FCC 96-325

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	CC Docket No. 95-185

FIRST REPORT AND ORDER

Adopted: August 1, 1996 Released: August 8, 1996

By the Commission: Chairman Hundt and Commissioners Quello, Ness, and Chong issuing separate statements.

Table of Contents

incremental cost (TSLRIC) (including a reasonable profit) plus a reasonable contribution to joint and common costs, which is consistent with section 252(d)(1).[347]

3. Discussion

176. We conclude that the term "interconnection" under section 251(c)(2) refers only to the physical linking of two networks for the mutual exchange of traffic. Including the transport and termination of traffic within the meaning of section 251(c)(2) would result in reading out of the statute the duty of all LECs to establish "reciprocal compensation arrangements for the transport and termination of telecommunications," under section 251(b)(5).[348] In addition, in setting the pricing standard for section 251(c)(2) interconnection, section 252(d)(1) states it applies when state commissions make determinations "of the just and reasonable rate for interconnection of *facilities and equipment* for purposes of subsection (c)(2) of section 251."[349] Because section 251(d)(1) states that it only applies to the interconnection of "facilities and equipment," if we were to interpret section 251(c)(2) to refer to transport and termination of traffic as well as the physical linking of equipment and facilities, it would still be necessary to find a pricing standard for the transport and termination of traffic apart from section 252(d)(1). We also reject CompTel's argument that reading section 251(c)(2) to refer only to the physical linking of networks implies that incumbent LECs would not have a duty to route and terminate traffic. That duty applies to all LECs and is clearly expressed in section 251(b)(5). We note that because interconnection refers to the physical linking of two networks, and not the transport and termination of traffic, access charges are not affected by our rules implementing section 251(c)(2).

B. National Interconnection Rules

1. Background

177. In the NPRM, we tentatively concluded that national interconnection rules would facilitate swift entry by competitors in multiple states by eliminating the need to comply with a multiplicity of state variations in technical and procedural requirements.[350] We sought comment on this tentative conclusion.

---

[347] ACSI comments at 11; Texas Public Utility Counsel comments at 1, 50; Texas Commission comments at 10.

[348] 47 U.S.C. § 251(b)(5).

[349] 47 U.S.C. § 251(d)(1) (emphasis added).

[350] NPRM at paras. 50-51.

184. We conclude that the phrase "telephone exchange service and exchange access" imposes at least three obligations on incumbent LECs: an incumbent must provide interconnection for purposes of transmitting and routing telephone exchange traffic or exchange access traffic or both. We believe that this interpretation is consistent with both the language of the statute and Congress's intent to foster entry by competitive providers into the local exchange market.[368] Moreover, the term "local exchange carrier" is defined in the Act as "any person that is engaged in the provision of telephone exchange service *or* exchange access."[369] Thus, we believe that Congress intended to facilitate entry by carriers offering either service. In imposing an interconnection requirement under section 251(c)(2) to facilitate such entry, however, we believe that Congress did not want to deter entry by entities that seek to offer either service, or both, and, as a result, section 251(c)(2) requires incumbent LECs to interconnect with carriers providing "telephone exchange service *and* exchange access."[370] Congress made clear that incumbent LECs must provide interconnection to carriers that seek to offer telephone exchange service *and* to carriers that seek to offer exchange access. This interpretation is consistent with section 251(c)(2), which imposes an obligation on incumbent LECs, but not requesting carriers.[371] Thus, for example, an analogous requirement might be that incumbent LECs must provide interconnection for the transmission and routing of "electrical and optical signals." Such a hypothetical requirement could not rationally be read to obligate *requesting carriers* to provide both electrical and optical signals.[372]

185. We also conclude that requiring new entrants to make available both local exchange service and exchange access as a prerequisite to obtaining interconnection to the incumbent LEC's network under subsection (c)(2) would unduly restrict potential competitors. For example, CAPs often enter the telecommunications market as exchange access providers prior to offering telephone exchange services. Further, applying separate regulatory regimes (*i.e.*, section 251 related-rules for providers of telephone exchange and exchange access services and section 201 related-rules for providers of only exchange access services) with divergent requirements to parties using essentially the same equipment

---

[368] As the U.S. Court of Appeals for the Fifth Circuit stated in *Peacock v. Lubbock Compress Company*, "the word 'and' is not a word with a single meaning, for chameleonlike, it takes its color from its surroundings." The court held that "[i]n the construction of statutes, it is the duty of the Court to ascertain the clear intention of the legislature. In order to do this, Courts are often compelled to construe 'or' as meaning 'and,' and again 'and' as meaning 'or'." *Peacock v. Lubbock Compress Company*, 252 F.2d 892, 893 (5th Cir. 1958) (*citing United States v. Fisk*, 70 U.S. 445, 448).

[369] 47 U.S.C. § 153(26) (emphasis added).

[370] 47 U.S.C. § 251(c)(2) (emphasis added).

[371] Where Congress intended to impose obligations on requesting carriers in section 251(c), it did so expressly. For example, section 251(c)(1) includes a specific and separate requirement on requesting carriers to negotiate in good faith. 47 U.S.C. § 251(c)(1).

[372] One definition of the word "and" is "as well as." Random House College Dictionary 50 (rev. ed. 1984). Under this definition, the provision can be read, and we believe should be read, to require LECs to provide interconnection for the transmission and routing of telephone exchange service as well as exchange access.

to transmit and route traffic, is undesirable in light of the new procompetitive paradigm created by section 251.[373] We see no convincing justification for treating providers of exchange access services that offer telephone exchange services differently from access providers who do not offer telephone exchange services. We therefore conclude that parties offering only exchange access are permitted to seek interconnection pursuant to section 251(c)(2).

D. Interexchange Service is Not Telephone Exchange Service or Exchange Access

1. Background

186. Sections 251(c)(2) and 251(c)(3) impose duties upon incumbent LECs to provide interconnection and nondiscriminatory access to unbundled network elements to "any requesting telecommunications carrier."[374] In the NPRM, we tentatively concluded that carriers providing interexchange services are "telecommunications carriers" and thus may seek interconnection and unbundled elements under subsections (c)(2) and (c)(3). We also tentatively concluded, however, that with respect to section 251(c)(2), the statute imposes limits on the purposes for which any telecommunications carrier, including IXCs, may request interconnection pursuant to that section. Section 251(c)(2) imposes an obligation upon incumbent LECs to provide requesting carriers with interconnection if the purpose of the interconnection is for the "transmission and routing of telephone exchange service and exchange access."[375] We tentatively concluded in the NPRM that interexchange service does not appear to constitute either "telephone exchange service" or "exchange access." "Exchange access" is defined in section 3(16) as "the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services."[376] We stated that an IXC that requests interconnection to originate or terminate an interexchange toll call is not "offering" access services, but rather is "receiving" access services.

2. Comments

187. DOJ and the Illinois Commission agree with the Commission's tentative conclusion that IXCs may obtain interconnection pursuant to 251(c)(2) to provide exchange service and exchange

---

[373] *See infra*, Section VI.B.2.a. for a discussion of the relationship between *Expanded Interconnection* tariffs and section 251. Competitive access providers use the same equipment in essentially the same manner as other providers of both telephone exchange and exchange access services.

[374] 47 U.S.C. §§ 251(c)(2) and (c)(3).

[375] 47 U.S.C. § 251(c)(2)(A).

[376] 47 U.S.C. § 153(16).

interim plan that would permit incumbent LECs to charge non-cost-based rates for access until the Commission completes access charge reform, but would declare that until that time, incumbent LECs would be deemed not to have met the section 271 checklist for providing in-region interexchange service.[392] Excel claims that it would be unlawful under section 202(a) for an IXC to pay charges for local network connections that are substantially higher than the charges paid by other users of the same network services.[393] Finally, CompTel and MCI argue that the legislative history of section 251 supports the conclusion that IXCs are permitted to obtain interconnection pursuant to section 251.[394]

3. Discussion

190. We conclude that IXCs are telecommunications carriers[395] under the 1996 Act, because they provide telecommunications services[396] (*i.e.*, "offer telecommunications for a fee directly to the public") by originating or terminating interexchange traffic. IXCs are permitted under the statute to obtain interconnection pursuant to section 251(c)(2) for the "transmission and routing of telephone exchange service and exchange access."[397] Moreover, traditional IXCs are a significant potential new local competitor and we conclude that denying them the right to obtain section 251(c)(2) interconnection lacks any legal or policy justification. Thus, all carriers (including those traditionally classified as IXCs) may obtain interconnection pursuant to section 251(c)(2) for the purpose of terminating calls originating from their customers residing in the same telephone exchange (*i.e.*, non-interexchange calls).

191. We conclude, however, that an IXC that requests interconnection solely for the purpose of originating or terminating its *interexchange* traffic, not for the provision of telephone exchange service and exchange access to others, on an incumbent LEC's network is not entitled to receive

[392] CompTel comments at 81-87.

[393] Excel comments at 4-5.

[394] CompTel reply at 32 (although the Senate bill, S.652, expressly required requesting carriers to obtain interconnection for the purpose of providing exchange access service, Congress rewrote that provision in conference to remove the requirement that carriers obtain interconnection for the purpose of providing exchange access); MCI reply at 21 (arguments based on provisions in unenacted drafts of the Act excluding access from the local interconnection provisions are rebutted by the fact that both the House and Senate bills included provisions mandating cost-based access rates in other sections).

[395] 47 U.S.C. § 153(44).

[396] 47 U.S.C. § 153(46).

[397] 47 U.S.C. § 251(c)(2).

interconnection pursuant to section 251(c)(2).[398] Section 251(c)(2) states that incumbent LECs have a duty to interconnect with telecommunications providers "for the transmission and routing of telephone exchange service and exchange access."[399] A telecommunications carrier seeking interconnection only for interexchange services is not within the scope of this statutory language because it is not seeking interconnection for the purpose of providing telephone exchange service. Nor does a carrier seeking interconnection of interstate traffic only -- for the purpose of providing interstate services only -- fall within the scope of the phrase "exchange access." Such a would-be interconnector is not "offering" access to telephone exchange services. As we stated in the NPRM, an IXC that seeks to interconnect solely for the purpose of originating or terminating its own interexchange traffic is not offering access, but rather is only obtaining access for its own traffic. Thus, we disagree with CompTel's position that IXCs are offering exchange access when they offer and provide exchange access as a part of long distance service. We conclude that a carrier may not obtain interconnection pursuant to section 251(c)(2) for the purpose of terminating interexchange traffic, even if that traffic was originated by a local exchange customer in a different telephone exchange of the same carrier providing the interexchange service, if it does not offer exchange access services to others. As we stated above, however, providers of competitive access services are eligible to receive interconnection pursuant to section 251(c)(2). Thus, traditional IXCs that offer access services in competition with an incumbent LEC (*i.e.*, IXCs that offer access services to other carriers as well as to themselves) are also eligible to obtain interconnection pursuant to section 251(c)(2). For example, when an IXC interconnects at a local switch, bypassing the incumbent LECs' transport network, that IXC may offer access to the local switch in competition with the incumbent. In such a situation, the interconnection point may be considered a section 251(c)(2) interconnection point.

[398] As stated above, interconnection pursuant to section 251(c)(2) is merely the physical linking of facilities between two networks, and thus access charges are not implicated by the Commission's decisions regarding whether parties who seek to interconnect solely for the purpose of originating or terminating interexchange traffic on the incumbent's network are entitled to obtain interconnection pursuant to section 251(c)(2). *See supra*, Section IV.A.

[399] Section 153(47) defines telephone exchange service as "(A) service within a telephone exchange, or within a connected system of [ ] exchanges within the same exchange area operated to furnish . . . intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities . . . ." 47 U.S.C. § 153(47). Section 153(16) states that exchange access means "the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services." 47 U.S.C. § 153(16).

virtual collocation.[433] Section 251 is silent as to whether an incumbent LEC's duty to provide for virtual collocation or other methods of interconnection or access to unbundled elements is dependent on space constraints. We conclude, as a practical matter, that space limitations at a particular network site, without any possibility of expansion, may render interconnection or access at that point infeasible, technically or otherwise. Where such expansion is possible, however, we conclude that, in light of the distinction drawn in section 251(c)(6), site restrictions do not represent a "technical" obstacle. Again, however, the requesting party would bear the cost of any necessary expansion. Nor do we believe the term "technical," when interpreted in accordance with its ordinary meaning as referring to engineering and operational concerns in the context of sections 251(c)(2) and 251(c)(3),[434] includes consideration of accounting or billing restrictions.

202. Several parties also attempt to draw a distinction between what is "feasible" under the terms of the statute, and what is "possible." The words "feasible" and "possible," however, are used synonymously. Feasible is defined as "capable of being accomplished or brought about; possible."[435] The statute itself provides a more meaningful distinction. Unlike the "technically *feasible*" terminology included in sections 251(c)(2) and 251(c)(3), section 251(c)(6) uses the term "*practical* for technical reasons" in determining the scope of an incumbent LEC's obligation to provide for physical collocation.[436] "Practical" is defined as "manifested in practice or action . . . not theoretical or ideal"[437] or "adapted or designed for actual use; useful," and connotes similarity to ordinary usage.[438] Thus, it is reasonable to interpret Congress's use of the term "feasible" in sections 251(c)(2) and 251(c)(3) as encompassing more than what is merely "practical" or similar to what is ordinarily done. That is, use of the term "feasible" implies that interconnecting or providing access to a LEC network element may be feasible at a particular point even if such interconnection or access requires a novel use of, or some modification to, incumbent LEC equipment. This interpretation is consistent with the fact that incumbent LEC networks were not designed to accommodate third-party interconnection or use of network elements at all or even most points within the network. If incumbent LECs were not required, at least to some extent, to adapt their facilities to interconnection or use by other carriers, the purposes of

---

[433] *Id.*

[434] *See* Random House College Dictionary at 1349 ("6. pertaining to or connected with the mechanical or industrial arts and the applied sciences").

[435] The American Heritage College Dictionary 499 (1993). Webster's Ninth New Collegiate Dictionary 453 (1989). Both "feasible" and "possible" refer to that which is "capable of being realized." *Id.* at 918.

[436] 47 U.S.C. § 251(c)(6) (emphasis added).

[437] Webster's at 923.

[438] Random House College Dictionary 1040 (rev. ed. 1984).

sections 251(c)(2) and 251(c)(3) would often be frustrated. For example, Congress intended to obligate the incumbent to accommodate the new entrant's network architecture by requiring the incumbent to provide interconnection "for the facilities and equipment" of the new entrant. Consistent with that intent, the incumbent must accept the novel use of, and modification to, its network facilities to accommodate the interconnector or to provide access to unbundled elements.

203. We also conclude, however, that legitimate threats to network reliability and security must be considered in evaluating the technical feasibility of interconnection or access to incumbent LEC networks. Negative network reliability effects are necessarily contrary to a finding of technical feasibility. Each carrier must be able to retain responsibility for the management, control, and performance of its own network. Thus, with regard to network reliability and security, to justify a refusal to provide interconnection or access at a point requested by another carrier, incumbent LECs must prove to the state commission, with clear and convincing evidence, that specific and significant adverse impacts would result from the requested interconnection or access. The reports of the Commission's Network Reliability Council discuss network reliability considerations, and establish templates that list activities that need to occur when service providers connect their networks pursuant to defined interconnection specifications or when they are attempting to define a new network interface specification.[439]

204. We further conclude that successful interconnection or access to an unbundled element at a particular point in a network, using particular facilities, is substantial evidence that interconnection or access is technically feasible at that point, or at substantially similar points in networks employing substantially similar facilities. In comparing networks for this purpose, the substantial similarity of network facilities may be evidenced, for example, by their adherence to the same interface or protocol standards. We also conclude that previous successful interconnection at a particular point in a network at a particular level of quality constitutes substantial evidence that interconnection is technically feasible at that point, or at substantially similar points, at that level of quality. Although most parties agree with this conclusion, some LECs contend that such comparisons are all but impossible because of alleged variability in network technologies, even where the ultimate services offered by separate networks are the same. We believe that, if the facilities are substantially similar, the LECs' contention is adequately addressed.

205. Finally, because sections 251(c)(2) and 251(c)(3) impose duties upon incumbent LECs, we conclude that incumbent LECs must prove to the appropriate state commission that interconnection or access at a point is not technically feasible. Incumbent LECs possess the information necessary to assess the technical feasibility of interconnecting to particular LEC facilities. Further, incumbent LECs

---

[439] *Network Reliability: A Report to the Nation* (1993, National Engineering Consortium); *Network Reliability: The Path Forward* (1996, Internet: http://www.fcc.gov/oet/nrc).

VI. METHODS OF OBTAINING INTERCONNECTION AND ACCESS TO UNBUNDLED ELEMENTS

542. In this section, we address the means of achieving interconnection and access to unbundled network elements that incumbent LECs are required to make available to requesting carriers.

A. Overview

1. Background

543. Section 251(c)(2) requires incumbent LECs to provide interconnection with the LEC's network "for the facilities and equipment of any requesting telecommunications carrier."[1321] Section 251(c)(6) imposes upon incumbent LECs "the duty to provide . . . for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the [LEC], except that the carrier may provide for virtual collocation if the [LEC] demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations."[1322] In the NPRM, we noted that section 251(c)(6) does not expressly limit the Commission's authority under section 251(c)(2) to establish rules requiring incumbent LECs to make available a variety of methods of interconnection, except in situations where the incumbent can demonstrate to the state commission that physical collocation is not practical for technical reasons or space limitations. We tentatively concluded that the Commission has the authority to require any reasonable method of interconnection, including physical collocation, virtual collocation, and meet point interconnection arrangements.[1323]

[1321] 47 U.S.C. § 251(c)(2).

[1322] 47 U.S.C. § 251(c)(6).

[1323] NPRM at para. 64. Under the Commission's *Expanded Interconnection* rules, LECs are not required to offer a collocating carrier a choice between physical and virtual collocation. *Special Access Order*, 7 FCC Rcd at 7407; *Switched Transport Order*, 8 FCC Rcd at 7404; *see also Physical Collocation Designation Order*, 8 FCC Rcd 4589 (under our *Expanded Interconnection* rules, LECs must provide virtual collocation where: virtual collocation is available on an intrastate basis; a LEC has negotiated an interstate virtual collocation arrangement; LECs are exempted from providing physical collocation because of space constraints; or a state commission has granted a waiver). Also, *see* Section VI.B.1.b. regarding the definitions of physical and virtual collocation.

546. Several parties urge the Commission to require interconnection at "meet points."[1332] Teleport states that incumbent LECs currently provide meet point interconnection arrangements between one another's facilities and are thus obligated to provide such arrangements to others.[1333] Teleport also claims that requiring meet point arrangements would be pro-competitive because it would allow competitors the flexibility to construct more efficient networks by eliminating the need to match the incumbent LEC's network.[1334]

547. Incumbent LECs respond that the statute does not give the Commission authority to require virtual collocation in addition to physical collocation.[1335] Ameritech argues that Congress specifically addressed collocation in section 251(c)(6), and that it would be inappropriate to mandate virtual collocation pursuant to the general duty under section 251(c)(2) to provide interconnection. It contends that, under principles of statutory construction, the specific language of section 251(c)(6), which provides for virtual collocation only where physical collocation is not practical, should govern the general language of section 251(c)(2).[1336]

548. GTE claims that section 251(c)(2) does not provide for any Commission role in specifying acceptable forms of interconnection.[1337] Bell Atlantic and BellSouth claim that meet point interconnection arrangements are very complex and should not be mandated by the Commission or the states, but rather left to the negotiation process.[1338] PacTel argues that incumbent LECs should not be required to develop new network capabilities or expand current network facilities to interconnect with competitors.[1339]

[1332] A meet point is a point, designated by two carriers, at which one carrier's responsibility for service begins and the other carrier's responsibility ends.

[1333] Teleport reply at 25; Sprint reply 21-22 (argues for a "mid-span" meet arrangement whereby two carriers' fiber optic cables would be spliced together at a point between two repeaters).

[1334] Teleport reply at 25.

[1335] *See, e.g.,* Bell Atlantic comments at 34; PacTel comments at 36.

[1336] Ameritech comments at 24.

[1337] GTE comments at 22.

[1338] Bell Atlantic comments at 22; BellSouth comments at 23.

[1339] PacTel comments at 19.

limitation on our authority to require virtual collocation, competitive providers would be required to undertake costly and burdensome actions to convert back to physical collocation even if they were satisfied with existing virtual collocation arrangements. We conclude that Congress did not intend to impose such a burden on requesting carriers that wish to continue to use virtual collocation for purposes of section 251(c). Further, the record indicates that this requirement would be costly and would delay competition.[1342] In short, we conclude that, in enacting section 251(c)(6), Congress intended to expand the interconnection choices available to requesting carriers, not to restrict them.

552. We also conclude that requiring incumbent LECs to provide virtual collocation and other technically feasible methods of interconnection or access to unbundled elements is consistent with Congress's desire to facilitate entry into the local telephone market by competitive carriers. In certain circumstances, competitive carriers may find, for example, that virtual collocation is less costly or more efficient than physical collocation. We believe that this may be particularly true for small carriers which lack the the financial resources to physically collocate equipment in a large number of incumbent LEC premises.[1343] Moreover, since requesting carriers will bear the costs of other methods of interconnection or access, this approach will not impose an undue burden on the incumbent LECs.

553. Consistent with this view, other methods of technically feasible interconnection or access to incumbent LEC networks, such as meet point arrangements, in addition to virtual and physical collocation, must be available to new entrants upon request.[1344] Meet point arrangements (or mid-span meets), for example, are commonly used between neighboring LECs for the mutual exchange of traffic, and thus, in general, we believe such arrangements are technically feasible.[1345] Further, although the creation of meet point arrangements may require some build out of facilities by the incumbent LEC, we believe that such arrangements are within the scope of the obligations imposed by sections 251(c)(2) and 251(c)(3). In a meet point arrangement, the "point" of interconnection for purposes of sections

---

[1342] *See* Teleport comments at 32; ALTS comments at 23; Time Warner comments at 42-44 (objecting to non-recurring charges for the reconnection of existing interconnected virtual collocation services to a replacement physical collocation arrangement).

[1343] *See* Hyperion comments at 15.

[1344] *See* Teleport comments at 26-30; *see also* Washington Utilities and Transportation Commission, *Fourth Supplemental Order Rejecting Tariff Filings and Ordering Refiling*, Granting Complaints, in Part, (Washington Commission Oct. 31, 1995), Docket No. UT-941464, at 45; *Application of Electric Lightwave, Inc., MFS Intelnet of Oregon, Inc., and MCI Metro Access Transmission Services, Inc.*, Public Utility Commission of Oregon Order, Order No. 96-021, (Oregon Commission Jan. 12, 1996), at 68-69; *Rules for Telecommunications Interconnection and Unbundling*, Arizona Corporation Commission Order, Decision No. 59483, (Arizona Commission Jan. 11, 1996), Proposed Rule R14-2-1303 (Attachment E hereto).

[1345] The Michigan Commission recently required Ameritech to provide meet point interconnection. Michigan Public Service Commission, Case No. U-10860 (Michigan June 5, 1996) at 18 n.4.

251(c)(2) and 251(c)(3) remains on "the local exchange carrier's network"[1346] (*e.g.*, main distribution frame, trunk-side of the switch), and the limited build-out of facilities from that point may then constitute an accommodation of interconnection.[1347] In a meet point arrangement each party pays its portion of the costs to build out the facilities to the meet point. We believe that, although the Commission has authority to require incumbent LECs to provide meet point arrangements upon request, such an arrangement only makes sense for interconnection pursuant to section 251(c)(2) but not for unbundled access under section 251(c)(3). New entrants will request interconnection pursuant to section 251(c)(2) for the purpose of exchanging traffic with incumbent LECs. In this situation, the incumbent and the new entrant are co-carriers and each gains value from the interconnection arrangement. Under these circumstances, it is reasonable to require each party to bear a reasonable portion of the economic costs of the arrangement. In an access arrangement pursuant to section 251(c)(3), however, the interconnection point will be a part of the new entrant's network and will be used to carry traffic from one element in the new entrant's network to another. We conclude that in a section 251(c)(3) access situation, the new entrant should pay all of the economic costs of a meet point arrangement. Regarding the distance from an incumbent LEC's premises that an incumbent should be required to build out facilities for meet point arrangements, we believe that the parties and state commissions are in a better position than the Commission to determine the appropriate distance that would constitute the required reasonable accommodation of interconnection.

554. Finally, in accordance with our interpretation of the term "technically feasible," we conclude that, if a particular method of interconnection is currently employed between two networks, or has been used successfully in the past, a rebuttable presumption is created that such a method is technically feasible for substantially similar network architectures. Moreover, because the obligation of incumbent LECs to provide interconnection or access to unbundled elements by any technically feasible means arises from sections 251(c)(2) and 251(c)(3), we conclude that incumbent LECs bear the burden of demonstrating the technical infeasibility of a particular method of interconnection or access at any individual point.

[1346] 47 U.S.C. § 251(c)(2).

[1347] *See, supra* Section IV.E., above, discussing accommodation of interconnection.

demonstrated with sufficient specificity, and overstate the scope of the constitutional guarantee.[1677] Commenters note that no incumbent LEC has made any effort to demonstrate the actual impact of a LRIC-based pricing methodology on its "financial integrity."[1678] These parties contend that there is no unconstitutional impairment if the shortfall is not sufficient to jeopardize the operating and financial integrity of the utility. Finally, these commenters maintain that there is no constitutional right to a particular rate-setting methodology (*i.e.*, historical cost) and there are no general principles that require every component of an integral whole of a utility service to show a profit.[1679]

(3) Discussion

672. *Overview*. Having concluded in Section II.D., above, that we have the requisite legal authority and that we should establish national pricing rules, we conclude here that prices for inter-connection and unbundled elements pursuant to sections 251(c)(2), 251(c)(3), and 252(d)(1), should be set at forward-looking long-run economic cost. In practice, this will mean that prices are based on the TSLRIC of the network element, which we will call Total Element Long Run Incremental Cost (TELRIC), and will include a reasonable allocation of forward-looking joint and common costs. The 1996 Act encourages competition by removing barriers to entry and providing an opportunity for potential new entrants to purchase unbundled incumbent LEC network elements to compete efficiently to provide local exchange services. We believe that the prices that potential entrants pay for these elements should reflect forward-looking economic costs in order to encourage efficient levels of investment and entry.

673. In this section, we describe this forward-looking, cost-based pricing standard in detail. First, we define the terms we are using, explain how the methodology we are adopting differs from other costing approaches, and describe how it should be implemented. In particular, we explain that the price of a network element should include the forward-looking costs that can be attributed directly to the provision of services using that element, which includes a reasonable return on investment (*i.e.*, "profit"), plus a reasonable share of the forward-looking joint and common costs. Second, we address potential cost measures that must not be included in a TELRIC analysis, such as embedded (or historical) costs, opportunity costs, or universal service subsidies. Finally, we refute arguments that this methodology would violate the incumbent LECs' rights under the Fifth Amendment.

[1677] *See, e.g.*, DoJ reply at 16-18.

[1678] DoJ reply at 16-18; MCI reply at 18.

[1679] *See, e.g.*, Jones Intercable reply at 16-17.

carriers."[2087] We conclude that an incumbent LEC must establish a wholesale rate for each retail service that: (1) meets the statutory definition of a "telecommunications service;" and (2) is provided at retail to subscribers who are not "telecommunications carriers."[2088] We thus find no statutory basis for limiting the resale duty to basic telephone services, as some suggest.

872. We need not prescribe a minimum list of services that are subject to the resale requirement. State commissions, incumbent LECs, and resellers can determine the services that an incumbent LEC must provide at wholesale rates by examining that LEC's retail tariffs. The 1996 Act does not require an incumbent LEC to make a wholesale offering of any service that the incumbent LEC does not offer to retail customers. State commissions, however, may have the power to require incumbent LECs to offer specific intrastate services.[2089]

873. Exchange access services are not subject to the resale requirements of section 251(c)(4). The vast majority of purchasers of interstate access services are telecommunications carriers, not end users. It is true that incumbent LEC interstate access tariffs do not contain any limitation that prevents end users from buying these services, and that end users do occasionally purchase some access services, including special access,[2090] Feature Group A,[2091] and certain Feature Group D elements for large private networks.[2092] Despite this fact, we conclude that the language and intent of section 251 clearly demonstrates that exchange access services should not be considered services an incumbent LEC "provides at retail to subscribers who are not telecommunications carriers" under section 251(c)(4). We

---

[2087] 47 U.S.C. § 251(c)(4)(A).

[2088] "Telecommunications service" is defined in section 3(46) to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 47 U.S.C. § 153(46) "Telecommunications" is, in turn, defined in section 3(43) as "the transmission, between or among points specified by the user, of information of the user's choosing without change in the form or content of the information as sent and received." 47 U.S.C. § 153(43). "Telecommunications carrier" is defined in section 3(44) to mean "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in section 226)." 47 U.S.C. § 153(44).

[2089] *See, e.g.*, Illinois Public Utilities Act, Section 13-505.5.

[2090] End users may purchase special access from incumbent LECs in order to use high volume services offered by IXCs, such as AT&T's Megacom service.

[2091] Feature Group A is similar to a local exchange service, but is used for interstate access. In such circumstances, the end user dials a seven-digit number to reach the LEC's "dial tone office" serving an IXC, where the LEC switches the call to the IXC's POP via a dedicated line-side connection. Feature Group A represents approximately one percent of incumbent LEC transport revenues.

[2092] Feature Group D is the set of elements through which IXCs today almost universally purchase switched access services from incumbent LECs.

note that virtually all commenters in this proceeding agree, or assume without stating, that exchange access services are not subject to the resale requirements of section 251(c)(4).[2093]

874. We find several compelling reasons to conclude that exchange access services should not be subject to resale requirements. First, these services are predominantly offered to, and taken by, IXCs, not end users. Part 69 of our rules defines these charges as "carrier's carrier charges,"[2094] and the specific part 69 rules that describe each interstate switched access element refer to charges assessed on "interexchange carriers" rather than end users.[2095] The mere fact that fundamentally non-retail services are offered pursuant to tariffs that do not restrict their availability, and that a small number of end users do purchase some of these services, does not alter the essential nature of the services. Moreover, because access services are designed for, and sold to, IXCs as an input component to the IXC's own retail services, LECs would not avoid any "retail" costs when offering these services at "wholesale" to those same IXCs. Congress clearly intended section 251(c)(4) to apply to services targeted to end user subscribers, because only those services would involve an appreciable level of avoided costs that could be used to generate a wholesale rate. Furthermore, as explained in the following paragraph, section 251(c)(4) does not entitle subscribers to obtain services at wholesale rates for their own use. Permitting IXCs to purchase access services at wholesale rates for their own use would be inconsistent with this requirement.

875. We conclude that section 251(c)(4) does not require incumbent LECs to make services available for resale at wholesale rates to parties who are not "telecommunications carriers" or who are purchasing service for their own use. The wholesale pricing requirement is intended to facilitate competition on a resale basis. Further, the negotiation process established by Congress for the implementation of section 251 requires incumbent LECs to negotiate agreements, including resale agreements, with "requesting telecommunications carrier or carriers,"[2096] not with end users or other entities. We further discuss the definition of "telecommunications carrier" in Section IX. of the Order.

876. With regard to independent public payphone providers, however, we agree with the American Public Communication Council's argument that such carriers are not "telecommunications carriers" under section 3(44). We therefore also agree with the American Public Communications

---

[2093] *See, e.g.*, Cincinnati Bell comments at 34; Citizens Utilities comments at 25; NYNEX comments at 35 n.70; Rural Tel. Coalition comments at 20; J. Staurulakis comments at 6; SBC reply at 13; USTA reply at 31; Wisconsin Commission comments at Attachment, pp. 7-8.

[2094] 47 U.S.C. § 69.5(b).

[2095] The one exception, as discussed below, is the SLC, which is assessed on end users regardless of who purchases the access services from the incumbent LEC.

[2096] 47 U.S.C.§ 252(a)(1).

(specifically cellular, broadband PCS and covered SMR) also provide telephone exchange service and exchange access as defined by the 1996 Act. Incumbent LECs must accordingly make interconnection available to these CMRS providers in conformity with the terms of sections 251(c) and 252, including offering rates, terms, and conditions that are just, reasonable and nondiscriminatory.[2387]

1013. The 1996 Act defines "telephone exchange service" as "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area . . . and which is covered by the exchange service charge, *or (B) comparable service* provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service."[2388] At a minimum, we find that cellular, broadband PCS, and covered SMR providers fall within the second part of the definition because they provide "comparable service" to telephone exchange service. The services offered by cellular, broadband PCS, and covered SMR providers are comparable because, as a general matter, and as some commenters note, these CMRS carriers provide local, two-way switched voice service as a principal part of their business.[2389] Indeed, the Commission has described cellular service as exchange telephone service[2390] and cellular carriers as "generally engaged in the provision of local exchange telecommunications in conjunction with local telephone companies . . . ."[2391] In addition, although CMRS providers are not currently classified as LECs, the fact that most CMRS providers are capable, both technically and pursuant to the terms of their licenses, of providing fixed services, as LECs do, buttresses our conclusion that these CMRS providers offer services that are "comparable" to telephone exchange service and supports the notion that these services may become a true economic substitute for wireline local exchange service in the future.[2392]

[2387] 47 U.S.C. § 251(c)(2)(D).

[2388] 47 U.S.C. § 153(47) (emphasis added). This is a broader definition of "telephone exchange service" than had previously existed; Congress changed the definition in the 1996 Act to include services "comparable" to telephone exchange.

[2389] *See, e.g.*, NYNEX comments at 23.

[2390] *See Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carriers*, Memorandum Opinion and Order, 59 Rad. Reg.2d 1275, 1278 (1986).

[2391] *In the Matter of the Need to Promote Competition and Efficient Use of Spectrum For Radio Common Carrier Services*, Memorandum Opinion and Order, 59 Rad. Reg. 2d 1275, 1278 (1986)(*Competition Opinion*); *see also id.* at 1284 (cellular carriers are primarily engaged in the provision of local, intrastate exchange telephone service); *Equal Access and Interconnection Obligations Pertaining to Commercial Radio Services*, CC Docket No. 94-54, Notice of Proposed Rulemaking and Notice of Inquiry, 9 FCC Rcd 5408, 5453 and nn.192, 195 (and cases cited therein) (1994).

[2392] *See Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services*, WT Docket No. 96-6, First Report and Order and Further Notice of Proposed Rulemaking, FCC 96-283 (released August 1, 1996)(amending rules to allow providers of narrowband and broadband PCS, cellular, CMRS SMR, CMRS paging, CMRS 220 MHz service, and for-profit interconnected business radio services to offer fixed wireless services on

1014. We also believe that other definitions in the Act support the conclusion that cellular, broadband PCS, and covered SMR licensees provide telephone exchange service. The fact that the 1996 Act's definition of a LEC excludes CMRS until the Commission finds that such service should be included in the definition,"[2393] suggests that Congress found that some CMRS providers were providing telephone exchange service or exchange access, but sought to afford the Commission the discretion to decide whether CMRS providers should be treated as LECs under the new Act. Similarly, section 253(f) permits the states to impose certain obligations on "telecommunications carrier[s] that seek[ ] to provide telephone exchange service" in rural areas.[2394] The provision further provides that "[t]his subsection shall not apply . . . to a provider of commercial mobile services."[2395] It would have been unnecessary for the statute to include this exception if some CMRS were not telephone exchange service. Similarly, section 271(c)(1)(A), which sets forth conditions for determining the presence of a facilities-based competitor for purposes of BOC applications to provide in-region, interLATA services, provides that Part 22 [cellular] services "shall not be considered to be telephone exchange services," for purposes of that section.[2396] Again, if Congress did not believe that cellular providers were engaged in the provision of telephone exchange service, it would not have been necessary to exclude cellular providers from this provision.

1015. The arguments that CMRS traffic flows may differ from wireline traffic, that CMRS providers' termination costs may differ from LECs, that CMRS service areas do not coincide with wireline local exchange areas, or that CMRS providers are not LECs, do not alter our conclusion that cellular, broadband PCS, and covered SMR licensees provide telephone exchange service. These considerations are not relevant to the statutory definition of telephone exchange service in section 3(47). Incumbent LECs are required to provide interconnection to CMRS providers who request it for the transmission and routing of telephone exchange service or exchange access, under the plain language of section 251(c)(2).[2397]

D. Jurisdictional Authority for Regulation of LEC-CMRS Interconnection Rates

1. Background

---

their assigned spectrum on a co-primary basis with mobile services).

[2393] 47 U.S.C. § 153(26).

[2394] 47 U.S.C. § 253(f).

[2395] *Id*.

[2396] 47 U.S.C. § 271(c)(1)(A).

[2397] 47 U.S.C. § 251(c)(2).

network that originates and terminates within the same MTA (defined based on the parties' locations at the beginning of the call) is subject to transport and termination rates under section 251(b)(5), rather than interstate or intrastate access charges. Under our existing practice, most traffic between LECs and CMRS providers is not subject to interstate access charges unless it is carried by an IXC, with the exception of certain interstate interexchange service provided by CMRS carriers, such as some "roaming" traffic that transits incumbent LECs' switching facilities, which is subject to interstate access charges.[2485] Based on our authority under section 251(g) to preserve the current interstate access charge regime, we conclude that the new transport and termination rules should be applied to LECs and CMRS providers so that CMRS providers continue not to pay interstate access charges for traffic that currently is not subject to such charges, and are assessed such charges for traffic that is currently subject to interstate access charges.[2486]

1044. CMRS customers may travel from location to location during the course of a single call, which could make it difficult to determine the applicable transport and termination rate or access charge.[2487] We recognize that, using current technology, it may be difficult for CMRS providers to determine, in real time, which cell site a mobile customer is connected to, let alone the customer's specific geographic location.[2488] This could complicate the computation of traffic flows and the applicability of transport and termination rates, given that in certain cases, the geographic locations of the calling party and the called party determine whether a particular call should be compensated under transport and termination rates established by one state or another, or under interstate or intrastate access charges. We conclude, however, that it is not necessary for incumbent LECs and CMRS providers to be able to ascertain

---

[2485] "[S]ome cellular carriers provide their customers with a service whereby a call to a subscriber's local cellular number will be routed to them over interstate facilities when the customer is "roaming" in a cellular system in another state. In this case, the cellular carrier is providing not local exchange service but interstate, interexchange service. In this and other situations where a cellular company is offering interstate, interexchange service, the local telephone company providing interconnection is providing exchange access to an interexchange carrier and may expect to be paid the appropriate access charge . . . . Therefore, to the extent that a cellular operator does provide interexchange service through switching facilities provided by a telephone company, its obligation to pay carrier's carrier [*i.e.*, access] charges is defined by § 69.5(b) of our rules." *The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services*, 59 RR 2d 1275, 1284-85 n.3 (1986). *See also Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services*, GN Docket No. 93-252, Second Report and Order, 9 FCC Rcd 1411, 1497-98 (1994) (concluding that there should be no distinction between incumbent LECs' interconnection arrangements with cellular carriers and those with other CMRS providers).

[2486] *See also, supra*, XI.A.2.c.(1).

[2487] In the *LEC-CMRS Interconnection NPRM*, we observed that a significant amount of LEC-CMRS traffic crosses state lines, because CMRS service areas often cross state lines and CMRS customers are mobile. *LEC CMRS Interconnection NPRM* at para. 112.

[2488] *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, RM-8143, Report and Order and Further Notice of Proposed Rulemaking, FCC 96-264 at paras. 8-9 (adopted June 12, 1996, released July 26, 1996).

geographic locations when determining the rating for any particular call at the moment the call is connected. We conclude that parties may calculate overall compensation amounts by extrapolating from traffic studies and samples. For administrative convenience, the location of the initial cell site when a call begins shall be used as the determinant of the geographic location of the mobile customer. As an alternative, LECs and CMRS providers can use the point of interconnection between the two carriers at the beginning of the call to determine the location of the mobile caller or called party.

1045. As discussed above, pursuant to section 251(b)(5) of the Act, all local exchange carriers, including small incumbent LECs and small entities offering competitive local exchange services, have a duty to establish reciprocal compensation arrangements for the transport and termination of local exchange service. CMRS providers, including small entities, and LECs, including small incumbent LECs and small entity competitive LECs, will receive reciprocal compensation for terminating certain traffic that originates on the networks of other carriers, and will pay such compensation for certain traffic that they transmit and terminate to other carriers. We believe that these arrangements should benefit all carriers, including small incumbent LECs and small entities, because it will facilitate competitive entry into new markets while ensuring reasonable compensation for the additional costs incurred in terminating traffic that originates on other carriers' networks. We also recognize that, to implement transport and termination pursuant to section 251(b)(5), carriers, including small incumbent LECs and small entities, may be required to measure the exchange of traffic, but we believe that the cost of such measurement to these carriers is likely to be substantially outweighed by the benefits of these arrangements.[2489]

3. Pricing Methodology

a. Background

1046. In the NPRM, we sought comment on how to interpret section 252(d)(2) of the Act. Specifically, we asked if we should establish a generic pricing methodology or impose a ceiling to guide the states in setting the charge for the transport and termination of traffic. We also asked whether such a generic pricing methodology or ceiling should be established using the same principles we adopt for interconnection and unbundled elements.[2490] Additionally, we sought comment on the use of an interim and transitional pricing mechanism that would address concerns about unequal bargaining power in negotiations.[2491]

[2489] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

[2490] NPRM at para. 234.

[2491] NPRM at para. 244.

LECs incorrectly assumes that the incumbent LEC will always have greater bargaining power in the process of negotiations.[2523] Cincinnati Bell argues that, to the contrary, small and mid-size LECs will be at a disadvantage when they negotiate with large corporations.[2524] LECs generally argue that, under the 1996 Act, the Commission is precluded from creating an interim pricing regime, and point to section 251(d)(3), which preserves state regulations over the obligations of LECs in certain circumstances, to support their argument.[2525]

c. Discussion

(1) Statutory Standard

1054. We conclude that the pricing standards established by section 252(d)(1) for interconnection and unbundled elements, and by section 252(d)(2) for transport and termination of traffic, are sufficiently similar to permit the use of the same general methodologies for establishing rates under both statutory provisions. Section 252(d)(2) states that reciprocal compensation rates for transport and termination shall be based on "a reasonable approximation of the additional costs of terminating such calls."[2526] Moreover, there is some substitutability between the new entrant's use of unbundled network elements for transporting traffic and its use of transport under section 252(d)(2). Depending on the interconnection arrangements, carriers may transport traffic to the competing carriers' end offices or hand traffic off to competing carriers at meet points for termination on the competing carriers' networks. Transport of traffic for termination on a competing carrier's network is, therefore, largely indistinguishable from transport for termination of calls on a carrier's own network. Thus, we conclude that transport of traffic should be priced based on the same cost-based standard, whether it is transport using unbundled elements or transport of traffic that originated on a competing carrier's network. We, therefore, find that the "additional cost" standard permits the use of the forward-looking, economic cost-based pricing standard that we are establishing for interconnection and unbundled elements.[2527]

[2523] Cincinnati Bell comments at 25-26.

[2524] *Id.*

[2525] *See, e.g.*, BellSouth comments in CC Docket No. 95-185 at 32.

[2526] 47 U.S.C. § 252(d)(2)(A)(ii).

[2527] *See supra,* Section VII.B.

conditions that will govern them if they fail to reach an agreement and helps to reduce the transaction costs of arbitration and litigation. We also find that states that have already adopted end-office termination rates based on an approach other than a full forward-looking cost study, either through arbitration or rulemaking proceedings, may keep such rates in effect, pending their review of a forward-looking cost study, as long as they do not exceed 0.5 cents ($0.005) per minute. As discussed below, a state may also order a "bill and keep" arrangement subject to certain limitations. Additionally, our adoption of a default price range temporarily relieves small and mid-sized carriers from the burden of conducting forward-looking economic cost studies.[2537]

1061. Similarly, in establishing transport rates under sections 251(b)(5) and 252(d)(2), state commissions should be guided by the price proxies that we are establishing for unbundled transport elements discussed above.[2538] States should explain the basis for selecting a particular default price subject to the applicable ceiling. Specifically, when interconnecting carriers hand off traffic at an incumbent LEC's tandem switch (or equivalent facilities of a carrier other than an incumbent LEC), the rates for the tandem switching and transmission from the tandem switch to end offices -- a portion of the "transport" component of transport and termination rates -- should be subject to the proxies that apply to the analogous unbundled network elements. Thus, for the time being, when states set rates for tandem switching under section 252(d)(2), they may set a default price at or below the default price ceiling that applies to the tandem switching unbundled element as an alternative to reviewing a forward-looking economic cost study using our TELRIC methodology.[2539] Similarly, when states set rates for transmission facilities between tandem switches and end offices, they may establish rates equal to the default prices we are adopting for such transmission, as discussed above in the section on unbundled elements.[2540]

1062. Finally, in establishing the rates for transmission facilities that are dedicated to the transmission of traffic between two networks, state commissions should be guided by the default price level we are adopting for the unbundled element of dedicated transport.[2541] For such dedicated transport, we can envision several scenarios involving a local carrier that provides transmission facilities (the "providing carrier") and another local carrier with which it interconnects (the "interconnecting carrier"). The amount an interconnecting carrier pays for dedicated transport is to be proportional to its relative use of the dedicated facility. For example, if the providing carrier provides one-way trunks that the interconnecting carrier uses

[2537] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

[2538] *See supra,* Section VII.C.2.b.(3).

[2539] *Id.*

[2540] *Id.*

[2541] *Id.*

exclusively for sending terminating traffic to the providing carrier, then the interconnecting carrier is to pay the providing carrier a rate that recovers the full forward-looking economic cost of those trunks. The interconnecting carrier, however, should not be required to pay the providing carrier for one-way trunks in the opposite direction, which the providing carrier owns and uses to send its own traffic to the interconnecting carrier. Under an alternative scenario, if the providing carrier provides two-way trunks between its network and the interconnecting carrier's network, then the interconnecting carrier should not have to pay the providing carrier a rate that recovers the full cost of those trunks. These two-way trunks are used by the providing carrier to send terminating traffic to the interconnecting carrier, as well as by the interconnecting carrier to send terminating traffic to the providing carrier. Rather, the interconnecting carrier shall pay the providing carrier a rate that reflects only the proportion of the trunk capacity that the interconnecting carrier uses to send terminating traffic to the providing carrier. This proportion may be measured either based on the total flow of traffic over the trunks, or based on the flow of traffic during peak periods.[2542] Carriers operating under arrangements which do not comport with the principles we have set forth above, shall be entitled to convert such arrangements so that each carrier is only paying for the transport of traffic it originates, as of the effective date of this order.

(5) Rate Structure

1063. Nearly all commenters agree that flat rates, rather than usage-sensitive rates, should apply to the purchase of dedicated facilities. As discussed in the NPRM, economic efficiency may generally be maximized when non-traffic sensitive services, such as the use of dedicated facilities for the transport of traffic, are priced on a flat-rated basis.[2543] We, therefore, require all interconnecting parties to be offered the option of purchasing dedicated facilities, for the transport of traffic, on a flat-rated basis. As discussed by Lincoln Telephone, the connection between an incumbent LEC's end or tandem office and an interconnecting LEC's network is likely to be a dedicated facility. We recognize that the facility itself can be provided in a number of different ways -- by use of two service providers, by the other carrier, or jointly in a meet-point arrangement. We conclude first that, no matter what the specific arrangements, these costs should be recovered in a cost-causative manner and that usage-based charges should be limited to situations where costs are usage sensitive. In cases going to arbitration and in reviewing BOC statements of terms and conditions, the carrier actually providing the facility should presumptively be entitled to a rate that is set based on the forward-looking economic cost of providing the portion of the facility that is used for terminating traffic that originates on the network of a competing carrier. We recognize that negotiated agreements may incorporate flat-rated charges when it is efficient to do so and find that the presence of the arbitration default rule is likely to lead parties to negotiate efficient rate structures.

[2542] *See infra,* Section XI.A.3.c.(5).

[2543] NPRM at para. 150.