No. 00-587

In the Supreme Court of the United States

FEDERAL COMMUNICATIONS COMMISSION AND
UNITED STATES OF AMERICA, PETITIONERS

v.

IOWA UTILITIES BOARD, ET AL.

ON PETITION FOR A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

1. Whether 47 U.S.C. 252(d)(1) (Supp. IV 1998) forecloses the cost methodology adopted by the Federal Communications Commission for determining the rates that new entrants into local telecommunications markets must pay incumbent local telephone companies to lease elements of, or interconnect with, the incumbents' networks.

2. Whether 47 U.S.C. 251(c)(3) (Supp. IV 1998) prohibits regulators from requiring that incumbent local telephone companies combine certain previously uncombined network elements when a new entrant requests the combination and agrees to compensate the incumbent for performing that task.

PARTIES TO THE PROCEEDING

The petitioners in this Court are the United States and the Federal Communications Commission.

The respondents are:

Ad Hoc Telecommunications Users Committee
Airtouch Communications, Inc.
Alabama Public Service Commission
American Communications Services, Inc.
Ameritech Corporation
AT&T Corporation
BellSouth Corp.
California Public Utilities Department
Cincinnati Bell Telephone Company
Citizens Telephone Company of Kecksburg
Comcast Corporation
Concord Telephone Company
Consumers' Utility Counsel Division, Governor's
    Office of Consumer Affairs
Contel of Minnesota, Inc.
Contel of the South, Inc.
Department of Public Utilities of the
    Commonwealth of Massachusetts
Excel Telecommunications, Inc.
General Communications, Inc.
GST Telecom, Inc.
GTE Alaska, Inc.
GTE Arkansas, Inc.
GTE Midwest, Inc.
GTE Service Corporation
GTE Southwest, Inc.
ICG Telecom Group, Inc.
Information Technology Industry Council
Iowa Utilities Board

Jones Intercable, Inc.
Kansas Corporation Commission
Kentucky Public Service Commission
KMC Telecom, Inc.
Maryland Public Service Commission
MCI Telecommunications Corporation
Mid-Sized Incumbent Local Exchange Carriers
Mississippi Public Service Commission
National Cable Television Association
National Rural Telecom Association
National Telephone Cooperative Association
New York State Department of Public Service
North Carolina Utilities Commission
North State Telephone Company
Oregon Public Utility Commission
Organization for the Promotion and Advancement of Small Telecommunications Companies
Pennsylvania Public Utility Commission
People of the State of California & PUC of California
Public Utilities Commission of the State of Colorado
Public Service Commission of Wisconsin
Public Service Commission of the State of Montana
Qwest Communications
Rock Hill Telephone Company
Roseville Telephone Company
Rural Telecommunications Group
Rural Telephone Coalition
SBC Communications, Inc.
South Dakota Public Utilities Commission
Sprint Communications Company
Sprint Corporation
Sprint PCS

Sprint Spectrum, L.P.
State of Texas
Telecommunications Resellers Association
Texas Office of Public Utility Counsel
The Ad Hoc Coalition of Telecommunications Manufacturing Companies
The Competition Policy Institute
United States Telecom Association
US Telephone Association
Verizon California, Inc. (formerly GTE California, Inc.)
Verizon Communications, Inc. (formerly Bell Atlantic Corp.)
Verizon Florida, Inc. (formerly GTE Florida, Inc.)
Verizon Hawaii Int'l, Inc. (formerly GTE Hawaiian Tel. Co., Inc.)
Verizon North, Inc. (formerly GTE North, Inc.)
Verizon Northwest, Inc. (formerly GTE Northwest, Inc.)
Verizon South, Inc. (formerly GTE South, Inc.)
Verizon West Coast, Inc. (formerly GTE West Coast, Inc.)
Virginia State Corporation Commission
Winstar Communications

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*ON PETITION FOR A WRIT OF CERTIORARI
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FOR THE EIGHTH CIRCUIT*

PETITION FOR A WRIT OF CERTIORARI

The Solicitor General, on behalf of the United States and the Federal Communications Commission, petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Eighth Circuit.

OPINION BELOW

The opinion of the court of appeals (App., *infra*, 1a-43a) is reported at 219 F.3d 744. The Order of the Federal Communications Commission (FCC) is reported at 11 F.C.C.R. 15,499 and is reprinted, in relevant part, at App., *infra*, 44a-103a.

JURISDICTION

The judgment of the court of appeals was entered on July 18, 2000. The jurisdiction of this Court is invoked under 28 U.S.C. 1254(1).

STATUTORY PROVISIONS INVOLVED

The relevant provisions of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, codified at 47 U.S.C. 251-252, are reproduced at App., *infra*, 104a-125a.

STATEMENT

1. In most areas of the United States, local telephone service has long been dominated by a single incumbent "local exchange carrier," or LEC. That LEC, whether a regional Bell company or an independent carrier, owns almost all of the loops (the wires that connect telephones to switches) in its service area, along with the switches themselves and the transport trunks that connect the switches. Incumbents continue to control approximately 94% of total local telecommunications revenues. See *Local Telephone Competition at the New Millennium*, Table 6 (FCC Aug. 2000).

The barriers to entry into a local telecommunications market are different from, and vastly more formidable than, the barriers to entry into the long-distance market. It has been economically practicable for some long-distance carriers to build their own interexchange infrastructure—*e.g.*, to lay cable or build microwave networks connecting local calling areas to one another—because they can rely (albeit at a cost) on the LECs on either end of an interexchange call to route the call through the various switches and local loops from the call's origin to its destination. But, at least with current technology, it would be economically impracticable for even the largest prospective competitor to duplicate the functions of an incumbent LEC's entire network, much less for multiple prospective competitors to do so. And, without rights of interconnection, a potential competitor could not gradually enter the market through partial duplication of those facilities: a new carrier would win few customers if its customers could call only one another and not customers on the incumbent LEC's separate (and completed) network.

"Until the 1990s, local phone service was thought to be a natural monopoly. * * * Technological advances, however, have made competition among multiple providers of local service seem possible." *AT&T* v. *Iowa Utils. Bd.* (*Iowa Utils. Bd. I*), 525 U.S. 366, 371 (1999). Congress enacted the Telecommunications Act of 1996 (1996 Act), Pub. L. No. 104-104, 110 Stat. 56 (47 U.S.C. 251 *et seq.*), to open local telecommunications markets to full competition. Congress recognized that no prospective entrant could replicate, particularly in the near term, all of an incumbent's existing local network infrastructure. Accordingly, in the "local competition provisions" of the 1996 Act, 47 U.S.C. 251-253,[1] Congress enabled potential competitors to enter local markets by using the incumbents' networks in a variety of ways. See 47 U.S.C. 251(c)(2)-(4).[2]

Central to the local competition provisions is Section 251(c)(3), which entitles a new entrant to gain "access" to (*i.e.*, to lease) an incumbent's "network elements," such as loops, switching capability, and other components and capabilities of the incumbent's network. 47 U.S.C. 251(c)(3); see also 47 U.S.C. 153(29) (defining "network element"). That provision permits new en-

[1] All citations of provisions of the 1996 Act are of Supp. IV 1998.

[2] Congress simultaneously conferred major benefits on the incumbent LECs. For example, the 1996 Act "relieve[d] the [regional Bell companies] of several of the burdens imposed by the [1982 AT&T consent decree], particularly by prescribing in [47 U.S.C.] § 271 a method whereby the [Bell companies] can achieve a long-sought-after presence in the long distance market." *BellSouth Corp.* v. *FCC*, 162 F.3d 678, 690 (D.C. Cir. 1998) (emphasis and citation omitted); see also 1996 Act, Title VI, § 601(a)(2), 110 Stat. 143 (superseding GTE consent decree).

trants, some of which may also have network elements of their own, to lease from incumbents whatever elements they need to provide services to their own customers. The 1996 Act further permits new entrants to "interconnect" their own facilities with those in the incumbent's network "at any technically feasible point." See 47 U.S.C. 251(c)(2).

Incumbents may charge new entrants for interconnection and access to network elements. If the incumbent and the new entrant cannot agree on those charges, state public utility commissions, acting as arbitrators, set the rates that the incumbent may charge. See 47 U.S.C. 252(a)(1) and (b)(1).[3] Under the 1996 Act, the state commissions must set rates that are "nondiscriminatory" and "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable)"; those rates "may include a reasonable profit" for the incumbent. 47 U.S.C. 252(d)(1). In setting such rates, the state commissions must follow the FCC's pricing rules that give content to that statutory standard. See *Iowa Utils. Bd. I*, 525 U.S. at 383-385. Those are among the rules that are at issue here.

2. a. In August 1996, the FCC issued its *Local Competition Order*, which addresses the most basic issues arising under the 1996 Act. *In re Implementation of the Local Competition Provisions in the Telecomms. Act of 1996, First Report & Order (Local Competition Order)*, 11 F.C.C.R. 15,499 (1996). The cornerstone of that order is the FCC's choice of a cost methodology—

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[3] The state commissions may opt out of that statutory role. In that event, the FCC would resolve individual disputes between carriers over the rates to be charged for providing interconnection and access to network elements. See 47 U.S.C. 252(e)(5).

"total element long-run incremental cost," or TELRIC —that state public utility commissions are to employ in resolving disputes between carriers about the "cost[s]" that Section 252(d)(1) entitles the incumbent to recover from the new entrant for providing interconnection and network elements. See App., *infra*, 62a-84a (¶¶ 674-703).

i. TELRIC embodies a "forward-looking" approach to calculating the cost of providing network elements and interconnection. See App., *infra*, 66a-67a (¶ 679). The essential objective of any forward-looking methodology is to determine what it would cost, in today's market, to replace the functions of an asset that make it useful. That is the asset's "forward-looking" cost (also known as its "replacement" or "economic" cost), which should be distinguished from the cost of duplicating the asset in every physical particular. Thus, under a forward-looking methodology, if an incumbent bought an analog switch in 1985 at a fixed cost of $150 per line, and an efficient carrier would address the same business needs today by purchasing a digital switch at a cost of $100 per line (more efficient digital switches have supplanted analog switches in the market), the latter figure would be used in determining what a new entrant would pay to lease switching capacity. Similarly, if a loop cost $100 to install in 1985 but would cost $150 to install today (because, for example, labor costs have increased), the rate for leasing that loop would be based on the higher current cost figure.

The forward-looking purchase price of an asset is only one variable in the TELRIC compensation calculus. TELRIC also takes into account (1) the duration of an element's useful life, as reflected in the applicable "depreciation" schedule; (2) the incumbent's "cost of capital" (its return, or profit, on investment); and (3) various types of expenses, such as maintenance expenses. See App., *infra*, 84a (¶ 703). One of TELRIC's principal objectives is to ensure an incumbent's opportunity, when leasing network elements to others, to recover the full forward-looking cost of those elements (including the cost of capital) over their useful lives. The FCC has not set depreciation schedules itself, but has left it to the state commissions to determine, among other things, how best to adopt "specific depreciation rate adjustments that reflect expected asset values over time," including, where relevant, "expected declines in the value of capital goods." *Id.* at 71a-72a (¶ 686). Similarly, the FCC has given the state commissions great discretion to determine the appropriate cost of capital. *Id.* at 83a-84a (¶ 702). The FCC has authorized the state commissions, in determining that cost of capital, to compensate the incumbent for any risk resulting from increased competition. *Ibid.*

ii. The FCC rejected the argument of several incumbent LECs that the 1996 Act entitles them to charge for interconnection and network elements at rates that are based on the "historical" (or "embedded") costs reflected on their accounting books. The FCC recognized that those costs could be either higher or lower than forward-looking costs. App., *infra*, 86a-87a (¶ 705). The FCC reasoned that the use of historical costs in determining the rates paid by new entrants would frustrate the competitive objectives of the 1996 Act. See *id.* at 84a-91a (¶¶ 704-711).

One of the 1996 Act's central premises is that it would make little economic sense to expect new entrants, particularly in the short term, to construct *all* of the telecommunications facilities they might need to serve their customers. In some (but by no means all) circumstances, the social and economic costs of duplicating an incumbent's facilities would exceed the corresponding benefits: significant resources would be expended, and significant disruptions would occur (*e.g.*, streets would be dug up), with no commensurate increase in the value or diversity of telecommunications services. For that reason, and to jump-start competition in local markets, Congress directed the FCC to identify the elements that new entrants should be entitled to lease from incumbents at "cost." 47 U.S.C. 251(c)(3) and (d)(2), 252(d)(1); see generally *Iowa Utils. Bd. I*, 525 U.S. at 387-392. The FCC determined that basing the rates for access to those elements on the incumbent's historical costs, when those costs exceed forward-looking costs, would either keep new entrants out of the market altogether or impair their competitive position by inducing them to construct certain inefficient, duplicative facilities. See App., *infra*, 61a-62a, 66a-67a (¶¶ 672, 679); see also *id.* at 86a-87a (¶ 705) (explaining that the use of forward-looking costs, whether "higher or lower than historical or embedded costs," is more conducive to "efficient investment decisions and competitive entry"). The FCC reasoned that either result would conflict with Congress's twin goals of bringing meaningful competition to local markets and enabling new entrants to make efficient use of existing network facilities, many of which embody enormous economies of scale and density. See *id.* at 66a-67a, 84a-88a (¶¶ 679, 704-707).

iii. As discussed above (at 5), in asking what it would cost to replace the functions that make an asset valuable, a forward-looking cost methodology requires an inquiry into currently available substitutes—including assets that perform the same functions as the original asset, but that do not resemble the asset in all respects (*e.g.*, because they embody more efficient technology than does the original asset). Some incumbents urged the FCC to foreclose any consideration of such alternatives. The FCC rejected that approach as arbitrarily limiting the inquiry into the forward-looking cost of replacing an asset's useful functions in today's market. See App., *infra*, 69a-71a (¶¶ 683-685).

At the same time, the FCC determined that TELRIC should take as given the incumbent's existing wire centers (*i.e.*, its switch locations). App., *infra*, 70a-71a (¶ 685). That pragmatic limitation has considerable significance for determining the rates that incumbents may charge new entrants for interconnection and network elements, because it confines the inquiry to efficient alternatives that are compatible with the most basic geographical design of the existing network. The FCC observed that this limitation, by encouraging new entrants to reduce costs "by designing more efficient network configurations," would put to rest any concern that the use of a forward-looking cost methodology would leave new entrants with insufficient incentives to construct their own facilities. *Ibid.*

The FCC codified its determinations on this subject in a regulation providing that, for purposes of determining the rates an incumbent may charge a new entrant, an element's cost "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers." 47 C.F.R. 51.505(b)(1).

b. At the same time that the FCC promulgated the pricing rules discussed above, the FCC also promulgated another set of rules, which have come to be known as the "combinations" rules. See App., *infra*, 44a-49a (¶¶ 292-297). Rule 315(b) provides that, "[e]xcept upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently combines." 47 C.F.R. 51.315(b). Rule 315(c)—the principal combinations rule at issue here—further requires incumbent LECs, at the request of a new entrant (and for a cost-based fee), to combine previously uncombined elements, "even if those elements are not ordinarily combined" within the incumbent's network. 47 C.F.R. 51.315(c).[4] As discussed below, the latter rule is designed principally for the many circumstances in which an incumbent is able to link facilities within its network more efficiently, and thus less expensively, than the new entrant. See pp. 25-26, *infra*. The new entrant must bear the costs of combination whether performed by the new entrant itself or by the incumbent; the principal objective of Rule 315(c) is to help the new entrant avoid *unnecessary* costs and delays.

3. a. In 1996 and 1997, the Eighth Circuit stayed and then invalidated the FCC's pricing rules on the ground that the 1996 Act gives state public utility commissions, not the FCC, general jurisdiction to interpret the pricing provisions of Sections 251 and 252. *Iowa Utils.*

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[4] The duty set forth in Rule 315(c) applies only where the requested combination is "[t]echnically feasible" and only where compliance with the request "[w]ould not impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network." 47 C.F.R. 315(c)(1) and (2). Rules 315(e) and (f) provide state commissions with specific guidance on the application of those two qualifications to the general duty stated in Rule 315(c). 47 C.F.R. 315(e) and (f). Finally, Rule 315(d) imposes on incumbent LECs a related duty to "perform the functions necessary to combine unbundled network elements with elements possessed by the requesting telecommunications carrier in any technically feasible manner." 47 C.F.R. 51.315(d).

Bd. v. *FCC*, 120 F.3d 753, 794-800 (8th Cir. 1997). The Eighth Circuit's jurisdictional orders remained in effect until early 1999. During that period, the great majority of state commissions *voluntarily* followed the FCC's basic forward-looking methodology in adjudicating disputes between incumbents and new entrants over the rates to be charged for interconnection and network elements. See pp. 20-21, *infra*. In January 1999, this Court reversed the Eighth Circuit's jurisdictional ruling, holding that the FCC has statutory authority to establish national pricing standards under Sections 251 and 252. *Iowa Utils. Bd. I,* 525 U.S. at 376-385. The Court remanded the case to the Eighth Circuit to address (among other things) the substantive validity of the FCC's cost methodology.

In July 2000, the Eighth Circuit issued its decision on remand. The court upheld the FCC's use of a forward-looking, rather than historical, cost methodology and rejected as premature the incumbents' Takings Clause challenge to that methodology. See App., *infra*, 10a-18a. But the court nonetheless invalidated the key regulation specifying that, apart from the "wire center" exception, the forward-looking cost of an element "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration." 47 C.F.R. 51.505(b)(1). See App., *infra*, 6a-10a.

The Eighth Circuit held the regulation to be contrary to "the plain meaning" of Section 252(d)(1), and thus to be invalid under step one of this Court's *Chevron* analysis. App., *infra*, 8a; see also *id.* at 4a; see generally *Chevron U.S.A. Inc.* v. *NRDC*, 467 U.S. 837, 842-843 (1986) ("First, always, is the question whether Congress has directly spoken to the precise question at issue * * * for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."). The court noted that Section 252(d)(1) requires that determination of the "just and reasonable rate" that an incumbent may charge for interconnection or network elements be based on "the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element." App., *infra*, 5a. Underscoring the word "the" in the final phrase of that provision (*id.* at 7a, 8a), the court concluded that Congress's use of the definite article generally forecloses regulators, in determining forward-looking costs, from looking beyond "the" actual facilities deployed by the incumbent. *Id.* at 8a-10a.[5]

b. In July 1997, the Eighth Circuit invalidated Rules 315(c)-(f), which require incumbents to combine certain previously uncombined elements in their networks at the request of new entrants. The court reasoned (among other things) that such a requirement was foreclosed by Section 251(c)(3), which states that an incumbent must provide new entrants with "nondiscriminatory access to network elements on an unbundled basis" and "in a manner that allows requesting carriers to combine such elements." The court reasoned that a new entrant's right to "unbundled" elements embodies only a right to physically separated elements; that the second sentence of Section 251(c)(3)

[5] After the Eighth Circuit ruled, the FCC and the United States moved for a partial stay of the mandate pending this Court's disposition of the case, explaining that, if the mandate were to issue immediately, it would cause severe and potentially unnecessary disruption in implementation of the 1996 Act. The Eighth Circuit granted that motion and stayed its mandate, pending this Court's review, with respect to the FCC's pricing rules implementing Section 252(d)(1).

states merely that incumbents must "provide such unbundled network elements in a manner that allows requesting [telecommunications] carriers to combine such network elements"; and that the plain language of that sentence, by negative implication, precludes provisions that, like Rules 315(c)-(f), require incumbents to provide combinations of elements to new entrants. See *Iowa Utils. Bd.*, 120 F.3d at 813. The court did not discuss Rule 315(b). Each side filed petitions for rehearing arguing for or against the proposition that the court's invalidation of Rules 315(c)-(f) compelled the invalidation of Rule 315(b) as well. In October 1997, the court resolved those petitions by invalidating Rule 315(b). See *id.* at 813, 820.

We sought certiorari to challenge the Eighth Circuit's invalidation of Rule 315(b) alone. We explained that Rule 315(b) includes a prohibition on a particularly egregious form of discriminatory conduct that Rules 315(c)-(f) do not, by their terms, address—*i.e.*, an incumbent's disconnection of previously combined elements simply to impose wasteful reconnection costs on a new entrant. FCC Reply Br. 25 n.17, *Iowa Utils. Bd. I*. This Court reinstated Rule 315(b). *Iowa Utils. Bd. I*, 525 U.S. at 393-395. The Court concluded that Section 251(c)(3) "is ambiguous on whether leased network elements may or must be separated," and that Rule 315(b) was an "entirely rational" means for the FCC to "ensur[e] against an anticompetitive practice." *Id.* at 395. In concluding that nothing in Section 251(c)(3) prevented the FCC from adopting that rule, the Court observed that the term "unbundled" in Section 251(c)(3) could refer to separately priced assets as distinguished from "physically separated" assets. *Id.* at 394. The Court also observed that the second sentence of Section 251(c)(3) "does not say, or even remotely imply, that elements *must* be provided [in discrete pieces] and never in combined form." *Ibid.* The Court did not explicitly address Rules 315(c)-(f).[6]

On remand, the FCC and certain private parties asked the Eighth Circuit to restore Rules 315(c)-(f), arguing that this Court's rationale for reinstating Rule 315(b) applied equally to those rules. The Eighth Circuit rejected that request. App., *infra*, 26a-29a. Once again, the court held that Congress, in the second sentence of Section 251(c)(3), "has directly spoken on the issue of who shall combine previously uncombined network elements. It is the requesting carriers who shall 'combine such elements.'" *Id.* at 29a. The court acknowledged that its holding on that point conflicted with two recent decisions of the Ninth Circuit, which sustained, as consistent with the 1996 Act, a state public utility commission's imposition of combinations requirements similar to Rules 315(c)-(f). *Id.* at 27a-28a (citing *US WEST Communications* v. *MFS Intelenet, Inc.*, 193 F.3d 1112, 1121 (1999), cert. denied, 120 S. Ct. 2741 (2000), and *MCI Telecomms. Corp.* v. *US WEST Communications*, 204 F.3d 1262, 1268 (2000), petition for cert. pending, No. 00-214 (filed Aug. 7, 2000)).

4. In 1997, the FCC issued rules addressing another important provision of the 1996 Act, 47 U.S.C. 254, which concerns universal-service programs; such programs are designed to assure, among other things, that essential telecommunications services are available at reasonable cost to all Americans. See *In re Federal-*

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[6] AT&T and other carriers had sought to reinstate those rules on the ground that the Eighth Circuit's invalidation of them had rested on its misunderstanding of the FCC's general jurisdictional role under the 1996 Act. See AT&T Opening Br. 34, *Iowa Utils. Bd. I*. But AT&T made that argument only in passing, and this Court did not address it.

State Joint Bd. on Universal Serv., Report & Order (*Universal Service Order*), 12 F.C.C.R. 8776 (1997). In that order, the FCC announced that it would employ essentially the same methodology as TELRIC, with modifications not material here, in determining the amount of the universal-service subsidies that LECs will receive for providing service to areas of the country that are particularly costly to serve.

In 1999, the Fifth Circuit adjudicated various challenges to the *Universal Service Order*. See *Texas Office of Pub. Util. Counsel* v. *FCC*, 183 F.3d 393 (1999). The court upheld the FCC's decision to use TELRIC in calculating federal universal-service subsidies. *Id.* at 410-413. In so doing, the court rejected the argument of certain incumbent LECs that construing Section 254 to permit the use of TELRIC (instead of a historical cost methodology) is barred by the Takings Clause. *Id.* at 413 & n.14. In June 2000, this Court granted a petition for a writ of certiorari on that issue. See *GTE Serv. Corp.* v. *FCC (Universal Service Case)*, 120 S. Ct. 2214 (2000) (No. 99-1244).

REASONS FOR GRANTING THE PETITION

The 1996 Act is "an unusually important legislative enactment" that was designed, in significant part, "to promote competition in the local telephone service market." *Reno* v. *ACLU*, 521 U.S. 844, 857 (1997). This Court granted certiorari in *Iowa Utilities Board I* and reversed a jurisdictional decision of the Eighth Circuit that, if left standing, would have severely encumbered the process of bringing the benefits of such competition to American consumers. This Court's intervention is needed again, and this time the stakes are, if anything, even higher.

Congress sought to encourage the development of competition in local telecommunications markets by enabling new entrants, at rates based on "cost," to lease elements of, and interconnect with, incumbents' existing networks. When this case was last before this Court, the relevant question was which regulatory entity—the FCC or the state commissions—had authority to determine the cost methodology to be used to calculate those rates. Before the Court decided that question, the great majority of state commissions *voluntarily* adopted the essentials of TELRIC because they, like the FCC, recognized that that methodology was both faithful to the 1996 Act and necessary to ensure robust local competition. By invalidating a key aspect of TELRIC on the merits, the Eighth Circuit's new decision threatens to upset that methodological consensus and throw the telecommunications industry, once more, into a state of disarray.

The decision below is wrong. It also conflicts in principle with the Fifth Circuit's decision in the *Universal Service Case*, which this Court has already granted certiorari to review this Term. Although the two cases involve different provisions of the 1996 Act, the cost methodology under review in the *Universal Service Case* is largely derivative of the cost methodology that the FCC developed in the order on review in this case. For that reason, and because the Court's decision in the *Universal Service Case* is unlikely to compel any particular disposition of the issue presented here, the Court should grant certiorari in this case as well and should decide it in conjunction with the *Universal Service Case*, rather than holding it pending the disposition of that case.

The Court should also grant certiorari to review the Eighth Circuit's erroneous invalidation of the FCC's combinations rules, Rules 315(c)-(f), which require incumbent carriers, at the request of a new entrant (and for a cost-based fee), to combine certain previously uncombined elements in their networks. The Eighth Circuit's decision invalidating Rules 315(c)-(f) is in direct conflict with decisions of the Ninth Circuit sustaining a similar obligation imposed by a state public utility commission. Both the Eighth Circuit and the Ninth Circuit have recognized as much. Unless the Court intervenes, that conflict will persist, sowing confusion concerning a highly significant issue of interpretation arising under the 1996 Act.

1. a. In implementing Congress's directive that the rates that incumbent LECs charge new entrants "shall be based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or element," 47 U.S.C. 252(d)(1),[7] the FCC determined that the relevant "cost" is the forward-looking cost of providing that interconnection or network element, not the historical cost. App., *infra*, 61a-88a (¶¶ 672-707). Any inquiry into forward-looking costs asks how much it would cost, in today's market, to replace the functions of an item

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[7] Section 252(d)(1), titled "Interconnection and network element charges," provides:

> Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251 of this title, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—
>
> (A) shall be
>
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and
>
> (ii) nondiscriminatory, and
>
> (B) may include a reasonable profit.

that make it valuable. See p. 5, *supra*. The outcome of that inquiry necessarily varies with the cost of currently available substitutes that perform those functions. For example, the forward-looking cost (as well as the fair market value) of a personal computer, a video cassette recorder, or a telephone switch declines as more efficient substitutes are introduced into the market. That principle is embodied in the key regulation at issue here, which provides that, as a general matter, forward-looking cost "should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration." 47 C.F.R. 51.505(b)(1).

While affirming the FCC's choice of a forward-looking cost methodology, the Eighth Circuit nonetheless invalidated the FCC's determination of what that methodology should measure. The court gave little explanation for that holding beyond the twin observations that Congress mandated an inquiry into the cost of providing "*the interconnection or network element*" requested by a new entrant and that "Congress was dealing with reality, not fantasizing about what might be." App., *infra*, 8a. Neither observation, however, is at all inconsistent with the FCC's methodology.

First, the Eighth Circuit appeared to believe that, in considering the costs of efficient substitutes, regulators are determining the forward-looking cost of something *other than* the element whose functions the new entrant seeks to obtain. That is simply wrong. Because (as the Eighth Circuit recognized) the "cost" inquiry mandated by Section 252(d)(1) is reasonably construed to permit an inquiry into forward-looking cost, and because the forward-looking cost of any asset necessarily turns on the cost of replacing its *functions* with currently available, efficient substitutes, the Eighth Circuit's decision lacks any apparent conceptual foundation. Under one of several possible interpretations, the Eighth Circuit believed that the forward-looking inquiry should turn on the cost of replicating an incumbent's existing facilities in every physical particular (rather than the functions of those facilities), whether or not any rational actor would construct such facilities in today's market. But nothing in the language of Section 252(d)(1) remotely compels the adoption of that wooden and long-discredited methodological approach. See App., *infra*, 70a (¶ 684) (recognizing that such an approach could produce rates "that reflect inefficient or obsolete network design and technology"); see also *Missouri ex rel. Southwestern Bell Tel. Co.* v. *Public Serv. Comm'n*, 262 U.S. 276, 312 (1923) (Brandeis, J., concurring in the judgment) (disparaging, as the *least* appropriate cost methodology, an inquiry into "what it would cost to reproduce the identical property").[8]

Moreover, contrary to the Eighth Circuit's suggestion, the more appropriate way to "deal[] with reality" (App., *infra*, 9a) in determining the forward-looking

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[8] The Eighth Circuit misconstrued the statutory language in another respect as well. Section 252(d)(1) concerns recovery of the costs of "providing the * * * network element" that a competitor seeks to lease. The term "element" describes, at an appropriately high level of generality, the *class* of "facilit[ies]" (or "features, functions, and capabilities") associated with particular tasks within the network. See 47 U.S.C. 153(29); *Iowa Utils. Bd. I*, 525 U.S. at 387. For example, fiber wires and copper wires, despite their technological differences, are examples of the loop element. Similarly, analog switches and digital switches are both examples of the switching element. See *Local Competition Order*, 11 F.C.C.R. at 15,691, 15,706 (¶¶ 380, 412). The Eighth Circuit's decision, however, appears to be based on the erroneous premise that the term "element" is confined to individual pieces of equipment.

costs of network elements is to take currently available alternatives into account, rather than to ignore them. In competitive markets, the price that a firm would pay to lease particular facilities varies with the cost of obtaining the function of those facilities through some other means, including through the use of more efficient substitutes; the firm would not arbitrarily blind itself to the availability of such substitutes. Taking those substitutes fully into account is not "fantasizing about what might be," as the Eighth Circuit believed (*ibid.*), but is a routine component of any sensible inquiry into the current value of an asset. Indeed, it would be fantastical, in conducting such an inquiry, to *omit* consideration of efficient substitutes altogether and to proceed on the assumption that technology has frozen in time and has no bearing on replacement costs.[9]

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[9] The FCC's approach is hardly novel. The FCC based TELRIC on forward-looking cost methodologies developed by several state public utility commissions that had already taken steps to open local telecommunications markets to competition. See App., *infra*, 56a-57a, 67a-68a (¶¶ 631, 681). The European Commission has endorsed a methodology very similar to TELRIC as a means of opening European telecommunications markets to competition. See *Commission Recommendation on Interconnection in a Liberalised Telecomms. Market (Part 1, Interconnection Pricing)* (Jan. 8, 1998) ("Interconnection costs should be calculated on the basis of forward-looking long run average incremental costs, since these costs closely approximate those of an efficient operator employing modern technology."). Other federal agencies have employed a similar approach in other regulated industries. In the 1980s, for example, the Interstate Commerce Commission ordered that the rate a market-dominant railroad could charge "captive" coal shippers should be limited to the forward-looking cost the shipper would incur were it to transport the coal to its destination using the most efficient railroad system that could be configured to accomplish that task. The D.C. Circuit upheld the ICC's approach, reasoning that although it "deals with hypothetical and not actual

The Eighth Circuit did not spell out what it believed an appropriate forward-looking methodology would entail. It is not even clear that the Eighth Circuit's preferred methodology would be more favorable than TELRIC to the incumbent LECs.[10] Our essential point is that the Nation's telecommunications industry should be governed not by the Eighth Circuit's obscure misunderstanding of the statutory text, but by the permissible construction of that text adopted by the expert federal agency to which Congress has delegated authority to resolve such matters. See *Iowa Utils. Bd. I*, 525 U.S. at 397. Because nothing in Section 252(d)(1) constrains the FCC's discretion to give full consideration to efficient alternatives as part of the forward-looking cost inquiry, the decision below should be reversed.

b. If left intact, the Eighth Circuit's decision could have destabilizing consequences for "a crucial segment of the economy worth tens of billions of dollars." *Iowa Utils. Bd. I*, 525 U.S. at 397.

Since August 1996, when the FCC first prescribed a forward-looking methodology to determine the appropriate rates for incumbents to charge new entrants for providing interconnection and network elements, that methodology has governed the telecommunications

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transportation situations, it provides an appropriate analytical tool" for determining rates. *Potomac Elec. Power Co.* v. *ICC*, 744 F.2d 185, 193-194 (D.C. Cir. 1984).

[10] In one passage, the court suggested that incumbents may be entitled to recover only the incremental costs of accommodating competitors within their networks: *i.e.*, "the cost to the [incumbent] of carrying the extra burden of the competitor's traffic." App., *infra*, 9a. That position, while arguably consistent with Section 252(d)(1), is not compelled by that provision, and it is at odds with the FCC's choice of an approach that permits full recovery of the forward-looking costs of the network elements leased by new entrants.

industry. Since January 1999, when this Court upheld the FCC's jurisdiction to issue the pricing rules adopting TELRIC, those rules have directly bound state public utility commissions in arbitrating rate disputes between incumbents and new entrants. Even during the previous period in which the pricing rules were vacated, the overwhelming majority of state commissions independently adopted essentially the same forward-looking methodology. See, *e.g.*, Peter W. Huber et al., *Federal Telecommunications Law* § 2.4.4.1, at 185 (2d ed. 1999) ("While the *Iowa Utilities Board* case was being litigated, most states used their price-setting authority in ways closely following the FCC models.").[11] And, during that same period, the federal courts consistently rejected arguments by incumbent LECs that the state commissions' adoption of TELRIC violated the 1996 Act. See, *e.g.*, *GTE S. Inc.* v. *Morrison*, 6 F. Supp. 2d 517, 528-530 (E.D. Va. 1998), aff'd on other grounds, 199 F.3d 733, 742-744, 749 (4th Cir. 1999); see also *Bell Atl.-Del., Inc.* v. *McMahon*, 80 F. Supp. 2d 218, 235-236 (D. Del. 2000). The Eighth Circuit's decision thus threatens to alter the basic legal framework on which state and federal implementation of the statutory "cost" standard has rested since enactment of the 1996 Act.

Because the Eighth Circuit was selected to review all challenges to the FCC's pricing rules, see 28 U.S.C. 2112(a)(3), its invalidation of those rules has nationwide significance. See 28 U.S.C. 2342(1); see note 16, *infra*

[11] Indeed, in their brief opposing our petition for certiorari on the jurisdictional issue (on the ground that it presented no issue of sufficient national importance), the Bell companies appeared to acknowledge that "'virtually every state in the union' has adopted pricing policies compatible with the FCC's own notions." Reg'l Bell Operating Cos. Br. in Opp. 19-20, *Iowa Utils. Bd. I*.

(discussing Hobbs Act). In the absence of further review by this Court, the FCC would be required to consider new, nationally binding rules consistent with the Eighth Circuit's decision. Accordingly, the Eighth Circuit's decision could have enormous substantive consequences for the rates set by the state commissions, and could produce disruption in the telecommunications industry at least comparable to the disruption that was threatened by the Eighth Circuit's earlier jurisdictional decision.

c. As the Eighth Circuit observed with "no small amount of interest" (App., *infra*, 17a n.8), this Court has granted certiorari in the *Universal Service Case* to consider the lawfulness of a forward-looking cost methodology that originated from, and closely parallels, the methodology at issue here. For the reasons discussed below, the Court should grant certiorari in this case so that it may review both cases on the merits this Term.

All parties agree that, "[w]hereas the Eighth Circuit set aside the FCC's forward-looking cost methodology in the network-element-pricing context, the Fifth Circuit sustained it in the universal service context." Br. for Respondents Southwestern Bell et al. 12, *Universal Service Case*.[12] The cost methodology on review in the

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[12] In asking this Court to review the *Universal Service Case*, GTE argued that "[t]he forward-looking cost method the FCC used for determining the cost of providing universal service is the same methodology the FCC has used in the other major proceeding under the Act in which it must provide compensation for the forced use of incumbents' property—namely, the rulemaking setting a pricing methodology for network elements under the local competition provisions of the Act." Pet. 15, *Universal Service Case*. GTE further explained that, in both the *Universal Service Case* and this case, it has specifically challenged the use of costs that would be incurred by "an imaginary, ideally efficient carrier." *Ibid.* And the parties' briefs on the merits in the *Universal Service*

Universal Service Case was first designed and adopted by the FCC in the local-competition context to determine the rates that incumbent LECs may charge for providing interconnection and network elements. See, *e.g.*, *id.* at 11. Understanding why the FCC selected that methodology to promote local competition is essential to understanding the role that the methodology plays in the FCC's implementation of the 1996 Act as a whole. See, *e.g.*, *Universal Service Order*, 12 F.C.C.R. at 8916-8917 & n.669. Thus, as the incumbent LECs who successfully petitioned for certiorari in the *Universal Service Case* themselves have urged, the Court should grant certiorari in this case as well and consider this case in conjunction with the *Universal Service Case.* See Pet. at 19-24, *Verizon Communications Inc.* v. *FCC*, No. 00-511 (filed Oct. 4, 2000).[13]

Because of the industry's need for prompt resolution of the issues presented here, the Court should not merely hold this case pending its disposition of the *Universal Service Case.* Although the two cases present closely related issues involving essentially the same cost methodology, this Court's resolution of the issues presented in the *Universal Service Case* is unlikely to resolve the issues presented in this petition.

Case devote substantial discussion to the local competition rules at issue here. See, *e.g.*, Pet. Br. 5-6, 8-10, 12-13, 42; U.S. Br. 10, 36-37, 44-48.

[13] Verizon (which arose from the merger of GTE Corp. and Bell Atlantic Corp.), together with a number of other major incumbent LECs, has filed a petition for a writ of certiorari to challenge the aspect of the Eighth Circuit's decision upholding the FCC's authority to adopt a forward-looking methodology. Because the underlying pricing issues presented by Verizon's petition and this petition are closely interrelated, we do not oppose Verizon's petition. We are authorized to represent that Verizon does not intend to oppose our petition on the first question presented here.

That is so for two reasons. First, for the reasons discussed in our brief on the merits in the *Universal Service Case* (at 16-28), the Court should answer the question presented there on threshold grounds that are independent of the FCC's choice of a cost methodology as one variable in the formula for calculating federal universal-service subsidies. Second, even if this Court were to address the underlying merits of TELRIC in the *Universal Service Case*, that case provides no apparent occasion to resolve the question of statutory interpretation presented here; that case does not directly involve Section 252(d)(1), the provision on which the Eighth Circuit relied, and which addresses carrier-to-carrier rates in the local-competition context, not subsidies in the universal-service context.

In short, as the incumbent LECs challenging TELRIC in both this case and the *Universal Service Case* have stated, holding this case pending disposition of the *Universal Service Case* would only further delay the resolution of the parties' dispute over the validity of that methodology in the local-competition context. Pet. at 21-22, *Verizon Communications*, *supra*. And further delay would be most undesirable. The FCC promulgated the pricing rules at issue here in August 1996. Largely because of the Eighth Circuit's erroneous jurisdictional rulings in 1996 and 1997, there is still no resolution of the legal disputes concerning those rules, and that uncertainty has had substantial adverse consequences for the development of local competition.[14]

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[14] See generally Deborah Solomon, *Regional Bells Win Partial Court Victory*, Wall St. J., July 19, 2000, at A2 (partial invalidation of TELRIC "further clouds the competitive local-phone environment by creating uncertainty about what rival carriers will be required to pay").

This Court's intervention is needed this Term to bring that uncertainty to an end.

2. This Court should also grant certiorari to resolve the circuit conflict created by the Eighth Circuit's erroneous invalidation of Rules 315(c)-(f).

a. With certain exceptions, Rule 315(c) requires an incumbent LEC to combine network elements, including elements that "are not ordinarily combined" in the incumbent's network, if the new entrant requesting the combination agrees to pay the incumbent for the cost of performing the task. 47 C.F.R. 51.315(c); see App., *infra*, 44a-49a (¶¶ 292-297); see also *id*. at 97a-102a (¶¶ 743-752) (discussing applicable pricing principles).[15] That obligation is principally invoked in the many circumstances in which elements within an incumbent's network can be combined more efficiently by the incumbent than by the new entrant; if the new entrant could combine the elements more efficiently, it would typically perform that task itself, rather than compensating the incumbent for doing so.

If incumbents could refuse to combine network elements for new entrants, even when incumbents could do so more efficiently (and would be compensated for doing so), new entrants and ultimately their customers would incur unnecessary and often debilitating costs and delays. Those costs and delays, which incumbents do not suffer when serving their retail customers, would put new entrants at a substantial competitive disadvantage. Indeed, the FCC determined that a new entrant might lack sufficient information about the incumbent's network to be able to perform the com-

[15] Rules 315(d)-(f) supplement or clarify the basic obligation set forth in Rule 315(c) in various ways that the Eighth Circuit did not consider independently problematic. See note 4, *supra*. This petition seeks reinstatement of those rules as well.

binations at all. App., *infra*, 45a (¶ 293). The FCC thus concluded that new entrants "would be seriously and unfairly inhibited in their ability to use unbundled elements to enter local markets" if incumbents were not required to combine those elements at a new entrant's request (and for a fee). *Ibid*. Moreover, as the FCC has since observed, recent developments illustrate the critical significance of Rule 315(c) because, in many contexts, "incumbent LECs have refused to provide access to network elements so that competitors could combine them." *In re Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, Third Report & Order & Fourth Further Notice of Proposed Rulemaking*, 15 F.C.C.R. 3696, 3910 (1999) (¶ 482).

In 1997, the Eighth Circuit invalidated Rules 315(c)-(f) as inconsistent with Section 251(c)(3), the provision of the 1996 Act that defines the duties of an incumbent LEC to include:

> [t]he duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory * * *. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

47 U.S.C. 251(c)(3). The Eighth Circuit reasoned (1) that the term "unbundled" in Section 251(c)(3) means disconnected and (2) that the second sentence of Section 251(c)(3) creates a negative inference that incumbents should not have to provide combinations of elements.

See *Iowa Utils. Bd.*, 120 F.3d at 813. In *Iowa Utilities Board I*, this Court did not explicitly address AT&T's passing challenge to the invalidation of Rules 315(c)-(f), see note 6, *supra*, and the parties raised the issue again in the Eighth Circuit on remand.

While those remand proceedings were pending, the Ninth Circuit upheld combinations requirements, imposed by the Washington Utilities and Transportation Commission, that are essentially identical to Rule 315(c). *US WEST*, 193 F.3d at 1121. The Ninth Circuit reasoned that this Court's decision in *Iowa Utilities Board I*—and, in particular, its recognition that Section 251(c)(3) "does not say, or even remotely imply, that elements *must* be provided only [in discrete pieces] and never in combined form," 525 U.S. at 394—"undermined the Eighth Circuit's rationale for invalidating" Rules 315(c)-(f). *US WEST*, 193 F.3d at 1121. The Ninth Circuit thus concluded that *Iowa Utilities Board I* removed any legal objection to the combinations requirements at issue "despite the Eighth Circuit's prior invalidation of the nearly identical FCC regulation." *Ibid.*; accord *MCI Telecomms. Corp.*, 204 F.3d at 1268.

In reaffirming its earlier decision to invalidate Rules 315(c)-(f), the Eighth Circuit acknowledged the conflict between that holding and the Ninth Circuit's holding in *US WEST*. App., *infra*, 28a. The court nonetheless reasoned that, under step one of *Chevron*, the final sentence of Section 251(c)(3), which requires an incumbent to provide network elements "in a manner that allows requesting carriers to combine such elements," 47 U.S.C. 251(c)(3), speaks directly to the question of "who shall combine previously uncombined network elements" and forecloses a combinations requirement such as the one set forth in Rule 315(c). App., *infra*, 29a; see also *Southwestern Bell Tel. Co.* v. *Waller Creek Com-*

munications, Inc., 221 F.3d 812, 820-821 (5th Cir. 2000) (noting conflict between Eighth and Ninth Circuits but resolving case on other grounds).

b. This Court's intervention is necessary to resolve the conflict between the Eighth and the Ninth Circuits over whether Section 251(c)(3) precludes the kind of combinations requirement at issue here. Until resolved by this Court, that conflict will persist, creating the potential for confusion throughout the United States concerning the types of combinations requirements that state commissions may impose. For example, state commissions in the Ninth Circuit remain free to impose requirements identical to Rules 315(c)-(f), but state commissions in the Eighth Circuit are now apparently barred from doing so.[16]

On the merits, the Eighth Circuit's decision was wrong and should be reversed. The court's reasoning rests on the notion that, under step one of *Chevron*, the second sentence of Section 251(c)(3) directly forecloses

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[16] Under 28 U.S.C. 2342(1), known as the Hobbs Act, "exclusive jurisdiction * * * to determine the validity" of FCC orders lies with the federal courts of appeals on direct review. See generally *FCC* v. *ITT World Communications, Inc.*, 466 U.S. 463, 468 (1984); *Wilson* v. *A.H. Belo Corp.*, 87 F.3d 393, 400 (9th Cir. 1996). Thus, the Eighth Circuit's invalidation of Rules 315(c)-(f), if not reversed, would mean that state public utility commissions would no longer be *required* to follow those rules (as distinguished from the underlying statute). At the same time, however, the Eighth Circuit's decision would not preclude state commissions in other circuits from imposing independent obligations that, in the view of the courts of appeals for those circuits, are consistent with federal law (including any extant FCC regulations). See *MCI Telecomms. Corp.*, 204 F.3d at 1268. This Court recently denied certiorari in *US WEST* to consider the claim that the Ninth Circuit had violated the Hobbs Act when it upheld a state commission counterpart to Rule 315(c). See *US WEST Communications, Inc.* v. *MFS Intelenet, Inc.*, 120 S. Ct. 2741 (2000) (No. 99-1641).

combinations requirements of the kind at issue here. But that sentence simply guarantees new entrants the right to receive "network elements in a manner that allows requesting carriers to combine such elements" if they choose to do so themselves. It does not speak to whether the FCC may separately require incumbents to combine requested elements when the new entrant is willing to pay them for that service.

Indeed, the Eighth Circuit's *Chevron* step one analysis here is little different from the analysis that this Court rejected in *Iowa Utilities Board I*. In each case, the Eighth Circuit construed the creation of a specific right in the second sentence of Section 251(c)(3) to bar the FCC, by negative implication, from recognizing other such rights in the exercise of its general authority to implement Sections 251 and 252 in a manner conducive to competition. In reinstating Rule 315(b), this Court observed that the second sentence of Section 251(c)(3), while "contemplat[ing] that elements *may* be requested and provided" in "discrete pieces," "does not say, or even remotely imply, that elements *must* be provided only in this fashion and never in combined form." *Iowa Utils Bd. I*, 525 U.S. at 394. Similarly, there is no basis here for concluding that, because that same sentence confers on new entrants the right to combine elements of the incumbent's network, it precludes the FCC from issuing rules recognizing a new entrant's additional right to have an incumbent combine those elements for a cost-based fee. In any event, the statute is at most ambiguous on this point, and the FCC's implementation is entitled to substantial deference. See *id.* at 395, 397.[17]

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[17] In *Iowa Utilities Board I*, we sought this Court's review only of the portion of the Eighth Circuit's original decision invalidating Rule 315(b), not the portion invalidating Rules 315(c)-(f). We

CONCLUSION

The petition for writ of certiorari should be granted.

Respectfully submitted.

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explained that Rule 315(b) includes a prohibition on conduct that is even more flagrantly discriminatory and anticompetitive than the conduct prohibited by Rule 315(c). See U.S. Reply Br. 24 n.17, *Iowa Utils. Bd. I*. As discussed in the text, developments following this Court's decision reinstating Rule 315(b) underscore the need for review of the Eighth Circuit's invalidation of Rules 315(c)-(f) as well. That is so both because the Eighth Circuit's position is difficult to square with this Court's decision in *Iowa Utililties Board I*, and because the courts of appeals are now in conflict over the validity of combinations requirements such as those at issue here.

APPENDIX A

UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

No. 96-3321

IOWA UTILITIES BOARD, ET AL., PETITIONERS

v.

FEDERAL COMMUNICATIONS COMMISSION AND
UNITED STATES OF AMERICA, RESPONDENTS

ON PETITIONS FOR REVIEW OF AN ORDER OF
THE FEDERAL COMMUNICATIONS COMMISSION

[Submitted: Sept. 17, 1999
Filed: July 18, 2000]

Before: WOLLMAN, Chief Judge, BOWMAN and HANSEN, Circuit Judges.

HANSEN, Circuit Judge. These cases are before us on remand from the Supreme Court. *See AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 119 S. Ct. 721, 142 L.Ed.2d 835 (1999). Local telephone service providers (known as "incumbent local exchange carriers" or "ILECs") and their industry associations petition for review of the First Report and Order[1] issued by the Federal Communications Commission (FCC) which contains the FCC's findings and rules[2] pertaining to the local competition provisions of the Telecommunications Act of 1996[3] (the Act). The Act requires an ILEC to (1) permit requesting new entrants (competitors) in the ILEC's local market to interconnect with the ILEC's existing local network and, thereby, use that network to compete in providing local telephone service (interconnection); (2) provide its competitors with access to elements of the ILEC's own network on an unbundled basis (unbundled access); and (3) sell to its competitors, at wholesale rates, any telecommunications service that the ILEC provides to its customers at retail rates in order to allow the competing carriers to resell those services (resale). *See* 47 U.S.C. § 251(c)(2)-(4) (1994 ed., Supp. III).[4] Through this Act, Congress sought "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies." Telecommunications Act of 1996, Pub.L. No. 104-104, purpose statement, 110 Stat. 56, 56 (1996).

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1 *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCCRcd 15499 (1996) (First Report and Order).

2 The FCC's rules are codified in scattered sections of Title 47, Code of Federal Regulations. All references in this opinion to the Code of Federal Regulations are to the 1997 version.

3 Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of Title 47, United States Code).

4 All references in this opinion to sections and subsections of the Telecommunications Act of 1996 in the United States Code are to the 1997 supplement unless otherwise indicated.

Challenges to the First Report and Order were consolidated in this court.

I. Background

We present a brief summary of the background of this case based upon the belief that all parties are familiar with the opinion of the Supreme Court as well as our prior opinion. In our prior opinion, *Iowa Utils. Bd. v. F.C.C.*, 120 F.3d 753 (8th Cir. 1997), we concluded, in relevant part, that (1) the FCC exceeded its jurisdiction in promulgating various pricing rules; (2) the FCC exceeded its jurisdiction in promulgating 47 C.F.R. § 51.405, regarding rural exemptions; (3) the FCC exceeded its jurisdiction in promulgating 47 C.F.R. § 51.303, regarding preexisting agreements; and (4) various unbundling rules, including the superior quality rules and the combination of network elements rule, were contrary to the Act.

The Supreme Court affirmed in part, reversed in part, and remanded. *See AT & T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999). The Supreme Court reversed that part of our opinion pertaining to jurisdiction and held that the FCC had jurisdiction to (1) design a pricing methodology; (2) promulgate rules pertaining to rural exemptions; and (3) promulgate rules regarding preexisting agreements. The Supreme Court also reversed our decision to vacate 47 C.F.R. § 51.315(b). The Supreme Court did not address the part of our opinion vacating the superior quality rules, 47 C.F.R. §§ 51.305(a)(4) and 51.311(c), and the additional combination of network elements rule, 47 C.F.R. § 51.315(c)-(f).

On remand we must now review on the merits the FCC's forward-looking pricing methodology, proxy prices, and wholesale pricing provisions. The petitioners also request that the court vacate 47 C.F.R. § 51.317, regarding the identification of additional unbundled network elements, and that the court reaffirm its previous decision vacating the superior-quality rules and the additional combination of network elements rule. We also must review on the merits 47 C.F.R. § 51.405, regarding rural exemptions, and 47 C.F.R. § 51.303, pertaining to preexisting agreements.

II. Analysis

The United States Courts of Appeals have exclusive jurisdiction to review final orders of the FCC pursuant to 28 U.S.C. § 2342(1) and 47 U.S.C. § 402(a) (1994). In reviewing an agency's interpretation of a statute, we must defer to the agency only if its interpretation is consistent with the plain meaning of the statute or is a reasonable construction of an ambiguous statute. *See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984). We will overturn an agency interpretation that conflicts with the plain meaning of the statute, *see id.*, is an unreasonable construction of an ambiguous statute, *see id.* at 844-45, or is arbitrary and capricious. *See* 5 U.S.C. § 706 (1994); *Chevron*, 467 U.S. at 844. In making our decision regarding reasonableness, the issue "is not whether the Commission made the best choice, or even the choice that this Court would have made, but rather 'whether the FCC made a reasonable selection from among the available alternatives.'" *Southwestern Bell Tel. Co. v. F.C.C.*, 153 F.3d 523, 559-60 (8th Cir. 1998) (quoting

MCI Telecomms. Corp. v. FCC, 675 F.2d 408, 413 (D.C. Cir. 1982).

A. Pricing Methodology

Congress established pricing standards for the rates that may be charged by ILECs to their new local service competitors for interconnection and for the furnishing of network elements on an unbundled basis. The statute, in relevant part, states:

> (d) Pricing standards
>
> (1) Interconnection and network element charges
>
> Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251 of this title, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—
>
> (A) shall be—
>
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and
>
> (ii) nondiscriminatory, and
>
> (B) may include a reasonable profit.

47 U.S.C. § 252(d)(1).

The FCC promulgated various pricing rules to implement the Act. The FCC's pricing provisions that pertain to the pricing of interconnection and network elements utilize a forward-looking economic cost methodology that is based on the total element long-run incremental cost (TELRIC) of the element. These costs are to be based on an ILEC's existing wire center locations using the most efficient technology available in the industry regardless of the technology actually used by the ILEC and furnished to the competitor. *See* First Report and Order ¶ 685. State commissions are to employ TELRIC to determine the price an ILEC may charge its competitors for the right to interconnect with the ILEC and/or to use the ILEC's network elements to compete with the ILEC in providing telephone services.

The petitioners contend the TELRIC method violates the plain language and purpose of the Act and represents arbitrary and capricious decision-making. The petitioners challenge TELRIC on four grounds.

1. Hypothetical Network Standard

In its First Report and Order, the FCC explained that forward-looking methodologies, like TELRIC, consider the costs that a carrier would incur in the future for providing the interconnection or unbundled access to its network elements. *See* First Report and Order ¶ 683. These costs either can be based on the most efficient network configuration and technology currently available, or on the ILEC's existing network infrastructures. *See id.* The FCC chose an approach which it says combined the two possibilities. *See id.* ¶ 685. Pursuant to § 252(d)(1), the FCC promulgated 47 C.F.R. § 51.505 entitled "Forward-looking economic cost." It states in part that "[t]he total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers." 47 C.F.R. § 51.505(b)(1). The only nonhypothetical factor in the calculation is the use of the actual location of the ILEC's existing wire centers.

The petitioners assert that the hypothetical network standard upon which TELRIC's costs are based is contrary to the Act's plain language. Section 252(d)(1)(A)(i) requires the just and reasonable rates for network elements to be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing *the* interconnection or network element." *Id.* (emphasis added). The petitioners contend the language points inescapably to the actual costs the ILEC incurs for furnishing its existing network to the competitor either through interconnection or on an unbundled network element basis. However, the petitioners explain that the costs under the FCC's pricing methodology are those costs that would be incurred by a hypothetical carrier deploying a hypothetical network that is optimally efficient in technology and configuration. The petitioners argue that the FCC's hypothetical network standard does not reflect what they are statutorily required to furnish to their competitors and is, therefore, flatly contrary to the statute.

The respondents counter the petitioners' assertion that TELRIC costs are based on a hypothetical network. The respondents contend TELRIC does reflect the ILECs' costs but on a predictive forward-looking basis that assumes a reasonable level of efficiency. According to the respondents, setting rates based on the use of the most efficient technology available and on the lowest cost network configuration using existing wire center locations is consistent with the statute, promotes competition, and is a reasonable application of forward-looking costs.

The intervenors in support of the FCC (the intervenors) explain that costs should be based on what any firm, including the specific ILEC whose rates are to be set, would incur in providing the network elements today. They suggest these costs should be the replacement cost of the network using the technology available today and that no firm in a competitive market would charge rates based on the cost of reproducing obsolete technology. The intervenors contend that calculating the cost of old technology with current prices defeats the purpose of using a forward-looking methodology.

We agree with the petitioners that basing the allowable charges for the use of an ILEC's existing facilities and equipment (either through interconnection or the leasing of unbundled network elements) on what the costs would be if the ILEC provided the most efficient technology and in the most efficient configuration available today utilizing its existing wire center locations violates the plain meaning of the Act. It is clear from the language of the statute that Congress intended the rates to be "based on the cost . . . of *providing the interconnection or network element*," *id.* (emphasis added), not on the cost some imaginary carrier would incur by providing the newest, most efficient, and least cost substitute for the actual item or element which will be furnished by the existing ILEC pursuant to Congress's mandate for sharing. Congress was dealing with reality, not fantasizing about what might be. The reality is that Congress knew it was requiring the existing ILECs to share their existing facilities and equipment with new competitors as one of its chosen methods to bring competition to local telephone service, and it expressly said that the ILECs' costs of providing *those* facilities and *that* equipment were to be recoverable by just and reasonable rates. Congress did not expect a new competitor to pay rates for a "reconstructed local network," First Report and Order ¶ 685, but for the existing local network it would be using in an attempt to compete.

It is the cost to the ILEC of providing its existing facilities and equipment either through interconnection or by providing the specifically requested existing network elements that the competitor will in fact be obtaining for use that must be the basis for the charges. The new entrant competitor, in effect, piggybacks on the ILEC's existing facilities and equipment. It is the cost to the ILEC of providing that ride on those facilities that the statute permits the ILEC to recoup. This does not defeat the purpose of using a forward-looking methodology as the intervenors assert. Costs can be forward-looking in that they can be calculated to reflect what it will cost the ILEC in the future to furnish to the competitor those portions or capacities of the ILEC's facilities and equipment that the competitor will use including any system or component upgrading that the ILEC chooses to put in place for its own more efficient use. In our view it is the cost to the ILEC of carrying the extra burden of the competitor's traffic that Congress entitled the ILEC to recover, and to that extent, the FCC's use of an incremental cost approach does no violence to the statute. At bottom, however, Congress has made it clear that it is the cost of providing the actual facilities and equipment that will be used by the competitor (and not some state of the art presently available technology ideally configured but neither deployed by the ILEC nor to be used by the competitor) which must be ascertained and determined.

Consequently, we vacate and remand to the FCC rule 51.505(b)(1).

2. Use of a Forward-looking Methodology

The petitioners contend that the FCC's use of its forward-looking TELRIC methodology, which denies the ILECs recovery of their historical costs, is contrary to the express terms of the Act and is unreasonable. The petitioners state that the term "cost" plainly refers to historical cost and that the juxtaposition of "cost" in § 252(d)(1)(A)(i) with "profit" in § 252(d)(1)(B) confirms this. They refer to the discussion of profit in paragraph 699 of the First Report and Order as support for their proposition that if profit must be read in an accounting sense, then so too must cost. In addition, they assert the FCC failed to provide an adequate explanation for its rejection of historical costs and that an agency is not allowed to change ratemaking methodologies without cogently explaining why the change is being made.

The respondents argue the term "cost" is an elastic term that can be construed to mean either historical or forward-looking costs and that the FCC's interpretation of cost as forward-looking is reasonable. They clarify the discussion in the First Report and Order regarding profit. They explain that the FCC found that a normal profit, which TELRIC is designed to yield, represents a "reasonable profit" within the meaning of the statute and that the FCC has not construed profit to mean accounting profit. The respondents also argue the FCC explained in detail its decision to use forward-looking costs and that the decision was reasonable based on the new competitive objectives of the 1996 Act. The intervenors agree with the respondents that the term "cost" imposes no clear limits on the FCC's authority to establish a ratemaking methodology, and according to their argument, it is in these circumstances that an agency is entitled to deference.

We respectfully disagree with the petitioners' contention that cost, as it is used in the statute, means historical cost. The statute simply states that rates "shall be based on the cost . . . of providing the interconnection or network element." 47 U.S.C. § 252(d)(1)(A). We conclude the term "cost," as it is used in the statute, is ambiguous, and Congress has not spoken directly on the meaning of the word in this context. We agree with the assessment that "the word 'cost' is a chameleon, capable of taking on different meanings, and shades of meaning, depending on the subject matter and the circumstances of each particular usage." *Strickland v. Commissioner, Maine Dept. of Human Servs.*, 48 F.3d 12, 19 (1st Cir. 1995), *cert. denied*, 516 U.S. 850 (1995).

The FCC has the authority to make rules to fill any gap in the Act left by Congress, provided the agency's construction of the statute is reasonable. *See Chevron*, 467 U.S. at 843. Likewise, "Congress is well aware that the ambiguities it chooses to produce in a statute will be resolved by the implementing agency." *AT & T Corp.*, 525 U.S. at 397 (citation to *Chevron* omitted). Forward-looking costs have been recognized as promoting a competitive environment which is one of the stated purposes of the Act. The Seventh Circuit, for example, explained, "[I]t is current and anticipated cost, rather than historical cost that is relevant to business decisions to enter markets . . . historical costs associated with the plant already in place are essentially irrelevant to this decision since those costs are 'sunk' and unavoidable and are unaffected by the new production decision." *MCI Communications v. American Tel. & Tel. Co.*, 708 F.2d 1081, 1116-17 (7th Cir. 1983), *cert. denied*, 464 U.S. 891 (1983). Here, the FCC's use of a forward-looking cost methodology was reasonable. The FCC sought comment on the use of forward-looking costs and concluded that forward-looking costs would best ensure efficient investment decisions and competitive entry. *See* First Report and Order ¶ 705. It is apparent that the FCC explained in detail its reason for selecting a forward-looking cost methodology to implement the new competitive goals of the Act, and any past rejection of forward-looking methodologies was made in a monopoly, rather than a competitive, environment. *See* First Report and Order ¶¶ 618-711.

Additionally, we are unpersuaded by the petitioners' discussion of the juxtaposition of the word "profit" with "cost" in the statute. The FCC did not interpret profit as accounting[5] profit as the petitioners contend. The

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[5] Accounting profit equals the difference between total revenue and explicit costs. Explicit costs are those costs incurred when a monetary payment is made. Accounting profit is typically higher than economic profit because accounting profit only subtracts

First Report and Order discusses only two types of profit: economic[6] and normal[7]. *See* First Report and Order ¶ 699. The FCC interpreted the word "profit" in the statute to mean "normal profit." The FCC found that TELRIC provides for a "normal" profit and that level of profit is reasonable within the meaning of the statute. Section 252(d)(1)(B) states only that the rates paid for either interconnection or furnishing unbundled access "may include a reasonable profit. " The use of the word "may" indicates that the inclusion of a reasonable profit is not mandatory but permitted. Additionally, nothing in the phrase "may include a reasonable profit" suggests "cost" must mean historical costs. A "profit" can be made whether a historical cost or forward-looking cost methodology is used. We reiterate that a forward-looking cost calculation methodology that is based on the incremental costs that an ILEC actually incurs or will incur in providing the interconnection to its network or the unbundled access to its specific network elements requested by a competitor will produce rates that comply with the statutory

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explicit costs rather than the total opportunity costs. *See* ROGER A. ARNOLD, ECONOMICS 484-85 (2d ed. 1992).

[6] Economic profit equals the difference between total revenue and total opportunity cost, including both explicit and implicit costs. Implicit costs represent the value of resources used for which no monetary payment is made. *See id.* Economic profit is also referred to as supranormal profit. *See* First Report and Order ¶ 699.

[7] Normal profit is achieved when a company earns revenue that is equal to its total opportunity costs. This is the level of profit needed for a company to cover all of its opportunity costs. Normal profit is the same as zero economic profit. *See* ARNOLD, *supra* note 5, at 485.

requirement of § 252(d)(1) that an ILEC recover its "cost" of providing the shared items.

3. Effect of Universal Service Subsidies

The petitioners submit that the failure to include the costs imposed by the government mandated subsidies in network element prices would frustrate the Act's objectives by forcing the ILECs to bear a disproportionate share of the universal service burdens. They explain that when an incumbent carrier provides to a competitor the network elements needed to serve a business customer, the costs to the incumbent not only include the costs of operating the particular network elements furnished but also the loss of that customer's contribution to support lower rates for others. The loss of that contribution, the petitioners argue, must be included in the determination of the rates charged the competitor for unbundled access to the ILEC's network elements.

The respondents and intervenors assert that allowing the ILECs to include the costs of universal service subsidies in its rates would violate the Act. They argue § 252(d)(1) requires rates to reflect the costs of providing the network elements, not the costs of universal service subsidies. Including those costs, according to the respondents, would violate that section of the Act. The respondents cite two decisions in which we concluded that the costs of universal services subsidies should not be included in the costs of providing the network elements. *See Competitive Telecomms. Ass'n v. F.C.C.*, 117 F.3d 1068, 1074-75 (8th Cir. 1997); *Southwestern Bell Tel. Co.*, 153 F.3d at 540.

In accordance with our previous opinions, we maintain our view that the costs of universal service subsidies should not be included in the costs of providing the network elements. Section 252(d)(1)(A)(1) requires rates to be cost-based. Universal service charges are not based on the actual costs of providing interconnection or the requested network element. *See Competitive Telecomms.*, 117 F.3d at 1073. "[P]ayment of cost-based rates represents full compensation to the incumbent LEC for use of the network elements that carriers purchase." *Southwestern Bell*, 153 F.3d at 540 (quoting *In re Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; End User Common Line Charges*, 12 FCCRcd 15982 (1997) ¶ 337). Including the costs of universal service subsidies would allow for double recovery. *See id.*

4. Takings Argument

The petitioners contend the use of the TELRIC method to set rates raises a serious Fifth Amendment takings issue that the statute should be construed to avoid. The petitioners challenge the pricing rules as mandating invalid confiscatory rates. The petitioners insist the statute must be read so that an ILEC receives just and reasonable compensation in the constitutional sense for the services it provides to its competitors.

The respondents argue that the claim that the use of TELRIC will constitute a taking is not ripe for judicial consideration because, at this point, it is unknown whether the rates established under TELRIC will constitute just and reasonable compensation. In addition, the intervenors point out that TELRIC compensates the ILECs for the present market value of the property taken which is all that is constitutionally required for just and reasonable compensation.

Because we have vacated 47 C.F.R. § 51.505(b)(1), we have some doubt that we need to address the argument that TELRIC also violates the Constitution. Our remand to the FCC of the TELRIC rule should result in a new rule for determining the compensation that the ILECs will receive for the new competitor's use of the ILEC's property—a rule that should accurately determine the actual costs to the ILEC of furnishing its network (either by interconnection or on an unbundled element basis) to its competitors together with a permitted reasonable profit. Whether the new rule will result in rates that do not provide just and reasonable compensation cannot be foretold. However, in the event our view of TELRIC's statutory invalidity turns out to be incorrect, and to avoid as best we can another remand, we proceed further with the petitioners' constitutional assertions.

In our earlier opinion we determined that the ILECs' claims that the FCC's unbundling rules constituted an unconstitutional taking were not ripe for adjudication. *See Iowa Utils. Bd.*, 120 F.3d at 818. We did so principally on the basis that the rates for the unbundled access were to be set by the state commissions, that the actual rates were largely yet unknown, and that the Act provided for a mechanism (arbitration before the state commissions and review in federal district court) to determine what the just and reasonable rates would be in individual cases. That ripeness conclusion was not attacked in the Supreme Court. While we recognize that the argument made here (that TELRIC itself, because it is based on a hypothetical network using the most efficient technology available which bears little or no resemblance to the ILEC's property which will be actually made available to competitors, must result in rates that are neither just nor reasonable, and confiscatory in the constitutional sense) is not the same one we addressed in our earlier opinion, we conclude for many of the same reasons we expressed before, *see id.*, that the present takings claim is not ripe for review.[8]

The Constitution protects public utilities from rates which are "so unjust as to be confiscatory." *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 307 (1989). However, a takings claim cannot be based on the ratemaking methodology, but rather it must be based on the rate itself. "It is not theory but the impact of the rate order which counts." *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 602 (1944). Until the actual rates are established, we cannot conclude whether the impact of TELRIC driven rates will constitute a taking. "It is not enough that a party merely speculates that a government action will cause harm." *Alenco Communications, Inc. v. F.C.C.*, 201 F.3d 608, 624 (5th Cir. 2000). We do not need to disregard *Chevron* deference and interpret the statute in accordance with the petitioners' views in order to avoid an unconstitutional taking in this instance. The possibility that a regulatory program may result in a taking does

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[8] We note, with no small amount of interest, that the Supreme Court has granted certiorari to review the Fifth Circuit's decision in *Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999), where the Fifth Circuit noted that the use of a forward-looking cost model to determine universal service subsidies did not result in an unconstitutional taking. *GTE Service Corp. v. FCC*, 68 U.S.L.W. 3496 (U.S. June 5, 2000) (No. 99-1244) [120 S. Ct. 2214].

not justify the use of a narrowing construction. *See United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 128-29 (1985). In such circumstances, the adoption of a narrowing construction might frustrate a potentially permissible application of a statute. *See id.* at 128. Because the consequences of the FCC's choice to use TELRIC methodology cannot be known until the resulting rates have been determined and applied, the constitutional claim is not ripe. *See Duquesne*, 488 U.S. at 317 (Scalia, White, and O'Connor, JJ., concurring) (noting that the Constitution looks to the consequences produced rather than the technique employed).

B. Wholesale Rates

Section 252(d)(3) of the Act provides that state commissions "shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier." Pursuant to this section, the FCC promulgated 47 C.F.R. § 51.607 which excludes "avoided retail costs" from wholesale rates. "Avoided retail costs" are defined by the FCC as "those costs that reasonably can be avoided when an incumbent LEC provides a telecommunications service for resale at wholesale rates to a requesting carrier." 47 C.F.R. § 51.609(b).

The petitioners challenge the FCC's interpretation of the term "avoided retail costs." The petitioners contend § 252(d)(3) plainly requires wholesale rates to reflect the ILECs' retail rates less those costs that an ILEC actually avoids when it loses its retail customers to a reselling competitor. However, under the FCC's definition of "avoided retail costs," the petitioners argue the FCC requires them to exclude all retailing costs rather than only those costs that an ILEC actually avoids. The petitioners state that many costs associated with retailing are fixed and will not begin to decline initially nor will the costs decline proportionately to the number of customers lost to the reseller. The petitioners explain the phrase "will be avoided" in § 252(d)(3) means "actually avoided" because otherwise the wholesale discount given the reseller would be inflated.

The respondents counter that the phrase "will be avoided" is ambiguous and that the FCC reasonably interpreted the language of the statute. The intervenors explain that the ILECs avoid incurring any retailing costs when engaging in wholesale transactions, and even if certain retailing costs are fixed, the ILECs would still incur only those costs that arose in connection with the ILECs' retailing activities. The respondents state that making competitors pay for a portion of the ILECs' retailing costs, even though the new entrant is not the cause of those retail costs, would result in the new entrants subsidizing the ILECs' retail offerings while still having to pay the new entrants' own retailing costs.

We agree with the petitioners that the phrase "will be avoided" refers to those costs that the ILEC will actually avoid incurring in the future, because of its wholesale efforts, not costs that "can be avoided." The verb "will" is defined, in part, as "a word of certainty." BLACK'S LAW DICTIONARY 1598 (6th ed. 1990). Whereas, the verb "can" is "[o]ften used interchangeably with 'may,'" *id.* at 206, and may is a word "of speculation and uncertainty." *Id.* at 1598. The language of the statute is clear. Wholesale rates shall exclude "costs that will be avoided by the local exchange carrier." 47 U.S.C. § 252(d)(3). The plain meaning of the statute is that costs that are actually avoided, not those that could be or might be avoided, should be excluded from the wholesale rates.

If the Congress had meant the standard to be one of reasonable avoidability, it could have easily said so. We note that Congress's starting point in § 252(d)(3) is the retail rates the ILEC charges its subscribers for the same service the new competitor (who wants to enter the market by reselling) has requested be furnished to it. From those retail rates, the ILEC's costs that "will be avoided" by furnishing those services to the competitor are to be excluded. The statute recognizes that the ILEC will itself remain a retailer of telephone service with its own continuing costs of providing that retail telephone service. The FCC's rule treats the ILEC as if it were strictly a wholesaler whose sole business is to supply local telephone service in bulk to new purveyors of retail telephone service. Under the statute as it is written, it is only those continuing costs of providing retail telephone service which will be avoided by selling to the competitor the services it requests which are to be excluded. The FCC's rule is contrary to the statute.

Consequently, we vacate and remand rule 51.609.

C. Proxy Prices

The FCC established proxy prices to be used for interconnection and network element charges, wholesale rates, and the rates for termination and transport.

The state commissions are to use these proxy prices if they do not use the provided ratemaking method to establish rates. The proxy prices consist of upper limits higher than which the rates set by the state commissions shall not go.

The petitioners argue the proxy prices should be vacated for three reasons. First, the petitioners state that the respondents expressly disavowed the proxy prices before the Supreme Court in order to support the FCC's position that it was not trying to set specific prices, but rather it was merely designing a pricing methodology. Therefore, the FCC, according to the petitioners, is judicially estopped from trying to revive the proxy prices now. Second, the petitioners contend the proxy prices should be vacated because they are based on the unlawful TELRIC method and employ the impermissible definition of "avoided retail costs." Third, the petitioners argue the proxy prices were developed using unreliable cost models and, as a result, are arbitrary and capricious.

The respondents counter that the petitioners' challenge to the proxy prices is not subject to review because the proxy prices are not binding on the states. The respondents contend that states may elect to use the proxy prices, but the states are not required to use them. The respondents insist that this court has jurisdiction to review only final orders of the FCC, and the proxy prices are not final orders because they do not impose an obligation on the states. The intervenors add that substantial deference should be accorded to the FCC because the issue concerns interim relief, citing *Competitive Telecommunications Association v. F.C.C.*, 117 F.3d 1068, 1073-75 (8th Cir. 1997).

We agree with the petitioners that the respondents are estopped from trying to now revive the proxy prices. "The doctrine of judicial estoppel prohibits a party from taking inconsistent positions in the same or related litigation." *Hossaini v. Western Missouri Med. Ctr.*, 140 F.3d 1140, 1142 (8th Cir. 1998). Judicial estoppel is invoked "to protect the integrity of the judicial process." *Id.* at 1143. The FCC represented to the Supreme Court that it was not establishing rates and depriving the state commissions of their role in implementing the Act. *See* Reply Br. for Federal Pet'rs at 7, *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999) 1998 WL 396961 (Nos. 97-826, 97-829, 97-830, 97-831, 97-1075, 97-1087, 97-1099, and 97-1141). The FCC emphasized that it was merely providing a methodology for state commissions to use in completing the "critical and complex task of determining the economic costs of an efficient telephone network." *Id.* The FCC dismissed the proxy prices as "designed for a past period in which no cost studies could have been made available to the state commissions. They have no relevance to this case." *Id.* at 7 n. 5.

We are not persuaded by the FCC's explanation to this court of its position before the Supreme Court. The respondents explain that the proxy prices were not relevant to the ILECs' claim before the Supreme Court that the pricing rules intruded on the states' role in establishing rates because the proxy prices were optional. The First Report and Order very clearly commands the use of the proxy prices by directing that "a state commission *shall* use [default proxies] . . . in the period before it applies the pricing methodology." First Report and Order ¶ 619 (emphasis added). Additionally, rule 51.503(b) states that the ILECs' rates for its elements "*shall* be established" using either TELRIC or the proxy prices. *See* 47 C.F.R. § 51.503(b) (emphasis added). The word "shall" is language of a mandatory nature. *Clark v. Brewer*, 776 F.2d 226, 230 (8th Cir. 1985). It is clear from the language of the First Report and Order, as well as the rules, that the state commissions are to use the proxy prices until the state commissions have established their own rates using the TELRIC method. The use of the proxy prices until such time is not optional.

The Supreme Court held that the FCC "has jurisdiction to design a pricing methodology." *AT&T Corp.*, 525 U.S. at 385. However, the FCC does not have jurisdiction to set the actual prices for the state commissions to use. Setting specific prices goes beyond the FCC's authority to design a pricing methodology and intrudes on the states' right to set the actual rates pursuant to § 252(c)(2). Following the Supreme Court's opinion, we now agree with the FCC that its role is to resolve "general methodological issues," and it is the state commission's role to exercise its discretion in establishing rates. Br. for Federal Pet'rs at 26-27, *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999), 1998 WL 396945 (No. 97-831).

The proxy prices are also infirm because they rely on the hypothetical most efficient carrier rationale which we have found to be violative of the Act, *ante* at [6a-10a], and because they rely on the erroneous definition of "avoided retail costs."

We conclude the proxy prices cannot stand and, for the foregoing reasons, vacate rules 51.513, 51.611, and 51.707.

D. Unbundling Rules

The FCC issued numerous rules to implement the ILECs' duties to provide unbundled access to their network elements under subsection 251(c)(3). Many of these rules were previously challenged. In light of the Supreme Court's opinion, we revisit three of the unbundling rules.

1. Identification of Additional Unbundled Network Elements

The Supreme Court vacated 47 C.F.R. § 51.319 which required the ILECs to provide requesting carriers with unbundled access to a minimum of seven network elements so long as access was "necessary" and failure to provide the access would "impair" the competitors' ability to provide services. The Supreme Court vacated 47 C.F.R. § 51.319 because the FCC's interpretation of the "necessary" and "impair" standard was too broad and unreasonable. *See AT&T Corp.*, 525 U.S. at 388-92.

The ILECs request that we now vacate rule 51.317 because it utilizes the same "necessary" and "impair" standard of rule 51.319. The Supreme Court did not specifically address the validity of rule 51.317. This court previously upheld the "necessary" and "impair" standard, but we vacated the portion of rule 51.317 that created the presumption that a network element must be unbundled if it is technically feasible to do so.

The respondents concede that rule 51.317 must be remanded to the FCC as a result of the Supreme Court's opinion. *See* Resp'ts' Br. at 87 n. 42. Therefore, we vacate rule 51.317 without any further discussion.

2. Superior Quality Rules

In our previous opinion, we vacated 47 C.F.R. §§ 51.305(a)(4) and 51.311(c), collectively known as the superior quality rules. These rules require an ILEC to provide, upon request, interconnection and unbundled network elements that are superior in quality to that which the ILEC provides to itself. The Supreme Court did not address these rules.

The petitioners ask us to reaffirm our previous decision vacating the superior quality rules. They contend the Supreme Court's decision did not affect our conclusion that the superior quality rules violated the Act because the FCC did not seek a review of our prior decision vacating these rules.

The respondents argue that the Supreme Court affirmed the FCC's general authority to adopt rules implementing the Act and that under this general authority the superior quality rules are valid. The intervenors agree and explain that because nothing in the Act forecloses the superior quality rules, the rules should be reinstated.

We again conclude the superior quality rules violate the plain language of the Act. We further conclude that nothing in 47 U.S.C. §§ 154(i), 201(b), or 303(r) gives the FCC the power to issue regulations contrary to the plain language of the Act. As we were correctly reminded at oral argument that this court is not a "super FCC," neither is the FCC an alter ego Congress free to change the words of a statute from "at least equal in quality" to "superior in quality" when it exercises its rule-making power. Subsection 251(c)(2)(C) requires the ILECs to provide interconnection "that is at least equal in quality to that provided by the local exchange carrier to itself. . . ." Nothing in the statute requires the ILECs to provide superior quality interconnection to its competitors. The phrase "at least equal in quality" establishes a minimum level for the quality of interconnection; it does not require anything more. We maintain our view that the superior quality rules cannot stand in light of the plain language of the Act for all the reasons we previously expressed. *See Iowa Utils. Bd.*, 120 F.3d at 812-13. We also note that it is self-evident that the Act prevents an ILEC from discriminating between itself and a requesting competitor with respect to the quality of the interconnection provided.

3. Additional Combinations Rule

In our previous opinion, we also vacated 47 C.F.R. § 51.315(c)-(f), the additional combinations rule. This rule requires an ILEC to perform the functions necessary to combine unbundled network elements in any technically feasible manner. Although the Supreme Court reversed our decision to vacate 47 C.F.R. § 51.315(b), prohibiting the ILECs from separating requested network elements that are already combined, the Supreme Court did not address subsections (c)-(f).

The petitioners request that we reaffirm our prior decision vacating the additional combinations rule. The petitioners state that the Supreme Court's decision to reinstate 51.315(b) does not call into question this court's decision to vacate 51.315(c)-(f). The petitioners explain 51.315(b) is different because it prohibited ILECs from separating previously combined network elements over the objection of the requesting carrier. The additional combinations rule contained in subsections (c)-(f), on the other hand, requires the ILECs to combine their own network elements in new ways or with elements provided by the requesting carriers. They argue the additional combinations rule violates the Act.

In addition to the respondents' argument regarding the general rulemaking authority of the FCC, they assert this court's decision to vacate rules 51.315(c)-(f) was predicated on language rejected by the Supreme Court when it reinstated rule 51.315(b). In reinstating subsection (b), the Supreme Court emphasized the ambiguous nature of § 251(c)(3) regarding the separation of leased network elements. *See AT&T Corp.*, 525 U.S. at 395. Because of this ambiguity, the Supreme Court concluded, subsection (b) is rationally based on the nondiscrimination language in § 251(c)(3). *See id.* The respondents rely on the same nondiscrimination language to support subsections (c)-(f) because without these subsections, they argue, new entrants would incur higher costs for unbundled network elements than the ILECs incur. The intervenors agree that the policy concerns of ensuring against an anticompetitive practice not only support 47 C.F.R. § 51.315(b) but also subsections (c)-(f).

We are not persuaded by the respondents' contention that the Supreme Court's reinstatement of rule 51.315(b) affects our decision to vacate subsections (c)-(f). Nor do we agree with the Ninth Circuit that the Supreme Court's opinion undermined our rationale for invalidating the additional combinations rule. *See U.S. West Communications v. MFS Intelenet, Inc.*, 193 F.3d 1112, 1121 (9th Cir. 1999), *cert. denied*, 68 U.S.L.W. 3669 (U.S. June 29, 2000) [120 S. Ct. 2741]. The Ninth

Circuit misinterpreted our decision to vacate subsections (c)-(f). We did not, as the Ninth Circuit suggests, employ the same rationale for invalidating subsections (c)-(f) as we did in invalidating subsection (b). *See MCI Telecomms. v. U.S. West*, 204 F.3d 1262, 1268 (9th Cir. 2000) ("The Eighth Circuit invalidated Rules 315(c)-(f) using the same rationale it employed to invalidate Rule 315(b). That is, the Eighth Circuit concluded that requiring combination was inconsistent with the meaning of the Act because the Act calls for 'unbundled' access.") Rather, the issue we addressed in subsections (c)-(f) was *who* shall be required to do the combining, not whether the Act prohibited the combination of network elements. *See Iowa Utils. Bd.*, 120 F.3d at 813.

Rule 51.315(b) prohibits the ILECs from separating previously combined network elements before leasing the elements to competitors. The Supreme Court held that 51.315(b) is rational because "[section] 251(c)(3) of the Act is ambiguous on whether leased network elements may or must be separated." *AT&T Corp.*, 525 U.S. at 395, 119 S. Ct. 721. Therefore, under the second prong of *Chevron*, the Supreme Court concluded 51.315(b) was a reasonable interpretation of an ambiguous statute.

Unlike 51.315(b), subsections(c)-(f) pertain to the combination of network elements. Section 251(c)(3) specifically addresses the combination of network elements. It states, in part, "An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunication service." Here, Congress has directly spoken on the issue of who shall combine previously uncombined network elements. It is the requesting carriers who shall "combine such elements." It is not the duty of the ILECs to "perform the functions necessary to combine unbundled network elements in any manner" as required by the FCC's rule. *See* 47 C .F.R. § 51.315(c). We reiterate what we said in our prior opinion: "[T]he Act does not require the incumbent LECs to do *all* the work." *Iowa Utils. Bd.*, 120 F.3d at 813. Under the first prong of *Chevron*, subsections (c)-(f) violate the plain language of the statute. We are convinced that rules 51.315(c)-(f) must remain vacated.

E. Rural Exemptions

Congress enacted § 251(f) to relieve the small and rural ILECs from some of the obligations imposed by other subsections of § 251. The FCC promulgated 47 C.F.R. § 51.405 to establish standards that the state commissions must follow in determining whether the small and rural ILECs are entitled to the exemption, suspensions, or modifications set forth in § 251(f).

The petitioners contend rule 51.405 cannot be reconciled with the language of the statute. They challenge the rule on three grounds. First, they argue the rule eliminates two of the three prerequisites that must be satisfied before a state commission may terminate an exemption. Second, they disagree with the limitation the rule places on the statutory phrase "unduly economically burdensome." Third, they suggest that the rule impermissibly shifts the burden of proof in exemption proceedings.

1. Prerequisites for Terminating an Exemption

Section 251(f)(1)(A) explains that a state commission may terminate an exemption for a rural telephone company if a request for interconnection, services, or network elements "is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof)." The FCC promulgated 47 C.F.R. § 51.405 pursuant to § 251(f). The rule requires the ILECs to offer evidence that the application of the requirements under § 251(c) "would be likely to cause undue economic burden beyond the economic burden that is typically associated with efficient competitive entry" in order to justify exemption. 47 C.F.R. § 51.405(c).

The petitioners contend the rule is invalid because it alters the statutorily-mandated criteria that must be met in order for a state commission to terminate a rural ILEC's exemption. The petitioners point out that rule 51.405 refers only to the "unduly economically burdensome" prerequisite for termination rather than the above-mentioned three criteria.

The respondents argue that the rule does not eliminate any statutory criteria regarding rural exemptions. The respondents explain it was not the FCC's intent, nor was it within the FCC's power, to eliminate any statutory requirements. The respondents suggest that state commissions will look to the statute itself, in addition to the FCC's rule, when implementing § 251(f). They further claim that the FCC has stated in a later order that rule 51.405(c) "does not in any way affect a state's responsibility to consider all three of the factors set forth in section 251(f)(1)(A)," citing to an order entered when the Rural Telephone Coalition sought a stay of rule 51.405(c). *See In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCCRcd 20166 (1996) ¶ 15.

We agree with the petitioners that the rule impermissibly disregards two of the three statutory requirements that must be met before a state commission can terminate an exemption. A state commission looking at rule 51.405(c) would conclude that if a rural ILEC had failed to show an undue economic burden, the exemption must be terminated, regardless of the existence of the ILEC's companion defenses of technical infeasibility and/or inconsistency with § 254 of the Act. A rule that permits such a result represents an arbitrary and unreasonable interpretation of the governing statute.

2. Undue Economic Burden

Rule 51.405 also refers to the statutory requirement that a request for interconnection, unbundled elements, or retail services for resale must not cause an undue economic burden in order to justify termination of an exemption under § 251(f)(1) or to justify the denial of a petition for suspension or modification under § 251(f)(2). The rule interprets the statutory phrase "unduly economically burdensome" as "undue economic burden beyond the economic burden that is typically associated with efficient competitive entry." 47 C.F.R. § 51.405(c), (d).

The petitioners argue that the rule's interpretation of the statutory language is unreasonable because it does not allow state commissions to consider the total actual economic burden that competitive entry could impose on a small or rural ILEC. The petitioners explain that the phrase "unduly economically burdensome" indicates Congress intended state commissions to consider any type of economic burden that might be imposed by such a request, including those burdens associated with efficient entry.

The respondents assert that the FCC interpreted "unduly economically burdensome" to refer to something more than the economic burden that commonly or ordinarily occurs upon efficient competitive entry because otherwise exemption, suspension, or modification would be virtually automatic. The respondents submit that Congress did not intend to preclude competitive entry into small or rural markets; rather Congress intended to protect the small or rural ILECs from only those § 251(b) or § 251(c) requirements that might be unfair or inappropriate.

We agree with the petitioners that the FCC has unreasonably interpreted the phrase "unduly economically burdensome." We owe no deference to an agency's interpretation that would "frustrate the congressional policy underlying a statute." *Bureau of ATF v. Fed. Labor Relations Auth.*, 464 U.S. 89 (1983) (quoting *NLRB v. Brown*, 380 U.S. 278, 291-92 (1965)). In the Act, Congress sought both to promote competition and to protect rural telephone companies as evidenced by the congressional debates. *See* 142 CONG. REC. S687-01 (Feb. 1, 1996) (statements by Sen. Hollings and Sen. Burns); 142 CONG. REC. H1145-06 (Feb. 1, 1996) (statement by Rep. Orton). It is clear that Congress intended that all Americans, including those in sparsely settled areas served by small telephone companies, should share the benefit of the lower cost of competitive telephone service and the benefits of new telephone technologies, which the Act was designed to provide. It is also clear that Congress exempted the rural ILECs from the interconnection, unbundled access to network elements, and resale obligations imposed by § 251(c), unless and until a state commission found that a request by a new entrant that the ILEC furnish it any of § 251(c)'s methods to compete in the rural ILEC's market is (1) not unduly economically burdensome, (2) technically feasible, and (3) consistent with § 254. *See* 47 U.S.C. § 251(f)(1). Likewise, Congress provided for the granting of a petition for suspension or modification of the application of the requirements of § 251(b) or (c) if a state commission determined that such suspension or modification is necessary to avoid (1) a significant adverse economic impact, (2) imposing a requirement that is unduly economically burdensome, and (3) imposing a requirement that is technically infeasible; and is consistent with the public interest, convenience, and necessity. *See* 47 U.S.C. § 251(f)(2).

There can be no doubt that it is an economic burden on an ILEC to provide what Congress has directed it to provide to new competitors in § 251(b) or § 251(c). Because the small and rural ILECs, while they may be entrenched in their markets, have less of a financial capacity than larger and more urban ILECs to meet such a request, the Congress declared that their statutorily-granted exemption from doing so should continue unless the state commission found all three prerequisites for terminating the exemption, or determined that all prerequisites for suspension or modification were met in order to grant an ILEC affirmative relief. It is the full economic burden on the ILEC of meeting the request that must be assessed by the state commission. The FCC's elimination from that assessment of the "economic burden that is typically associated with efficient competitive entry" substantially alters the requirement Congress established. By limiting the phrase "unduly economically burdensome" to exclude economic burdens ordinarily associated with competitive entry, the FCC has impermissibly weakened the broad protection Congress granted to small and rural telephone companies. We have found no indication that Congress intended such a cramped reading of the phrase. If Congress had wanted the state commissions to consider only that economic burden which is in excess of the burden ordinarily imposed on a small or rural ILEC by a competitor's requested efficient entry, it could easily have said so. Instead, its chosen language looks to the whole of the economic burden the request imposes, not just a discrete part.

Nor do we think the consideration of the whole economic burden occasioned by the request will result in state commissions "automatically" continuing the exemption, or "automatically" granting a petition for suspension or modification. In making their determination of "unduly economically burdensome," the state commissions will undoubtedly take into their judgment the fact that the ILEC will be paid for the cost of meeting the request and may also receive a reasonable profit pursuant to § 252(d). Subsections (c) and (d) of rule 51.405 are an unreasonable interpretation of the statute's requirement that a § 251(b) or § 251(c) request made by a competitor must not be "unduly economically burdensome" to the small or rural ILEC.

3. Burden of Proof

Rule 51.405 also requires the rural ILEC to offer evidence to the state commission to prove that it is entitled to a continuing exemption. The rule states, "Upon receipt of a bona fide request for interconnection, services, or access to unbundled network elements, a rural telephone company must prove to the state commission that the rural telephone company should be entitled, pursuant to section 251(f)(1) of the Act, to continued exemption from the requirements of section 251(c) of the Act." 47 C.F.R. § 51.405(a).

The petitioners contend the FCC has improperly placed the burden of justifying a continued exemption on the ILECs. The petitioners discuss the language in 47 U.S.C. § 251(f)(1)(A), which states "[s]ubsection (c) of this section shall not apply to a rural telephone company until (i) such company has received a bona fide request for interconnection, services, or network elements. . . ." This language, they explain, indicates that the ILECs are automatically exempt from subsection (c) until a request has been made, and once a request is made, the burden is on the party making the request to prove that the request is not unduly economically burdensome, is technically feasible, and is consistent with § 254. They also assert the burden of proof lies with the proponent of the order according to the Administrative Procedure Act. *See* 5 U.S.C. § 556(d) (1994).

The respondents argue it was reasonable to place the burden on the rural ILECs because the default rule is for the state commission to deny the exemption unless the state commission affirmatively finds a reason to continue the exemption. The respondents rely on the

Senate conference report on the Act which explains that a state commission must rule on the continuation of an exemption within 120 days, "and, if no exemption is granted," then the state commission must establish a schedule for compliance. S. CONF. REP. NO. 104-230, at 122 (1996). The respondents emphasize the word "granted" implies that a state commission will only grant an exemption if there is a specific reason to do so.

We agree with the petitioners that the rule impermissibly places the burden of proof on the ILECs. The statute states that the requirements of § 251(c) "shall not apply to a rural telephone company *until*" a request has been made. 47 U.S.C. § 251(f)(1)(A) (emphasis added). The use of the word "until" suggests that the rural telephone companies have a continuing exemption that is only terminated once a bona fide request is made, provided the request is not unduly economically burdensome, is technically feasible, and is consistent with § 254. Although the conference report refers to state commissions granting an exemption, the language of a conference report does not trump the language of a statute. *See Sierra Club v. Clark*, 755 F.2d 608, 615 (8th Cir. 1985). The language of the statute uses the word "terminate" not "grant." *See* 47 U.S.C. § 251(f)(1)(B). The plain meaning of the statute requires the party making the request to prove that the request meets the three prerequisites to justify the termination of the otherwise continuing rural exemption.

For the foregoing reasons, we vacate rule 51.405(a), (c), and (d).

F. Preexisting Agreements

Congress enacted § 252 of the Act to establish procedures for state commissions to approve agreements between ILECs and competing telecommunication carriers arrived at through negotiation or arbitration. Section 252(a) requires agreements entered into pursuant to § 251(c)(1)'s duty to negotiate to be submitted to the state commissions for approval. Section 252(a)(1) states:

> Upon receiving a request for interconnection, services, or network elements pursuant to section 251 of this title, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251 of this title. The agreement shall include a detailed schedule of itemized charges for interconnection and each service or network element included in the agreement. The agreement, including any interconnection agreement negotiated before February 8, 1996, shall be submitted to the State commission under subsection (e) of this section.

The FCC promulgated 47 C.F.R. § 51.303 which requires all interconnection[9] agreements, even those that predate the 1996 Act, to be submitted to the state commissions for approval. The rule states, "All interconnection agreements between an incumbent LEC and a telecommunications carrier, including those negoti-

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[9] We note that the term "interconnection" has been defined by the FCC as "the physical linking of two networks for the mutual exchange of traffic." First Report and Order ¶ 26.

ated before February 8, 1996, shall be submitted by the parties to the appropriate state commission for approval. . . ." 47 C.F.R. § 51.303(a).

The petitioners argue that the rule violates the explicit language of the Act because, while the Act references agreements entered into pursuant to § 251, the rule applies to *all* agreements, even those entered into years before the Act was passed. The petitioners explain that agreements negotiated and entered into pre-1996 could not have been entered into "pursuant to section 251" because § 251 did not exist at that time, and therefore, only agreements that were either negotiated before the Act and formally entered into after the Act, or agreements that were both negotiated and formally entered into after the Act, must be submitted for approval.

The respondents contend that the agreement referred to in the third sentence of § 252(a)(1) is not limited to the agreement mentioned in the first and second sentences. The first and second sentences, they argue, refer to agreements reached pursuant to § 251, while the agreement mentioned in the third sentence refers to all, including pre-Act, agreements. The respondents explain that the term "negotiated" in the phrase set off by commas in the third sentence means a completed negotiation or, in other words, a negotiation that has resulted in a completed interconnection agreement.

We agree with the petitioners that the rule is contrary to the language of the Act. The respondents attempt to isolate the third sentence of § 252(a)(1) from the prior two sentences. The FCC concluded "that the final sentence of section 252(a)(1), which requires that *any* interconnection agreement must be submitted to the state commissions, can and should be read to be independent of the prior sentences in section 252(a)(1)." First Report and Order ¶ 166. This is not a proper construction because "we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy." *United States Nat'l Bank of Oregon v. Independent Ins. Agents*, 508 U.S. 439, 455 (1993).

The subsection in question begins by making reference to a competitor's "request . . . pursuant to section 251." Upon receiving such a request, the competitor and the ILEC "may negotiate and enter into a binding agreement" without regard for the interconnection and unbundled network element access standards of § 251(b) and (c). The second sentence requires that the agreement so negotiated and entered into contain a detailed schedule of itemized charges for the items covered by the "agreement." The third sentence begins with the words, "[t]he agreement" (which can only mean the same agreement authorized by the first sentence and referred to in the second sentence) and requires that it be submitted to the state commission for approval pursuant to subsection (e).

The phrase in the third sentence set off by commas, which reads, "including any interconnection agreement negotiated before February 8, 1996," serves as the co-subject of the verb form "shall be submitted" and explains and defines what else besides the "agreement" mentioned in the first two sentences of the section must be submitted to the state commission. The "what else" that must be submitted to the state commission for approval is any interconnection agreement "negotiated" before February 8, 1996.

Congress was aware that many states were already exploring and experimenting with ways to open up local telephone markets to competition, and that telephone carriers were involved with each other in negotiations for those purposes prior to and at the time of the Act's passage. *See, e.g.*, S. REP. NO. 104-23, at 5 (1995). By using the phrase "including any interconnection agreement negotiated before February 8, 1996," Congress brought within the sphere of required state commission approval all interconnection agreements entered into after February 8, 1996, including specifically those whose terms were arrived at by negotiation prior to that date but which had not yet been formally entered into by the parties. Because that unique group of interconnection agreements (those that were negotiated before but not yet entered into by February 8, 1996) could not have been agreements prompted or originated by either a request made under the Act or by the duty to negotiate contained in the Act (as the Act was not yet in existence at the time they were being negotiated), they could not be an "agreement" covered by the first two sentences and the first two words of the third sentence of § 252(a)(1). Nevertheless, because their subject matter, interconnection, was one which the Act was intended to compel, and because they would be entered into after the effective date of the Act, it was logical for Congress to want them subject to the Act's provisions. The use of the statutory language "including any interconnection agreement negotiated before February 8, 1996" also eliminated any argument that the agreeing carriers could have made in order to avoid state commission approval that their agreement had been negotiated before the Act's date and, therefore, was not subject to it.

We also think it of some significance that Congress intentionally used both the terms "negotiate" and "enter into" in the first sentence of § 252(a)(1) but only used the verb "negotiated" in the third sentence. Had Congress wanted to include all interconnection agreements that had been both negotiated and entered into before the Act's effective date within the scope of the third sentence, all it had to do was use the same words it had used in the first sentence. *See Kifer v. Liberty Mut. Ins. Co.*, 777 F.2d 1325, 1333 n. 9 (8th Cir. 1985) ("'When the same word or phrase is used in the same section of an act more than once, and the meaning is clear as used in one place, it will be construed to have the same meaning in the next place.'") (quoting *United States v. Nunez*, 573 F.2d 769, 771 (2d Cir.), *cert. denied*, 436 U.S. 930 (1978)). It did not, and its choice not to do so reinforces our conclusion that Congress did not intend to do so. *See, e.g.*, *Johnson v. United States*, 120 S. Ct. 1795, 1803 (2000) (When Congress means the same consequences, it is "natural for Congress to write in like terms.").

Across the country there were thousands of interconnection agreements existing between and among ILECs before the Act was passed. In Wisconsin alone the state commission estimated that there were over 3,000 pre-Act agreements which, under the FCC's construction of § 252, would now have to be submitted for approval. *See* Addendum to Br. of Pet'rs United States Telephone Ass'n et al. at 9. Many of those agreements were between neighboring noncompeting ILECs for the exchange of features and functions.

There is no indication that Congress intended the state commissions to go back through years of agreements and approve or disapprove them. We conclude that Congress knew it was already giving the state commissions a huge amount of new work to do in arbitrating and approving the new agreements that would quickly be coming into being by virtue of the substantive provisions of the Act, and that it did not intend to add an even heavier burden by forcing the state commissions to replow old ground. The FCC's construction of the statute is unreasonable.

We further find it difficult to square the FCC's interpretation with the recognized presumption against retroactive legislation. By construing the word "negotiated" in the third sentence to mean "negotiated and entered into," the FCC's rule reaches back and requires something that the parties to the preexisting agreement had no reason to expect—required state commission approval under new and different standards which affect the rights the parties had at the time they entered into their agreement. *See Landgraf v. USI Film Prods.*, 511 U.S. 244, 280 (1994). Here again Congress's choice not to use the words "entered into" in the third sentence tells us that Congress did not intend the retroactive effect the FCC has given to the Act. Absent clear Congressional intent for retroactive effect, there should be none. *See id.* By making the Act applicable to interconnection agreements that were only negotiated before the Act's effective date (but not yet entered into), Congress gave the parties the option of either proceeding to enter into the negotiated agreement with the knowledge it would have to be submitted to the state commission for approval, or not. In so doing, an unwanted retroactive effect can be avoided, the parties can proceed knowing what the law will be, and the effect of the Act is entirely prospective.

We hold that § 252(a)(1) applies to any agreement which was either (1) both negotiated and entered into pursuant to § 251 after the Act went into effect or (2) is an interconnection agreement that was negotiated before, but not yet entered into when, the Act went into effect.

Consequently, we vacate rule 51.303.

III. Conclusion

We grant the pending petitions for review in part. For the reasons stated, we vacate, in total, 47 C.F.R. §§ 51.505(b)(1), 51.609, 51.513, 51.611, 51.707, 51.317, 51.405(a), (c), and (d), and 51.303. We remain firm in our previous decision to vacate 47 C.F.R. §§ 51.305(a)(4) and 51.311(c) (the superior quality rules) and 47 C.F.R. § 51.315(c)-(f) (the additional combinations rule). In all other respects, we deny the petitions for review.

APPENDIX B

In Re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, CC Docket No. 96-98 (Aug. 8, 1996), 11 F.C.C.R. 15499:

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V. ACCESS TO UNBUNDLED NETWORK ELEMENTS

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F. Provision of a Telecommunications Service Using Unbundled Network Elements

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3. Discussion

292. Under section 251(c)(3), incumbent LECs must provide access to "unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide" a telecommunications service.[619] We agree with the Illinois Commission, the Texas Public Utility Counsel, and others that this language bars incumbent LECs from imposing limitations, restrictions, or requirements on requests for, or the sale or use of, unbundled elements that would impair the ability of requesting carriers to offer telecommunications services in the manner they intend. For example, incumbent LECs may not restrict the types of telecommunications services requesting carriers may offer through unbundled elements, nor may they

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[619] 47 U.S.C. § 251(c)(3).

restrict requesting carriers from combining elements with any technically compatible equipment the requesting carriers own. We also conclude that section 251(c)(3) requires incumbent LECs to provide requesting carriers with all of the functionalities of a particular element, so that requesting carriers can provide any telecommunications services that can be offered by means of the element. We believe this interpretation provides new entrants with the requisite ability to use unbundled elements flexibly to respond to market forces, and thus is consistent with the procompetitive goals of the 1996 Act.

293. We agree with AT&T and Comptel that the quoted text in section 251(c)(3) bars incumbent LECs from separating elements that are ordered in combination, unless a requesting carrier specifically asks that such elements be separated. We also conclude that the quoted text requires incumbent LECs, if necessary, to perform the functions necessary to combine requested elements in any technically feasible manner either with other elements from the incumbent's network, or with elements possessed by new entrants, subject to the technical feasibility restrictions discussed below. We adopt these conclusions for two reasons. First, in practice it would be impossible for new entrants that lack facilities and information about the incumbent's network to combine unbundled elements from the incumbents' network without the assistance of the incumbent. If we adopted NYNEX's proposal, we believe requesting carriers would be seriously and unfairly inhibited in their ability to use unbundled elements to enter local markets. We therefore reject NYNEX's contention that the statute requires requesting carriers, rather than incumbents, to combine

elements. We do not believe it is possible that Congress, having created the opportunity to enter local telephone markets through the use of unbundled elements, intended to undermine that opportunity by imposing technical obligations on requesting carriers that they might not be able to readily meet.

294. Second, given the practical difficulties of requiring requesting carriers to combine elements that are part of the incumbent LEC's network, we conclude that section 251(c)(3) should be read to require incumbent LECs to combine elements requested by carriers. More specifically, section 251(c)(3) provides that incumbent LECs must provide unbundled elements "in a manner that allows requesting carriers to combine them" to provide a telecommunications service. We believe this phrase means that incumbents must provide unbundled elements in a way that *enables* requesting carriers to combine them to provide a service. The phrase "allows requesting carriers to combine them," does not impose the obligation of physically combining elements exclusively on requesting carriers. Rather, it permits a requesting carrier to combine the elements if the carrier is reasonably able to do so. If the carrier is unable to combine the elements, the incumbent must do so.[620]

295. Our conclusion that incumbent LECs must combine unbundled elements when so requested is consistent with the method we have adopted to identify unbundled network elements. Under our method, in-

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[620] In this context, we conclude that the term "combine" means connecting two or more unbundled network elements in a manner that would allow a requesting carrier to offer the telecommunications service it seeks to offer.

cumbents must provide, as a single, combined element, facilities that could comprise more than one element. This means, for example, that, if the states require incumbent LECs to provision subloop elements, incumbent LECs must still provision a local loop as a single, combined element when so requested, because we identify local loops as a single element in this proceeding.[621]

296. We decline to adopt the view proffered by some parties that incumbents must combine network elements in any technically feasible manner requested. This proposal necessarily means that carriers could request incumbent LECs to combine elements that are not ordinarily combined in the incumbent's network. We are concerned that, in some instances, this could potentially affect the reliability and security of the incumbent's network, and the ability of other carriers to obtain interconnection, or request and use unbundled elements. Accordingly, incumbent LECs are required to perform the functions necessary to combine those elements that are ordinarily combined within their network, in the manner in which they are typically combined. Incumbent LECs are also required to perform the functions necessary to combine elements, even if they are not ordinarily combined in that manner, or they are not ordinarily combined in the incumbent's network, provided that such combination is technically feasible,[622] and such combination would not undermine the ability of other carriers to access unbun-

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[621] *See infra*, Section V.J.

[622] As discussed in Section IV, effects on network reliability and security are factors to be considered in determining technical feasibility.

dled elements or interconnect with the incumbent LEC's network. Incumbent LECs must prove to state commissions that a request to combine particular elements in a particular manner is not technically feasible, or that the request would undermine the ability of other carriers to access unbundled elements and interconnect because they have the information to support such a claim.

297. We agree with Sprint and the Florida Commission, respectively, that in some cases incumbent LECs may be required to provision a particular element in different ways, depending on the service a requesting carrier seeks to offer; and, in other instances, where a new entrant needs a particular variant of an element to offer a service, that element should be treated as distinct from other variants of the element. This means, for example, that we will treat local loops with a particular type of conditioning[623] as distinct elements that are different from loops with other types of conditioning.[624] As discussed below, we agree with CompTel that incumbent LECs must provide the operational and support systems necessary for requesting carriers to purchase and combine network elements. Incumbent LECs use these systems to provide services to their own end users, and new entrants similarly must have access to them to provide telecommunications services using unbundled elements.[625] Finally, we agree with BellSouth that requesting carriers must specify to

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[623] For an explanation of what conditioning of a local loop means *see infra,* Section V.J.1.

[624] Florida Commission comments at 22.

[625] Incumbent LEC back-office systems are discussed in Section V.J.

incumbent LECs the network elements they seek before they can obtain such elements on an unbundled basis. We do not believe, however, that it will always be possible for new entrants to do this either before negotiations (or arbitrations) begin, or before they end, because new entrants will likely lack knowledge about the facilities and capabilities of a particular incumbent LEC's network. We further believe that incumbent LECs must work with new entrants to identify the elements the new entrants will need to offer a particular service in the manner the new entrants intend.

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VII. PRICING OF INTERCONNECTION AND UNBUNDLED ELEMENTS

A. Overview

618. The prices of interconnection and unbundled elements, along with prices of resale and transport and termination, are critical terms and conditions of any interconnection agreement. If carriers can agree on such prices voluntarily without government intervention, these agreements will be submitted directly to the states for approval under section 252. To the extent that the carriers, in voluntary negotiations, cannot determine the prices, state commissions will have to set those prices. The price levels set by state commissions will determine whether the 1996 Act is implemented in a manner that is *pro-competitor* and favors one party (whether favoring incumbents or entrants) or, as we believe Congress intended, *pro-competition*. As discussed more fully in Section II.D. above, it is therefore critical to implementing Congress's pro-competitive, de-regulatory national policy framework to establish

among the states a common, pro-competition understanding of the pricing standards for interconnection and unbundled elements, resale, and transport and termination. While such a common interpretation might eventually emerge through judicial review of state arbitration decisions, we believe that such a process could delay competition for years and require carriers to incur substantial legal costs.[1490] We therefore conclude that, to expedite the development of fair and efficient competition, we must set forth rules now establishing this common, pro-competition understanding of the 1996 Act's pricing standards. Accordingly, the rules we adopt today set forth the methodological principles for states to use in setting prices. This section addresses interconnection and unbundled elements, and subsequent sections address resale and transport and termination, respectively.

619. While every state should, to the maximum extent feasible, immediately apply the pricing methodology for interconnection and unbundled elements that we set forth below, we recognize that not every state will have the resources to implement this pricing methodology immediately in the arbitrations that will need to be decided this fall. Therefore, so that competition is not impaired in the interim, we establish default proxies that a state commission shall use to resolve arbitrations in the period before it applies the pricing methodology. In most cases, these default proxies for unbundled elements and interconnection are ceilings, and states may select lower prices. In one instance, the default proxy we establish is a price

[1490] For a discussion of our legal authority to adopt national pricing rules, *see supra*, Section II.D.

range. Once a state sets prices according to an economic cost study conducted pursuant to the cost-based pricing methodology we outline, the defaults cease to apply. In setting a rate pursuant to the cost-based pricing methodology, and especially when setting a rate above a default proxy ceiling or outside the default proxy range, the state must give full and fair effect to the economic costing methodology we set forth in this Order and must create a factual record, including the cost study, sufficient for purposes of review after notice and opportunity for the affected parties to participate.

620. In the following sections, we first set forth generally, based on the current record, a cost-based pricing methodology based on forward-looking economic costs, which we conclude is the approach for setting prices that best furthers the goals of the 1996 Act. In dynamic competitive markets, firms take action based not on embedded costs, but on the relationship between market-determined prices and forward-looking economic costs. If market prices exceed forward-looking economic costs, new competitors will enter the market. If their forward-looking economic costs exceed market prices, new competitors will not enter the market and existing competitors may decide to leave. Prices for unbundled elements under section 251 must be based on cost under the law, and that should be read as requiring that prices be based on forward-looking economic costs. New entrants should make their decisions whether to purchase unbundled elements or to build their own facilities based on the relative economic costs of these options. By contrast, because the cost of building an element is based on forward-looking economic costs, new entrants' invest-

ment decisions would be distorted if the price of unbundled elements were based on embedded costs. In arbitrations of interconnection arrangements, or in rulemakings the results of which will be applied in arbitrations, states must set prices for interconnection and unbundled network elements based on the forward-looking, long-run, incremental cost methodology we describe below. Using this methodology, states may not set prices lower than the forward-looking incremental costs directly attributable to provision of a given element. They may set prices to permit recovery of a reasonable share of forward-looking joint and common costs of network elements.[1491] In the aftermath of the arbitrations and relying on the state experience, we will continue to review this costing methodology, and issue additional guidance as necessary.

621. We reject various arguments raised by parties regarding the recovery of costs other than forward-looking economic costs in section 251(c)(2) and (c)(3) prices, including the possible recovery of: (1) embedded or accounting costs in excess of economic costs; (2) incumbent LECs' opportunity costs; (3) universal service subsidies; and (4) access charges. As discussed in Section VII.B.2.a. below, certain portions of access charges may continue to be collected for an interim period in addition to section 251(c)(3) prices.

622. With respect to prices developed under the forward-looking, cost-based pricing methodology, we conclude that incumbent LECs' rates for interconnec-

[1491] We define these and other forward-looking cost concepts *infra*, Section VII.B.2.a. We define what we consider to be a reasonable share of forward-looking joint and common costs *infra*, Section VII.B.2.a.

tion and unbundled elements must recover costs in a manner that reflects the way they are incurred. We adopt certain rules that states must follow in setting rates in arbitrations. These rules are designed to ensure the efficient cost-based rates required by the 1996 Act.

623. In the next section of the Order, we establish default proxies that states may elect to use prior to utilizing an economic study and developing prices using the cost-based pricing methodology. We recognize that certain states may find it difficult to apply an economic costing methodology within the statutory time frame for arbitrating interconnection disputes. We therefore set forth default proxies that will be relatively easy to apply on an interim basis to interconnection arrangements. We discuss with respect to particular unbundled elements the reasonable rate structure for those elements and the particular default proxies we are establishing for use pending our adoption of a generic forward-looking cost model. Finally, we discuss the following additional matters: generic forward-looking costing models that we intend to examine further by the first quarter of 1997 in order to determine whether any of those models, with modifications, could serve as better default proxies; the future adjustment of rates; the relationship of unbundled element prices to retail prices; and the meaning of the statutory prohibition against discrimination in sections 251 and 252.

624. Those states that have already established methodologies for setting interconnection and unbundled rates must review those methodologies against the rules we are adopting in this Order. To the extent a state's methodology is consistent with the approach we

set forth herein, the state may apply that methodology in any section 252 arbitration. However, if a state's methodology is not consistent with the rules we adopt today, the state must modify its approach. We invite any state uncertain about whether its approach complies with this Order to seek a declaratory ruling from the Commission.

B. Cost-Based Pricing Methodology

625. As discussed more fully in Section II.D. above, although the states have the crucial role of setting specific rates in arbitrations, the Commission must establish a set of national pricing principles in order to implement Congress's national policy framework. For the reasons set forth in the preceding section and as more fully explained below, we are adopting a cost-based methodology for states to follow in setting interconnection and unbundled element rates. In setting forth the cost-based pricing methodology for interconnection and access to unbundled elements, there are three basic sets of questions that must be addressed. First, does the 1996 Act require that the same standard apply to the pricing of interconnection provided pursuant to section 251(c)(2), and unbundled elements provided pursuant to section 251(c)(3)? Second, what is the appropriate methodology for establishing the price levels for interconnection and for each unbundled element, how should costs be defined, and is the price based on economic costs, embedded costs, or other costs? Third, what are the appropriate rate structures to be used to set prices designed to recover costs, including a reasonable profit? We address each of the questions in the following sections.

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2. Rate Levels

a. Pricing Based on Economic Cost

(1) Background

630. We observed in the NPRM that economists generally agree that prices based on forward-looking long-run incremental costs (LRIC) give appropriate signals to producers and consumers and ensure efficient entry and utilization of the telecommunications infrastructure.[1502] We noted, however, that there was a lack of general agreement on the specifics of methodology for deriving prices based on LRIC or total service long-run incremental cost (TSLRIC). We invited parties to comment on whether we should require the states to employ a LRIC-based pricing methodology and to explain with specificity the costing methodology they support.[1503] We recognized, however, that prices based on LRIC might not permit recovery of forward-looking costs if there were significant forward-looking joint and common costs among network elements.[1504] We sought comment on how, if rates are set above incremental cost, to deal with the problems inherent in allocating common costs and any other overheads.[1505] We observed that, by defining the unbundled elements at a sufficiently aggregated level, it may be possible to reduce the costs to be allocated as joint and common by identifying a substantial portion of costs as incremental to a particular element. To the extent that joint and common costs cannot be entirely eliminated, we sought

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[1502] NPRM at para. 124.

[1503] *Id*. at para. 126.

[1504] *Id*. at para. 129.

[1505] *Id*. at para. 130.

comment on various methodologies for assigning them, including the use of a fixed allocator or on the basis of inverse demand elasticity. We also sought comment on whether, regardless of the method of allocating common costs, we should limit rates to levels that do not exceed stand-alone costs.[1506] Finally, we invited parties to comment on whether a LRIC-based methodology would establish a price for interconnection and unbundled network elements that includes a reasonable profit and thus complies with section 252(d)(1).[1507]

631. A number of states already employ, or have plans to utilize, some form of LRIC or TSLRIC methodology in their approach to setting prices for unbundled network elements,[1508] with several states choosing LRIC or TSLRIC as a price floor.[1509] For instance, the

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[1506] *Id.* For a definition of stand-alone costs, *see* Section VII.B.2.a. *infra*.

[1507] 47 U.S.C. § 252(d)(1)(A)(i); NPRM at para. 129.

[1508] *See, e.g.*, California Commission comments at 29 (California has adopted TSLRIC as the standard for developing the costs of unbundled elements and in a rulemaking this summer will determine the unbundled network elements and what level of shared and common costs should be included in the price of each); Michigan Commission comments at 13 (1996 prices for loops to remain at levels established by the Michigan Commission in its original interconnection order or at TSLRIC); Texas Commission comments at 22 (Texas Commission has employed LRIC-based pricing methodologies for many years; SWBT and GTE required to file LRIC cost studies to be used in pricing not later than November 1, 1996).

[1509] *See, e.g.*, Colorado Commission comments at Attachment (Rules Prescribing Principles for Costing and Pricing of Regulated Services of Telecommunications Service Providers) 4 CCR 723-30, Rules 4-5; Hawaii Administrative Rules, Sections 6-80-32-34 (setting out a three-tiered pricing regime with TSLRIC set as floor for pricing of competitive services); Louisiana Commission comments at Attachment (Louisiana Public Service Commission "Regulations

Connecticut Commission adopted a TSLRIC methodology to measure the cost of service of SNET, its principal incumbent LEC.[1510] Arizona also requires incumbent LECs to conduct TSLRIC cost studies to establish the underlying cost of unbundled services and facilities.[1511] The Ohio Commission has adopted Long Run Service Incremental Cost ("LRSIC"), which is closely related to TSLRIC.[1512] The Missouri and Wyoming Commissions are among a number of state commissions that have not yet adopted a pricing methodology, but are considering LRIC or TSLRIC.[1513] Oklahoma law provides for submission of LRIC cost studies and studies identifying a contribution to common costs for interconnection of facilities and access to network elements to the Oklahoma Commission during an arbi-

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for Competition in the Local Telecommunications Market"), p.30; Washington Commission comments at 25, Appendix B (*Washington Utilities and Transportation Commission v. US West Communications*, Docket No. UT-950200 at 82 (Washington Commission, April 11, 1996)); Wisconsin Stat. Ann. Section 196.204 (requiring the price of each network service or function to exceed TSLRIC).

[1510] Connecticut Commission comments at 4.

[1511] Arizona Commission comments, Exhibit V (Arizona Administrative Code R14-2-1101 *et seq.*), p.10.

[1512] *See* Ohio Commission comments at 43-45.

[1513] *See*, *e.g.*, Missouri Commission comments at 11 (supports LRIC for costing; LRIC is defined in pending state legislation); Wyoming Commission comments at 26-27 (draft rules propose use of TSLRIC as a price floor, with prices to include a contribution to shared, common, and joint costs, and the sum of prices for unbundled elements not to exceed retail for bundled services; incumbent LECs shall impute the prices of unbundled elements into the price floors of each of their own services that utilize the network elements).

tration.[1514] A number of states have yet to choose a pricing methodology. For instance, the New York Commission sets prices on a case-by-case basis.[1515] Unbundled element prices also exist in several states pursuant to negotiated interconnection agreements that have either already been approved by state commissions or are under consideration.[1516]

632. Section 252(d)(1) requires, *inter alia*, that rates for interconnection and unbundled network elements be based on "cost (determined without reference to a rate-of-return or other rate-based proceeding)."[1517] We tentatively concluded in the NPRM that this language precludes states from setting rates by use of traditional cost-of service regulation, with its detailed examination of historical carrier investment and expenses.[1518] In-

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[1514] Oklahoma Commission comments at Appendix A (Corporation Commission Telephone Rules OAC 165:55-17-25), pp. 10-11.

[1515] *Competition, The State Experience* at 80 (compilation of written responses by state commission staffs to questions by FCC staff, compiled by NARUC) (March 8, 1996).

[1516] According to information in our possession, such agreements have been negotiated in, among other states, Alabama, Florida, Georgia, Kentucky, Illinois, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. Letter from W.W. Jordan, Executive Director–-Federal Regulatory, BellSouth, to William F. Caton, Acting Secretary, July 11, 1996 at Attachment (containing chart detailing agreements between BellSouth and new entrants in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee); "Interconnection Agreement Under Sections 251 and 252 of the Telecommunications Act of 1996, by and between, Ameritech Information Industry Services and MFS Intelenet of Illinois, Inc.," dated May 17, 1996 (filed July 25, 1996).

[1517] 47 U.S.C. § 252(d)(1)(B).

[1518] NPRM at para. 123.

stead, we indicated our belief that the statute contemplates the use of other forms of cost-based price regulation, such as the setting of prices based on forward-looking economic cost methodologies (such as LRIC) that do not involve the use of an embedded rate base. We sought comment on whether section 252(d)(1) forecloses consideration of historical or embedded costs or merely prohibits state commissions from conducting a traditional rate-of-return proceeding to establish prices for interconnection and unbundled network elements. Embedded costs are the costs that the incumbent LECs carry on their accounting books that reflect historical purchase prices, regulatory depreciation rates, system configurations, and operating procedures. We invited parties to comment on whether incumbent LECs should be permitted to recover some portion of their historical or embedded costs over TSLRIC.[1519]

633. In the NPRM, we noted that certain incumbent LECs had advocated that interconnection and access to unbundled element prices be based on the "efficient component pricing rule" (ECPR).[1520] Under this approach, an incumbent LEC that sells an essential input element, such as interconnection, to a competing network would set the price of that input element equal to "the input's direct per-unit incremental costs plus the opportunity cost to the input supplier of the sale of a

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[1519] *Id.* at para. 129.

[1520] *Id.* at para. 147. *See* William J. Baumol, *Some Subtle Issues in Railroad Deregulation*, 10 Int'l J. Trans. Econ. 341 (1983); William Baumol & Gregory Sidak, *Toward Competition in Local Telephony* (1994); William Baumol & Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 Yale J. on Reg. 171 (1994).

unit of input."[1521] We tentatively concluded in the NPRM that ECPR or equivalent methodologies are inconsistent with the section 252(d)(1) requirement that rates be based on "cost," and we proposed to preclude the states from using this methodology.[1522]

634. Section 254 requires the Commission and the Joint Board established thereunder to ensure that "[a]ll providers of telecommunications service . . . make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service. . . ." That section further provides that "[t]here should be specific, predictable, and sufficient Federal and State mechanisms to preserve and advance universal service."[1523] The Conference Committee also explained that these provisions require any such universal service support payment to be, to the extent possible, "explicit, rather than implicit as many support mechanisms are today."[1524] In the NPRM, we sought comment on whether "it would be consistent with sections 251(d)(1) and 254 for states to include any universal service costs or subsidies in the rates they set for interconnection, collocation, and unbundled network elements."[1525] In particular, we discussed the "play or pay" system adopted by the state of New York in which interconnectors that agree to serve all customers in

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1521 William Baumol & Gregory Sidak, *The Price of Inputs Sold to Competitors*, 11 Yale J. on Reg. 171, 178.

1522 NPRM at para. 148.

1523 47 U.S.C. § 254(b)(4) and (b)(5).

1524 Joint Explanatory Statement at 130-31. "In keeping with the conferees' intent that universal service support should be clearly identified, [section 254(e)] states that such support should be made explicit." *Id.* at 131; *see also* 47 U.S.C. § 254(e).

1525 NPRM at para. 145.

their self-defined service areas ("players") potentially pay a substantially lower interconnection rate than those that serve only selected customers ("payers") and are, therefore, liable to pay additional contribution charges.[1526] We noted that the statutory schedule for the completion of the universal service reform proceeding (15 months from the enactment of the 1996 Act) is different from that for this proceeding (6 months from the date of enactment of the 1996 Act). We asked whether the ability of states to take universal service support into account differs pending completion of the section 254 Joint Board proceeding or state universal service proceedings, pursuant to section 254(f), during any transition period that may be established in the section 254 proceeding or thereafter.[1527]

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(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 interconnection 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 poten-

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[1526] *Id.*

[1527] *Id.*

tial 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.

(a) Total Element Long Run Incremental Cost

674. *Definitions of Terms.* In light of the various possible definitions of a number of the critical economic terms used in this context, we begin by defining terms as we use them in this Order. Specifically, we provide definitions for the following terms: "incremental cost;" "economic cost;" "embedded or accounting cost;" "joint cost;" "common cost;" "long run incremental cost;" "total service long run incremental cost;" "total element long run incremental cost." In addition to defining

these terms, we explain the economic rationale behind the concepts.

675. Incremental costs are the additional costs (usually expressed as a cost per unit) that a firm will incur as a result of expanding the output of a good or service by producing an additional quantity of the good or service.[1680] Incremental costs are forward-looking in the sense that these costs are incurred as the output level changes by a given increment.[1681] The costs that are considered incremental will vary greatly depending on the size of the increment. For example, the incremental cost of carrying an additional call from a residence that is already connected to the network to its end office is virtually zero. The incremental cost of connecting a new residence to its end office, however, is the cost of the loop. Forward-looking incremental costs, plus a portion of the forward-looking joint and common costs, are sometimes referred to as "economic costs." Embedded or accounting costs are costs that firms incurred in the past for providing a good or service and are recorded as past operating expenses and depreciation. Due to changes in input prices and technologies, incremental costs may differ from embedded costs of that same increment. In competitive markets, the price of a good or service will tend towards its long-run incremental cost.

676. Certain types of costs arise from the production of multiple products or services. We use the term

[1680] *See* 1 Alfred Kahn *The Economics of Regulation* 66 (1971); William Baumol and Gregory Sidak, *Toward Competition in Local Telephony* 57 (1994).

[1681] William Baumol and Gregory Sidak, *Toward Competition in Local Telephony* 57 (1994).

"joint costs" to refer to costs incurred when two or more outputs are produced in fixed proportion by the same production process (*i.e.*, when one product is produced, a second product is generated by the same production process at no additional cost). The term "common costs" refers to costs that are incurred in connection with the production of multiple products or services, and remains unchanged as the relative proportion of those products or services varies (*e.g.*, the salaries of corporate managers). Such costs may be common to all services provided by the firm or common to only a subset of those services or elements. If a cost is common with respect to a subset of services or elements, for example, a firm avoids that cost only by not providing each and every service or element in the subset. For the purpose of our discussion, we refer to joint and common costs as simply common costs unless the distinction is relevant in a particular context.

677. The term "long run," in the context of "long run incremental cost," refers to a period long enough so that all of a firm's costs become variable or avoidable.[1682] The term "total service," in the context of TSLRIC, indicates that the relevant increment is the entire quantity of the service that a firm produces, rather than just a marginal increment over and above a given level of production. Depending on what services are the subject of a study, TSLRIC may be for a single service or a class of similar services. TSLRIC includes the incremental costs of dedicated facilities and operations

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[1682] *See, e.g.*, William Baumol, *Economic Theory and Operations Analysis* 290 (4th ed. 1977) ("The very long run is a period so long that all of the firm's present contracts will have run out, its present plant and equipment will have been worn out or rendered obsolete and will therefore need replacement, etc.").

that are used by only the service in question. TSLRIC also includes the incremental costs of shared facilities and operations that are used by that service as well as other services.

678. While we are adopting a version of the methodology commonly referred to as TSLRIC as the basis for pricing interconnection and unbundled elements, we are coining the term "total element long run incremental cost" (TELRIC) to describe our version of this methodology. The incumbent LEC offerings to be priced using this methodology generally will be "network elements," rather than "telecommunications services," as defined by the 1996 Act.[1683] More fundamentally, we believe that TELRIC-based pricing of discrete network elements or facilities, such as local loops and switching, is likely to be much more economically rational than TSLRIC-based pricing of conventional services, such as interstate access service and local residential or business exchange service. As discussed in greater detail below, separate telecommunications services are typically provided over shared network facilities, the costs of which may be joint or common with respect to some services. The costs of local loops and their associated line cards in local switches, for example, are common with respect to interstate access service and local exchange service, because once these facilities are installed to provide one service they are able to provide the other at no additional cost. By contrast, the network elements, as we have defined them,[1684] largely correspond to distinct network facilities. Therefore, the amount of joint and common costs

[1683] 47 U.S.C. §§ 3(29), 3(46).

[1684] *See supra* Section V.

that must be allocated among separate offerings is likely to be much smaller using a TELRIC methodology rather than a TSLRIC approach that measures the costs of conventional services. Because it is difficult for regulators to determine an economically-optimal allocation of any such joint and common costs, we believe that pricing elements, defined as facilities with associated features and functions, is more reliable from the standpoint of economic efficiency than pricing services that use shared network facilities.

679. *Description of TELRIC-Based Pricing Methodology*. Adopting a pricing methodology based on forward-looking, economic costs best replicates, to the extent possible, the conditions of a competitive market. In addition, a forward-looking cost methodology reduces the ability of an incumbent LEC to engage in anti-competitive behavior. Congress recognized in the 1996 Act that access to the incumbent LECs' bottleneck facilities is critical to making meaningful competition possible. As a result of the availability to competitors of the incumbent LEC's unbundled elements at their economic cost, consumers will be able to reap the benefits of the incumbent LECs' economies of scale and scope, as well as the benefits of competition. Because a pricing methodology based on forward-looking costs simulates the conditions in a competitive marketplace, it allows the requesting carrier to produce efficiently and to compete effectively, which should drive retail prices to their competitive levels. We believe that our adoption of a forward-looking cost-based pricing methodology should facilitate competition on a reasonable and efficient basis by all firms in the industry by establishing prices for interconnection and unbundled elements based on costs similar to those incurred by the

incumbents, which may be expected to reduce the regulatory burdens and economic impact of our decision for many parties, including both small entities seeking to enter the local exchange markets and small incumbent LECs.[1685]

680. We note that incumbent LECs have greater access to the cost information necessary to calculate the incremental cost of the unbundled elements of the network. Given this asymmetric access to cost data, we find that incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking cost that it seeks to recover in the prices of interconnection and unbundled network elements.

681. Some parties express concern that the information required to compute prices based on forward-looking costs is inherently so hypothetical as to be of little or no practical value.[1686] Based on the record before us, we disagree. A number of states, which ultimately will have to review forward-looking cost studies in carrying out their duties under section 252, either have already implemented forward-looking, incremental costing methodologies to set prices for interconnection and unbundled network elements or support the use of such an approach.[1687] While these

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[1685] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

[1686] *See, e.g.*, GVNW comments at 35; NYNEX comments at 54; USTA comments at 47-50.

[1687] *See, e.g.*, Louisiana Commission comments at 4; Texas Commission comments at 22; Washington Commission comments at 25; California Commission comments at 28-29; Colorado Commission comments at 35; Maryland Commission comments at 7-8; Oklahoma Commission comments at Attachment A (Oklahoma Corporation Commission Telephone Rules, OAC 165:55) pp. 10-11.

states have applied somewhat different definitions of, and approaches to setting prices developed on, an incremental cost methodology, the record demonstrates that such approaches are practical and implementable.

682. We conclude that, under a TELRIC methodology, incumbent LECs' prices for interconnection and unbundled network elements shall recover the forward-looking costs directly attributable to the specified element, as well as a reasonable allocation of forward-looking common costs. Per-unit costs shall be derived from total costs using reasonably accurate "fill factors" (estimates of the proportion of a facility that will be "filled" with network usage); that is, the per-unit costs associated with a particular element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual total usage of the element. Directly attributable forward-looking costs include the incremental costs of facilities and operations that are dedicated to the element. Such costs typically include the investment costs and expenses related to primary plant used to provide that element. Directly attributable forward-looking costs also include the incremental costs of shared facilities and operations. Those costs shall be attributed to specific elements to the greatest extent possible.[1688] For example, the costs

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The Wyoming and Florida commissions have indicated their support for such an approach. *See* Wyoming Commission comments at 27 (supporting uniform use of TSLRIC costing methods so long as details left to states); *see also* Florida Commission comments at 26 (TSLRIC may be appropriate to set cost standard for a price floor).

1688 *Compare Telephone Company-Cable Television Cross-Ownership Rules*, CC Docket No. 87-266, Memorandum Opinion of conduits shared by both transport and local loops, and the costs of central office facilities shared by both local switching and tandem switching, shall be attributed to specific elements in reasonable proportions. More broadly, certain shared costs that have conventionally been treated as common costs (or overheads) shall be attributed directly to the individual elements to the greatest extent possible. The forward-looking costs directly attributable to local loops, for example, shall include not only the cost of the installed copper wire and telephone poles but also the cost of payroll and other back office operations relating to the line technicians, in addition to other attributable costs.

683. Forward-looking cost methodologies, like TELRIC, are intended to consider the costs that a carrier would incur in the future. Thus, a question arises whether costs should be computed based on the least-cost, most efficient network configuration and technology currently available, or whether forward-looking cost should be computed based on incumbent LECs' existing network infrastructures, taking into account changes in depreciation and inflation. The record indicates three general approaches to this issue. Under the first approach, the forward-looking economic cost for interconnection and unbundled elements would be based on the most efficient network architecture, sizing, technology, and operating decisions that are operationally feasible and currently available to the industry. Prices based on the least-cost, most efficient network design and technology replicate conditions in a highly competitive marketplace by not basing prices on

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and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, 10 FCC Rcd 244, 345-46 (1994).

existing network design and investments unless they represent the least-cost systems available for purchase. This approach, however, may discourage facilities-based competition by new entrants because new entrants can use the incumbent LEC's existing network based on the cost of a hypothetical least-cost, most efficient network.

684. Under the second approach, the cost of inter-connection and unbundled network elements would be based on existing network design and technology that are currently in operation.[1689] Because this approach is not based on a hypothetical network in the short run, incumbent LECs could recover costs based on their existing operations, and prices for interconnection and unbundled elements that reflect inefficient or obsolete network design and technology. This is essentially an embedded cost methodology.

685. Under the third approach, prices for inter-connection and access to unbundled elements would be developed from a forward-looking economic cost meth-odology based on the most efficient technology deployed in the incumbent LEC's current wire center locations. This approach mitigates incumbent LECs' concerns that a forward-looking pricing methodology ignores existing network design, while basing prices on efficient, new technology that is compatible with the existing infrastructure. This benchmark of forward-looking cost and existing network design most closely represents the incremental costs that incumbents actually expect to incur in making network elements

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[1689] *See, e.g.*, BellSouth reply at 37; Roseville Tel. reply at 8; USTA reply at 18-19.

available to new entrants. Moreover, this approach encourages facilities-based competition to the extent that new entrants, by designing more efficient network configurations, are able to provide the service at a lower cost than the incumbent LEC. We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements.

686. We agree with USTA, Bell Atlantic, and BellSouth that, as a theoretical matter, the combination of significant sunk investment, declining technology costs, and competitive entry may increase the depreciation costs and cost of capital of incumbent LECs. We do not agree, however, that TSLRIC does not or cannot account for risks that an incumbent LEC incurs because it has sunk investments in facilities. On the contrary, properly designed depreciation schedules should account for expected declines in the value of capital goods. Both AT&T and MCI appear to agree with this proposition.[1690] For example, AT&T states, "[i]n order to estimate TSLRIC, one must perform a discounted cash flow analysis of the future costs

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[1690] *See* Letter from Leonard S. Sawicki, Director, FCC Affairs, MCI Telecommunications Corp. to William F. Caton, Acting Secretary, FCC, July 24, 1996 at Attachment (Depreciation and Capital Recovery Issues: A Response to Professor Hausman), pp.1-3; *see also* Letter from Richard N. Clarke, AT&T, to William F. Caton, Acting Secretary, FCC, July 19, 1996 at Attachment (Capital Recovery Issues in TSLRIC Pricing: Response to Professor Jerry A. Hausman).

associated with the decision to invest. . . . One-time costs associated with the acquisition of capital goods are amortized over the economic life of the assets using the user cost of capital . . ., which requires accounting for both expected capital good price changes and economic depreciation."[1691] Moreover, we are confident that parties to an arbitration with TELRIC studies can propose specific depreciation rate adjustments that reflect expected asset values over time.

687. As noted, we also agree that, as a matter of theory, an increase in risk due to entry into the market for local exchange service can increase a LEC's cost of capital. We believe that this increased risk can be partially mitigated, however, by offering term discounts, since long-term contracts can minimize the risk of stranded investment. In addition, growth in overall market demand can increase the potential of the incumbent LEC to use some of its displaced facilities for other purposes. Overall, we think that these factors can and should be captured in any LRIC model and therefore we do not agree that this requires a departure from the general principle of forward-looking cost-based pricing for network elements.

688. We are not persuaded by USTA's argument that forward looking methodologies fail to adjust the cost of capital to reflect the risks associated with irreversible investments and that they are "biased downward by a factor of three." First, USTA's argument unrealistically assumes that competitive entry

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[1691] Letter from Richard N. Clarke, AT&T, to William F. Caton, Acting Secretary, FCC, July 19, 1996 at Attachment (Capital Recovery Issues in TSLRIC Pricing: Response to Professor Jerry A. Hausman), p.8.

would be instantaneous. The more reasonable assumption of entry occurring over time will reduce the costs associated with sunk investment. Second, we find it unlikely that investment in communications equipment is entirely irreversible or that such equipment would become valueless once facilities-based competition begins. In a growing market, there most likely would be demand for at least some embedded telecommunications equipment, which would therefore retain its value. Third, contractual arrangements between the new entrant and the incumbent that specifically address USTA's concerns and protect incumbent's investments during transition can be established.

689. Finally we are not persuaded that the use by firms of hurdle rates that exceed the market cost of capital is convincing evidence that sunk investments significantly increase a firm's cost of capital. An alternative explanation for this phenomenon is that the process that firms use to choose among investment projects results in overestimates of their returns. Firms therefore use hurdle rates in excess of the market cost of capital to account for these overestimates.[1692]

[1692] *See* Richard Thaler, *The Winner's Curse*, 2 J. Econ. Perspectives 201 (1988); Keith Brown, *Note on the Apparent Bias of Net Revenue Estimates for Capital Investment Projects*, 29 J. Fin. 1215-16 (1974); Daniel Kahneman and Daniel Lovallo, *Timid Choices, Bold Forecasts*, 39 Management Science 17, 28 (1993). In addition, we note that Hausman's arguments that TSLRIC method underestimate the true cost of an element apply only to the capital expense associated with an element and not to the operating expense.

690. *Summary of TELRIC Methodology*. The following summarizes our conclusions regarding setting prices of interconnection and access to unbundled network elements based on the TELRIC methodology for such elements. The increment that forms the basis for a TELRIC study shall be the entire quantity of the network element provided. As we have previously stated, all costs associated with the providing the element shall be included in the incremental cost. Only forward-looking, incremental costs shall be included in a TELRIC study. Costs must be based on the incumbent LEC's existing wire center locations and most efficient technology available.

691. Any function necessary to produce a network element must have an associated cost. The study must explain with specificity why and how specific functions are necessary to provide network elements and how the associated costs were developed. Only those costs that are incurred in the provision of the network elements in the long run shall be directly attributable to those elements. Costs must be attributed on a cost-causative basis. Costs are causally-related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them. Thus, for example, the forward-looking costs of capital (debt and equity) needed to support investments required to produce a given element shall be included in the forward-looking direct cost of that element. Directly attributable costs shall include costs such as certain administrative expenses, which have traditionally been viewed as common costs, if these costs vary with the provision of network elements. Retailing costs, such as marketing or consumer billing

costs associated with retail services, are not attributable to the production of network elements that are offered to interconnecting carriers and must not be included in the forward-looking direct cost of an element.

692. In a TELRIC methodology, the "long run" used shall be a period long enough that all costs are treated as variable and avoidable.[1693] This "long run" approach ensures that rates recover not only the operating costs that vary in the short run, but also fixed investment costs that, while not variable in the short term, are necessary inputs directly attributable to providing the element.

693. States may review a TELRIC economic cost study in the context of a particular arbitration proceeding, or they may conduct such studies in a rulemaking and apply the results in various arbitrations involving incumbent LECs. In the latter case, states must replace any interim rates[1694] set in arbitration proceedings with the permanent rate resulting from the separate rulemaking. This permanent rate will take effect at or about the time of the conclusion of the separate rulemaking and will apply from that time forward.

694. *Forward-Looking Common Costs.* Certain common costs are incurred in the provision of network elements. As discussed above, some of these costs are common to only a subset of the elements or services provided by incumbent LECs. Such costs shall be

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[1693] *See* 1 Alfred E. Kahn *The Economics of Regulation: Principles and Institutions* 70-71 (1988).

[1694] *See infra,* Section VII.C., discussing default proxy price ceilings and ranges.

allocated to that subset, and should then be allocated among the individual elements or services in that subset, to the greatest possible extent. For example, shared maintenance facilities and vehicles should be allocated only to the elements that benefit from those facilities and vehicles. Common costs also include costs incurred by the firm's operations as a whole, that are common to all services and elements (*e.g.*, salaries of executives involved in overseeing all activities of the business), although for the purpose of pricing interconnection and access to unbundled elements, which are intermediate products offered to competing carriers, the relevant common costs do not include billing, marketing, and other costs attributable to the provision of retail service.[1695] Given these common costs, setting the price of each discrete network element based solely on the forward-looking incremental costs directly attributable to the production of individual elements will not recover the total forward-looking costs of operating the wholesale network.[1696] Because forward-looking common costs are consistent with our forward-looking, economic cost paradigm, a reasonable measure of such costs shall be included in the prices for interconnection and access to network elements.

695. The incumbent LECs generally argue that common costs are quite significant,[1697] while several other parties maintain that these amounts are mini-

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[1695] *See infra*, Section VIII.B., describing "avoided costs" in the resale context.

[1696] *See*, *e.g.*, AT&T comments at 61-66; Teleport comments at 47-48.

[1697] *See, e.g.*, PacTel reply at 27-28; *see also* Cincinnati Bell reply at 10; USTA comments at Attachment 1 (Affidavit of Jerry A. Hausman), p.4 n.1.

mal.[1698] Because the unbundled network elements correspond, to a great extent, to discrete network facilities, and have different operating characteristics, we expect that common costs should be smaller than the common costs associated with the long-run incremental cost of a service. We expect that many facility costs that may be common with respect to the individual services provided by the facilities can be directly attributed to the facilities when offered as unbundled network elements. Moreover, defining the network elements at a relatively high level of aggregation, as we have done,[1699] should also reduce the magnitude of the common costs. A properly conducted TELRIC methodology will attribute costs to specific elements to the greatest possible extent, which will reduce the common costs. Nevertheless, there will remain some common costs that must be allocated among network elements and interconnection services. For example, at the subelement level of study (*e.g.*, identifying the respective costs of 2-wire loops, 4-wire loops, ISDN loops, and so on), common costs may be a significant proportion of all the costs that must be recovered from sub-elements. Given the likely asymmetry of information regarding network costs, we conclude that, in the arbitration process, incumbent LECs shall have the burden to prove the specific nature and magnitude of these forward-looking common costs.

696. We conclude that forward-looking common costs shall be allocated among elements and services in a reasonable manner, consistent with the pro-competi-

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[1698] *See, e.g.*, Competition Policy Institute comments at 19; MCI comments at 66; Texas Public Utility Counsel comments at 24.

[1699] *See supra*, Section V., discussing unbundling requirements.

tive goals of the 1996 Act. One reasonable allocation method would be to allocate common costs using a fixed allocator, such as a percentage markup over the directly attributable forward-looking costs. We conclude that a second reasonable allocation method would allocate only a relatively small share of common costs to certain critical network elements, such as the local loop and collocation, that are most difficult for entrants to replicate promptly (*i.e.*, bottleneck facilities). Allocation of common costs on this basis ensures that the prices of network elements that are least likely to be subject to competition are not artificially inflated by a large allocation of common costs. On the other hand, certain other allocation methods would not be reasonable. For example, we conclude that an allocation methodology that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services may not be used.[1700] We conclude that such an allocation could unreasonably limit the extent of entry into local exchange markets by allocating more costs to, and thus raising the prices of, the most critical bottleneck inputs, the demand for which tends to be relatively inelastic. Such an allocation of these costs would undermine the pro-competitive objectives of the 1996 Act.

[1700] *See* Frank P. Ramsey, *A Contribution to the Theory of Taxation*, 37 Econ. J. 47 (1927); *see generally* Kenneth E. Train, *Optimal Regulation: The Economic Theory of Natural Monopoly* 115-40 (1992) (discussing efficiency properties of Ramsey prices); Bridger M. Mitchell & Ingo Vogelsang, *Telecommunications Pricing: Theory and Practice* 43-61 (1991). The sensitivity of demand is measured by the elasticity of demand, which is defined as the percentage change in the quantity of a service demanded for a one per cent change in price.

697. We believe that our treatment of forward-looking common costs will minimize regulatory burdens and economic impact for all parties involved in arbitration of agreements for interconnection and access to unbundled elements, and will advance the 1996 Act's pro-competitive objectives for local exchange and exchange access markets.[1701] In our decisionmaking, we have considered the economic impact of our rules in this section on small incumbent LECs. For example, although opposed to the use of a forward-looking, economic cost methodology, small incumbent LECs favor the recovery of joint and common costs in the event the Commission adopts forward-looking cost methodology. We are adopting such an approach. Moreover, the cost-based pricing methodology that we are adopting is designed to permit incumbent LECs to recover their economic costs of providing interconnection and unbundled elements, which may minimize the economic impact of our decisions on incumbent LECs, including small incumbent LECs. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act.[1702]

698. We further conclude that, for the aggregate of all unbundled network elements, incumbent LECs must be given a reasonable opportunity to recover their forward-looking common costs attributable to operating the wholesale network. In no instance should prices

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[1701] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

[1702] 47 U.S.C. § 251(f).

exceed the stand-alone cost for a specific element, and in most cases they should be below stand-alone costs. Stand-alone costs are defined as the forward-looking cost that an efficient entrant would incur in providing a given element or any combination of elements. No price higher than stand-alone cost could be sustained in a market from which entry barriers were completely absent. Where there are few common costs, there is likely to be only a minimal difference between the forward- looking costs that are directly attributable to the particular element, which excludes these costs, and stand-alone cost, which includes all of them. Network elements should not, however, be priced at levels that would enable the incumbent LEC to recover the same common costs multiple times from different elements. Any multiple recovery would be unreasonable and thus in violation of the statutory standard. Further, we note that the sum of the direct costs and the forward-looking common costs of all elements will likely differ from the incumbent LEC's historical, fully distributed costs.

699. *Reasonable Return on Investment and "Profit."* Section 252(d)(1) states that rates for interconnection and access to unbundled elements "may include a reasonable profit."[1703] We find that the TELRIC pricing methodology we are adopting provides for such a reasonable profit and thus no additional profit is justified under the statutory language. We note there are two types of profit. First, in plain English, profit is defined as "the excess of returns over expenditure in a transaction or a series of transactions."[1704] This is also known as a "normal" profit, which is the total revenue

[1703] 47 U.S.C. § 252(d)(1).

[1704] *Webster's New Collegiate Dictionary* 931 (10th ed. 1994).

required to cover all of the costs of a firm, including its opportunity costs.[1705] Second, there is "economic" profit, which is any return in excess of normal profit.[1706] Thus, for example, if the normal return in an industry is 10 percent and a firm earns a return of 14 percent, the economic profit for that firm is 4 percent. Economic is also referred to as "supranormal" profit. We conclude that the definition of "normal" profit is embodied in "reasonable profit" under Section 252(d)(1).

700. The concept of normal profit is embodied in forward-looking costs because the forward-looking cost of capital, *i.e.*, the cost of obtaining debt and equity financing, is one of the forward-looking costs of providing the network elements. This forward-looking cost of capital is equal to a normal profit. We conclude that allowing greater than normal profits would not be "reasonable" under sections 251(c) and 252(d)(1).[1707]

[1705] *See* David W. Pearce, *The MIT Dictionary of Modern Economics* (1994) at 310.

[1706] *Id.* at 415.

[1707] We note that our interpretation is consistent with existing Supreme Court precedent concerning what constitutes a reasonable rate of return for a regulated public utility. For example, in *Bluefield Water Works*, the Court stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.

Thus, contrary to the arguments put forth by several incumbent LECs, we find that adding an additional measure of profit to the risk-adjusted cost of capital[1708] in setting the prices for interconnection and access to unbundled elements would violate the requirements of sections 251(c) and 252(d)(1) of the 1996 Act.

701. Possible accounting losses from the sale of interconnection and unbundled network elements using a reasonable forward-looking cost-based methodology do not necessarily indicate that incumbent LECs are being denied a "reasonable profit" under the statute. The use of a forward-looking, economic, cost-based pricing methodology, including a reasonable allocation of legitimate joint and common costs, will permit

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Bluefield Water Works & Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679, 692-93 (1923). Similarly, in *FPC v. Hope Natural Gas*, the Court stated:

> . . . it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . . By that standard the return to the equity owner should be commensurate with risks on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1994) (*Hope Natural Gas*). *Cf.*, Charles F. Phillips, Jr., *The Economics of Regulation* 260 (Rev. ed. 1965) (". . . a regulated company must be afforded the opportunity not only of assuring its financial integrity so that it can maintain its credit standing and attract additional capital as needed, but also for earnings comparable to those of other companies having corresponding risks.")

[1708] *See supra*, this Section, for a discussion of risk- adjusted cost of capital.

incumbent LECs the opportunity to earn a reasonable return on their investment in network elements. Finally, contrary to PacTel's argument, and as discussed below in detail, we conclude that our forward-looking cost-based pricing methodology is consistent with the Fifth Amendment and is not confiscatory.

702. Based on the current record, we conclude that the currently authorized rate of return at the federal or state level is a reasonable starting point for TELRIC calculations, and incumbent LECs bear the burden of demonstrating with specificity that the business risks that they face in providing unbundled network elements and interconnection services would justify a different risk-adjusted cost of capital or depreciation rate. These elements generally are bottleneck, monopoly services that do not now face significant competition. We recognize that incumbent LECs are likely to face increased risks given the overall increases in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current marketplace cost of equity and debt.[1709] On the basis of the current record, we decline to engage in a time-consuming examination to determine a new rate of return, which may well require a detailed proceeding. States may adjust the cost of capital if a party demonstrates to a state commission that either a higher or lower level of cost of capital is warranted, without

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[1709] *See Common Carrier Bureau Sets Pleading Schedule in Preliminary Rate of Return Inquiry*, Public Notice, 11 FCC Rcd 3651 (Com. Car. Bur. 1996).

that commission conducting a "rate-of-return or other rate based proceeding."[1710] We note that the risk-adjusted cost of capital need not be uniform for all elements. We intend to re-examine the issue of the appropriate risk-adjusted cost of capital on an ongoing basis, particularly in light of the state commissions' experiences in addressing this issue in specific situations.

703. We disagree with the conclusion that, when there are mostly sunk costs, forward-looking economic costs should not be the basis for pricing interconnection elements. The TELRIC of an element has three components, the operating expenses, the depreciation cost,[1711] and the appropriate risk- adjusted cost of capital. We conclude that an appropriate calculation of TELRIC will include a depreciation rate that reflects the true changes in economic value of an asset and a cost of capital that appropriately reflects the risks incurred by an investor. Thus, even in the presence of sunk costs, TELRIC-based prices are an appropriate pricing methodology.

(b) Cost Measures Not Included in Forward-Looking Cost Methodology

704. *Embedded Costs*. We read section 252(d)(1)(A)(i) to prohibit states from conducting traditional rate-of-return or other rate-based proceedings to determine rates for interconnection and

[1710] 47 U.S.C. § 252(d)(1)(A)(i).

[1711] Depreciation is the method of recognizing as an expense the cost of a capital investment. Properly calculated economic depreciation is a periodic reduction in the book value of an asset that makes the book value equal to its economic or market value.

access to unbundled network elements. We find that the parenthetical, "(determined without reference to a rate-of-return or other rate-based proceeding),"[1712] does not further define the type of costs that may be considered, but rather specifies a type of proceeding that may not be employed to determine the cost of interconnection and unbundled network elements. The legislative history demonstrates that Congress was eager to set in motion expeditiously the development of local competition and intended to avoid imposing the costs and administrative burdens associated with a traditional rate case. Prior to the joint conference, the Senate version of the 1996 Act contained the parenthetical language.[1713] In addition, the Senate version of the 1996 Act eliminated rate-of-return regulation,[1714] as did the House version.[1715] Conferees removed the provisions eliminating rate-of-return regulation, but retained the parenthetical.

[1712] 47 U.S.C. § 252(d)(1)(A)(i).

[1713] S. 652, 104th Cong., 1st Sess. § 251(d)(6)(A) (1995) ("the charge (A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the unbundled element . . . .").

[1714] *Id.* at § 301(a)(3) ("Rate of Return Regulation Eliminated—(A) In instituting the price flexibility required under paragraph (1) the Commission and the States shall establish alternative forms of regulation for Tier 1 telecommunications carriers that do not include regulation of the rate of return earned by such carrier . . . .").

[1715] H.R. 1555, 104th Cong., 1st Sess. § 248(b) (1995) ("Abolition of Rate-of-Return Regulation—Notwithstanding any other provision of law, to the extent that a carrier has complied with sections 242 and 244 of this part, the Commission, with respect to rates for interstate or foreign communications, and State commissions, with respect to rates for intrastate communications, shall not require rate-of-return regulation.").

705. Section 252(d)(1)(A)(i) does not specify whether historical or embedded costs should be considered or whether only forward-looking costs should be considered in setting arbitrated rates. We are not persuaded by incumbent LEC arguments that prices for interconnection and unbundled network elements must or should include any difference between the embedded costs they have incurred to provide those elements and their current economic costs. Neither a methodology that establishes the prices for interconnection and access to network elements directly on the costs reflected in the regulated books of account, nor a price based on forward looking costs plus an additional amount reflecting embedded costs, would be consistent with the approach we are adopting. The substantial weight of economic commentary in the record suggests that an "embedded cost"-based pricing methodology would be pro-competitor—in this case the incumbent LEC—rather than pro-competition.[1716] We therefore decline to adopt embedded costs as the appropriate basis of setting prices for interconnection and access to unbundled elements. Rather, we reiterate that the prices for the interconnection and network elements critical to the development of a competitive local exchange should be based on the pro-competition, forward-looking, economic costs of those elements,

[1716] *See, e.g.*, Ad Hoc Telecommunications Users' Committee reply at Appendix A (Interconnection Pricing Standards for Monopoly Rate Elements in a Potentially Competitive Local Telecommunications Market), p.4; ALTS comments at Attachment B (Competitive Pricing of Interconnection, Unbundled Elements, and Collocation), pp.28-29; AT&T reply at Appendix B (Reply Affidavit of William J. Baumol, Janusz A. Ordover, and Robert D. Willig), pp.3-5; Competition Policy Institute comments at 18-19; DJ comments at 30-31.

which may be higher or lower than historical embedded costs. Such pricing policies will best ensure the efficient investment decisions and competitive entry contemplated by the 1996 Act, which should minimize the regulatory burdens and economic impact of our decisions on small entities.[1717]

706. Incumbent LECs contend generally that, in order to ensure they will recover their total investment costs and earn a profit, they must recover embedded costs. These costs, they argue, were incurred under federal and regulatory oversight and therefore should be recoverable.[1718] We are not convinced by the incumbent LECs' principal arguments for recognizing embedded cost in setting section 251 pricing rules. Even if the incumbent LECs' contention is correct, increasing the rates for interconnection and unbundled elements offered to competitors would interfere with the development of efficient competition, and is not the proper remedy for any past under-depreciation. Moreover, contrary to assertions by some incumbent LECs, regulation does not and should not guarantee full recovery of their embedded costs. Such a guarantee would exceed the assurances that we or the states have provided in the past.[1719] We have considered the economic impact of precluding recovery of small incumbent LECs' embedded costs.[1720] We do not believe that basing the prices of interconnection and unbundled ele-

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[1717] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

[1718] *See, e.g.,* Ameritech reply at 31; BellSouth comments at 57; Lincoln Tel. comments at 16-17.

[1719] *See In the Matter of the Applications of Pacific Bell*, Order and Authorization, 10 FCC Rcd 12448, 12502-12503 (1995).

[1720] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

ments on an incumbent LEC's embedded costs would advance the pro-competitive goals of the statute. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act.[1721]

707. We acknowledge that some incumbent LECs may have incurred certain embedded costs reasonably before the passage of the 1996 Act, based on different regulatory regimes. Some incumbent LECs may assert that they have made certain historical investments required by regulators that they have been denied a reasonable opportunity to recover in the past and that the incumbent LECs may no longer have a reasonable opportunity to recover in the new environment of the 1996 Act. The record before us, however, does not support the conclusion that significant residual embedded costs will necessarily result from the availability of network elements at economic costs. To the extent that any such residual consists of costs of meeting universal service obligations, the recovery of such costs can and should be considered in our ongoing universal service proceeding.[1722] To the extent a significant residual exists within the interstate jurisdiction that does not fall within the ambit of section 254, we intend that to address that issue in our upcoming proceeding on access reform.

[1721] 47 U.S.C. § 251(f).

[1722] *See Universal Service* NPRM at para. 32.

708. *Opportunity Cost—Efficient Component Pricing Rule.* A number of incumbent LECs advocate using the "efficient component pricing rule" (ECPR) to set the prices that incumbent LECs charge new entrants for inputs required to produce the same retail services the incumbent produces. Under the ECPR, the price of an input should be equal to the incremental cost of the input plus the opportunity cost that the incumbent carrier incurs when the new entrant provides the services instead of the incumbent. The opportunity cost, which is computed as revenues less all incremental costs, represents both profit and contribution to common costs of the incumbent, given the existing retail prices of the services being sold.

709. We conclude that ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based. Moreover, the ECPR does not provide any mechanism for moving prices towards competitive levels; it simply takes prices as given. The record indicates that both incumbents and new entrants agree that retail prices are not based on costs. Incumbents generally argue that local residential retail prices are below costs while new entrants contend that they exceed competitive levels.[1723] In either case, application of ECPR would result in input prices that would be either higher or lower than those which would be generated in a competitive market and would not lead to efficient retail pricing.

[1723] *See, e.g.,* Ameritech comments at 62.

710. In markets where retail prices exceed competitive levels, entry would take place if network element prices were set at efficient competitive levels. The ECPR, however, will serve to discourage competition in these very markets because it relies on the prevailing retail price in setting the price which new entrants pay the incumbent for inputs. While ECPR establishes conditions for efficient entry given existing retail prices, as its advocates contend, the ECPR provides no mechanism that will force retail prices to their competitive levels. We do not believe that Congress envisioned a pricing methodology for interconnection and network elelments that would insulate incumbent LECs' retail prices from competition. Instead, Congress specifically determined that input prices should be based on costs because this would foster competition in the retail market. Therefore, we reject the use of ECPR for establishing prices for interconnection and unbundled elements.

711. As discussed above, the record in this docket shows that end user prices are not cost-based. *In Open Video Systems*, in contrast, we did not find that there would be a problem with the determination of end user prices.[1724] We concluded that "[u]se of [an ECPR] approach is appropriate in circumstances where the pricing is applicable [sic] to a new market entrant (the open video system operator) that will face competition from an existing incumbent provider (the incumbent cable operator), as opposed to circumstances where the

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[1724] *Implementation of Section 302 of the Telecommunications Act of 1996—Open Video Systems*, CS Docket No. 96-46, Second Report and Order, FCC 96-249 (rel. June 3, 1996) (*Open Video Systems*).

pricing is used to establish a rate for an essential input service that is charged to a competing new entrant by an incumbent provider."[1725] In addition, in *Open Video Systems*, we concluded that the ECPR is appropriate because it encourages entry for open video system operators and also enhances the availability of carriage for unaffiliated programmers.[1726] The ECPR generally protects the provider's profits and provides opportunities for third parties to use the provider's inputs. The ECPR does not provide a mechanism to drive retail prices to competitive levels, however. In *Open Video Systems*, we wanted to encourage entry by open video system providers and to encourage them to have incentives to open their systems to unaffiliated programmers. Here, our goal is to ensure that competition between providers, including third party providers using interconnection and unbundled elements, will drive prices toward competitive levels and thus use of the ECPR is inappropriate.

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(c) Fifth Amendment Issues

733. We conclude that our decision that prices for incumbent LECs' unbundled elements and interconnection offerings be based on forward-looking economic cost does not violate the incumbent LECs' rights under the Fifth Amendment of the Constitution. The Supreme Court has recognized that public utilities owned and operated by private investors, even though their assets are employed in the public interest to provide consumers with service, may assert their rights under

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[1725] *Id.* at 127.

[1726] *Id.*

the Takings Clause of the Fifth Amendment.[1746] In applying the Takings Clause to rate setting for public utilities, the Court has stated that "[t]he guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory."[1747]

734. The Supreme Court has held that the determination of whether a rate is confiscatory depends on whether that rate is just and reasonable, and not on what methodology is used.[1748] In *Federal Power Comm'n v. Hope Natural Gas Co.*, the Court upheld the Federal Power Commission's order that required the company to make a large reduction in wholesale gas rates. The commission based its determination of a reasonable rate of return on a plant valuation determined by using a historical cost methodology that was only half as large as the company's own valuation based on forward-looking reproduction costs. In its decision, the Court set forth the governing legal standard for

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[1746] The Fifth Amendment provides that, "private property [shall not] be taken for public use, without just compensation." U.S. Const. amend. V. *See Duquesne Light Co. v. Barasch,* 488 U.S. 299, 307 (1989) (*Duquesne*).

[1747] *Duquesne,* 488 U.S. at 307 (*citing Covington & Lexington Turnpike Road Co. v. Sandford*, 164 U.S. 578, 597 (1896)).

[1748] *Hope Natural Gas*, 320 U.S. at 602-603; *see also Duquesne*; *In re Permian Basin Area Rate Cases*, 390 U.S. 747 (1968); *Federal Power Commission v. Memphis Light, Gas & Water Division*, 411 U.S. 458 (1973); *Jersey Central Power & Light v. FERC,* 810 F.2d 1168 (D.C. Cir. 1987).

determining whether a rate is constitutional:

> Under the statutory standard of "just and reasonable" it is the result reached not the method employed that is controlling. It is not the theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important.[1749]

735. The Court went on to explain that, in determining whether a rate is reasonable, the regulatory body must balance the interests of both the investor and consumer.[1750] "From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business . . . . [T]he return on the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."[1751]

736. Under sections 251(c)(2) and (3) of the 1996 Act, incumbent LECs must establish rates for interconnection and unbundled elements that are just and reasonable.[1752] In adopting the rules that govern those rates, under *Hope Natural Gas* we must consider whether the end result of incumbent LEC rates is just and reasonable. Incumbent LECs argue that establish-

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[1749] *Hope Natural Gas*, 320 U.S. at 602.

[1750] *Id.*

[1751] *Id.* at 603.

[1752] 47 U.S.C. § 251(c)(2) and (3).

ing a rate structure that does not permit recovery of historical or embedded costs is confiscatory. We disagree. As stated above, the Court has consistently held since *Hope Natural Gas* that it is the end result, not the method used to achieve that result, that is the issue to be addressed.[1753] Indeed, the Court has found that the "fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid."[1754] Moreover, the Court has upheld as reasonable changes in ratemaking methodology when the change resulted in the exclusion of historical costs prudently incurred.[1755] Thus, the mere fact that an incumbent LEC may not be able to set rates that will allow it to recover a particular cost incurred in establishing its regulated network does not, in and of itself, result in confiscation.

737. Moreover, *Hope Natural Gas* requires only that the end result of our overall regulatory framework provides LECs a reasonable opportunity to recover a return on their investment. In other words, incumbent LECs' overall rates must be considered, including the revenues for other services under our jurisdiction.[1756]

738. In this proceeding, we are establishing pricing rules that should produce rates for monopoly elements and services that approximate what the incumbent

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[1753] *See, e.g., Duquesne,* 488 U.S. at 310; *Hope Natural Gas,* 320 U.S. at 602.

[1754] *Hope Natural Gas,* 320 U.S. at 601.

[1755] *Duquesne,* 488 U.S. at 301-302.

[1756] However, we may not consider incumbent LECs' revenue derived from services not under our jurisdiction. *Smith v. Ill. Bell,* 282 U.S. 133 (1930).

LECs would be able to charge if there were a competitive market for such offerings. We believe that a forward-looking economic cost methodology enables incumbent LECs to recover a fair return on their investment, *i.e.*, just and reasonable rates. The record does not compel a contrary conclusion. No incumbent LEC has provided persuasive evidence that prices based on a forward- looking economic cost methodology would have a significant impact on its "financial integrity." We further note that at least one federal appellate court has held incremental cost-based pricing constitutional.[1757]

739. Incumbent LECs may seek relief from the Commission's pricing methodology if they provide specific information to show that the pricing methodology, as applied to them, will result in confiscatory rates. We also do not completely foreclose the possibility that incumbent LECs will be afforded an opportunity to recover, to some extent, their embedded costs through a mechanism separate from rates for interconnection and unbundled network elements. As stated above, we intend to explore this issue in detail in our upcoming access reform proceeding.

740. GTE argues that the proper standard to review our ratemaking methodology is the just compensation standard generally reserved for takings of property. This is in effect a contention that the 1996 Act's physical collocation and unbundled network facility requirements constitute physical occupation of their property that should be deemed a taking and that must

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[1757] *Metropolitan Transp. Auth. v. Interstate Commerce Commission*, 792 F.2d 287, 297 (2d Cir.), *cert. denied*, 479 U.S. 1017 (1986).

be subject to "just compensation." Assuming for the sake of argument that the physical collocation and unbundled facilities requirements do result in a taking, we nevertheless find that the ratemaking methodology we have adopted satisfies the just compensation standard. Just compensation is normally measured by the fair market value of the property subject to the taking.[1758] Just compensation is not, however, intended to permit recovery of monopoly rents.[1759] The just and reasonable rate standard of TELRIC plus a reasonable allocation of the joint and common costs of providing network elements that we are adopting attempts to replicate, with respect to bottleneck monopoly elements, the rates that would be charged in a competitive market,[1760] and, we believe, is entirely consistent with the just compensation standard. Indeed, a similar rate methodology based on incremental costs has been found to satisfy the just compensation requirement.[1761] For these reasons, we conclude that, even if the 1996 Act's physical collocation and unbundled network facility requirements constitute a taking, a forward-looking economic cost methodology satisfies the Constitution's just compensation standard.

1758 *See, e.g., United States v. Miller*, 317 U.S. 369, 374 (1943) (holding that just compensation can readily be set by ascertaining the property's fair market value, *i.e.*, "what a willing buyer would pay in cash to a willing seller").

1759 *See, e.g., Lord Mfg. Co. v. United States*, 84 F. Supp. 748, 755-56 (Ct. Cl. 1949), *citing United States v. Cors*, 337 U.S. 325, 334 (1949).

1760 *Compare Policy and Rules Concerning Rates for Dominant Carriers*, Further Notice of Proposed Rulemaking, CC Docket No. 87-313, 3 FCC Rcd 3195, 3200-01 (1988).

1761 *Metropolitan Transp. Auth. v. Interstate Commerce Commission*, 792 F.2d at 297.

3. Rate Structure Rules

a. General Rate Structure Rules

(1) Background

741. In addition to applying our economic pricing methodology to determine the rate level of a specific element or interconnection, the state must also determine the appropriate rate structure. We discuss in this section general principles for analyzing rate structure questions, such as in what circumstances charges should be flat-rated or usage sensitive and in what circumstances they should be recurring or non-recurring. These rate structure rules will apply as well if a state sets rates based on default proxies discussed in Section VII.C.2 below, where we also discuss the appropriate rate structure for specific network elements. Network providers incur costs in providing two broad categories of facilities, dedicated and shared. Dedicated facilities are those that are used by a single party—either an end user or an interconnecting network. Shared facilities are those used by multiple parties. In the NPRM, we proposed that costs should be recovered in a manner that reflects the way they are incurred.[1762] We also sought comment on whether we should require states to provide for recovery of dedicated facility costs on a flat-rated basis, or at a minimum, require LECs to offer a flat-rate option.

* * * * *

(3) Discussion

743. We conclude, as a general rule, that incumbent LECs' rates for interconnection and unbundled ele-

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[1762] NPRM at para. 150.

ments must recover costs in a manner that reflects the way they are incurred. This will conform to the 1996 Act's requirement that rates be cost-based, ensure requesting carriers have the right incentives to construct and use public network facilities efficiently, and prevent incumbent LECs from inefficiently raising costs in order to deter entry. We note that this conclusion should facilitate competition on a reasonable and efficient basis by all firms in the industry by establishing prices for interconnection and unbundled elements based on costs similar to those incurred by the incumbents, which may be expected to reduce the regulatory burdens and economic impact of our decision for many parties, including both small entities seeking to enter the local exchange markets and small incumbent LECs.[1768] We also adopt some more specific rules that follow from this general rule.

744. First, we require that the charges for dedicated facilities be flat-rated, including, but not limited to, charges for unbundled loops, dedicated transport, interconnection, and collocation. These charges should be assessed for fixed periods, such as a month. We are requiring flat-rated charges for dedicated facilities. Usage-based charges for dedicated facilities would give purchasers of access to network elements an uneconomic incentive to reduce their traffic volumes. Moreover, purchasers of access to network elements with low volumes of traffic would pay below-cost prices, and therefore have an incentive to add lines that they would not add if they had to pay the full cost. As stated in the NPRM, a flat-rated charge is most efficient for dedicated facilities, because it ensures that a customer will

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[1768] *See* Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

pay the full cost of the facility, and no more. It ensures that an entrant will, for example, purchase the exclusive right to use additional loops only if the entrant believes that the benefits of the additional loops will exceed its costs. It also ensures that the entrant will not face an additional (and non-cost-based) usage charge.

745. Second, if we apply our general rule that costs should be recovered in a manner that reflects the way they are incurred, then recurring costs must be recovered through recurring charges, rather than through a nonrecurring charge. A recurring cost is one incurred periodically over time. A LEC may not recover recurring costs such as income taxes, maintenance expenses, and administrative expenses through a nonrecurring charge because these are costs that are incurred in connection with the asset over time. For example, we determine that maintenance expenses relating to the local loop must be recovered through the recurring loop charge, rather than through a nonrecurring charge imposed upon the entrant.

746. We find that recovering a recurring cost through a nonrecurring charge would be unjust and unreasonable because it is unlikely that incumbent LECs will be able to calculate properly the present value of recurring costs. To calculate properly the present value of recurring costs, an incumbent LEC would have to project accurately the duration, level, and frequency of the recurring costs and estimate properly its overall cost of capital. We find that, in practice, the present value of the recurring costs cannot be calculated with sufficient accuracy to warrant upfront recovery of these costs because incumbent LECs lack sufficient experience with the provision of

interconnection and unbundled rate elements. Without sufficient experience, incumbent LECs are unable to project the length of time that an average entrant would interconnect with, or take an unbundled element from, the incumbent LEC, or how expenses associated with interconnection and unbundled rate elements would change over time. In contrast, a recurring charge for a recurring cost would ensure that a customer is only charged for the costs the entrant incurs while that entrant is taking interconnection service or unbundled rate elements from the incumbent LEC. Moreover, when costs associated with the interconnection and particular unbundled rate elements change, the incumbent LEC can make appropriate adjustments to the charges at the time such cost changes occur.

747. Accordingly, we find that imposing nonrecurring charges for recurring costs could pose a barrier to entry because these charges may be excessive, reflecting costs that may (1) not actually occur; (2) be incurred later than predicted; (3) not be incurred for as long as predicted; (4) be incurred at a level that is lower than predicted; (5) be incurred less frequently than predicted; and (6) be discounted to the present using a cost of capital that is too low.

748. Notwithstanding the foregoing, where recurring costs are *de minimis*, we will permit incumbent LECs to recover such costs through nonrecurring charges. We find that recurring costs are *de minimis* where the costs of administering the recurring charge would be excessive in relation to the amount of the recurring costs.

749. Third, states may, but need not, require incumbent LECs in an arbitrated agreement to recover

nonrecurring costs, costs that are incurred only once, through recurring charges over a reasonable period of time. The recovery of such nonrecurring costs through recurring charges is a common practice for telecommunications services. Construction of an interconnector's physical collocation cage is an example of a nonrecurring cost. We find that states may, where reasonable, require an incumbent LEC to recover construction costs for an interconnector's physical collocation cage as a recurring charge over a reasonable period of time in lieu of a nonrecurring charge. This arrangement would decrease the size of the entrant's initial capital outlay, thereby reducing financial barriers to entry. At the same time, any such reasonable arrangement would ensure that incumbent LECs are fully compensated for their nonrecurring costs.

750. We require, however, that state commissions take steps to ensure that incumbent LECs do not recover nonrecurring costs twice and that nonrecurring charges are imposed equitably among entrants. A state commission may, for example, decide to permit incumbent LECs to charge the initial entrants the full amount of costs incurred for shared facilities for physical collocation service, even if future entrants may benefit. A state commission may, however, require subsequent entrants, who take physical collocation service in the same central office and receive benefits as a result of costs for shared facilities, to pay the incumbent LEC for their proportionate share of those costs, less depreciation (if an asset is involved). Under this approach, the state commission could require the incumbent LEC to provide the initial entrants *pro rata* refunds, reflecting the full amount of the charges collected from the subsequent entrants. Alternatively,

a state commission may decide to permit incumbent LECs to charge initial entrants a proportionate fraction of the costs incurred, based on a reasonable estimate of the total demand by entrants for the particular interconnection service or unbundled rate elements.

751. In addition, state commissions must ensure that nonrecurring charges imposed by incumbent LECs are equitably allocated among entrants where such charges are imposed on one entrant for the use of an asset and another entrant uses the asset after the first entrant abandons the asset. For example, when an entrant pays a nonrecurring charge for construction of a physical collocation cage and the entrant discontinues occupying the cage before the end of the economic life of the cage, a state commission could require that the initial entrant receive a *pro rata* refund from the incumbent LEC for the undepreciated value of the cage in the event that a subsequent entrant takes physical collocation service and uses the asset. Under this approach, the state commission could require that the subsequent entrant pay the incumbent LEC a nonrecurring charge equal to the remaining unamortized value of the cage and the initial entrant will receive a credit from the incumbent LEC equal to the unamortized value of the cage at the time the subsequent entrant takes service and utilizes the cage.

752. BellSouth's concern that rate structure rules could preclude mutually agreeable alternative structures is misplaced. The rate structure rules we adopt here apply only to rates imposed by the states in arbitration among the parties and to state review of BOC statements of generally available terms. Our rules do not restrict parties from agreeing to alterna-

tive rate structures. On the contrary, our intent, following the clear pro-negotiation spirit of the 1996 Act, is for parties to use the backdrop of state arbitrations conducted under our rules, to negotiate more efficient, mutually agreeable arrangements, subject, of course, to the antitrust laws[1769] and to the 1996 Act's requirements that voluntarily negotiated agreements not unreasonably discriminate against third parties.[1770]

[1769] Sherman Antitrust Act, 15 U.S.C. §§ 1 *et seq.*

[1770] *E.g.*, 47 U.S.C. § 252(e)(2)(A)(i).

APPENDIX C

1. Section 251 of Title 47 of the United States Code (Supp. IV 1998) provides:

§ 251. Interconnection

(a) General duty of telecommunications carriers

Each telecommunications carrier has the duty—

(1) to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers; and

(2) not to install network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to section 255 or 256 of this title.

(b) Obligations of all local exchange carriers

Each local exchange carrier has the following duties:

(1) Resale

The duty not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services.

(2) Number portability

The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.

(3) Dialing parity

The duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service, and the duty to permit all such providers to have nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays.

(4) Access to rights-of-way

The duty to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms, and conditions that are consistent with section 224 of this title.

(5) Reciprocal compensation

The duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.

(c) Additional obligations of incumbent local exchange carriers

In addition to the duties contained in subsection (b) of this section, each incumbent local exchange carrier has the following duties:

(1) Duty to negotiate

The duty to negotiate in good faith in accordance with section 252 of this title the particular terms and conditions of agreements to fulfill the duties described in paragraphs (1) through (5) of subsection

(b) of this section and this subsection. The requesting telecommunications carrier also has the duty to negotiate in good faith the terms and conditions of such agreements.

(2) Interconnection

The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network—

(A) for the transmission and routing of telephone exchange service and exchange access;

(B) at any technically feasible point within the carrier's network;

(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and

(D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title.

(3) Unbundled access

The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

(4) Resale

The duty—

(A) to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers; and

(B) not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service, except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers.

(5) Notice of changes

The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

(6) Collocation

The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

(d) Implementation

(1) In general

Within 6 months after February 8, 1996, the Commission shall complete all actions necessary to establish regulations to implement the requirements of this section.

(2) Access standards

In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether—

(A) access to such network elements as are proprietary in nature is necessary; and

(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

(3) Preservation of State access regulations

In prescribing and enforcing regulations to implement the requirements of this section, the Commission shall not preclude the enforcement of any regulation, order, or policy of a State commission that—

(A) establishes access and interconnection obligations of local exchange carriers;

(B) is consistent with the requirements of this section; and

(C) does not substantially prevent implementation of the requirements of this section and the purposes of this part.

(e) Numbering administration

(1) Commission authority and jurisdiction

The Commission shall create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis. The Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States. Nothing in this paragraph shall preclude the Commission from delegating to State commissions or other entities all or any portion of such jurisdiction.

(2) Costs

The cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission.

(f) Exemptions, suspensions, and modifications

(1) Exemption for certain rural telephone companies

(A) Exemption

Subsection (c) of this section shall not apply to a rural telephone company until (i) such company has received a bona fide request for interconnection, services, or network elements, and (ii) the State commission determines (under subpargraph (B)) that such request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof).

(B) State termination of exemption and implementation schedule

The party making a bona fide request of a rural telephone company for interconnection, services, or network elements shall submit a notice of its request to the State commission. The State commission shall conduct an inquiry for the purpose of determining whether to terminate the exemption under subparagraph (A). Within 120 days after the State commission receives notice of the request, the State commission shall terminate the exemption if the request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof). Upon termination of the exemption, a State commission shall establish an implementation schedule for compliance with the request that is consistent in time and manner with Commission regulations.

(C) Limitation on exemption

The exemption provided by this paragraph shall not apply with respect to a request under subsection (c) of this section from a cable operator providing video programming, and seeking to provide any telecommunications service, in the area in which the rural telephone company provides video programming. The limitation contained in this subparagraph shall not apply to a rural telephone company that is providing video programming on February 8, 1996.

(2) Suspensions and modifications for rural carriers

A local exchange carrier with fewer than 2 percent of the Nation's subscriber lines installed in the aggregate nationwide may petition a State commission for a suspension or modification of the application of a requirement or requirements of subsection (b) or (c) of this section to telephone exchange service facilities specified in such petition. The State commission shall grant such petition to the extent that, and for such duration as, the State commission determines that such suspension or modification—

(A) is necessary—

(i) to avoid a significant adverse economic impact on users of telecommunications services generally;

(ii) to avoid imposing a requirement that is unduly economically burdensome; or

(iii) to avoid imposing a requirement that is technically infeasible; and

(B) is consistent with the public interest, convenience, and necessity.

The State commission shall act upon any petition filed under this paragraph within 180 days after receiving such petition. Pending such action, the State commission may suspend enforcement of the requirement or requirements to which the petition applies with respect to the petitioning carrier or carriers.

(g) Continued enforcement of exchange access and interconnection requirements

On and after February 8, 1996, each local exchange carrier, to the extent that it provides wireline services, shall provide exchange access, information access, and exchange services for such access to interexchange carriers and information service providers in accordance with the same equal access and nondiscriminatory interconnection restrictions and obligations (including receipt of compensation) that apply to such carrier on the date immediately preceding February 8, 1996, under any court order, consent decree, or regulation, order, or policy of the Commission, until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission after February 8, 1996. During the period beginning on February 8, 1996, and until such restrictions and obligations are so superseded, such restrictions and obligations shall be enforceable in the same manner as regulations of the Commission.

(h) "Incumbent local exchange carrier" defined

(1) Definition

For purposes of this section, the term "incumbent local exchange carrier" means, with respect to an area, the local exchange carrier that—

(A) on February 8, 1996, provided telephone exchange service in such area; and

(B)(i) on February 8, 1996, was deemed to be a member of the exchange carrier association pursuant to section 69.601(b) of the Commission's regulations (47 C.F.R. 69.601(b)); or

(ii) is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (i).

(2) Treatment of comparable carriers as incumbents

The Commission may, by rule, provide for the treatment of a local exchange carrier (or class or category thereof) as an incumbent local exchange carrier for purposes of this section if—

(A) such carrier occupies a position in the market for telephone exchange service within an area that is comparable to the position occupied by a carrier described in paragraph (1);

(B) such carrier has substantially replaced an incumbent local exchange carrier described in paragraph (1); and

(C) such treatment is consistent with the public interest, convenience, and necessity and the purposes of this section.

(i) Savings provision

Nothing in this section shall be construed to limit or otherwise affect the Commission's authority under section 201 of this title.

2. Section 252 of Title 47 of the United States Code (Supp. IV 1998) provides:

§ 252. Procedures for negotiation, arbitration, and approval of agreements

(a) Agreements arrived at through negotiation

(1) Voluntary negotiations

Upon receiving a request for interconnection, services, or network elements pursuant to section 251 of this title, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251 of this title. The agreement shall include a detailed schedule of itemized charges for interconnection and each service or network element included in the agreement. The agreement, including any interconnection agreement negotiated before February 8, 1996, shall be submitted to the State commission under subsection (e) of this section.

(2) Mediation

Any party negotiating an agreement under this section may, at any point in the negotiation, ask a State commission to participate in the negotiation and to mediate any differences arising in the course of the negotiation.

(b) Agreements arrived at through compulsory arbitration

(1) Arbitration

During the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition a State commission to arbitrate any open issues.

(2) Duty of petitioner

(A) A party that petitions a State commission under paragraph (1) shall, at the same time as it submits the petition, provide the State commission all relevant documentation concerning—

(i) the unresolved issues;

(ii) the position of each of the parties with respect to those issues; and

(iii) any other issue discussed and resolved by the parties.

(B) A party petitioning a State commission under paragraph (1) shall provide a copy of the petition and any documentation to the other party or parties not later than the day on which the State commission receives the petition.

(3) Opportunity to respond

A non-petitioning party to a negotiation under this section may respond to the other party's petition and provide such additional information as it wishes within 25 days after the State commission receives the petition.

(4) Action by State commission

(A) The State commission shall limit its consideration of any petition under paragraph (1) (and any response thereto) to the issues set forth in the petition and in the response, if any, filed under paragraph (3).

(B) The State commission may require the petitioning party and the responding party to provide such information as may be necessary for the State commission to reach a decision on the unresolved issues. If any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the State commission, then the State commission may proceed on the basis of the best information available to it from whatever source derived.

(C) The State commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) of this section upon the parties to the agreement, and shall conclude the resolution of any unresolved issues not later than 9 months after the date on which the local exchange carrier received the request under this section.

(5) Refusal to negotiate

The refusal of any other party to the negotiation to participate further in the negotiations, to cooperate with the State commission in carrying out its function as an arbitrator, or to continue to negotiate in good faith in the presence, or with the assistance, of the State commission shall be considered a failure to negotiate in good faith.

(c) Standards for arbitration

In resolving by arbitration under subsection (b) of this section any open issues and imposing conditions upon the parties to the agreement, a State commission shall—

(1) ensure that such resolution and conditions meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title;

(2) establish any rates for interconnection, services, or network elements according to subsection (d) of this section; and

(3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

(d) Pricing standards

(1) Interconnection and network element charges

Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251 of this title, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—

(A) shall be—

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

(2) Charges for transport and termination of traffic

(A) In general

For the purposes of compliance by an incumbent local exchange carrier with section 251(b)(5) of this title, a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless—

(i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and

(ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

(B) Rules of construction

This paragraph shall not be construed—

(i) to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); or

(ii) to authorize the Commission or any State commission to engage in any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls, or to require carriers to maintain records with respect to the additional costs of such calls.

(3) Wholesale prices for telecommunications services

For the purposes of section 251(c)(4) of this title, a State commission shall determine wholesale rates on the basis of retail rates charges to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier.

(e) Approval by State commission

(1) Approval required

Any interconnection agreement adopted by negotiation or arbitration shall be submitted for approval to the State commission. A State commission to which an agreement is submitted shall approve or reject the agreement, with written findings as to any deficiencies.

(2) Grounds for rejection

The State commission may only reject—

(A) an agreement (or any portion thereof) adopted by negotiation under subsection (a) of this section if it finds that—

(i) the agreement (or portion thereof) discriminates against a telecommunications carrier not a party to the agreement; or

(ii) the implementation of such agreement or portion is not consistent with the public interest, convenience, and necessity; or

(B) an agreement (or any portion thereof) adopted by arbitration under subsection (b) of this section if it finds that the agreement does not meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title, or the standards set forth in subsection (d) of this section.

(3) Preservation of authority

Notwithstanding paragraph (2), but subject to section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of an agreement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(4) Schedule for decision

If the State commission does not act to approve or reject the agreement within 90 days after submission by the parties of an agreement adopted by negotiation under subsection (a) of this section, or within 30 days after submission by the parties of an agreement adopted by arbitration under subsection (b) of this section, the agreement shall be deemed approved. No State court shall have jurisdiction to review the action of a State commission in approving or rejecting an agreement under this section.

(5) Commission to act if State will not act

If a State commission fails to act to carry out its responsibility under this section in any proceeding or other matter under this section, then the Commission shall issue an order preempting the State commission's jurisdiction of that proceeding or matter within 90 days after being notified (or taking notice) of such failure, and shall assume the responsibility of the State commission under this section with respect to the proceeding or matter and act for the State commission.

(6) Review of State commission actions

In a case in which a State fails to act as described in paragraph (5), the proceeding by the Commission under such paragraph and any judicial review of the Commission's actions shall be the exclusive remedies for a State commission's failure to act. In any case in which a State commission makes a determination under this section, any party aggrieved by such determination may bring an action in an appropriate Federal district court to determine whether the agreement or statement meets the requirements of section 251 of this title and this section.

(f) Statements of generally available terms

(1) In general

A Bell operating company may prepare and file with a State commission a statement of the terms and conditions that such company generally offers within that State to comply with the requirements of section 251 of this title and the regulations thereunder and the standards applicable under this section.

(2) State commission review

A State commission may not approve such statement unless such statement complies with subsection (d) of this section and section 251 of this title and the regulations thereunder. Except as provided in section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of such statement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(3) Schedule for review

The State commission to which a statement is submitted shall, not later than 60 days after the date of such submission—

(A) complete the review of such statement under paragraph (2) (including any reconsideration thereof), unless the submitting carrier agrees to an extension of the period for such review; or

(B) permit such statement to take effect.

(4) Authority to continue review

Paragraph (3) shall not preclude the State commission from continuing to review a statement that has been permitted to take effect under subparagraph (B) of such paragraph or from approving or disapproving such statement under paragraph (2).

(5) Duty to negotiate not affected

The submission or approval of a statement under this subsection shall not relieve a Bell operating company of its duty to negotiate the terms and conditions of an agreement under section 251 of this title.

(g) Consolidation of State proceedings

Where not inconsistent with the requirements of this chapter, a State commission may, to the extent practical, consolidate proceedings under sections 214(e), 251(f), 253 of this title, and this section in order to reduce administrative burdens on telecommunications carriers, other parties to the proceedings, and the State commission in carrying out its responsibilities under this chapter.

(h) Filing required

A State commission shall make a copy of each agreement approved under subsection (e) of this section and each statement approved under subsection (f) of this section available for public inspection and copying within 10 days after the agreement or statement is approved. The State commission may charge a reasonable and nondiscriminatory fee to the parties to the agreement or to the party filing the statement to cover the costs of approving and filing such agreement or statement.

(i) Availability to other telecommunications carriers

A local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement.

(j) "Incumbent local exchange carrier" defined

For purposes of this section, the term "incumbent local exchange carrier" has the meaning provided in section 251(h) of this title.

APPENDIX D

1. Section 51.315 of the Code of Federal Regulations provides:

§ 51.315 Combination of unbundled network elements.

(a) An incumbent LEC shall provide unbundled network elements in a manner that allows requesting telecommunications carriers to combine such network elements in order to provide a telecommunications service.

(b) Except upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently combines.

(c) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in the incumbent LEC's network, provided that such combination is:

(1) Technically feasible; and

(2) Would not impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

(d) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements with elements possessed by the requesting telecommunications carrier in any technically feasible manner.

(e) An incumbent LEC that denies a request to combine elements pursuant to paragraph (c)(1) or paragraph (d) of this section must prove to the state commission that the requested combination is not technically feasible.

(f) An incumbent LEC that denies a request to combine elements pursuant to paragraph (c)(2) of this section must prove to the state commission that the requested combination would impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

2. Section 51.505 of the Code of Federal Regulations provides:

§ 51.505 Forward-looking economic cost.

(a) *In general*. The forward-looking economic cost of an element equals the sum of:

(1) The total element long-run incremental cost of the element, as described in paragraph (b); and

(2) A reasonable allocation of forward-looking common costs, as described in paragraph (c).

(b) *Total element long-run incremental cost.* The total element long-run incremental cost of an element is the forward-looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, such element, calculated taking as a given the incumbent LEC's provision of other elements.

(1) *Efficient network configuration*. The total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers.

(2) *Forward-looking cost of capital*. The forward-looking cost of capital shall be used in calculating the total element long-run incremental cost of an element.

(3) *Depreciation rates.* The depreciation rates used in calculating forward-looking economic costs of elements shall be economic depreciation rates.

(c) *Reasonable allocation of forward-looking common costs*—(1) *Forward-looking common costs.* Forward-looking common costs are economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services.

(2) *Reasonable allocation.* (i) The sum of a reasonable allocation of forward-looking common costs and the total element long-run incremental cost of an element shall not exceed the stand-alone costs associated with the element. In this context, stand-alone costs are the total forward-looking costs, including corporate costs, that would be incurred to produce a given element if that element were provided by an efficient firm that produced nothing but the given element.

(ii) The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs, attributable to operating the incumbent LEC's total network, so as to provide all the elements and services offered.

(d) *Factors that may not be considered.* The following factors shall not be considered in a calculation of the forward-looking economic cost of an element:

(1) *Embedded costs.* Embedded costs are the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's books of accounts;

(2) *Retail costs.* Retail costs include the costs of marketing, billing, collection, and other costs associated with offering retail telecommunications services to

subscribers who are not telecommunications carriers, described in § 51.609;

(3) *Opportunity costs.* Opportunity costs include the revenues that the incumbent LEC would have received for the sale of telecommunications services, in the absence of competition from telecommunications carriers that purchase elements; and

(4) *Revenues to subsidize other services.* Revenues to subsidize other services include revenues associated with elements or telecommunications service offerings other than the element for which a rate is being established.

(e) *Cost study requirements.* An incumbent LEC must prove to the state commission that the rates for each element it offers do not exceed the forward-looking economic cost per unit of providing the element, using a cost study that complies with the methodology set forth in this section and § 51.511.

(1) A state commission may set a rate outside the proxy ranges or above the proxy ceilings described in § 51.513 only if that commission has given full and fair effect to the economic cost based pricing methodology described in this section and § 51.511 in a state proceeding that meets the requirements of paragraph (e)(2) of this section.

(2) Any state proceeding conducted pursuant to this section shall provide notice and an opportunity for comment to affected parties and shall result in the creation of a written factual record that is sufficient for purposes of review. The record of any state proceeding in which a state commission considers a cost study for

purposes of establishing rates under this section shall include any such cost study.