32	1.7
500 – 599	38	1.72
600 – 699	44	1.72
700 – 799	49	1.73
800 – 899	55	1.75
900 – 999	60	1.77
1000 and above	Calculated for Type-1 Error Probability of 5%	Calculated for Type-1 Error Probability of 5%

10.0 General Assessments:

10.1 If SWBT fails to submit performance reports by the 20th day of the month, the following assessments apply unless excused for good cause by the Commission:

If no reports are filed, $5,000 per day past due;
If incomplete reports are filed, $1,000 per day for each missing performance results.

10.2 If SWBT alters previously reported data to a CLEC, and after discussions with SWBT the CLEC disputes such alterations, then the CLEC may ask the Commission to review the submissions and the Commission may take appropriate action. This does not apply to the limitation stated under the section titled "Exclusions Limited."

10.3 When SWBT performance creates an obligation to pay liquidated damages to a CLEC or an assessment to the State under the terms set forth herein, SWBT shall make payment in the required amount on or before the 30th day following the due date of the performance measurement report for the month in which the obligation arose (e.g., if SWBT

performance through March is such that SWBT owes liquidated damages to CLECs for March performance, or assessments to the State for January – March performance, then those payments will be due May 15, 30 days after the April 15 due date for reporting March data). For each day after the due date that SWBT fails to pay the required amount, SWBT will pay interest to the CLEC at the maximum rate permitted by law for a past due liquidated damages obligation and will pay an additional $3,000 per day to the Texas State Treasury for a past due assessment.

10.4 SWBT may not withhold payment of liquidated damages to a CLEC, for any amount up to $3,000,000 a month, unless SWBT had commenced an expedited dispute resolution proceeding on or before the payment due date, asserting one of the three permitted grounds for excusing a damages payment below the procedural threshold (Force Majeure, CLEC fault, and non-SWBT problems associated with third-party systems or equipment). In order to invoke the procedural threshold provisions allowing for escrow of damages obligations in excess of $ 3,000,000 to a single CLEC (or $ 10,000,000 to all CLECs), SWBT must pay the threshold amount to the CLEC(s), pay the balance into escrow, and commence the show cause proceeding on or before the payment due date.

10.5 CLEC will have access to monthly reports on performance measures and business rules through an Internet website that includes individual CLEC data, aggregate CLEC data, and SWBT's data.

10.6 The cap provided in Section 7.3 does not apply to assessments under Section 10 of this Attachment.

11.0 Methods of Calculating the Liquidated Damage and Assessment Amounts

The following methods apply in calculating per occurrence liquidated damage and assessments:

11.1 Tier-1 Liquidated Damages

11.1.1 *Application of K Value Exclusions*

Determine the number and type of measures with a sample size greater than 10 that are "non-compliant" for the individual CLEC for the month, applying the parity test and bench mark provisions provided for above. Sort all measures having non-compliant classification with a sample size greater than 10 in ascending order based on the number of data points or transactions used to develop the performance measurement result (e.g., service orders, collocation requests, installations, trouble reports). Exclude the first "K" measures designated Low on Appendix -1, starting with the measurement results having the fewest number of underlying data points greater than 10. If all Low measurement results with a non-compliant designation are excluded before "K" is exceeded, then the exclusion process proceeds with the Medium measurement results and thereafter the High measurement results. If all

Low, Medium and High measurements are excluded, then those measurements with sample sizes less than 10 may be excluded until "K" measures are reached. In each category measurement results with non-compliant designation having the fewest underlying data point are then excluded until either all non-compliant measurement results are excluded or "K" measures are excluded, whichever occurs first. For the remaining non-compliant measures that are above the K number of measures, the liquidated damages per occurrence are calculated as described further below. (Application of the K value may be illustrated by an example, if the K value is 6, and there are 7 Low measures and 1 Medium and 1 High which exceed the Critical Z-value, the 6 Low measures with the lowest number of service orders used to develop the performance measure are not used to calculate the liquidated damages, while the remaining 1 Low measure, 1 Medium measure, and 1 High measure which exceed the critical Z-value are used.) In applying the K value, the following qualifications apply to the general rule for excluding measures by progression from measures with lower transaction volumes to higher. A measure for which liquidated damages are calculated on a per measure basis will not be excluded in applying the K value unless the amount of liquidated damages payable for that measure is less than the amount of liquidated damages payable for each remaining measure. A measure for which liquidated damages are calculated on a per occurrence basis subject to a cap will be excluded in applying the K value whenever the cap is reached and the liquidated damages payable for the remaining non-compliant measures are greater than the amount of the cap.

11.1.2 Calculating Tier-1 Liquidated Damages

11.1.2.1 Measures for Which the Reporting Dimensions are Averages or Means.

Step 1: Calculate the average or the mean for the measure for the CLEC that would yield the Critical Z-value. Use the same denominator as the one used in calculating the Z-statistic for the measure. (For benchmark measures, calculate the value that would yield the critical Z-value by adding or subtracting the critical Z-value to the benchmark as appropriate, subject to 4.0 and the Business Rules.).

Step 2: Calculate the percentage difference the between the actual average and the calculated average.

Step 3: Multiply the total number of data points by the percentage calculated in the previous step and the per occurrence dollar amount taken from the Liquidated Damages Table to determine the applicable liquidated damages for the given month for that measure.

11.1.2.2 Measures for Which the Reporting Dimensions are Percentages.

Step 1: Calculate the percentage for the measure for the CLEC that would yield the Critical Z-value. Use the same denominator as the one used in calculating the Z-statistic for the measure. (For benchmark measures, calculate the value that would yield the critical Z-value by adding or subtracting the critical Z-value to the benchmark as appropriate, subject to 4.0 and the Business Rules.).

Step 2: Calculate the difference between the actual percentage for the CLEC and the calculated percentage.

Step 3: Multiply the total number of data points by the difference in percentage calculated in the previous step and the per occurrence dollar amount taken from the Liquidated Damages Table to determine the applicable liquidated damages for the given month for that measure.

11.1.2.3 Measures for Which the Reporting Dimensions are Ratios or Proportions.

Step 1: Calculate the ratio for the measure for the CLEC that would yield the Critical Z-value. Use the same denominator as the one used in calculating the Z-statistic for the measure.

Step 2: Calculate the percentage difference between the actual ratio for the CLEC and the calculated ratio.

Step 3: Multiply the total number of data points by the percentage calculated in the previous step and the per occurrence dollar amount taken from the Liquidated Damages Table to determine the applicable liquidated damages for the given month for that measure.

12.1 Tier Two Liquidated Damages

12.1.1 Determine the Tier-2 measurement results, such as High, Medium, or Low that are non-compliant for three consecutive months for all CLECs, or individual CLEC if the measure is not reported for all CLECs.

If the non-compliant classification continues for three consecutive months, an additional assessment will apply in the third month and in each succeeding month as calculated below, until SWBT reports performance that meets the applicable criterion. That is, Tier-2 assessments will apply on a "rolling three month" basis, one assessment for the average number of occurrences for months 1-3, one assessment for the average number of occurrences for months 2-4, one assessment for the average number of occurrences for months 3-5, and so forth, until satisfactory performance is established.

12.1.2 Measures for Which the Reporting Dimensions are Averages or Means.

Step 1: Calculate the average or the mean for the measure for the CLEC that would yield the Critical Z-value for the third consecutive month. Use the same denominator as the one used in calculating the Z-statistic for the measure. (For benchmark measures, calculate the value that would yield the Critical Z-value by adding or subtracting the Critical Z-value to the benchmark as appropriate, subject to 4.0 and the Business Rules.).

Step 2: Calculate the percentage difference between the actual average and the calculated average for the third consecutive month.

Step 3: Multiply the total number of data points by the percentage calculated in the previous step. Calculate the average for three months and multiply the result by $500, $300, and $200 for Measures that are designated as High, Medium, and Low respectively; to determine the applicable assessment payable to the Texas State Treasury for that measure.

12.1.3 Measures for Which the Reporting Dimensions are Percentages.

Step 1: Calculate the percentage for the measure for the CLEC that would yield the Critical Z-value for the third consecutive month. Use the same denominator as the one used in calculating the Z-statistic for the measure. (For benchmark measures, calculate the value that would yield the critical Z-value by adding or subtracting the Critical Z-value to the benchmark as appropriate, subject to 4.0 and the Business Rules.).

Step 2: Calculate the difference between the actual percentage for the CLEC and the calculated percentage for each of the three non-compliant months.

Step 3: Multiply the total number of data points for each month by the difference in percentage calculated in the previous step. Calculate the average for three months and multiply the result by $500, $300, and $200 for measures that are designated as High, Medium, and Low respectively; to determine the applicable assessment for that measure.

12.1.4 Measures for Which the Reporting Dimensions are Ratios or Proportions.

Step 1: Calculate the ratio for the measure for the CLEC that would yield the Critical Z-value for the third consecutive month. Use the same denominator as the one used in calculating the Z-statistic for the measure. (For benchmark measures, calculate the value that would yield the Critical Z-value by adding or subtracting the Critical Z-value to the benchmark as appropriate, subject to 4.0 and the Business Rules.).

Step 2: Calculate the percentage difference between the actual ratio for the CLEC and the calculated ratio for each month of the non-compliant three-month period.

Step 3: Multiply the total number of service orders by the percentage calculated in the previous step for each month. Calculate the average for three months and multiply the result by $500, $300, and $200 for measures that are designated as High, Medium, and Low respectively; to determine the applicable assessment for that measure.

13.0 December 16, 1999 Amendments

13.1 The following amendments to the this Attachment 17: Performance Remedy Plan specifically address concerns raised by the Commission during its November 4, 1999 Open Meeting. These amendments are interim in nature and will expire when the results reflect three months of compliant performance as set forth below:

13.1.1. For the following amendments, any Tier 2 assessment changes will be based on results considering data from all CLECs operating in Texas regardless of whether they have opted into this Attachment 17: Performance Remedy Plan.

13.1.2 For the following amendments, any Tier 1 changes or additions will only be applicable to those CLECs that have opted into this Attachment 17: Performance Remedy Plan.

13.1.3 On an interim basis, SWBT will not apply the K exemption on each of the following measurements until SWBT demonstrates three consecutive months of compliant performance for that measurement ("compliant performance" is defined in this amendment as performance which is in parity or within the benchmark as defined by the statistical tests as described in this Attachment.) After three consecutive months of compliant performance for a measurement, this paragraph of the amendment will no longer be effective for that measurement, and application of the K exemption will resume.

13.1.3.1 PM 38-05-DF & 38-05-ST - % Missed Repair Commitments for UNE Combos-Dispatch

13.1.3.2 PM 41-03-DF, 41-03-HS & 41-03-ST - % Repeat Reports for UNE Combos

13.1.3.3 PM 55.1 (All Market Areas) - Average Installation Interval – DSL

13.1.3.4 PM 57 (All Market Areas) - Average Response Time for DSL Loop Make-up Information

13.1.3.5 PM 65-02-CW & 65-02-DF - Trouble Report Rate for 5.0dB Loop with Test Access

13.1.3.6 PM 109 - % Request Processed within Tariffed Timeliness-Collocation – This measurement will be updated based on the new Tariff intervals.

13.1.3.7 PM 70-01-HS - % Trunk Blockage – SWBT End Office to CLEC End Office-Houston

13.1.3.8 PM 78-01 (All Market Areas) - Average Interconnection Trunk Installation Interval

13.1.4 On an interim basis, SWBT will increase the per measurement cap for Tier 2 payments on the following measures until SWBT demonstrates three consecutive months of compliant performance for that measure. After three months of compliant performance for the measure, this paragraph of the amendment will no longer be effective for that measure.

13.1.4.1 PM 17 Billing Completeness – This measurement is Tier 2 "Medium" assessment, which equates to a $300 per occurrence assessment with a $30,000 CAP. For the interim period described herein, SWBT will raise this measurement to a Tier 2 "High" assessment with penalties of $500 per occurrence with a $75,000 cap.

13.1.4.2 PM 70 % Trunk Blockage – SWBT End Office to CLEC End Office – Houston. This measurement is a Tier 2 "High", which equates to a $500 per occurrence assessment with a $75,000 cap. For the interim period described herein, SWBT will raise the Tier 2 assessments to $1,500 per occurrence with a $225,000 cap.

13.1.5 The increased cap for PM 17 and PM 70 (as set out above) will take effect with November performance at which time monthly damage assessments, where applicable, will be based on September, October, and November performance.

13.1.6 For the interim period described herein, SWBT will change PM 78 Average Interconnection Trunk Installation Interval from a per occurrence damage and assessment category to a per measurement category until SWBT demonstrates three consecutive months of compliant performance for PM 78.

13.1.7 Effective with the January, 2000 performance measurements, SWBT agrees to add an interim measurement on coordinated cutovers to measure the length of time it takes to physically complete the cutover. (*See*, PM 114.1, Attachment 17, Appendix III: Performance Measurement Business Rules (Version 1.6) On an interim basis, until the first six month review process this interim measurement will not be subject to the K exemption.

13.1.8 Effective with the January, 2000 performance measurements, SWBT agrees to add an interim measurement (PM 73.1) on the percentage of held interconnection trunk orders greater than 90 calendar days. (*See*, PM 73.1 Attachment 17, Appendix III:

Performance Measurement Business Rules (Version 1.6)). On an interim basis until the first six month review process, this interim measurement will not be subject to the K exemption.

13.1.9 Notwithstanding any Attachment 17: Performance Remedy Plan provision, SWBT may, at any time, bring a complaint to the Commission pursuant to the expedited dispute resolution procedures that SWBT should not be subject to a payment pursuant to PM 73.1 and SWBT should be provided any other appropriate relief because a CLEC's action contributed to SWBT's inability to meet this measure. In the Commission's consideration of any such complaint, it will consider such issues as the CLEC's history of ordering, percent trunk utilization, forecasts, history regarding past-due orders, and whether there were other viable provisioning alternatives to address the CLEC's needs.

14.0 Advanced and Nascent Services:

14.1 In order to ensure parity and benchmark performance where CLECs order low volumes of advanced and nascent services, SWBT will make additional voluntary payments to the Texas State Treasury on those measurements listed in §14.2 below (the "Qualifying Measurements"). Such additional voluntary payments will only apply when there are more than 10 and less than 100 observations for a Qualifying Measurement on average statewide for a three month period with respect to the following order categories:

- UNE loop and port combinations;
- resold ISDN,
- ISDN UNE loop and port combinations;
- BRI loop with test access; and
- DSL loops.

14.2 The Qualifying Measurements are as follows:

Provisioning Measurements:

- PMs 29, 45, 58 - Percent SWBT Caused Missed Due Dates
- PMs 35, 46, 59 - Installation Trouble Reports Within "X" Days
- PMs 27, 43, 56 - Mean Installation Interval
- PMs 32, 49, 62 - Average Delay Days for SWBT Caused Missed Due Dates
- PM 55.1 - Average Installation Interval – DSL
- PM 57 - Average Response Time for Loop Qualification Information

Maintenance Measurements:

- PMs 38, 66 - % Missed Repair Commitments
- PMs 41, 53, 69 - % Repeat Reports

- PMs 39, 52, 67 - Mean Time to Restore
- PMs 37, 54, 65 - Trouble Report Rate

14.3 The additional voluntary payments referenced in §14.1 will be made if SWBT fails to provide parity or benchmark service for the above measurements as determined by the use of the Modified Z-test and a critical Z-value for either:

- 3 consecutive months; or
- 6 months or more in a calendar year.

14.4 The additional voluntary payments will be calculated on the rolling average of occurrences or measurements, as appropriate, where SWBT has failed to provide parity or benchmark performance for 3 consecutive months. If SWBT fails to provide parity or benchmark performance in Texas for 6 or more months in a calendar year, the voluntary payments will be calculated as if all such months were missed consecutively.

14.5 If, for the three months that are utilized to calculate the rolling average, there were 100 observations or more on average for the qualifying measurement or sub-measurement, then no additional voluntary payments will be made to the Texas State treasury. However, if during this same time frame there is an average of more than 10 but less than 100 observations for a qualifying measurement on a statewide basis, then SWBT shall calculate the additional payments to the Texas State treasury by first applying the normal Tier 2 assessment calculation methodology to that qualifying measurement, and then trebling that amount.

14.6 Any payments made hereunder shall be subject to the annual cap set forth in § 7.3.

15.0 Attached hereto, and incorporated herein by reference, are the following Appendices:

Appendix 1: Measurements Subject to Per Occurrence Damages or Assessment with a Cap and Measurements Subject to Per Measure Damages or Assessment

Appendix 2: Performance Measures Subject to Tier-1 and Tier-2 Damages Identified as High, Medium and Low

Appendix 3: Performance Measurement Business Rules (Version 1.6)