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

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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.

6 WILLIAM BLACKSTONE, COMMENTARIES 2 (1765); see also RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 22 (1985); Bernard Schwartz, Takings Clause--'Poor Relation' No More?, 47 OKLA. L. REV. 417, 418 (1994); William Michael Treanor, The Original Understanding of the Takings Clause and the Political Process, 95 COLUM. L. REV. 782, 785-90 (1995). Moreover, Article 28 of the Magna Carta barred crown officials from "tak[ing] any one's grain or other chattels, without immediately paying for them in money." MAGNA CARTA art. 28 (1215), reprinted in SOURCES OF OUR LIBERTIES: DOCUMENTARY ORIGINS OF INDIVIDUAL LIBERTIES IN THE UNITED STATES CONSTITUTION AND
stated public purpose⁹ and in exchange for just compensation.¹⁰

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. 209 (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, 526 (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, Reclaiming 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. Grizz, 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 cost 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,
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." 26 Pumpelly expanded compensable takings to include physical invasions, as well as physical appropriations of private property. 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. 28 Mugler involved a prohibition statute directing all liquor manufacturing facilities to close because they were considered to be common nuisances. 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. 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. 31 The Court determined that a taking had occurred even though the facilities occupied only 1/2 cubic feet. 32

The Court found that regulations imposing permanent physical occupations of private property require just compensation, 33 echoing the oft-proounced rule that a permanent physical occupation of real property 34 is a per se taking and automatically requires just compensation. 35 The Court concluded that a "physical occupation authorized by government is a taking without regard to the public interests that it may serve" 36 or the extent of the private property owner's economic loss. 37 As noted above, this rule is applicable even when the physical invasion is "minor" or "minute." 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. 39 The statute required physical collocation 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. 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." 42 Although this ruling does not hold all physical and virtual collocation stat-

and not directly encroaching upon private property . . . are universally held not to be a taking within the meaning of the constitutional provision." 34 Id. at 642.

26 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." 35 Id.

28 80 U.S. (13 Wall.) 166, 181 (1872).

29 See id. at 662-63.

30 See id. at 668-69.


32 See Loretto, 458 U.S. at 438 n.16.

33 See id. at 426.

34 The Court stated that an occupation is "permanent" when it may last for the duration of the applicable legal regime. See id. at 439.

35 See 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. 41

In *FCC v. Florida Power Corp.*, 480 U.S. 245, 250-54 (1987), the Supreme Court held the Attachment Act, which provided that cable operators leasing space on utility poles may seek relief from alleged overcharging, did not compel a "permanent occupation" of the utility companies' property. The Court noted that "nothing in the Pole Attachments Act . . . gives cable companies any right to occupy space on utility poles, or prohibits utility companies from refusing to enter into attachment agreements with cable operators." Id. at 251.

36 Loretto, 458 U.S. at 426.


38 See id. at 421, 436-37.


40 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.

41 GTE Northwest Inc., 900 P.2d at 503 (citing Loretto, 458 U.S. at 426) (emphasis added).

42 Id.
utes 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. 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. The Court ruled that because the Kohler Act went "too far," it amounted to an uncompensated regulatory taking. 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.

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. The reciprocity of advantage test requires that a regulation provide a private as well as public benefit. 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.

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
most important modern takings law decision. However, while it made clear that the Takings Clause protects private property owners from exercises of police power that “go too far,” Pennsylvania Coal and subsequent rulings did little to clarify the meaning of “too far.”

During the period following Pennsylvania Coal, the Supreme Court, in its application of the “too far” test, upheld far-reaching police power regulations. 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.” Any single factor may determine whether there is or is not a taking.

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The reciprocity of advantage test requires that police power regulations provide both public and private benefits. See supra note 51. In Keystone Bituminous Coal Ass’n, the Court noted that the law will more likely be upheld if it “is not a taking.”

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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 nor 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


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. 483 U.S. 825.

Id. at 837. 480 U.S. at 481-502. In many ways the majority opinion in Keystone Bituminous Coal Ass’n. simply restated Justice Brandeis’ dissent in Pennsylvania Coal. See Pennsylvania Coal Co., 260 U.S. at 416-22 (Brandeis, J., dissenting). Justice Brandeis, echoing his Pennsylvania Coal dissent, argued that the Kohler Act did not violate the Takings Clause because it was "merely the prohibition of a noxious use." Id. at 417 (Brandeis, J., dissenting). Justice Brandeis, restating the rule in Mugler v. Kansas, 123 U.S. 623 (1887), noted that "a restriction upon use does not become inappropriate as a means, merely because it deprives the owner of the only use to which the property can then be profitably put," especially when the statute attacked merely regulates that which constitutes a public nuisance. Id. at 418.

"Brandeis’ dissent in Pennsylvania Coal . . . became known as the noxious use exception to the Takings Clause." See Mc Knight, supra note 44, at 621. One scholar has argued that the Court’s use of the noxious use exception as part of the reciprocity of advantage balancing test in Keystone Bituminous Coal Ass’n. appeared to indicate that the Court was beginning to increase Fifth Amendment scrutiny. See Raymond Coletta,
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.* Contrasting *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 carr[y] 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, 269 (1980). That rule stated that a regulation does not affect 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 DeBow, *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 GOLDBEIN, *REAL PROPERTY 1309-10* (1984); Epstein, supra note 6, at 183-84; Timofeyk Muras, *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, 479 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." 988 F.2d at 1260.

\(^{105}\) 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.106 Such a burden of proof is difficult for a challenger to overcome.107 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,108 opportunities continue to emerge for new entrants to penetrate the largely monopolized local telecommunications marketplace,109 and Bell Operating Company entry into long-distance telephone service appears to be imminent.110 Sections 251 and 252 of the 1996 Act specifically provides a prospective entrant with three methods of entry into the local marketplace.111 A new entrant may (1) construct and interconnect its own facilities;112 (2) purchase unbundled elements;113 or (3) resell existing service offerings.114 Pursuant to Sections 251 and 252 of the 1996 Act, on August 8, 1996, the FCC released the *Local Competition Report and Order*,115 which prescribes a methodology by which new entrants116 in the local exchange marketplace will be charged for the UNEs117 of the ILEC's system.118 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.119 TELRIC is a forward-looking pricing methodology that aims to capture the total long run incremental cost of a specific unbundled element.120 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.

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
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 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 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 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

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  \item \textsuperscript{121} See id. at 45,544.
  \item \textsuperscript{122} "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." Id. at 45,544.
  \item \textsuperscript{123} See id. at 45,543.
  \item \textsuperscript{124} The FCC noted that "due to changes in input prices and technologies, incremental costs may differ from embedded costs of that same increment." Id. at 45,544.
  \item \textsuperscript{125} Duquesne Light Co., 488 U.S. at 309. Of course, this assumes that some portion of ILEC investment has not been prudent.
  \item \textsuperscript{126} See Local Competition Report & Order, at 45,479.
  \item \textsuperscript{127} See id. at 45,481.
  \item \textsuperscript{128} See id. at 45,544.
  \item \textsuperscript{129} See Joint Motion of GTE Corporation and the Southern New England Telephone Company for Stay Pending Judicial Review (Teleport Communications Group) in CC Dkt. No. 96-98 (Sept. 4, 1996); Opposition of the United States Department of Justice to the Joint Motion of GTE Corporation and the Southern New England Telephone Company for a Stay Pending Judicial Review in CC Dkt. No. 96-98 (Sept. 4, 1996).
  \item \textsuperscript{130} Iowa Utils. Bd. v. FCC, 109 F.3d 418 (8th Cir. 1996), rev'd, AT&T Corp. v. Iowa Utilities Bd., ___ U.S. ___, 1999 WL 24568 (Jan. 25, 1999).
  \item \textsuperscript{132} See Joint Motion of GTE Corporation and the Southern New England Telephone Company, supra note 129, at 16. These parties argue that the 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 Teleport Communications Group Opposition, supra note 129, at 6.
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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 reinstanting 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, 129 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).

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.146

Regardless, the FCC went on to state that the rates adopted under TELRIC would survive constitutional challenge.147 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.148 The FCC noted that rates which reduce the value of property are not necessarily invalid.149 Without providing a specific citation the FCC explained that the rule in Hope Natural Gas simply requires that the “overall regulatory framework” enables LECs to realize a profit.150

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.151 The FCC argued that since “just compensation is normally measured by the fair market value of the property subject to the taking,”152 and TELRIC attempts to replicate rates in a competitive market,153 the pricing methodology that it adopted provides for just compensation.154 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 (i.e., just compensation).155 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.156

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.157 The 1996 Act at Section 251(c)(6) requires that ILECs provide physical collocation of equipment necessary for access to unbundled elements.158 However, section 251(c)(6) also states that an ILEC may provide virtual collocation159 if it can show that physical collocation is not practical for technical reasons.160 Ultimately, ILECs must provide one or the other.161

In Loretto the Court ruled that a permanent physical invasion of private property, however minor or minute, is a per se taking and requires just

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(1973); Jersey Central Power & Light v. FERC, 810 F.2d 1168 (D.C. Cir. 1987).

146 Under Section 252 of the Act, if parties negotiating rates for unbundled elements are unable to reach an agreement, either on their own or through voluntary mediation, within a specified period of time, they may either voluntarily agree to or will eventually be forced to enter into mandatory state arbitration of rates, which will be binding on them. See 47 U.S.C. § 252. Both arbitrated and voluntarily negotiated agreements must be submitted for approval to the appropriate state regulator. Id. § 252(e)(1). If a state does not act upon arbitrated rates within a specified period, the FCC may intervene and conduct its own arbitration proceedings. Id. § 252(e)(5). The decisions of these regulatory bodies are appealable to the appropriate U.S. District Court. Id. § 252(e)(6).

147 See 61 Fed. Reg. at 45,553.

148 Id.

149 See id. (citing Hope Natural Gas, 320 U.S. at 601).

150 Id. In Hope Natural Gas, the Court stated that “[i]f the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end.” 320 U.S. at 602.


152 Id. (citing United States v. Miller, 317 U.S. 369, 374 (1942)).


154 See Id.

155 See id. (citing Metro. Transp. Auth. v. Interstate Commerce Comm’n, 792 F.2d 287, 297 (2d Cir. 1986)).


158 See Id. at 251(c)(6).

159 With virtual collocation, the connection is done from sites near the telephone central offices, but not within them.

160 "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 45,554.

161 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).
compensation.\textsuperscript{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.\textsuperscript{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,\textsuperscript{164} constitutes such a physical invasion.\textsuperscript{165}

On the other hand, it is unlikely that such a conclusion could be reached if the Court treats the rule in \textit{GTE Northwest v. Public Utility Commission} as a modification of \textit{Loretto}. In \textit{GTE Northwest}, the Court ruled that a statute requiring physical collocation constituted a physical taking of property for public use.\textsuperscript{166} Unlike the statute in \textit{GTE Northwest}, the 1996 Act does not require physical collocation in all situations.\textsuperscript{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 \textit{GTE Northwest} three-part test,\textsuperscript{168} which requires that the LEC not own the equipment on its property dedicated to the interconnector's use.\textsuperscript{169} However, by stating that "collocation 'can be characterized as a physical invasion by the government' . . . for the three reasons provided" in the opinion,\textsuperscript{170} the rule in \textit{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

\textsuperscript{162} See \textit{Loretto} v. Teleprompter Manhattan CATV, Corp., 458 U.S. 419, 427 (1981); see also supra text accompanying notes 80-87.
\textsuperscript{164} See id.
\textsuperscript{165} Under \textit{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 \textit{generally Loretto}, 458 U.S. at 436-39. The Court would be creating new precedent in doing so.
\textsuperscript{167} See \textit{47 U.S.C. § 251(c)(6)}.
\textsuperscript{168} 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
\textsuperscript{169} See \textit{GTE Northwest Inc.}, 900 P.2d at 503.
\textsuperscript{170} See id.
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 Carriage 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 carriage context. Even though the Supreme Court has recognized the unique nature of rate-making and Takings Clause scrutiny of it,\textsuperscript{178} 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 carriage 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}

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  \item \textsuperscript{177} In \textit{GTE South, Inc. v. Morrison}, the United States District Court for the Eastern District for Virginia went as far as to hold that such a claim would not be ripe for review until permanent (not just interim) rates were adopted. 6 F. Supp. 2d 517, 530 (E.D. Va. 1998). This position appears to contradict the United States Supreme Court's rule in \textit{First English Evangelical Lutheran Church of Glendale v. County of Los Angeles}, in which it held that temporary regulations can violate the Takings Clause. 482 U.S. 304, 317-18, 322 (1987).
  \item \textsuperscript{178} See supra text accompanying note 89-92.
  \item \textsuperscript{179} See supra text accompanying notes 94-119.
  \item \textsuperscript{180} See supra text accompanying notes 93-95.
  \item \textsuperscript{181} See supra notes 90-91; see also McKnight supra note 44.
  \item \textsuperscript{182} If the preceedentially 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 \textsuperscript{183} See 47 U.S.C. §§ 271-72.
  \item \textsuperscript{184} See id. at § 254.
  \item \textsuperscript{185} See supra text accompanying notes 74-78.
  \item \textsuperscript{186} See Dolan v. City of Tigard, 512 U.S. 374, 395-96
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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.