FORWARD-LOOKING COSTING METHODOLOGIES AND THE SUPREME COURT'S TAKINGS CLAUSE JURISPRUDENCE

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I. INTRODUCTION

Much of the debate regarding the unbundled network element ("UNE") costing provisions of the Telecommunications Act of 1996 ("1996 Act") has thus far largely focused on two issues: (1) whether the Federal Communications Commission ("FCC") has been given jurisdiction under the 1996 Act to impose its Total Element Long Run Incremental Cost ("TELRIC") UNE costing scheme on the states; and (2) whether one costing methodology or the other will provide just compensation as required by the Takings Clause of the Fifth Amendment of the United States Constitution.¹ The first of these issues was recently resolved by the United States Supreme Court's decision to grant the FCC authority over the determination of UNE costing.² In the context of the second issue, this article proposes that another critical and largely overlooked issue lurking on the jurisprudence horizon is whether the recent sea change that has occurred in the Supreme Court's Takings Clause jurisprudence in the land use context will influence the way the Courts of Appeals and ultimately the United States Supreme Court reviews incumbent local exchange carrier ("ILEC") claims of unjust compensation resulting from the various UNE costing methodologies.

At what point private property is said to be 'taken' and, thus, at what point a private party is entitled to compensation has long been the subject of debate. In particular, recent developments in Takings Clause jurisprudence have left open the following question: Should the point at which a government regulation becomes a taking depend on whose private property is taken—a private individual putting her property to private use or a private individual putting her property to public use? This question has taken on renewed importance recently in traditional public utility sectors, such as telecommunications, which are increasingly subject to regulations meant to spur competition. This paper analyzes whether the FCC's and the states' recently adopted forward-looking costing methodologies provide the Supreme Court with an opportunity to resolve this question.

This paper begins with an analysis of the development of physical and regulatory Takings Clause jurisprudence both in the land use and common carriage contexts. In light of this case law, this paper argues that a divergence in confiscatory takings jurisprudence would be inconsistent with past practices. It also argues that such a divergence would be unjustified. The paper then discusses the legal and regulatory issues surrounding the debate over whether forward-looking costing methodologies violate the Takings Clause. It analyzing that open-access regulation in the telecommunications field and cost recovery through efficient component pricing effectuate a taking). One recent article has correctly asserted that "neither the Takings Clause nor the regulatory contract precludes the use of forward-looking costs in setting prices for network elements or access to local exchange service." William J. Baumol & Thomas W. Merrill, Deregulatory Takings, Breach of the Regulatory Contract, and the Telecommunications Act of 1996, 72 N.Y.U. L. Rev. 1037 (1997).


alyzes the FCC's forward-looking methodology for the pricing of ILEC unbundled elements in the Local Competition Report and Order, as well as state approval of arbitration agreements with such pricing methodologies. It then reviews the FCC's rationale in adopting the TELRIC pricing methodology, and analyzes whether TELRIC is consistent with existing Takings Clause case law. The paper argues that, although the 1996 Act may prescribe a physical taking, the TELRIC unbundled elements costing methodology, or any costing methodology, does not alone deny ILECs just compensation. In a legal sense, the methodology chosen is largely irrelevant to whether a taking has occurred. Of course, this may be of little comfort to ILECs that want to charge more and Competitive Local Exchange Carriers ("CLECs") who want to pay less for the purchase of UNEs. This paper continues, the application of this pricing methodology through mandatory arbitrated rates will constitute a taking if ILECs are not sufficiently compensated by purchasers of UNEs so that the financial integrity of the ILEC is threatened. Further, even if the ILEC is sufficiently compensated, a reviewing court could subject the regulations to the same standard of review it imposes upon land use regulation. In spite of valid public policy justifications for upholding a forward-looking costing methodology (or any methodology), the courts could overturn such regulations if there is no essential nexus or if a rough proportionality analysis is absent. This paper finally recommends that the inclusion of such analysis by state or federal regulators would serve as a useful insurance policy should the Supreme Court determine that the new world of Takings Clause jurisprudence encompasses telecommunications carrier rate regulation.

II. THE CASE LAW ON TAKINGS—CLARIFYING THE RELATIONSHIPS BETWEEN PRIVATE PROPERTY OWNERS AND THE STATE

According to Blackstone, the third absolute right of men is that of property, subject only to the laws of the land. In order to protect such a right, the Takings Clause of the Fifth Amendment to the United States Constitution states, "private property [shall not] be taken for public use, without just compensation." Under the government's power of eminent domain, private property may be taken, but only pursuant to some


4 It is important to note that this paper limits its analysis to the constitutionality of TELRIC under the Takings Clause, not whether it is the appropriate costing methodology under the 1996 Act. For an analysis of which costing methodology is more appropriate under the 1996 Act, see GTE South, Inc. v. Morrison, 6 F. Supp. 2d 517 (E.D. Va. 1998) (holding that, under the language of Section 252(d)(1)(a) of the 1996 Act, a forward-looking costing methodology is more appropriate).

5 This paper would not for a moment argue that the methodology chosen is irrelevant to the resulting price charged. It does note, however, that any model, whether forward-looking or based on embedded costs, can be designed to result in excessive compensation or too little compensation. Thus, as will be discussed, the real issue is whether payment is adequate, not whether the methodology is adequate.


8 Kurt H. Garber, Eminent Domain: When Does a Temporary Denial of Access Become a Compensable Taking?, 25 U. MEM. L. REV. 271, 276 (1994). The power of eminent domain enables the federal government to take private property for public use through a condemnation hearing. See id. Thus, in order to take private property the federal government must condemn the private property and pay its owner just compensation for it. See id.
stated public purpose and in exchange for just compensation.9

The evolution of takings case law can be characterized as one of increased protection of property rights by the Supreme Court in response to the ever-expanding reach of government regulation. Traditionally, Takings Clause protections were applied only to the land use context and were limited to physical appropriations of private property.11 Such physical takings were recognized as per se compensable at an early stage in Takings Clause jurisprudence.12 It was not until earlier in this century that the Supreme Court recognized confiscatory or regulatory taking, which occurs when a police power regulation goes "too far" in limiting the use of private property.13 Both physical and confiscatory takings require the government to pay just compensation to the owner of the property.14 In spite of these developments, the Supreme Court has noted that physical invasions more easily give rise to Takings Clause protection.15

In the non-land use context, the most recent tests for confiscatory regulations—essential nexus and rough proportionality—have not yet been applied. In particular, although the Takings Clause protects privately controlled common carriers16 from confiscatory government regula-

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9 A law is more likely to be upheld if it "is not meant to merely bring about a private benefit, but instead is designed to further a broader public purpose." Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 485 (1987); see also Hawaii Hous. Auth. v. Midkiff, 467 U.S. 229, 259-61 (1984) (upholding a State's land condemnation procedures, that served a legitimate public purpose (reduced concentration of ownership of fees simple), though the ultimate purchasers of the land were the existing tenants on the land); Thompson v. Consolidated Gas Util. Corp, 300 U.S. 55, 80 (1937) (noting that a person's property may only be taken for another's benefit when there is a public purpose supporting such an action). See generally Lawrence Berger, The Public Use Requirement in Eminent Domain, 57 OR. L. REV. 203 (1978) (analyzing the Taking Clause's public use requirement).

10 The just compensation requirement of the Takings Clause "assures that the state will give to each person a fair equivalent to what has been taken." Richard Allen Epstein, Takings: Private Property & the Power of Eminent Domain 5 (1985).

11 In the ordinary meaning of the term, a 'taking' of property is a physical takeover of a distinct entity, with an accompanying transfer of the legal powers of enjoyment and exclusion that are typically associated with rights of property." Schwartz, supra note 6, at 426-27 (quoting Laurence H. Tribe, American Constitutional Law 592-93 (2d ed. 1988)).

12 See infra notes 21-31.


14 See, e.g., United States v. 50 Acres of Land, 469 U.S. 24, 26 (1984) (holding that the just compensation requirement of the Takings Clause only requires the government to pay the fair market value of the property taken at the time of the taking); Monongahela Navigation Co. v. United States, 148 U.S. 512, 326 (1893) (holding that just compensation must be the "full and perfect equivalent for the property taken"). However, it has been noted that such holdings do not limit the term just compensation to fair market value when such compensation would be unfair. See Roger Clegg, Redeeming The Test of The Takings Clause, 46 S.C. L. REV. 531, 535 (1995); (citing Michael DeBow, Unjust Compensation: The Continuing Need for Reform, 46 S.C. L. REV. 579 (1995)); see also, United States v. 564.54 Acres of Land, 441 U.S. 506, 513 (1979) (noting that replacement cost may be the more appropriate measure of compensation where "an award of market value would diverge so substantially from the indemnity principle as to violate the Fifth Amendment"); United States v. Grizzard, 219 U.S. 180, 182-86 (1911) (holding that, when a portion of a party's property is taken, an owner is not justly compensated if he is unable to recover for the depreciation in the value of the remaining property); Merrill Trust Co. v. State, 417 A.2d 435, 437 (1980) (holding that just compensation was the market value of the portion taken, plus the diminution of the remaining property). For a general overview of unjust compensation arguments see Epstein, supra note 6, at 182-215.


16 For a rather ambiguous definition of "common carrier" see 47 U.S.C. § 153(h) (1995). The United States Court of Appeals for the D.C. Circuit developed a two part test for common carriage: (1) does the carrier provide service to all potential users indifferently; and (2) is the system designed to enable customers to transmit message of their own design.
tions, these tests have not yet been applied in the context of government-prescribed rates for common carriers. The most recent confiscatory takings case in the common carriage context only requires that the regulation advance a legitimate state interest and not limit the carrier to a confiscatory charge for its property. Thus, common carriers, who devote their property for public use (albeit for a handsome profit), could potentially receive less Takings Clause protection than private property owners merely putting their property to private use. This is quite ironic given that common carriers once received more Takings Clause protections.

Given the lack of recent Supreme Court case law reviewing takings claims in the common carrier context, one wonders whether the Supreme Court would subject such public uses of private property to a different standard from the one outlined above. Challenges to forward-looking costing methodologies for the sale of unbundled network elements, first enunciated in the FCC's Local Competition Report & Order and approved by several states, may provide the courts with an opportunity to explain whether such divergence is justified.

A. Traditional Takings Analysis—Takings Limited to Physical Invasions of Property

Most early takings cases involved physical takings by the government of private property for public use through the government's power of eminent domain. These cases consistently held that government actions that do not physically appropriate private property for public use are not justiciable under the Takings Clause. However,

and choosing? Southwestern Bell Tel. Co. v. FCC, 19 F.3d 1475 (D.C. Cir. 1994). In addition, the Omnibus Budget Reconciliation Act of 1993 states that Commercial Mobile Radio Service ("CMRS") providers shall be common carriers. 47 U.S.C. § 332(c). The Budget Reconciliation Act also provided a three part test for common carriage in the context of "communication . . . radio or in interstate or foreign radio transmission of energy." 107 Stat. at 395-96 47 U.S.C. § 332(d)(1). For a discussion of this test see E. Ashton Johnston, Regulatory Treatment of Mobile Services: The FCC Attempts to Create Regulatory Symmetry, 2 COMMLAW CONSPECTUS 1 (1994); see also In re Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Second Report and Order, 9 FCC Rcd. 1411 (1994).

See Epstein, supra note 6, at 168. The Supreme Court has acknowledged the right of public utilities (such as a telephone company) owned and operated by private investors to assert their rights under the Takings Clause of the Fifth Amendment, even though their assets are employed for a quasi-public purpose. Duquesne Light Co. v. Barasch, 488 U.S. 299, 307 (1989). Robert Allen Epstein notes that, even though a common carrier, such as a LEC, is required to "offer its service on a nondiscriminatory basis to all comers at an appropriate price . . . the taking is for public use, even though by a private party." Epstein, supra note 6, at 168-69.

See infra text accompanying notes 90-104 (discussion of Takings Clause application in the common carriage context).

See Duquesne Light Co., 488 U.S. at 307 (citing Covingston & Lexington Turnpike Road Co. v. Sandford, 164 U.S. 578, 597 (1896)). This test mirrored a test enunciated in Agins v. City of Tiburon, a case considering a takings claim in the land use context. 447 U.S. 255 (1980). The court held that a regulation "effects a taking . . . if [it] does not substantially advance legitimate state interests . . . or denies an owner economically viable use of his land." Id. at 260 (citing Nectow v. Cambridge, 277 U.S. 183, 188 (1928).

See infra notes 90-91.


22 See infra text accompanying notes 154-55.

23 As this paper will discuss, such disparate treatment would be unjustified and inconsistent with past practices and current realities.

24 Note, The Principle of Equality in Takings Clause Jurisprudence, 109 HARv. L. Rev. 1030, 1051 (1996); citing MORTon J. Horwitz, The Transformation of American Law, 1870 - 1960 145 (1992)."[M]ost of the early case law . . . held that compensation was required if government physically took property, but not if it merely regulated the owner's use of property." Trenor, supra note 6, at 792. Bernard Schwartz notes that "[i]n the ordinary meaning of the term, a 'taking' of property is 'a physical takeover of a distinct entity, with an accompanying transfer of legal powers of enjoyment and exclusion that are typically associated with rights of property.'" Schwartz, supra note 6, at 417 (quoting LAURENCE H. Tribe, AMERICAN CONSTITUTIONAL LAW 599-600 (2d ed. 1988)). Further, in 1857, Theodore Sedgwick noted that "[i]t seems to be settled that, to entitle the owner to protection under this clause, the property must be actually taken in the physical sense of the word." Theodore Sedgwick, A Treatise on the Rules Which Govern the Interpretation and Application of Statutory and Constitutional Law 519-20 (1857). Laurence Tribe notes that "[a]s early as 1798, Justice Chase, in his memorable dictum in Calder v. Bull, had expressed constitutional law's undisputed condemnation of any law attempting to 'take from A and give it to B.'" Tribe, supra note 7, at 457. See also PAUL GOLDSTEIN, REAL PROPERTY 1108 (1984). The Supreme Court opined that "the takings clause clearly requires government to pay (just compensation) when it physically appropriates land for some public use." Id.

25 See Gibson v. United States, 166 U.S. 269 (1897) (holding that damage caused by a dike, which altered the flow of water to the petitioner's land, was not compensable); Transp. Co. v. Chicago, 99 U.S. 635 (1879) (holding that an obstruction placed at the entrance of the petitioner's property during construction of a tunnel was not compensable). "[A]cts done in the proper exercise of governmental powers,
in *Pumpelly v. Green Bay Company* the Supreme Court ruled that when private property "is actually invaded, [either directly or indirectly] so as to effectually destroy or impair its usefulness, it is a taking."\(^\text{26}\) *Pumpelly* expanded compensable takings to include physical invasions, as well as physical appropriations of private property.\(^\text{27}\)

The Court clarified *Pumpelly* in *Mugler v. Kansas*, where it held that police power regulations meant to protect the health, safety, or morals of a community were not compensable takings.\(^\text{28}\) *Mugler* involved a prohibition statute directing all liquor manufacturing facilities to close because they were considered to be common nuisances.\(^\text{29}\) The Court limited compensation to exercises of the state’s power of eminent domain, not its police power, which simply abates existing noxious or injurious uses of property.\(^\text{30}\)

In the realm of physical takings, the Supreme Court recognizes no distinctions among types of private property owners. A private property owner putting his property to public use receives the same protections as a private property owner putting his property to private use. In *Loretto v. Teleprompter Manhattan CATV Corp.*, the Supreme Court found that a New York law requiring landlords to allow cable television companies to install cable facilities in their buildings constituted a taking.\(^\text{31}\) The Court determined that a taking had occurred even though the facilities occupied only \(1/8\) cubic feet.\(^\text{32}\)

The Court found that regulations imposing permanent physical occupations of private property require just compensation,\(^\text{33}\) echoing the oft-proounced rule that a permanent physical occupation of real property\(^\text{34}\) is a per se taking and automatically requires just compensation.\(^\text{35}\) The Court concluded that a "physical occupation authorized by government is a taking without regard to the public interests that it may serve"\(^\text{36}\) or the extent of the private property owner’s economic loss.\(^\text{37}\) As noted above, this rule is applicable even when the physical invasion is "minor" or "minute."\(^\text{38}\)

Recently, the Supreme Court denied certiorari to hear a Supreme Court of Oregon ruling that held that an Oregon Open Network Architecture ("ONA") statute constituted a permanent physical taking of ILEC property.\(^\text{39}\) The statute required physical collocation\(^\text{40}\) for Enhanced Service Provider ("ESP") equipment on LEC property. Citing *Loretto*, the Supreme Court found that "collocation can be characterized as a physical invasion by the government" for three reasons.\(^\text{41}\) The Court stated that the statute: (1) "involves the placement of a fixed structure on [the] land of real property of an LEC," (2) "the ESP, not the ILEC, . . . owns the equipment placed on the LEC’s property," and (3) "the rule requires an LEC to provide collocation to an ESP that requests collocation."\(^\text{42}\) Although this ruling does not hold all physical and virtual collocation stat-

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\(^{26}\) 80 U.S. (13 Wall.) 166, 181 (1872).

\(^{27}\) See id. at 181. It is critical to note that *Pumpelly* limited its holding to physical invasions of private property, not restrictions on use. *Id.* The *Pumpelly* holding was limited to instances "where real estate is actually invaded by superinduced additions of water, earth, sand, or other material, or by having any artificial structure placed on it, so as to effectually destroy or impair its usefulness." *Id.*

\(^{28}\) 123 U.S. 623, 668-69 (1887).

\(^{29}\) See id. at 662-63.

\(^{30}\) See id. at 668-69.

\(^{31}\) 458 U.S. 419, 421 (1982).

\(^{32}\) See *Loretto*, 458 U.S. at 438 n.16.

\(^{33}\) See id. at 426.

\(^{34}\) *Id.* at 427. See, e.g., *Yee v. City of Escondido*, 503 U.S. 519, 527 (1992) ("the Takings Clause requires compensation if the government authorizes a compelled physical invasion of property."). It is important to note that the Court had previously refused to overturn a regulation that merely regulated the terms of a voluntary commercial relationship.

\(^{35}\) 458 U.S. at 426.

\(^{36}\) Id. at 435; *see also* *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

\(^{37}\) See id. at 421, 436-37.


\(^{39}\) Collocation is "[t]he ability of someone who is not the local phone company to put their equipment in the phone company’s offices and jointly use the phone company’s equipment. That ‘someone’ might be . . . a competitor of the local phone company (i.e., another local phone company)." *Id.*

\(^{40}\) *GTE Northwest Inc.*, 900 P.2d at 503 (citing *Loretto*, 458 U.S. at 426) (emphasis added).

\(^{41}\) *Id.*
states violative of the Takings Clause, it clearly reveals an application of the Loretto rule that finds a taking in the context of a physical collocation statute.

B. Pennsylvania Coal v. Mahon—Extending Protection of Private Property To Regulations That Go 'Too Far'

Following the early physical takings cases, which held that police power regulations of property were immune from Takings Clause claims, the Supreme Court expanded the protections that the Takings Clause provides by holding that police power regulations that go "too far" also are violative of the Takings Clause.43 The case that established the "too far" test was Pennsylvania Coal Co. v. Mahon, which involved a Pennsylvania statute that denied a mining company's right to mine under the private property of another when the mining caused subsidence.44 The Court ruled that because the Kohler Act went "too far," it amounted to an uncompensated regulatory taking.45 The Court reasoned that by preventing Pennsylvania Coal from profitably mining coal in the subsurface estate, the Kohler Act had the practical effect of physically taking it.46

The Court also noted that, while reciprocity of advantage has been recognized as a justification for many police power regulations, the Kohler Act provided no benefit to Pennsylvania Coal.47 The reciprocity of advantage test requires that a regulation provide a private as well as public benefit.48 Thus, the Court reversed its rule in Mugler v. Kansas by holding that the Kohler Act—an exercise of the state's police powers—prescribed an uncompensated taking of property without just compensation.49

C. 1986 to Present—Toward Greater Protection of Private Property and a More Clarified Definition of Too Far

Pennsylvania Coal is often characterized as the

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43 The United States Supreme Court noted "[p]rior to Justice Holmes' exposition in Pennsylvania Coal Co. v. Mahon, 260 U.S. 398 (1922), it was...thought that the Takings Clause reached only a 'direct appropriation' of property...or the functional equivalent of a 'practical ouster of [the owner's] possession,'" Transportation Co. v. Chicago, 99 U.S. 635, 642 (1879). Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1014 (1992). William Treanor notes that "anterior courts...consistently held that state regulation pursuant to the police power did not give rise to a compensation requirement, regardless of how dramatically that regulation affected the value of property." Treanor, supra note 6, at 792-93; see also Fred Bosselman et al., The Taking Issue: A Study of the Constitutional Limits of Governmental Authority to Regulate the Use of Privately-Owned Land Without Paying Compensation to the Owners 106-10 (1973); see, e.g., Hadacheck v. Sebastian, 299 U.S. 394 (1915) (holding that a prohibition on brickyards did not constitute a taking, even though it caused a 90% reduction in the value of the claimant's property); Mugler v. Kansas, 123 U.S. 623, 667-69 (1887) (holding that where a land-use regulation is enacted for the public morals, health or safety of the community, it will be upheld despite its effect on the value of the property); Smith v. Corp. of Washington, 61 U.S. (20 How.) 135 (1858) (holding that the lowering of the grade of a road adjoining a lot, which forced the homeowner to construct a new entry, was not a compensable taking).

44 Pennsylvania Coal Co., 260 U.S. at 415. Justice Holmes previously observed that a "restriction might be a valid exercise of...police power, but if it render[s] the [property] 'wholly useless...the police power would fail...[requiring] compensation and the power of eminent domain.'" Treanor, supra note 6, at 801 n.102 (citing Hudson County Water Co. v. McCarter, 209 U.S. 349, 355 (1908)). Hinging that the Supreme Court's decision in Pennsylvania Coal was a long time in the making, Laura McKnight notes that "as...the scope of state police powers expanded even further in response to changing social conditions, however, the Court grew less convinced that every police power regulation was immune from the Fifth Amendment Takings Clause." Laura McKnight, Regulatory Takings: Sorting Out Supreme Court Standards After Lucas v. South Carolina Coastal Council, 41 U. Kan. L. Rev. 615, 619 (1993). Further, in a series of cases that specifically dealt with "businesses clothed with a public interest," such as railroads and utilities, the Supreme Court "permitted regulation so long as it was not found to be confiscatory." Treanor, supra note 6, at 800; see, e.g., Block v. Hirsh, 256 U.S. 153, 155-56 (1921); N. Pac. Ry. Co. v. North Dakota, 236 U.S. 585, 596 (1915); Louisville & Nashville R.R. Co. v. Cent. Stock Yards Co., 212 U.S. 132, 145-44 (1909); Lake Shore & Mich. S. Ry. v. Smith, 173 U.S. 684, 695-96 (1899). For an explanation of the term 'clothed with a public interest' see Glynn S. Lunney, Jr., A Critical Reexamination of the Takings Jurisprudence, 90 Mich. L. Rev. 1892, 1914 (1992).

45 Pennsylvania Coal, 260 U.S. at 412

46 See id. at 415-16. Whether or not the Act went too far was determined by the extent that the regulation reduced the value of the property. See id. at 413.

47 See id. at 414. William Michael Treanor opines that "both Pennsylvania Coal and Rideout [a previous Holmes opinion] reflect a belief that property is properly viewed as value, not physical possession, and that the Takings clause should therefore protect more than physical possession." Treanor, supra note 6, at 802.

48 See Pennsylvania Coal Co., 260 U.S. at 415. The Court noted that "an average reciprocity of advantage...has been recognized as the justification of various laws." Id. Holmes noted that while the Kohler Act may have provided a public benefit, it provided no reciprocal private benefit. See id. at 415-16.

49 See id.

50 See id. at 414-16.
most important modern takings law decision.\(^{51}\) However, while it made clear that the Takings Clause protects private property owners from exercises of police power that “go too far,”\(^{52}\) Pennsylvania Coal and subsequent rulings did little to clarify the meaning of “too far.”\(^{53}\)

During the period following Pennsylvania Coal, the Supreme Court, in its application of the “too far” test, upheld far-reaching police power regulations.\(^{54}\) In Penn Central Transportation Co. v. New York City, the Supreme Court identified a three-part “ad hoc” balancing test to determine when regulation goes “too far.” This three-part balancing test included: “[t]he economic impact of the regulation on the claimant, . . . the extent to which the regulation has interfered with distinct investment-backed-expectations . . . [and] the character of the governmental action.”\(^{55}\) Any single factor may determine whether there is or is not a taking.\(^{56}\) Under this test the Supreme Court upheld far-reaching land use regulations, such as a statute that essentially had the same effect as the Kohler Act overturned by Pennsylvania Coal.\(^{57}\) In Keystone Bituminous Coal Assoc., the Court used the same reciprocity of advantage test\(^{58}\) that Holmes

\(^{51}\) See Treanor, supra note 6, at 798. In Keystone Bituminous Coal Ass’n. v. DeBenedictis, the Court noted that Pennsylvania Coal “has for 65 years been the foundation of our ‘regulatory takings’ jurisprudence.” Keystone Bituminous Coal Ass’n. v. DeBenedictis, 480 U.S. 470, 508 (1987) (Renquist, C.J. dissenting); see also Richard A. Epstein, Takings: Descent and Resurrection, 1987 Sup. Ct. Rev. 1, 12 (1987) (noting that “Pennsylvania Coal has long been regarded as perhaps the single most important decision in the takings [jurisprudence].”); Bruce A. Ackerman, Private Property and the Constitution 156 (1977) (calling Pennsylvania Coal “both the most important and most mysterious writing in takings law.”).

\(^{52}\) “Under Pennsylvania Coal Co., ‘there is a line beyond which a regulation may not go without violating the Takings Clause.” Schwartz, supra note 6, at 427.

\(^{53}\) Laura McKnight notes that “Pennsylvania Coal . . . blurred what had been a clear line between the police powers and eminent domain in the Court’s land use decisions throughout the previous century.” McKnight, supra note 44, at 621. Even in Pennsylvania Coal v. Mahon, Justice Holmes conceded that whether a regulation “goes too far” is “a question of degree— and therefore cannot be disposed of by general propositions.” Pennsylvania Coal, 260 U.S. at 416. The Supreme Court recently noted that “our decision in [Pennsylvania Coal v. Mahon] offered little insight into when, and under what circumstances, a given regulation would be seen as going ‘too far’ for purposes of the Fifth Amendment.” Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1015 (1992). There is much debate among legal scholars as to when a regulation adopted pursuant to police powers goes too far. For example, Bernard Schwartz notes that “the regulation must destroy the essential rights of the property owner before the Holmes ‘diminution in value’ theory becomes applicable.” Schwartz, supra note 6, at 427. But, there is little agreement as to when such ‘essential rights of property’ are in fact destroyed. For example, some would argue that “any diminution in the Blackstone trilogy of rights is a ‘taking’ within the meaning of the Fifth Amendment.” Id. at 418 (citing Richard A. Epstein, Takings: Private Property and the Power of Eminent Domain 23 (1985)). Justice Scalia has argued that “the Takings clause comes into play whenever government regulation interferes with the rights of the property owner.” Pennell v. City of San Jose, 485 U.S. 1, 15 (1988) (Scalia, J. dissenting). On the other extreme, Justice Stevens has argued that “[u]nlike physical invasions, which are relatively rare and easily identifiable without making any economic analysis, regulatory programs constantly affect property values in countless ways, and only the most extreme regulations can constitute takings.” First English Evangelical Lutheran Church v. County of Los Angeles, 482 U.S. 304, 329 (1987) (Stevens, J. dissenting).

\(^{54}\) See Daniel A. Crane, A Poor Relation? Regulatory Takings After Dolan v. City of Tigard, 63 U. CHI. L. REV. 199, 200 (1996) (“[T]he Court’s [rulings] traditionally . . . [tilted] heavily in favor of the regulatory state.”); see, e.g., Keystone Bituminous Coal Ass’n. v. DeBenedictis, 480 U.S. at 506 (1987) (upholding a mining restriction similar to that which existed in the Kohler Act, which was struck down in Pennsylvania Coal); Pruneyard Shopping Ctr. v. Robins, 447 U.S. 74, 88 (1980) (upholding a requirement that a shopping center owner allow petitioners to gather signatures on his property); Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 138 (1978) (upholding the City of New York’s historic landmarks zoning regulation, which placed height limits on certain buildings, as a legitimate exercise of police power); Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 397 (1926) (upholding zoning ordinance restricting commercial development despite a 75% diminution in property value). In Penn Central Transportation Co. v. New York City, the Supreme Court noted that the petitioners would have an uphill struggle in invalidating the zoning ordinance, the Court noted that “[a] ‘taking’ may be more readily found when the interference with property can be characterized as a physical invasion by government, see, e.g., United States v. Causby, 328 U.S. 256 (1946), than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.” Penn Cent. Transp. Co., 438 U.S. at 124.

\(^{55}\) Id.

\(^{56}\) See id. See also Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1005 (1984) (holding that the absence of investment-backed expectation alone was “so overwhelming . . . that it disposes of the taking question.”).

\(^{57}\) Keystone Bituminous Coal Ass’n, 480 U.S. at 474. Unlike the Kohler Act, which merely weighed the public interests of surface owners against the private interests of subsurface owners, the Subsidence Act included a finding that “important public interests are served by enforcing a policy that is designed to minimize subsidence.” Id. at 485.

\(^{58}\) The reciprocity of advantage test requires that police power regulations provide both public and private benefits. See supra note 51-52. In Keystone Bituminous Coal Ass’n, the Court noted that the law will more likely be upheld if it “is not meant to merely bring about a private benefit, but instead is designed to further a broader public purpose.” Jan G. Laitos, The Takings Clause in America’s Industrial States After Lucas, 24 U. TOL. L. REV. 281, 296 (1993) (citing Connolly v. Pension Benefit Guar. Corp., 475 U.S. 211, 225 (1986)).
used in *Pennsylvania Coal.* However, the Court held that the Subsidence Act provided for substantial private benefits—the right to profitably remove ninety-eight percent of the subsurface estate—in addition to the public benefit of less subsidence. While clarifying the "too far" test, these rulings confirmed the Court's deference to the state's power to regulate the use of private property.

This judicial deference to the state's police power began to erode in *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles,* in which the Supreme Court held that even when regulations "take" property temporarily, the government must pay compensation to the landowner equal to the value of the property for the period of the taking.

In *Nollan v. California Coastal Comm'n* the Court further increased scrutiny of such police power regulations by striking down a California Coastal Commission decision that lacked an "essential nexus" to the justification for the prohibition.

The Court noted that the traditional test of police power regulations is whether they "substantially advance . . . legitimate state interests," and do not "den[y] an owner economically viable use of his land." In *Nollan,* the Court added the condition that there be an essential nexus between the public purpose of the regulation and the restriction on the private property.

While not furthering heightening of Takings Clause scrutiny, *Lucas v. South Carolina Coastal Council* further clarified its scope. The Court held that the state can justify a complete regulatory taking of private property without compensation only if the contemplated use was already prohibited either by common law or nuisance principles or by statute when the property owner originally purchased its property. In such a scenario, the prohibited use would not be a justified, investment-backed expectation at the time of purchase. The Court further held that if the regulation "denies all economically beneficial or productive use of land" the regulation is a per se

Reciprocity of Advantage and Regulatory Takings: Toward a New Theory of Taking Jurisprudence, *40 Am. U. L. Rev.* 297, 335-36 (1990). The Court seemed to indicate that even when regulating noxious uses, the state must now show a resulting public benefit. See *Keystone Bituminous Coal Ass'n,* 480 U.S. at 491-92. Previously regulation of a noxious use was a per se valid public purpose. See *Coletta,* 40 Am. U. L. Rev. at 321 n.158.


62 *See id.* at 317-18, 322. The Court further held that "[i]nvalidation of the ordinance or its successor ordinance after this period of time, though converting the taking into a 'temporary' one, is not a sufficient remedy to meet the demands of the Just Compensation Clause." *Id.* at 319.

63 483 U.S. 825.

64 *Id.* at 837.

65 *See id.* In *Nollan,* the Supreme Court held that the California Coastal Commission could not condition the grant of a permit for constructing a beachfront bungalow in Ventura, California on a concession from the property owners, that they would permit the public access to an easement "bounded by the mean high tide line on one side, and their seawall on the other." *Id.* at 828. *See id.* The stated purpose of the prohibition was to protect the public's view of the beach, enable the public to access the beach, and reduce congestion at the public beaches. *See id.* at 833.

66 *Id.* at 834; *citing Agins v. Tiburon,* 447 U.S. 255, 260 (1980). In *Nollan,* the Court conceded that the regulations advanced legitimate state interests and did not deny Nollan economically viable use of his land. 483 U.S. at 835-36.

67 *See id.* at 837.

68 505 U.S. at 1003 (1992). The State of South Carolina passed the Beachfront Management Act which prevented Lucas from erecting any permanent structures on his land. *See id.*

69 *See id.* at 1014, 1030-31.

70 *See id.*
taking and must be compensated. The Court concluded that the Beachfront Management Act was an unconstitutional per se taking of Lucas' property without just compensation because it denied Lucas all the economically viable uses of his property, and the contemplated use was not prohibited by common law or nuisance principles or by a statute at the time of purchase.

Two years later, in *Dolan v. City of Tigard*, the Supreme Court further increased Takings Clause scrutiny by invalidating a building permit that required Dolan, the owner of a hardware store, to dedicate a portion of land lying within a creek's flood plain for use as a public green way and an additional fifteen foot strip of land adjacent to the flood plain for use as a pedestrian/bicycle path. The Court concluded that the City of Tigard had not shown that the required dedication was reasonably related to the impact of the proposed development. Though there was an essential nexus between the purpose of the permit and the required dedication, the Court ruled that the City had not shown that the dedication was roughly proportional to the impact of the proposed development. Thus, in addition to the essential nexus test, the Court demanded the dedication to be roughly proportional to the impact of the development.

*Dolan*, *Lucas* and *Nollan* establish a higher degree of Takings Clause scrutiny than in previous Supreme Court cases. Physical invasions of property as well as any denial of economically viable use, absent the exceptions stated above, are now per se takings. If the regulation is not a per se taking, there must now be an essential nexus between the public purpose of the regulation and the restriction on use. Moreover, the restriction or required dedication must be roughly proportional to the impact of the regulated activity. Thus, *Nollan* and *Dolan* hold that a property owner need not show that the regulation has denied all economically viable use of the property to seek relief under the Takings Clause.

D. 'Too Far' Analysis in the Common Carriage Context

1. Confiscatory Takings—Regulations that Deny All Beneficial Uses of Property

Takings Clause protection of "businesses clothed with a public interest" from confiscatory police power regulations pre-dates *Pennsylvania Coal v. Mahon* by at least thirty years. In these early cases, the Supreme Court reasoned that the power to regulate rates of common carriers must have limits. Thus, a quid pro quo of the legislatures' right to regulate the rates charged by these

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71 Id. at 1015. The Court reasoned that "[w]hen no productive or economically beneficial use of [property] is permitted, it is less realistic to indulge our usual assumption that the legislature is simply adjusting the benefits and burdens of economic life . . . in a manner that secures an average reciprocity of advantage' to everyone concerned." Id. at 1017-18.

72 See id. at 1029-32. In *Lucas* the Court did not need to indulge in essential nexus analysis because it concluded at the outset that the Act had forced Lucas to sacrifice all economically beneficial uses of his property. See infra note 75.


74 See id. at 386-87.

75 See id. at 387-90. Dedication of the green way would reduce flooding and dedication of the bicycle/foot path would reduce traffic congestion. See id.

76 See id. at 390-96. The government would have to show that the extent of the dedication is roughly proportional to the quantifiable needs of the municipality. See id. In the instant case, the City of Tigard had not quantified how much traffic would be offset by the bicycle/foot path. Id. at 395. The Court noted that "[n]o precise mathematical calculation is required." Id.

77 See id. at 391.

78 See Lake Shore & Mich. S. Ry. Co. v. Smith, 173 U.S. 684, 687 (1899) (citing Chicago & Grand Trunk Ry. Co. v. Wellman, 143 U.S. 339, 344 (1892); Reagan v. Farmers' Loan & Trust Co., 154 U.S. 362, 399 (1894); St. Louis & San Francisco Railway Co. v. Gill, 156 U.S. 649, 657 (1895); Smyth v. Ames, 169 U.S. 466, 523 (1898)). In *Lake Shore & Michigan S. Ry. Co.*, although the Supreme Court recognized the state's police power to set just and reasonable rates, it held "[I]f rates are fixed at an insufficient amount within the meaning of that term as given by the courts, the law would be invalid, as amounting to the taking of the property of the company without due process of law." *Id. Contrariwise* Chicago Burlington & Quincy Ry. Co. v. Illinois, 200 U.S. 561, 562 (1906) (holding that a railroad forced to tear down and rebuild a bridge for reasons of public safety was not entitled to compensation); New Orleans Gas Light Co. v. Drainage Comm'n, 197 U.S. 453 (1905) (holding that no compensation was required when a gas company was ordered to change the location of underground pipes to accommodate a drainage system).

79 In *Chicago & Grand Trunk R.R. Co. v. Wellman*, the Supreme Court held that "[t]he legislature has power to fix rates, and the extent of judicial interference is protection against unreasonable rates." 143 U.S. at 344. The Supreme Court later held that rates imposed by legislatures upon common carriers must not conflict with "every constitution[al] guarantee against the taking of private property for public purposes without just compensation." *Reagan v. Farmers' Loan & Trust Co.*, 154 U.S. at 399; *see also* *St. Louis & San Francisco Ry. Co.*, 156 U.S. at 657-58 (When "legislation establishing . . . rates . . . is so unreasonable as to practically destroy the value of property of companies engaged in the carriage business . . . such acts of legislation . . . deprive[e] the companies of their property without due process of law; and . . . deprive[e] them of equal protection [under] the laws.").
private entities was judicial oversight. Despite this early trail-blazing, and although the Supreme Court has recognized the unique nature of rate-making, throughout this century it has consistently applied similar judicial scrutiny to regulations that prescribe physical invasions of common carrier property or impose rates that go too far. However, the recent Supreme Court opinions that have brought about so much change in Takings Clause jurisprudence in the land use context have not addressed regulation of common carriers. Thus, depending on the way the Supreme Court interprets its most recent holdings, common carriers, which (arguably) devote their property to public use could potentially receive less Takings Clause protection than land owners utilizing their property for purely private gain.

In Federal Power Comm'n v. Hope Natural Gas Co., perhaps the most important regulatory takings clause case in this century, the United States Supreme Court upheld an Order issued by the Federal Power Commission that required Hope Natural Gas to substantially reduce its wholesale gas rates. The Federal Power Commission used an embedded costing methodology that resulted in a plant valuation only half as large as the company's own valuation. Thus, Hope Natural Gas was able to recover only half the costs it wished to include in its interstate wholesale rates. Despite these disallowances, the Court upheld the pricing methodology because it enabled the gas company as a whole to operate successfully, although with only a "meager return."

In Duquesne Light Co. v. Barasch, the United States Supreme Court upheld a Pennsylvania law that had the effect of prohibiting an electric utility from recovering prudent and reasonable costs of aborted plant construction either by including these costs in its rate base or by amortizing them. The Court held "that utility regulation does not 'take' property [if it] simply . . . disallows . . . [certain] capital investments that are not 'used and useful in service to the public.'" The Court reasoned that when applying the Takings Clause to government rate setting for public utilities, the Takings Clause simply requires that the government-prescribed rates not be "so 'unjust' as to be confiscatory." Nine years earlier, a similar test was used in Agins v. City of Tiburon, in which the Court considered a regulatory Takings Clause claim in the land use context. The Court concluded that if the State prescribes a rate that does not provide the common carrier with adequate compensation, the rate will violate the Takings Clause of the Fifth Amendment.

Because Duquesne Light Co. found that the regulated utility was provided sufficient compensation to operate profitably under a test similar to the Agins v. City of Tiburon two-part test, no Takings Clause violation existed. Thus, rulings such as Duquesne and Hope Natural Gas, which were unaffected by the additional tests developed in Nollan, Lucas, and Dolan, are illustrative of a deferential period in the Supreme Court's takings clause jurisprudence featuring cases such as Pennsylvania Coal Co. and DeBenedictis. It is unclear whether the Supreme Court will subject rate making to the essential nexus and rough proportionality tests developed in these latter cases if a government prescribed rate is anything short of confiscatory.

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83 See id. at 596-98.
84 See id.
85 Id. at 605. Compare this rule with the test developed in Agins v. City of Tiburon, 447 U.S. 255, 260 (1980). That rule stated that a regulation does not effect a taking if it does not deny economically viable use of private property and substantially advances legitimate state interests. It would appear that the legitimate state interest in Hope Natural Gas was just and reasonable wholesale gas rates (although the Court did not explicitly address this prong of the test).
86 Duquesne Light Co., 488 U.S. at 301-02.
2. In Rate Making Unjust Results, Not Methodologies, Can Constitute Takings

Although several recent articles have bantered back and forth about the constitutionality of one costing methodology or the other, the Supreme Court has consistently held that the methodology itself is largely irrelevant to whether the Takings Clause has been violated.95 In general, the Court has assumed a position of neutrality as to whether one methodology or the other is constitutionally sound.96 In Hope Natural Gas, the United States Supreme Court held that under a statutory standard of "just and reasonable it is the result reached [and] not the method employed [that] is controlling."97 In other words, "it is not the theory, but the impact of the rate order that counts."98 Following Hope Natural Gas, the Court in Duquesne explained that a rate may not be challenged by attacking the methodology used to produce it.99 As a result, the embedded or prudent investment costing methodology upheld in Hope Natural Gas is no more susceptible to a Takings Clause challenge than the forward-looking or "fair value" costing methodology upheld in Smyth v. Ames, which "mimics the operation of the competitive market."100 Although just compensation has most often meant "the full and perfect equivalent fair market value in money of the property taken,"101 or fair market value,102 the Court does not limit itself to forward-looking methodologies when doing so provides insufficient compensation.103 Ultimately, there is not only one "constitutionally acceptable method of fixing utility rates."104

An important practical reason for not choosing one methodology over another is that it would undoubtedly lead to a form of economic trickery. Such trickery has already been displayed by some parties to the UNE pricing debate. For example, in one recently litigated state interconnection arbitration proceeding, both the ILEC, GTE South, Inc., and the CLEC, Cox Fibernet Commercial Services, Inc., proposed very different "forward-looking" UNE costing methodologies. It should be no surprise that GTE’s proposal included more costs than Cox’s proposal.105

95 Of course, the methodology may be highly relevant in light of the law under which it is adopted. For example, the United States District Court for the Eastern District of Virginia held that under the 1996 Act, a forward-looking UNE costing methodology was more appropriate. See GTE South Inc. v. Morrison 6 F. Supp. 2d 517, 529 (E.D. Va. 1998) ("252(d)(1)(A) is best read as not allowing historical costs").

96 See Baumol & Merrill, supra note 1, at 1043 ("the Constitution is neutral as between different rate setting methods").


98 Id. at 602.

99 Duquesne Light Co. v. Barash, 488 U.S. 299, 314 (1989). The Court reasoned "[t]he designation of a single theory of ratemaking as a constitutional requirement would unnecessarily foreclose alternatives which could benefit both consumers and investors." Id. at 316.

100 Smyth v. Ames, 169 U.S. 466, 546 (1898); see also MCI Communications Corp. v. AT&T, 708 F.2d 1081, 1117 (7th Cir. 1983) ("long-run incremental cost has been approved as an economically relevant measure of average total cost").


102 See Miller, 317 U.S. at 374. Robert Allen Epstein notes that "the value of the property, not its cost, determines the amount of compensation to be paid." Epstein, supra note 6, at 182. In other words, though a private property owner may have invested a significant amount in its property, it is only entitled to recovering the market value of that property, even if this means that the property owner will not recover all of its investment. See id. Of course, this is conditioned by the requirement that the compensation be just to the property owner. See Clegg, supra note 14, at 535.

103 See Clegg, supra note 14, at 535. See also Michael DeBrow, Unjust Compensation: The Continuing Need for Reform, 46 S.C. L. Rev. 579 (1995); Monongahela Navigation Co., 148 U.S. at 325-329; United States v. Grizzard, 219 U.S. 180 at 182-86 (1911). The Court is hesitant to award amounts other than market value (e.g., replacement cost), especially when doing so may result in a windfall. See Paul Goldstein, Real Property 1309-10 (1984); Epstein, supra note 6, at 183-84; Timothy Mursi, Cost of Completion or Diminution in Market Value: The Relevance of Subjective Value, 12 J. Legal Stud. 379, 395 (1983).

104 Duquesne Light Co., 488 U.S. at 310 (citing Hope Natural Gas, 320 U.S. at 605.). Since the Supreme Court’s landmark Hope Natural Gas decision, it has upheld numerous pricing methodologies. See, e.g., Lord Mfg. Co. v. United States, 84 F. Supp. 748, 755-56 (Cl. Ct. 1949) (holding that just compensation is not intended to permit recovery of monopoly rents); United States v. Commodities Trading Corp., 339 U.S. 121, 123 (1950) (holding that [w]here market value [is] . . . difficult to find, other standards [may be appropriate].); Metro Transp. Auth. v. ICC, 792 F.2d 287, 297 (2d Cir. 1986), cert. denied, 487 U.S. 1017 (1986) (holding that incremental cost based pricing is just compensation); Illinois Bell Telephone v. FCC, 988 F.2d 1294 (D.C. Cir. 1993) (holding that a discounted cash flow methodology provides for just compensation). In Hope Natural Gas, the Court noted that the rate should also be "commensurate with returns on investments [of] other enterprises having corresponding risks." 320 U.S. at 605.; Illinois Bell Tel. Co., 988 F.2d at 1290.

105 See GTE South, Inc. v. Morrison, 6 F. Supp. 2d 517, 528 (E.D. Va. 1998). GTE advocated the M-ECPR method, which is based on the sum of the ILEC’s TELRICs plus its opportunity costs, while Cox advocated a pure TELRIC methodology. Although characterized as a forward-looking methodology, the former methodology would permit GTE to re-
In *Hope Natural Gas* the Court further noted that the total effect of the rate order on the entity regulated must deny it just compensation. Such a burden of proof is difficult for a challenger to overcome. In short, no matter which methodology is utilized, the regulated entity must be compensated so that it can operate at a profit, however small.

III. THE PRICING OF UNBUNDLED NETWORK ELEMENTS—STRIKING A BALANCE BETWEEN THE NEED FOR COMPETITION AND THE PRIVATE PROPERTY INTERESTS OF INCUMBENT LOCAL EXCHANGE CARRIERS

Three years after passage of the 1996 Act opportunities continue to emerge for new entrants to penetrate the largely monopolized local telecommunications marketplace, and Bell Operating Company entry into long-distance telephone service appears to be imminent. Sections 251 and 252 of the 1996 Act specifically provides a prospective entrant with three methods of entry into the local marketplace. A new entrant may cover historical (embedded) costs.

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106 *Hope Natural Gas*, 320 U.S. at 602.
107 See id.
110 Id. at § 271-272. The RBOCs, after several attempts, been unsuccessful in obtaining approval from the FCC for entry into in-region long-distance.
113 See infra note 34.
116 New entrants are prospective providers of local exchange services in the local exchange marketplace, such as long-distance providers, cable companies and competitive access providers. MICHAEL K. KELLOGG ET AL., FEDERAL TELECOMMUNICATIONS LAW 849 (1992).
117 Unbundled elements are defined as the components that make up the Local Exchange Carrier’s network. FCC’s Initial Decisions in FCC Docket No. 96-98, 2 TELECOMM. ACT INFO. SERV. (BRP) 9-12 (Sept. 1996). This aggregation of components is the means by which local origination and termination of wireline telephony occurs. See id. at 9. Unbundled elements include all the infrastructure that extends from the end user to the IXC’s point of presence (where the IXC’s network begins) and back to the end user. See id. at 10. Local transmission of wireline telephony does not require (1) construct and interconnect its own facilities; (2) purchase unbundled elements; or (3) resell existing service offerings. Pursuant to Sections 251 and 252 of the 1996 Act, on August 8, 1996, the FCC released the Local Competition Report and Order, which prescribes a methodology by which new entrants in the local exchange marketplace will be charged for the UNEs of the ILEC’s system. In other words, the FCC prescribed a methodology by which Regional Bell Operating Companies (RBOCs) and other ILECs must charge new entrants, such as Competitive Access Providers (CAPs), Interexchange Carriers (IXCs), and Cable Television Companies, to lease specific elements of their network, so that these new entrants may compete with them in the local exchange marketplace.

In the Local Competition Report and Order, the FCC adopted the Total Element Long Run Incremental Cost methodology for the pricing of unbundled elements. TELRIC is a forward-looking pricing methodology that aims to capture the total long run incremental cost of a specific unbundled element. TELRIC is meant to approximate what it would cost a competitive or efficient any additional components, other than the network components, for local transmission. See BRENNER, supra note 114, at 35. Once one possesses these components one may provide local service, without any reliance on any other provider’s infrastructure.

118 61 Fed. Reg. at 45,543.
119 See id. at 45,483.
120 See id. at 45,543. The FCC’s TELRIC or any long-run incremental costing methodology looks at the economically efficient, forward-looking long-run incremental cost of producing a given bundled element. See id. A long-run incremental or marginal cost model attempts to identify all of the costs associated with producing a next unit of output, as opposed to a short-run incremental or marginal cost methodology, which merely isolates the cost today of increasing output. See id. In other words, a long-run incremental cost methodology looks at what it would cost an efficient ILEC, on a per unit basis, to produce the next unit of output (i.e., the unbundled element). See id. at 45,546. Most importantly, perhaps, the FCC’s TELRIC methodology includes forward-looking assumptions regarding the technologies that will be used in producing that next unit of output. See id. It also includes assumptions regarding how efficiently this modern network will be operated—so-called “fill factors”. Id. Any methodology will have different assumptions built into it. See id. The FCC’s assumptions are meant to ensure that ILECs charge competitive prices for unbundled network elements, which theoretically will encourage new entrants into the marketplace. See id. These forward-looking assumptions, which may not necessarily reflect how an ILEC or a new entrant would in fact produce that next unit of output, have been the subject of perhaps the most intense debate. See id. Finally, TELRIC excludes the costs of providing the service to the end user. See id. at 45,544. The Report and Order notes that
local exchange carrier to produce UNEs using today's most efficient technologies.\textsuperscript{121} An embedded cost methodology, on the other hand, looks at the actual costs incurred in building a network using yesterday's technologies, and in the absence of any threat of competition.\textsuperscript{122} Ultimately, the FCC's TELRIC model attempts to simulate what it would cost an existing or prospective local service provider to develop the infrastructure required to provide each unbundled element of local service and limits compensation to those costs plus a reasonable profit.\textsuperscript{123} By not limiting compensation to forward-looking costs, an embedded cost methodology would theoretically ensure that the ILEC is always made whole (in essence, is able to recover all of its costs). Some parties argue that because the TELRIC or any forward-looking cost methodology includes assumptions about how much it should cost an ILEC to provide an unbundled element, it inevitably risks inadequately compensating ILECs, who may in fact incur far greater costs.\textsuperscript{124} On the other hand, an embedded costing methodology, such as that reviewed in \textit{Duquesne Light Co.}, that only compensates for "prudent investment" could also potentially inadequately compensate ILECs.\textsuperscript{125}

Given the 1996 Act's stated intent to promote competition in all sectors of telecommunications,\textsuperscript{126} the FCC concluded in the \textit{Local Competition Report and Order} that any methodology adopted for pricing unbundled network elements should attempt to simulate the cost of these unbundled elements in a competitive and efficient marketplace.\textsuperscript{127} The FCC reasoned that a TELRIC methodology will most effectively accomplish this goal, because it best replicates the conditions of a competitive marketplace and prevents ILECs from engaging in anti-competitive behavior.\textsuperscript{128}

Several parties filed Petitions with the FCC\textsuperscript{129} and with the United States Court of Appeals for the Eighth Circuit\textsuperscript{130} challenging the FCC's adoption of the TELRIC methodology. ILECs have also challenged several state regulators for adopting TELRIC.\textsuperscript{131} Opponents of the TELRIC methodology argue that it constitutes a physical taking because the \textit{Local Competition Report and Order} prescribed the physical occupation of ILEC property without just compensation.\textsuperscript{132} These parties also argue that because a forward-looking costing

\textit{Total Service Long-Run Incremental Cost or TSLRIC, a pricing methodology advocated by some parties, is a forward-looking pricing methodology that would include such costs. See id. Under TELRIC, these service costs would be presumably assumed by the purchaser of the unbundled element in providing service to the end user. See id. Thus, these would be costs avoided by the ILEC in selling the unbundled element to the new entrant and should not be included in the price of the unbundled element. See id. See id. at 45,544. See id. at 45,543. The FCC noted that "[d]ue to changes in input prices and technologies, incremental costs may differ from embedded costs of that same increment." Id. at 45,544. See \textit{Duquesne Light Co.}, 488 U.S. at 309. Of course, this assumes that some portion of ILEC investment has not been prudent. See \textit{Local Competition Report & Order}, at 45,479. See id. at 45,481. See id. at 45,544. See \textit{Joint Motion of GTE Corporation and the Southern New England Telephone Company} supra note 129, at 6. These parties argue that the \textit{Report and Order} involves a physical invasion because another section of the 1996 Act, Section 251(c)(6), requires that ILECs permit the physical or virtual collocation of the equipment of prospective competitors that is necessary for access to the ILECs' unbundled elements. 47 U.S.C. § 251(c)(6). Opponents of the ILECs' argument note that 47 U.S.C. § 251(c)(6) also permits the virtual collocation of "equipment necessary for . . . access to unbundled network elements . . . if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations." Id. This, they argue, is not a physical invasion of ILEC property, because under virtual collocation the interconnecting carrier's equipment is not actually physically located on the ILEC's property. See \textit{Teleport Communications Group Opposition}, supra note 129, at 6.}
methodology does not permit them to recover their actual or embedded 'costs,' and thus, is not 'just' and 'reasonable,' it violates Sections 251(c)(2) and (3), and 252(d)(1)(A) of the 1996 Act and constitutes a taking. These opponents reason that forward-looking costing methodologies do not adequately compensate them for the cost of providing unbundled network elements, so that they are unable to recover their embedded or actual costs.

Petitions for Stay of the Local Competition Report and Order were denied by the FCC on September 17, 1996. On October 15, 1996, the U.S. Court of Appeals for the Eighth Circuit stayed the Local Competition Report and Order pending its review of the takings claim. On July 17, 1997, the Eighth Circuit issued its long-awaited decision on this challenge, overturning the FCC's imposition of the TELRIC methodology largely on jurisdictional grounds, and left open the question of whether a TELRIC methodology could result in a taking. On January 25, 1999, the United States Supreme Court issued its long-awaited decision largely reiterating the FCC's local competition rules. In light of the largely jurisdictional nature of the appeal, the Supreme Court did not address the issue of whether the FCC's UNE costing rules constitute a taking. Meanwhile, at least thirty-five states have independently approved a TELRIC unbundled elements pricing methodology. Of these states, at least fifteen are being sued for approving forward-looking cost incremental pricing for unbundled network elements. Moreover, ILECs continue to contend that TELRIC does not provide them with adequate compensation. Thus far, United States District Courts have uniformly held that, absent permanent rates, a TELRIC UNE claim is not ripe for review.

IV. THE FCC ARGUES THAT THE ACT DOES NOT PRESCRIBE A PHYSICAL TAKING AND TELRIC WILL PROVIDE ILECS WITH JUST COMPENSATION

In the Local Competition Report and Order, the FCC argued that the 1996 Act does not prescribe a physical invasion of ILEC property. But, even if it does, the FCC reasoned that adopting the TELRIC pricing methodology provides for just compensation, and thus, is not confiscatory.

In defending its pricing methodology against claims that it constitutes a regulatory taking, the FCC correctly argued that, in determining whether a rate is confiscatory, the Supreme Court examines whether the rate itself is just and reasonable, not the methodology used to arrive at the rate. The FCC asserted that any claims of con-

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133 See Joint Motion of GTE Corporation and the Southern New England Telephone Company, supra note 129, at 12, 14, 17. Opponents argue that Section 251(d)(1)(A) requires a costing methodology that allows them to recover all prudently incurred embedded (actual) costs, which they allege a long run incremental costing methodology does not permit. See Joint Motion of GTE Corporation and the Southern New England Telephone Company, supra note 129, at 17.


137 See Iowa Util. Bd. v. FCC, 120 F.3d 753, 816 (8th Cir. 1997). The court held that the Act demanded that states, not the FCC, develop methodologies for the pricing of unbundled network elements. See id. Noting that it had already vacated the unbundling rules on jurisdictional grounds, the court held that "because the petitioners have not demonstrated that they have participated in . . . state arbitration proceedings and have been denied just compensation, we find that their takings claim is not ripe for review." Id. at 818. The Supreme Court granted certiorari in this case. See MCI Telecommunications Corp., et al. v. Iowa Util. Bd., 118 S. Ct. 879 (1998).


139 FCC Chairman Reed E. Hundt, speech before National Associations of Regulatory Utility Commissioner Communications Committee (Feb. 25, 1997); FCC Chairman Reed E. Hundt, speech before The Freedom Forum and Georgetown University (Feb. 7, 1997). For a sample listing of states that have approved forward-looking economic cost studies, see In re Federal-State Joint Board on Universal Service, Report & Order, 12 FCC Rcd. 8776, para. 247 n.651 (rel. May 8, 1997).

140 See FCC Chairman Reed E. Hundt, speech before National Association of Regulatory Utility Commissioners Communications Committee (Feb. 25, 1997).


143 See Local Competition Report and Order, 61 Fed. Reg. at 45,553.

144 See id.

fiscation by the ILECs were premature at best because no rates had yet been adopted through statutorily mandated arbitration by the states under the TELRIC formula.\footnote{Id.} Regardless, the FCC went on to state that the rates adopted under TELRIC would survive constitutional challenge.\footnote{See id.} Noting that 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,” the FCC argued that preventing a carrier from recovering all of its costs is not alone confiscatory.\footnote{See id. (citing United States v. Miller, 317 U.S. 369, 374 (1942)).} The FCC noted that rates which reduce the value of property are not necessarily invalid.\footnote{See 61 Fed. Reg. at 45,553.} Without providing a specific citation the FCC explained that the rule in \textit{Hope Natural Gas} simply requires that the “overall regulatory framework” enables LECs to realize a profit.\footnote{See 47 U.S.C. § 251(c) (3).}

In response to the argument that the TELRIC pricing methodology should be judged under the standard of just compensation usually applied to physical takings of property, as opposed to the standard used for exercises of the government police power, the FCC argued that even if it were prescribing such a physical taking, TELRIC satisfies the just compensation standard.\footnote{See 47 U.S.C. § 251(c)(6).} The FCC argued that since “just compensation is normally measured by the fair market value of the property subject to the taking,”\footnote{See 47 U.S.C. § 251(c)(3).} and TELRIC attempts to replicate rates in a competitive market,\footnote{See id. at 251(c)(6).} the pricing methodology that it adopted provides for just compensation.\footnote{With virtual collocation, the connection is done from sites near the telephone central offices, but not within them.} Stating that at least one United States Court of Appeals has upheld the constitutionality of a forward-looking pricing methodology, the FCC concluded that TELRIC will provide ILECs with a fair return on their investment (\textit{i.e.}, just compensation).\footnote{“Under virtual collocation, interconnectors are allowed to designate central office transmission equipment dedicated to their use, as well as to monitor and control their circuits terminating in the LEC central office. Interconnectors, however, do not pay for the incumbent’s floor space under virtual collocation arrangements and have no right to enter the LEC central office.” 61 Fed. Reg. at 45,534.} The FCC further concluded that ILECs may seek relief from the TELRIC pricing methodology if they can show that under TELRIC their rates will be confiscatory.\footnote{\textit{Cf.} FCC Florida Power, 480 U.S. at 250-54 (discussing the Court’s refusal to apply the Takings Clause to regulation that simply govern the terms of voluntary commercial relationship).}

V. ANALYSIS: DOES TELRIC PRICING OF UNBUNDLED ELEMENTS CONSTITUTE A TAKING?

A. Whether the 1996 Act Prescribes the Physical Invasion of Private Property Is Unclear

Section 251 of the 1996 Act requires that incumbent LECs provide requesting telecommunications carriers nondiscriminatory access to network elements on an unbundled basis.\footnote{See 47 U.S.C. § 251(c) (6).} The 1996 Act at Section 251(c)(6) requires that ILECs provide physical collocation of equipment necessary for access to unbundled elements.\footnote{See 47 U.S.C. § 251(c)(6).} However, section 251(c)(6) also states that an ILEC may provide virtual collocation\footnote{See 47 U.S.C. § 251(c)(6).} if it can show that physical collocation is not practical for technical reasons.\footnote{See id. at 251(c)(6).} Ultimately, ILECs must provide one or the other.\footnote{See 47 U.S.C. § 251(c)(3).}

In \textit{Loretto} the Court ruled that a permanent physical invasion of private property, however minor or minute, is a per se taking and requires just compensation.\footnote{61 Fed. Reg. at 45,553.}
compensation.\(^{162}\) Under virtual collocation, even though the interconnector does not own the equipment in the ILEC’s central office, it does own the circuits terminating into the office.\(^{163}\) If the Court finds that the virtual collocation requirement does involve such a government-authorized invasion, however minute, Section 251(c)(6) would be ruled a physical taking of private property for a public purpose, and requiring just compensation. This will require a finding that the virtual collocation requirement, in which ILECs must permit interconnecting carriers to terminate their circuits in the LEC’s central office,\(^{164}\) constitutes such a physical invasion.\(^{165}\)

On the other hand, it is unlikely that such a conclusion could be reached if the Court treats the rule in *GTE Northwest v. Public Utility Commission* as a modification of *Loretto*. In *GTE Northwest*, the Court ruled that a statute requiring physical collocation constituted a physical taking of property for public use.\(^{166}\) Unlike the statute in *GTE Northwest*, the 1996 Act does not require physical collocation in all situations.\(^{167}\) In addition, under virtual collocation the interconnector does not own the equipment in the ILEC’s central office. Thus, it would appear that Section 251(c)(6) of the 1996 Act does not satisfy part two of the *GTE Northwest* three-part test,\(^{168}\) which requires that the LEC not own the equipment on its property dedicated to the interconnector’s use.\(^{169}\) However, by stating that “collocation ‘can be characterized as a physical invasion by the government’ ... for the three reasons provided” in the opinion,\(^{170}\) the rule in *GTE Northwest* seemed to leave open the possibility that collocation can be characterized as a physical invasion for other reasons, or that other forms of collocation can be physical invasions.\(^{171}\) In short, *Loretto* and *GTE Northwest* provide the Court with wide discretion in deciding whether or not virtual collocation constitutes a physical taking of ILEC property, requiring just compensation.

**B. The FCC Correctly Notes That, Absent Rates, the TELRIC Methodology Can Not Alone Constitute a Taking**

If challengers to the *Local Competition Report and Order* are able to prove that it prescribes a physical taking of property, they will be confronted with the equally difficult task of showing that the TELRIC methodology is confiscatory. However, in the absence of a rate, whether TELRIC unbundled elements pricing is confiscatory is irrelevant. In the *Local Competition Report and Order*, the FCC noted that it is the impact of the rate order that matters, not the theory upon which it is based.\(^{172}\) In *Iowa Utilities Board*, the Court of Appeals for the Eighth Circuit characterized the ILEC takings claim as not ripe without confiscatory rates actually imposed.\(^{173}\) As *Hope Natural Gas* held, the rate must prevent the entity as a whole from recovering a sufficient return on investment.\(^{174}\) Although US West, GTE, SNET and other petitioners to the Court of Appeals would disagree, the case law clearly supports this conclusion. As the Court in *Duquesne* most recently concluded, the Constitution provides regulators wide latitude in deciding what rate methodology is in the best interest of the utility and consumers.\(^{175}\) Thus, because TELRIC is simply a methodology for developing unbundled element rates, it could not alone violate the Takings Clause.\(^{176}\) Without a

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162. See *Loretto v. Teleprompter Manhattan CATV, Corp.*, 458 U.S. 419, 427 (1981); see also supra text accompanying notes 80-87.


164. See id.

165. Under *Loretto v. Teleprompter Manhattan CATV*, virtual collocation may be a physical invasion of ILEC property since it requires ILECs to permit interconnecting carriers to terminate their circuits in the ILEC’s central office—a “permanent physical invasion” of LEC property, “however minute.” See *generally Loretto*, 458 U.S. at 436-39. The Court would be creating new precedent in doing so.


168. See supra text accompanying notes 42-43.

169. See *GTE Northwest Inc.*, 900 P.2d at 503.

170. See id.

171. See id. (emphasis added) (citing *Loretto*, 458 U.S. at 426).

172. 61 Fed. Reg. at 45,553; see also *Hope Natural Gas*, 320 U.S. at 602.


175. *Duquesne Light Co.*, 488 U.S. at 314 (“[t]he Constitution ... leaves [regulators] free to decide what ratesetting methodology best meets their needs in balancing the interests of the utility and the public.”).

176. It is critical to note that Supreme Court will not apply the takings clause to voluntary commercial relationships. See supra note 35. Thus, if an ILEC and a new entrant voluntarily negotiate rates for unbundled elements under the TELRIC methodology, any agreement they enter into will not be protected by the Takings Clause. See id. TELRIC derived rates
rate these claims are simply not ripe for review.\textsuperscript{177} Of course, if the rate adopted does not provide the ILEC with sufficient compensation, TELRIC would be ruled a per se confiscatory takings under \textit{Lucas}.

C. If Changes in Takings Clause Scrutiny in the Land Use Context Are Applied to the Common Carrier Context, TELRIC Could Be Invalidated

If TELRIC methodology is not per se confiscatory (\textit{i.e.}, represents the fair market value and enables the entity as a whole to realize a profit), the Supreme Court should nonetheless apply the most recent tests to the common carrier context. Even though the Supreme Court has recognized the unique nature of rate-making and Takings Clause scrutiny of it, regulators have not been immune from the just compensation requirement.\textsuperscript{179} In fact, the development of Takings Clause jurisprudence in this context has largely coincided with changes that have occurred in land use takings jurisprudence.\textsuperscript{180}

As discussed previously, the early rate-making Takings Clause cases, which preceded by over thirty years the Supreme Court's recognition of regulations that go "too far" in regulating land use, were a response to the ever increasing reach of the regulatory state.\textsuperscript{181} These cases recognized that there are limits to the state’s legitimate right to regulate the rates of public utilities. The Supreme Court viewed its role as ensuring that these limits were not exceeded. This judicial oversight has incrementally expanded, as has the regulation of private property use. Moreover, since \textit{Pennsylvania Coal}, the Supreme Court has accorded private property owners putting their property to private use the same protection as private property owners putting their property to public use.\textsuperscript{182}

The abundance of regulations adopted by the FCC following passage of the 1996 Act graphically illustrates that the reach of the regulatory state in the common carrier context will not recede in the near future. Furthermore, although the telecommunications industry is increasingly competitive, it is hardly deregulated—especially in the provision of local telephony. Thus, any rationale for providing telecommunications regulators greater deference under the Takings Clause is at the very least premature.

With that in mind, it would not be surprising if the Supreme Court applied some form of the essential nexus and rough proportionality tests to a rate that was not per se confiscatory. The Court would first require an essential nexus between the purpose of the unbundled element pricing methodology, increased local competition and lower prices, and the TELRIC pricing methodology itself. The Court would also look at whether the sacrifices (if any) the ILECs make in the sale of unbundled elements to potential competitors at TELRIC are roughly proportional to any benefits they may derive from the 1996 Act. Sacrifices would likely consist of lost revenues on the sale of unbundled elements to end users and possible loss of market share, while the benefits would include the ability to enter into the interexchange marketplace in exchange for enabling competitors to enter the local marketplace, a provision of the 1996 Act.\textsuperscript{183} An additional benefit may include the receipt of universal service subsidies.\textsuperscript{184} It is unclear how such sacrifices or losses and benefits could be quantified, as \textit{Dolan} requires.\textsuperscript{185} The \textit{Local Competition Report and Order} did not provide such a quantification, nor have state Orders adopting these pricing methodologies. As the Court in \textit{Dolan} indicated, in the absence of such quantification a regulation will be invalidated.\textsuperscript{186}

\begin{footnotesize}
\begin{enumerate}
\item See supra notes 90-91; see also McKnight supra note 44.
\item If the precedentially high degree of takings clause protection provided in \textit{Loretto} is any indication of how the Court will act in the common carrier takings context, it would appear that changes in the land use area will have a significant effect on Takings Clause protections afforded common carriers in rate regulation. See supra text accompanying notes 32-39. \textit{Loretto}, which occurred during the \textit{Nollan, Lucas, Dolan} line of cases, extended takings clause protections to physical invasions, however minute. \textit{Loretto} v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982).
\item See id. at § 254.
\item See supra text accompanying notes 74-78.
\item See Dolan v. City of Tigard, 512 U.S. 374, 395-96
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\end{enumerate}
\end{footnotesize}
If the these tests were applied to a rate adopted pursuant to a TELRIC pricing methodology, the Court could invalidate it because no quantified showing of rough proportionality was made. Of course, such a ruling would not prevent a regulator from issuing another Order in which TELRIC was adopted and which provided such quantification. To prevent such an outcome, regulators should include such an analysis in any of their UNE rate-making orders.

VI. CONCLUSION

In Hope Natural Gas, the Supreme Court recognized that rate orders, by virtue of being issued by a governmental body, carry a presumption of validity.\(^{187}\) This sort of deference, however, may be a thing of the past. As discussed, once rates are adopted, ILECs will be provided with an opportunity to challenge forward-looking unbundled element pricing methodologies. Even if the rates adopted are not per se confiscatory, a court following precedent may choose to apply the essential nexus and rough proportionality test to the Order. If an Order adopting such methodology does not contain the required quantification, it may be ruled unconstitutional. As an insurance policy against such a constitutional challenge, regulators adopting such costing methodologies and accompanying rates should include these additional analyses.