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# WHO PAYS FOR CARBON COSTS? UNCERTAINTY AND RISK IN RESPONSE TO THE CURRENT PATCHWORK OF CARBON REGULATION FOR PUBLIC UTILITIES

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## I. INTRODUCTION

*Addressing climate change will require a suite of policies and programs . . . .*[1]

Historically, environmental regulation in the United States has occurred piecemeal, reflecting the diverse positions on the topic taken by state legislators, state and federal agencies, the courts, and other stakeholders. Current initiatives to reduce or to regulate carbon are no different, as they involve varying levels of regulation and oversight.[2] Even with the passage of a federal cap-and-trade law this complex regulatory structure will not change. As such, public utilities and others in the energy sector can expect to be regulated at many different levels for the purpose of restricting carbon output.[3]

1. Mandatory Reporting of Greenhouse Gases, 74 Fed. Reg. 56,260, 26,266 (Oct. 30, 2009) (to be codified at 40 C.F.R. pts. 86, 87, 89).

2. *See id.*

3. While carbon regulation will apply to many different areas of industry, this article will focus on the impact resulting from regulation on public utilities providing retail electricity service to customers. While each state has a slightly different defini-

In particular, public utilities are rate regulated, which requires approval of intrastate retail rates by the state regulatory commission[4] that has jurisdiction over its rates and services. Rate regulation is of particular significance where compliance with carbon regulations creates additional costs for public utilities. With few exceptions, carbon regulations do not address a critical driver for a public utility—who will bear responsibility to pay for the additional expense resulting from such regulation? In the absence of a clear mandate, the answer is left open to debate in the hundreds of regulatory and judicial proceedings that will ensue. Where a public utility operates in multiple states, it may also experience different regulatory treatment of these costs, creating disparity between different jurisdictions and challenges for the public utility's resource planning and financial integrity.

Costs resulting from the generation of electricity, such as fuel and generating facilities, are considered part of the operating costs of providing that service to customers. In the context of a retail rate setting proceeding, a state regulatory commission's role is to consider whether the rates identified by the requesting public utility are just and reasonable, and to establish a reasonable return on investment.[5]

Current estimates of the costs associated with carbon regulation compliance are significant, and consequently could result in requests by public utilities for correspondingly significant increases in retail

tion, a "public utility" is typically defined as "a diverse group of businesses that have been subjected over several decades to detailed local, state and federal regulation of rates and service." CHARLES F. PHILLIPS, JR., THE REGULATION OF PUBLIC UTILITIES 4 (3d ed. 1993). Public utilities can generally be divided into two categories: (1) "those enterprises which supply, directly or indirectly, continuous or repeated services through more or less permanent physical connection between the [generation] plant . . . and the premises of the consumer;" and (2) transportation entities. *Id.* *See also* JAMES C. BONBRIGHT ET. AL., PRINCIPLES OF PUBLIC UTILITIES RATES 10 (2d ed. 1988) (stating that "an enterprise is not regarded as a public utility, at least for the most part, unless the regulation to which it is subject includes direct control of its rates of charge for services and a limitation on its allowed rate of return"). The focus of this article will be on the first type of public utility.

4. State agencies with the legislative authority to regulate rates, facilities and services of private utilities offering retail service are called by a variety of different names depending on the individual state (e.g., Public Utilities Commission, Public Service Commission, Public Regulation Commission, Board of Public Utilities, etc.). This article will generically refer to these entities as "state regulatory commissions."

5. *See, e.g.*, Federal Power Act, 16 U.S.C. § 824d (2006) ("All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.").

rates. If the public utility does not recover the cost of carbon regulation through its rates, these costs reduce the public utility's earnings and shareholders initially bear the reduced earnings. The public utility's profitability, however, impacts its ability to remain investment-worthy and to borrow capital at reasonable terms for investment in its systems and services. While disallowing carbon costs may initially mitigate a rate impact for electricity customers, this option also has consequences that are magnified by the expected size of the necessary rate increase. Customers will ultimately feel degradation in the public utility's credit status through increases in other costs or in the quality of the service provided.

Additionally, increased regulatory risk and uncertainty for public utilities can have a chilling effect on its capital investment. Where costs for carbon regulation are not recovered in rates, it could have a corresponding impact on investment in new technologies that are necessary to substantively address the issue of climate change. In these instances, the negative effects of regulatory uncertainty will not only be felt by public utilities, their customers and shareholders, but are ultimately likely to harm the environmental cause that the carbon policy is meant to help.

This article addresses the types of cost resulting from carbon regulation and discusses how they should be treated for ratemaking purposes. First, a summary is provided of the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment report that found global warming to be "unequivocal."[6] The article next considers various carbon initiatives from different branches of government and at both the state and federal levels. The article then considers cost recovery for these different carbon costs under fundamental ratemaking principles.[7] The article concludes that carbon costs and its impacts should be dealt with comprehensively and consistently.[8]

## II. THE IPCC STATES THAT GLOBAL WARMING IS "UNEQUIVOCAL"

In 2007, the IPCC published its Fourth Assessment Report.[9] In

6. *See infra* Part II.
7. *See infra* Parts III, IV.
8. *See infra* Part V.
9. The Intergovernmental Panel on Climate Change (IPCC) is a scientific body that reviews scientific, technical, and socio-economic information in an effort to understand global climate change. *See* IPCC, Organization, www.ipcc.ch / organization / organization.htm (last visited on Mar. 28, 2010). The IPCC was established in 1989 by the United Nations Environment Program and the World Meteorological Organization. *See* IPCC, History, http: / / www.ipcc.ch / organization / organization_history.htm

that report, the IPCC concluded that global warming is "unequivocal" and that human activity "very likely"[10] has caused a rise in global temperatures since 1950.[11] The report explained that the "primary source of the increased atmospheric concentration of carbon dioxide since the pre-industrial period results from fossil fuel use, with land-use change providing another significant but smaller contribution."[12] At the time of the report, the United States accounted for five percent of the world's population, but contributed a quarter of greenhouse gas emissions.[13]

Based on these conclusions, the IPCC recommended a number of adaptation and mitigation strategies. Among them, and most relevant here, the IPCC recommended that the energy sector adapt by strengthening energy efficiency and increasing the use of renewable resources, while reducing dependence on a single source of energy—fossil fuels.[14] The IPCC suggested that this could be accomplished by "[n]ational energy policies, regulations, and fiscal and financial incentives to encourage uses of alternative sources."[15] The IPCC noted that this adaption strategy could stimulate new technologies and use local resources, but there could also be technological and financial

(last visited on Mar. 28, 2010). The Organization's first report was published in 1990. *Id.* The IPCC won the Nobel Peace Prize in 2007 (jointly with former U.S. Vice President Al Gore) for its efforts "to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measurers that are needed to counteract such change." Ole Danbolt Mjos, Chairman, The Norwegian Nobel Committee, Presentation Speech (Dec. 10, 2007), http://nobelpeaceprize.org/en_GB/laureates/laureates-2007/presentation-2007.

10. The IPCC's 2007 report was the first to conclude that human activity was "very likely," or greater than ninety percent, a cause of global warming. The 2007 report is available on the IPCC website. *See* IPCC, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS (2007), *available at* http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html [hereinafter IPCC PHYSICAL REPORT]. In previous IPCC reports, human activity was only sixty-six to ninety percent "likely," a cause of global warming. IPCC, CLIMATE CHANGE 2007: SYNTHESIS REPORT 27 (2008), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf [hereinafter IPCC SYNTHESIS REPORT].

11. IPCC, SUMMARY FOR POLICY MAKERS 5, 10 (2007), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf [hereinafter IPCC 2007 SUMMARY]. *See also* Elisabeth Rosenthal & Andrew C. Revkin, *Science Panel Calls Global Warming 'Unequivocal,'* N.Y. TIMES, Feb. 3, 2007, at A1.

12. IPCC PHYSICAL REPORT, *supra* note 10, at 2.

13. *See* Rosenthal & Revkin, *supra* note 11, at 2.

14. IPCC SYNTHESIS REPORT, *supra* note 10, at 15 tbl. 4.1. The IPCC also recommended strengthening the transmission and distribution infrastructure. *Id.* Strengthening the transmission and distribution infrastructure is critical as more renewable resources come on to the system.

15. *Id.*

barriers.[16] To mitigate global warming, the IPCC recommended "fuel switching from coal to [natural] gas; nuclear power; renewable heat and power (hydropower, solar, wind, geothermal[,] and bioenergy); combined heat and power," and carbon sequestration.[17] The IPCC recommended that these mitigation strategies could be accomplished by carbon charges on fossil fuels and renewable energy obligations, among other policies.[18]

The 111th Congress relied in part on these IPCC conclusions when drafting carbon regulation legislation in 2009. Among the congressional findings for American Clean Energy and Security (ACES) Act's Global Warming Pollution Reduction Program, Congress found:

> (1) Global warming poses a significant threat to the national security, economy, public health and welfare, and environment of the United States, as well as of other nations.
>
> (2) Reviews of scientific studies, including by the Intergovernmental Panel on Climate Change and the National Academy of Sciences, demonstrate that global warming is the result of the combined anthropogenic greenhouse gas emissions from numerous sources of all types and sizes. Each increment of emission, when combined with other emissions, causes or contributes materially to the acceleration and extent of global warming and its adverse effects for the lifetime of such gas in the atmosphere. Accordingly, controlling emissions in small as well as large amounts is essential to prevent, slow the pace of, reduce the threats from, and mitigate global warming and its adverse effects.[19]

The ACES bill used many of the adaptation and mitigation strategies listed in the IPCC report.[20]

## III. CARBON REDUCTION INITIATIVES IN ALL BRANCHES OF GOVERNMENT CREATE UNEQUIVOCAL CARBON-RELATED COSTS

Various forms of carbon initiatives impacting the energy sector have been commenced by a variety of stakeholders. All of these initiatives create new carbon-related costs—from civil litigation costs and

16. *Id.*
17. *Id.* at tbl. 4.2.
18. *Id.*
19. American Clean Energy and Security Act, H.R. 2454, 111th Cong. § 701(a)(1)–(2) (2009).
20. *See* discussion of ACES *infra* Part III.B.

potential damages to compliance-related costs—but few of the initiatives explicitly provide for cost recovery or explain how these new carbon-related costs will be recovered.

### *A. Climate Change Litigation*

Climate change litigation, specifically whether plaintiffs can maintain a cause of action against oil, energy, and public utilities for adverse effects of global warming, create massive potential costs to comply with an injunction or civil damages awards.[21] Two United States Courts of Appeals found that tort liability for global warming is a justiciable political question and that plaintiffs have standing to maintain a cause of action against oil, energy, and utility companies.[22] One federal district court disagreed.[23]

If the plaintiffs ultimately prevail, the defendant public utilities may be ordered to reduce or eliminate carbon emissions associated with the electricity it provides to customers. Compliance with such an order may require the public utility to incur substantial costs, including purchase of alternative carbon neutral power to meet customer demand, and eventually the replacement of existing electric generation resources that emit carbon.[24]

21. This article does not address whether civil damages for carbon emissions should be included in the cost of service when setting retail rates; but the magnitude of such costs for a public utility may be considerable. *See, e.g.*, Mireya Navarro, *States Settle With Plant Polluting Region's Air*, N.Y. TIMES, Dec. 23, 2009, at A25 (explaining that Duke Energy settled a case about the sulfur dioxide emissions from one coal plant by paying a $1.75 million civil penalty, committing to spend $80 million to reduce the coal plant's emissions and an additional $6.25 million on other environmental projects).

22. *See infra* Part III.A.1.

23. *See infra* Part III.A.2.

24. For example, if the public utility relies on electricity generated from its own carbon-emitting generation plants, it would have to purchase carbon-neutral replacement power to continue serving its customers while it prepares to retrofit or replace these carbon-emitting generation plants with other carbon-neutral generation resources. Replacement power may cost more than the electricity from its current generation plants, and any physical changes to its own generation plant would also involve new costs. If the public utility purchases all of its electricity for resale, it would have to negotiate new contracts for carbon-neutral resources, while possibly remaining under contract obligations for its existing resources.

*1. Courts of Appeals hold Global Warming Claims are Justiciable and Plaintiffs have Standing:* Connecticut v. American Electric Power Company Inc. *and* Comer v. Murphy Oil USA

In *Connecticut v. American Electric Power Company Inc.*,[25] the Second Circuit Court of Appeals held that eight states, New York City, and three land trusts had standing to bring federal common law nuisance claims against several public utilities[26] that own and operate coal-fired power plants and that such a nuisance claim did not present a non-justiciable political question. The plaintiffs sought to cap and then reduce the defendant's carbon emissions.[27]

In 2004, the plaintiffs filed two separate actions against the public utilities. In both actions, the plaintiffs asserted that the public utilities were "substantial contributors to elevated levels of carbon dioxide and global warming."[28] Citing the causal link between heightened greenhouse gases and global warming, the states and New York City predicted that global warming "will have substantial adverse impacts on their environments, residents, and property, and that it will cost billions of dollars to respond to these problems."[29] The land trusts complaint was similar, but alleged a different type of injury—the land trusts argued that global warming would "diminish or destroy the particular ecological and aesthetic values that caused [them] to acquire, and cause them to maintain, the properties they hold in trust" and

25. Connecticut v. Am. Elec. Power Co. (*AEP*), 582 F.3d 309 (2d Cir. 2009). The other court of appeals case is *Comer v. Murphy Oil USA*, 585 F.3d 855 (5th Cir. 2009). In *Comer*, the Fifth Circuit Court of Appeals held that residents and owners of land and property along the Mississippi Golf coast have standing to assert Mississippi state law public and private nuisance, trespass, and negligence claims against various energy, fossil fuel, and chemical industries that operate in Mississippi, and that such claims do not present non-justiciable political questions. *Id.* at 860. In *Comer*, the plaintiffs sought damages from the defendants for private property that was destroyed during Hurricane Katrina. *Id.* at 863. *Comer* will not be discussed in detail because the plaintiffs requested damages, as opposed to an injunction, and the Fifth Circuit's conclusion is similar to the *AEP* court. The defendants in *AEP* and *Comer* have since requested *en banc* review. The Fifth Circuit granted *en banc* review on March 1, 2010.

26. Specifically, these utilities are American Electric Power Company Inc., American Electric Power Service Corporation, Southern Company, Tennessee Valley Authority, Xcel Energy Inc., and Cinergy Corporation. American Electric Power Service Corporation is the service company for American Electric Power Company Inc.; the service company provides management and professional services for AEP's operating companies, but the service company does not generate carbon dioxide emissions. *AEP*, 582 F.3d at 316 n.1.

27. *Id.* at 314.

28. *Id.* at 316–18 (states' and New York City's claims); *id.* at 318–19 (land trusts' claims).

29. *Id.* at 317.

would "interfer[e] with their efforts to preserve ecologically significant and sensitive land for scientific and educational purposes, and for human use and enjoyment."[30]

The Southern District of New York dismissed both complaints, finding that the case presented a non-justiciable political question.[31] In so holding, the court relied heavily on the third factor of the political question inquiry provided in *Baker v. Carr*.[32] The third *Baker* factor suggests there is a non-justiciable political question when it is "impossib[le] [to] decid[e] without an initial policy determination of a kind clearly for non-judicial discretion."[33] The district court held that initial policy determinations had to be made by the elected branches of government before a court could adjudicate the case.[34] The district court did not address directly the standing issue because of its determination on the political question.[35]

More than three years after oral argument, the Second Circuit decided the case, overruling the district court and finding that the plaintiffs had standing to bring nuisance claims against the public utilities.[36] The court started its analysis of the political question doctrine by noting that "*Baker* set a high bar for non-justiciability."[37] The court then analyzed all six of the *Baker* factors.[38] The court's analysis focused on the second and third *Baker* factors—that is, whether there was a lack of judicially-discoverable and manageable standards for resolving the case and whether it was impossible to decide the case without an initial policy determination of a kind clearly for non-judicial discretion.

The public utilities argued that neither public nuisance cases nor the Second Restatement of Torts[39] provided guidance on the potential

30. *Id.* at 319.
31. *Id.*
32. *Id.* at 319–20 (discussing the district court's application of the factors outlined in *Baker v. Carr*, 369 U.S. 186, 198 (1962)).
33. Connecticut v. Am. Elec. Power Co. (*AEP*), 582 F.3d 309, 319 (2d Cir. 2009) (quoting Vieth v. Jubelirer, 541 U.S. 267, 278 (2004)).
34. Connecticut v. Am. Elec. Power Co. (*AEP*), 406 F. Supp. 2d 265, 272–73 (S.D.N.Y. 2005).
35. *Id.* at 271 n.6.
36. *AEP*, 582 F.3d at 315. The Honorable Justice Sonia Sotomayor was a member of the panel who considered the *AEP* case, but was appointed to the U.S. Supreme Court before the case was decided. The case was therefore decided only by the two remaining members of the panel. *Id.* at 314 n.*.
37. *Id.* at 321.
38. *Id.* at 323–32. When a *Baker* factor is present, it suggests a non-justiciable political question.
39. RESTATEMENT (SECOND) OF TORTS § 821B (1979).

complex issues in global warming–related nuisance cases.[40] The court disagreed, citing cases where federal courts "grappled with complex scientific evidence, and resolved the issues presented, based on a fully developed record."[41] The court held that "[w]ell-settled principles of tort and public nuisance law provide appropriate guidance to the district court in assessing Plaintiffs' claims and the federal courts are competent to deal with these issues."[42]

The court of appeals also disagreed with the district court's conclusion that the elected branches needed to make an initial policy determination on the case. The court of appeals relied on *Illinois v. City of Milwaukee*,[43] finding that if a federal statute, like the Clean Air Act, does not provide the plaintiffs with a remedy, the plaintiff does not have to wait for Congress to enact comprehensive legislation that provides a remedy.[44] Instead, the plaintiff can rely on the federal common law.[45] After reviewing the other *Baker* factors, the court held "that the district court erred when it dismissed the complaints on the ground that they presented non-justiciable political questions."[46]

The court next addressed the standing issues.[47] Under *Lujan v. Defenders of Wildlife*,[48] the Supreme Court provided a three-part test for standing:

> First, the plaintiff must have suffered an injury in fact—an invasion of a legally protected interest which is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical. Second, there must be a causal connection between the injury and the conduct complained

40. *AEP*, 582 F.3d at 326.

41. *Id.* at 327 (citing New Jersey v. City of New York, 283 U.S. 473 (1931); North Dakota v. Minnesota, 263 U.S. 365 (1923); New York v. New Jersey, 256 U.S. 296 (1921); Pennsylvania v. Wheeling & Belmont Bridge Co., 54 U.S. (13 How.) 518 (1851)).

42. *Id.* at 329.

43. 406 U.S. 91 (1972).

44. *AEP*, 582 F.3d at 330–31.

45. *Id.*

46. *Id.* at 332.

47. The court first addressed the States's *parens patriae* standing. To have *parens patriae* standing, "[a] state: (1) 'must articulate an interest apart from the interests of particular private parties, i.e., the State must be more than a nominal party'; (2) 'must express a quasi-sovereign interest'; and (3) must have 'alleged injury to a sufficiently substantial segment of its population.'" *Id.* at 335–36 (citing Snapp v. Puerto Rico *ex rel.* Barez, 458 U.S. 592, 607 (1982)). The court found that the States met the test for *parens patriae* standing. *Id.* at 338. The court's analysis will not be detailed in this article because the plaintiffs in *Native Village of Kivalina*, discussed *infra* Part III.2, are not states.

48. 504 U.S. 555 (1992).

> of—the injury has to be fairly trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court. Third, it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.[49]

The court found that all of the plaintiffs satisfied the injury in fact prong of the *Lujan* test.[50] Only one state, California, showed a *current* injury in fact.[51] The rest of the states, New York City and the land trusts all alleged a *future* injury. For example, the states with ocean coastline and New York City argued that the rise in sea level caused by global warming will lead to more floods resulting in damage to infrastructure.[52] The court included a quotation from *Massachusetts v. Environmental Protection Agency*,[53] in order to explain that incremental injuries did not foreclose finding an injury in fact: "Petitioners [in *Massachusetts v. EPA*] maintain that the seas are rising and will continue to rise, and have alleged that such a rise will lead to the loss of Massachusetts' sovereign territory. No one, save perhaps the dissenters, disputes those allegations. Our cases require nothing more."[54] The court further concluded that the risk of catastrophic harm to the plaintiffs, though remote, was real and therefore the plaintiffs sufficiently alleged a future injury.[55]

Regarding causation, the court noted that causation required for standing is not a tort-like causation requirement; instead, the injury must be "fairly traceable" to the actions of the defendants.[56] Both sides relied on *Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc.*[57] and its progeny. In *Powell Duffryn*, the court provided a three-part test to determine whether an injury is fairly traceable to a defendant's discharge of pollutants:

> [T]his likelihood may be established by showing that a defendant has (1) discharged some pollutant in concentra-

49. Connecticut v. Am. Elec. Power Co. (*AEP*), 582 F.3d 309, 339 (2d Cir. 2009) (quoting *Lujan*, 504 U.S. at 560–61 (citations omitted)).

50. *Id.* at 344.

51. *Id.* at 341. The State of California alleged reduced snowpack and asserted that the reduced snowpack negatively impacted water supplies and caused flood-related property damage. *Id.* at 341.

52. *Id.* at 342.

53. 549 U.S. 497 (2007).

54. *AEP*, 582 F.3d at 344 (quoting Massachusetts v. Envtl. Prot. Agency, 549 U.S. 497, 523 n.21 (2007)).

55. *Id.* at 344.

56. *Id.* at 345.

57. 913 F.2d 64 (3d Cir. 1990).

> tions greater than allowed by its permit (2) into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that (3) this pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs.[58]

The defendants tried to distinguish *Powell Duffryn* based on the first prong of the test. The court rejected the defendant's argument and held that the causation element was met in that case because the defendants contributed to the types of injuries alleged.[59] Finally, the court found that the plaintiffs' claims satisfied the redressibility prong of the standing test because the reduction of domestic emissions would slow the pace of global emissions.[60]

The court then analyzed the defendant public utilities' Rule 12(b)(6) motion. The court found that all of the plaintiffs stated claims under the federal common law of nuisance. The court therefore vacated the judgment of the district court and remanded the case for further proceedings.[61]

#### *2. Federal District Court holds Global Warming Claims are not Justiciable under the Political Question Doctrine and Plaintiffs do not have Standing:* Native Village of Kivalina v. ExxonMobil Corporation

In contrast to *AEP* and *Comer*, the Northern District of California dismissed a climate change claim in *Native Village of Kivalina v. ExxonMobil Corporation*.[62] In that case, the governing body of an Inupiat Eskimo village and the City of Kivalina (collectively, the Kivalina Plaintiffs) filed suit against twenty-four oil, energy, and utility companies (collectively, the Kivalina Defendants).[63] The Kivalina Plaintiffs

58. *AEP*, 582 F.3d at 346 (quoting *Powell Duffryn*, 913 F.2d at 72).

59. *Id.* at 347.

60. *Id.* at 347–49.

61. The court of appeals also found that the plaintiffs' claims were not displaced by federal law and that the discretionary function exception does not provide one of the defendants, the Tennessee Valley Authority, with immunity from suit. *See id.* at 371–92. The displacement theory is discussed *infra* Part III.D. The Tennessee Valley Authority's claim need not be discussed for the purposes of this article.

62. Order Granting Defendants' Motion to Dismiss for Lack of Subject Matter Jurisdiction at 7, Native Vill. of Kivalina v. ExxonMobil Corp., No. 08-CV-01138, (N.D. Cal. granted Sept. 30, 2009). The Native Village of Kivalina has filed a notice of appeal.

63. *Id.* at 1. The defendants in the *Kivalina* case were: (1) ExxonMobil Corporation; (2) BP P.L.C.; (3) BP America, Inc.; (4) BP Products North America, Inc.; (5) Chevron Corporation; (6) Chevron U.S.A., Inc.; (7) ConocoPhillips Company; (8) Royal Dutch Shell P.L.C.; (9) Shell Oil Company; (10) Peabody Energy Corporation;

sought damages under a nuisance theory, asserting that the Kivalina Defendants' emissions of carbon dioxide and other greenhouse gases had caused global warming. The Kivalina Plaintiffs argued that, as a result of global warming, the sea ice that protects the City of Kivalina is thinner and less extensive than it was previously, making the City uninhabitable and necessitating the relocation of its residents.[64]

The Kivalina Defendants filed a motion to dismiss for lack of subject matter jurisdiction.[65] The Kivalina Defendants argued that the claims were not justiciable under the political question doctrine and that the Kivalina Plaintiffs lacked standing under Article III of the U.S. Constitution.[66] The court agreed.[67]

In considering whether the Kivalina Plaintiffs' claim presented a political question, the court considered the factors provided in *Baker v. Carr*,[68] as synthesized under *Wang v. Masaitis*:[69]

> Justice Powell distilled the *Baker* test into three inquiries: "(i) Does the issue involve resolution of questions committed by the text of the Constitution to a coordinate branch of government? (ii) Would resolution of the question demand that a court move beyond areas of judicial expertise? (iii) Do prudential considerations counsel against judicial intervention?"[70]

(11) The AES Corporation; (12) American Electric Power Corporation; (13) American Electric Power Services Corporation; (14) DTE Energy Company; (15) Duke Energy Corporation; (16) Dynergy Holdings, Inc.; (17) Edison International; (18) Mid-American Energy Holdings Company; (19) Mirant Corporation; (20) NRG Energy; (21) Pinnacle West Capital Corporation; (22) Reliant Energy, Inc.; (23) The Southern Company; and (24) Xcel Energy Inc. *Id.* at n.1.

64. *Id.* at 2.

65. *Id.*

66. *Id.*

67. *Id.* at 24.

68. *Id.* at 7 (discussing Baker v. Carr, 369 U.S. 186 (1962)). Under *Baker v. Carr*, any of the following demonstrate that the issue is a non-justiciable political question:

> [1] [A] textually demonstrable constitutional commitment of the issue to a coordinate political department; or [2] a lack of judicially discoverable and management standards for resolving it; or [3] the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or [4] the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or [5] an unusual need for unquestioning adherence to a political decision already made; or [6] the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

369 U.S. 186, 210 (1962).

69. 416 F.3d 992, 995 (9th Cir. 2005) (quoting Goldwater v. Carter, 444 U.S. 996, 998 (1979)).

70. Native Vill. of Kivalina v. ExxonMobil Corp., 663 F.Supp.2d 863, 872 (N.D.

Under the first inquiry, the Kivalina Defendants argued that global warming was a foreign policy issue and therefore resolution of the issue would interfere with the political branches' authority over foreign policy.[71] The court found that global warming was not exclusively a foreign policy issue and therefore resolution of the issue was not conclusively within the authority of the political branches of government.[72]

The court concluded that the case was non-justiciable under the second inquiry relating to judicial expertise. The Kivalina Plaintiffs first argued that the law provided judicially discoverable and manageable standards because the standards are the same for all nuisance cases—the court must determine "whether Defendants contributed to 'an unreasonable interference with public rights.'"[73] The court disagreed because resolution of a nuisance claim requires "weighing 'the gravity of the harm against the utility of the conduct.'"[74] The court reasoned that the case would require weighing "the energy-producing alternatives that were available in the past and consider their respective impact on far ranging issues such as reliability as an energy source, safety considerations and the impact of the different alternatives on consumers and business at every level" with the "benefits derived from those choices against the risk that increasing greenhouse gases would in turn increase the risk of causing flooding along the coast of a remote Alaskan locale."[75] The court concluded that there were no judicially discoverable or manageable standards to guide the fact-finder in making a decision on this issue.[76]

The Kivalina Plaintiffs next argued that air and water pollution cases create judicially discoverable or manageable standards. The court disagreed with the reasoning of the *AEP* court, finding that the well-settled principles of tort and public nuisance law do not provide sufficient guidance to decide the case. The court distinguished global warming cases from other environmental cases tried under a tort or nuisance theory. In those cases, there were "a discrete number of 'polluters' that were identified as causing a specific injury to a specific area."[77] Further, the sequence of events leading up to other envi-

Cal. 2009) (quoting *Wang*, 416 F.3d at 995).

71. *Id.* at 872–73.
72. *Id.* at 873.
73. *Id.* at 874 (quoting Plaintiffs' Motion in Opposition at 63).
74. *Id.* (citing RESTATEMENT (SECOND) OF TORTS § 821 cmt. e (1979)).
75. *Id.* at 874–75.
76. *Id.* at 875.
77. *Id.*

ronmental litigation cases was more direct.[78] Because the court found that there were no judicially discoverable and manageable standards, the court concluded that the case presented a political question and was non-justiciable; thus the court did not consider the third inquiry of the political question doctrine.

On the issue of standing, the court found that the case did not meet the causation requirement for standing.[79] The damage caused to the Kivalina coastline through global warming is attributable to many entities over the course of hundreds of years. The court explained that the Kivalina Defendants were not the seed of the Kivalina Plaintiffs' injury, and therefore found that the case lacked Article III standing.[80]

### *B. Federal Legislation—American Clean Energy and Security Act of 2009*

Although the federal courts have been considering the issue of responsibility for climate change in the absence of a federal policy, Congress proposed legislation in 2009 that ultimately intended to codify such policy and create a regulatory structure aimed at reducing the amount of carbon emitted in the United States.[81] If enacted, such legislation would result in new costs stemming from the regulation of carbon emissions, but does not appear to completely preclude the risk of injunction from the type of litigation summarized above. [82]

78. *Id.* at 875–76 (citing Texas Indep. Producers & Royalty Owners Ass'n v. E.P.A., 410 F.3d 964, 974 (5th Cir. 2005) (holding that a discharge in excess of the amount prescribed is presumed harmful in a water pollution case)).

79. *Id.* at 877–82. To have Article III standing a plaintiff must establish

> an injury in fact (i.e., a "concrete and particularized" invasion of a "legally protected interest"); (2) causation (i.e., a "'fairly . . . trace[able]'" connection between the alleged injury in fact and the alleged conduct of the defendant); and (3) redressibility (i.e., it is "'likely'" and not "merely 'speculative'" that the plaintiff's injury will be remedied by the relief plaintiff seeks in bringing suit).

*Id.* at 877 (citing Sprint Comm'n Co., L.P. v. APCC Servs., Inc., 128 S. Ct. 2531, 2535 (2008)).

80. *Id.* at 880–81.

81. *See* STAFF OF H. COMM. ON ENERGY & COMMERCE, 111TH CONG., DISCUSSION DRAFT SUMMARY, THE AMERICAN CLEAN ENERGY & SECURITY ACT OF 2009 1 (2009).

82. Nevertheless, by Congress setting caps on greenhouse gas emissions, if ACES passes, one can make a stronger case for dismissing such litigation on the basis of a political question, as there is no longer a political vacuum on this issue. Sally Roberts, *More Public Nuisance Suits Could Arise from Recent Court Decisions*, BUS. INS., Nov. 23, 2009, at 18, *available at* http://www.businessinsurance.com/article/20091122/ISSUE03/311229994.

*1. ACES Generally*

H.R. 2454—the America Clean Energy and Security Act of 2009 (ACES)—passed the U.S. House of Representatives by a vote of 219–211 on June 26, 2009.[83] The bill is best known for its cap-and-trade system, discussed below. The bill also requires public utilities who generate electricity to provide a certain percentage of their load with electricity from renewable resources (i.e., a renewable energy standard), and encourages use of "smart grid" and carbon capture and sequestration technologies.[84] Reducing emissions and complying with renewable energy standards in ACES will create considerable costs for public utilities.

*2. The Cap and Trade System under ACES*

The cap-and-trade system under ACES covers emissions from electric utilities and other entities that account for eighty-five percent of emissions in the United States. The system provides allowances to covered entities,[85] thereby allowing them to emit a certain amount of carbon dioxide and other greenhouse gases (GHGs).[86] Covered entities can also offset their carbon emissions.[87]

*a. Allowances*

Under ACES, covered entities would need allowances to emit GHGs. An allowance is equal to one ton of carbon dioxide equivalent of GHGs.[88] ACES specifically prescribes the number of allowances available for each calendar year.[89] If ACES were enacted, the cap and

83. At the time of publication, the U.S. Senate had not acted on ACES. Accordingly, this article only considers the bill as approved by the House.

84. Details of ACES's renewable energy standards, smart grid, and carbon capture and sequestration policies are beyond the scope of this article.

85. American Clean Energy and Security Act [ACES], H.R. 2454, 111th Cong. § 700(13) (2009).

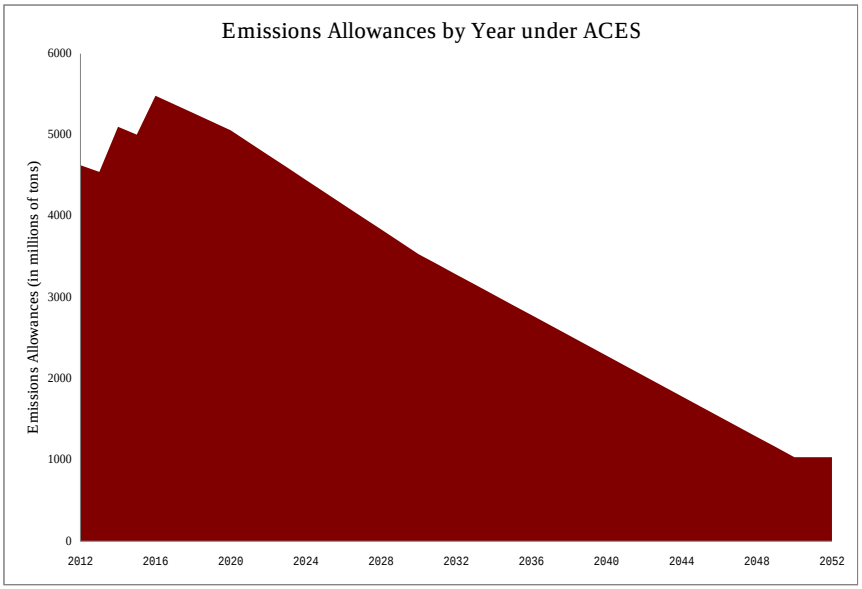
86. Section 711(a) defines greenhouse gases to include: "(1) Carbon dioxide. (2) Methane. (3) Nitrous oxide. (4) Sulfur hexafluoride. (5) Hyprofluorocarbons [emitted] from a chemical manufacturing process at an industrial stationary source. (6) Any perfluorocarbon. (7) Nitrogen trifluoride[,] [and] (8) Any other anthropogenic gas designated as a greenhouse gas by the [EPA] Administrator under this section." § 711(a)(1)–(8).

87. § 732.

88. Each GHG listed in note 86 is expressed in terms of carbon dioxide equivalents. For example, one metric ton of methane is equal to twenty-five metric tons of carbon dioxide. *See* § 712 (b)(1).

89. § 721.

trade system would start in 2012, covering emissions from electric generators, refiners and importers of electric fuel, and fluorinated gas manufacturers.[90] In 2014, industrial stationary sources would be added to the cap and trade system, and natural gas local distribution companies would be added to the program in 2016.[91] Emissions allowances would decrease each year and, in 2050, level off to 17% of the quantity of GHG emissions in 2005.[92] This would translate to an 83% percent reduction of GHGs from 2005 levels.

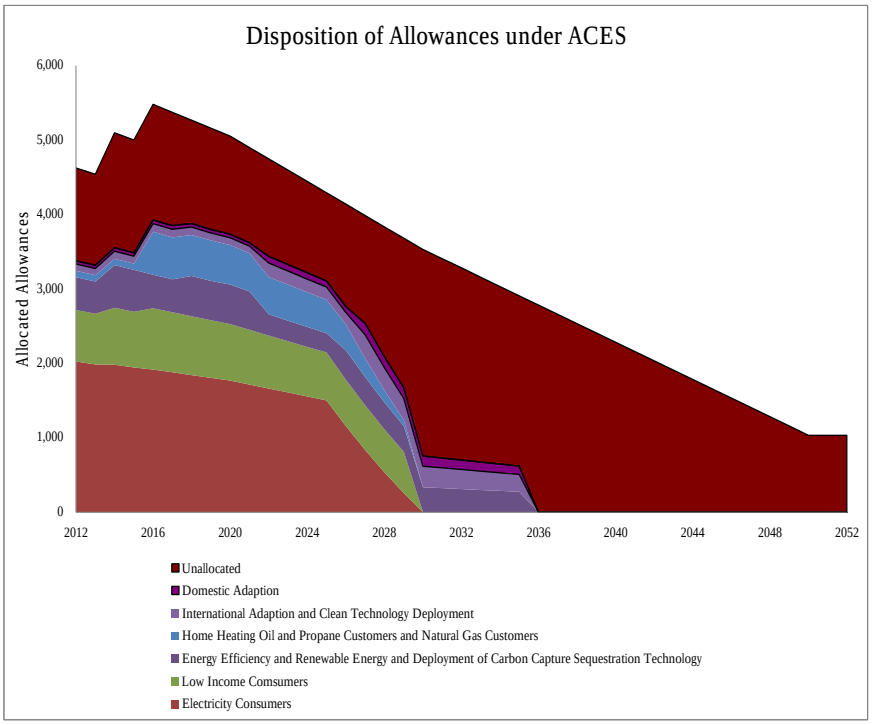



In addition to prescribing the number of allowances available, ACES also prescribes to whom the allowances will be allocated.[93] Under ACES, the majority of the allowances would be allocated to specific stakeholders in 2012, when the cap and trade system is proposed to start. By 2030, approximately 25% of the allowances would be allocated to specific stakeholders; the rest of the allowances would be available for trade or purchase on the market.

In 2012 and 2013, 43.75% of the allowances available would be allocated to public utilities (or "local distribution companies" as they

90. *See* § 700(13)(A)–(C) & (E) (providing proposed covered entities involved in the cap-and-trade program in 2012).
91. *See* § 721(c).
92. § 702(4).
93. *See generally* § 782 (describing emissions allowances).

are referenced in ACES) for the benefit of their electricity consumers.[94] The percentage of allowances allocated for the benefit of electricity customers would drop to 38.89% in 2014 and 2015, and 35% from 2016 to 2025.[95] From 2026 to 2029, the percentage of allowances allocated to electricity customers would drop annually by 7%.[96] The number of allowances allocated to a specific public utility would be 50% based on historic emissions and 50% based on annual average retail electricity deliveries.[97] By 2030, no allowances would be allocated for the benefit of electricity customers.




Each covered entity (which includes public utilities) is generally prohibited from emitting GHGs in excess of its allowances.[98] If a covered entity will emit more tons of carbon dioxide equivalents than allotted in a particular year, the covered entity can trade, buy, or bor-

94. § 782(a)(1)(A).
95. § 782(a)(1)(B) and (C).
96. § 782(a)(1)(D)–(G).
97. § 782(b)(2) and (3).
98. *See* § 722(a).

row allowances to comply with ACES.

Each covered entity (which includes public utilities) would be generally prohibited from emitting GHGs in excess of its allowances.[99] If a covered entity would emit more tons of carbon dioxide equivalents than allotted in a particular year, the covered entity could trade, buy, or borrow allowances to comply with ACES.

Allowances would be tradable.[100] Subject to certain limitations (not relevant here), a holder of an emissions allowance could "without restriction, sell, exchange, transfer, hold for compliance . . . , or request that the Administrator [of the EPA] retire the emission allowance."[101] Thus, a covered entity would be able to buy allowances from other covered entities that, because of the resources on their system, did not need all of their allowances in a given year.

Covered entities could also buy allowances from the EPA strategic reserve.[102] Under ACES, the EPA would be directed to create a strategic reserve of allowances, which would contain one to three percent of the quantity of allowances for a certain year.[103] The EPA would auction off the allowances from the strategic reserve on a quarterly basis.[104] The EPA would auction off approximately 18% of allowances in 2014 and then it would gradually increase this number until 2031 when approximately 70% of the allowances would be auctioned.[105]

Finally, covered entities could also bank their allowances to satisfy future compliance.[106] Covered entities could borrow emissions allowances without interest from the calendar year immediately following the compliance year.[107] A covered entity could also borrow some of its own future allowances with a prepayment of interest.[108]

99. *See* § 722(a).
100. § 724.
101. § 724(a). Even though allowances and offsets are tradable, neither one constitutes a property right. § 721(c)(1).
102. § 726(b)(1).
103. § 726(b)(1)(B).
104. § 726(a)(1). The Federal Energy Regulatory Commission will regulate the cash market of allowances and offsets. § 761.
105. *See* § 726(d) (quantifying the level of allowances released by the reserve per year).
106. § 725.
107. § 725(c)(1).
108. § 725(c)(2). Under ACES section 725(c)(2)(C), the interest payment is a portion of emission allowances (i.e., the product of 0.08 and "the number of years between the calendar year in which the allowance is being used to satisfy a compliance obligation and the [year for which the allowance was originally intended]").

*b. Offsets*

A covered entity could also satisfy compliance by offsetting emissions. Covered entities could obtain offset credits by conducting EPA certified actions that reduce GHG emissions or increase the amount of GHGs that are sequestered.[109] "Examples of such offset activities include reducing emissions of methane gas from solid waste landfills, sequestering GHGs on agricultural lands, rangelands, and forests, altering agricultural tillage practices, planting winter crops, and reducing the use of nitrogen fertilizer."[110] A covered entity would get one offset credit for each carbon dioxide equivalent that "has been reduced, avoided, or sequestered."[111]

*c. Cost Recovery Under ACES*

Although ACES develops a rigid framework dictating the allocation of benefits associated with carbon allowances to different groups, it does not mandate specific compliance cost policies.[112] This silence leaves the issue open for possible rulemaking by the EPA or FERC, or in the absence of such rulemaking, to state regulatory commissions who have traditionally had jurisdiction over the setting of intrastate retail rates.[113]

One advantage of federal rulemaking on this issue would be the resulting consistent application of any codified cost recovery or accounting treatment for carbon costs.[114] Where the EPA or FERC is-

109. *See* § 731(d) (instructing EPA to create an Offsets Integrity Advisory Board, which will make recommendations about which offset types will be eligible for compliance purposes). *See also* § 722 (directing the EPA to give priority to the Advisory Board recommendations in creating a list of eligible offset project types). Similar to allowances, an offset can be sold, traded, or transferred unless it has been used or has expired. § 742.

110. *See* CONGRESSIONAL BUDGET OFFICE, H.R. 2454 AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009, COST ESTIMATE 6 (2009), *available at* http://www.cbo.gov/ftpdocs/102xx/doc10262/hr2454.pdf.

111. H.R. 2454 § 737(b).

112. § 783(b)(5)(A). The silence of ACES is a change from earlier environmental policy proposals considered by Congress. In 2007, Reps. Udall (D-NM) and Platts (R-PA) developed a proposal which would have required state regulatory agencies to pass through compliance costs resulting from a Federal Renewable Portfolio Standard. The National Association of Regulatory Utility Commissioners (NARUC) opposed the proposal, which was never adopted. Press Release, National Association of Regulatory Utility Commissioners, RPS-Compliance Costs Decisions Best Left to States, NARUC Tells Congress (Aug. 2, 2007), http://www.naruc.org/News/default.cfm?pr=42&pdf.

113. *See infra* Part III.D.

114. *See, e.g.*, Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act, 18 C.F.R. pt. 101 (2010)

sued a rule directing specific regulatory treatment of carbon costs, it would ensure that the issue would be treated consistently in all subsequent rate-setting proceedings at the state level. However, with the silence of ACES on this issue, it is not clear whether it is envisioned that either federal agency would have the proper jurisdiction.[115]

Regardless of whether it is considered at the federal or state level, in making a determination as to who pays for compliance, the enacting provisions of ACES may be helpful. The Act allocates allowances to retail customers, which suggests an expectation that they will bear the cost of compliance and thus should receive some of the allowances to offset this burden. Additionally, ACES anticipates that the distribution of allowances may occur through a rate setting proceeding, which by its nature would involve the consideration of those costs incurred by the public utility from the provision of electricity service.[116]

Ultimately, ACES does not resolve the question of cost recovery, and prior judicial and state regulatory commission decisions governing ratemaking will likely be the best guide for future treatment of compliance costs.

### *C. State Initiatives*

#### *1. Renewable Resource Mandates*

Most states have a regulatory commission that regulates the public utilities operating within that state, but the scope of authority and specific direction given to each entity regarding environmental regulation varies considerably.[117] Some states require the regulatory com-

(offering an example of the uniformity under a federally regulated system, in this case for public utilities).

115. *See* La. Pub. Serv. Comm'n v. Fed. Commc'n Comm'n, 476 U.S. 355, 374 (1986) ("While it is certainly true, and a basic underpinning of our federal system, that state regulation will be displaced to the extent that it stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress . . . it is also true that a federal agency may pre-empt state law only when and if it is acting within the scope of its congressionally delegated authority.").

116. Before a public utility can receive allowances on behalf of its customers, a state regulatory commission must, after notice and comment, promulgate a regulation or complete a rate case which fully implements the distribution envisioned in ACES. H.R. 2454 § 783(b)(6)(A)(i).

117. *See, e.g.*, Michael Dworkin, David Farnsworth, Jason Rich & Jason Salmi Klotz, *The Environmental Duties for Public Utilities Commissions for 2006*, 7 VA. ENVTL. L.J. 1, 9–69 (2006) (listing each state regulatory commission's general authority and obligations as provided by statute).

mission to consider environmental costs when approving a new resource (*e.g.*, a coal plant or high voltage transmission line serving a coal plant).[118] Other state legislatures have enacted provisions that explicitly prohibit the state regulatory commission from considering environmental costs when approving a new generation resource or setting rates for retail service.[119]

Public utilities increasingly operate in more than one state.[120] Where two states differ on environmental policy, it creates the potential for inconsistent rate treatment for the public utility that operates in both. The current inconsistent treatment of environmental externalities (which could include carbon) among states puts the public utility at risk for stranded costs when it seeks to recover the likely higher cost of electricity generated from renewable resources consumed by customers in more than one state.[121]

This existing conflict will likely continue for the recovery of carbon-related costs. For example, if the cost associated with carbon regulation is allocated on a per-customer or usage basis, with the public utility's customer base straddling more than one state, the disallowance of these costs by one of the state regulatory commissions will create a stranded cost for the public utility. Depending on the magnitude of the potential stranded costs, the disallowance of prudently incurred costs could also reach constitutional dimensions if it affects the public utility's ability to earn a reasonable return.[122] Conflicting poli-

118. *See, e.g.*, CAL. PUB. UTIL. CODE § 701.1(c) (West 2004); COLO. REV. STAT. § 40-2-123(1)(a), (b) (West Supp. 2009) (requiring the commission to give consideration to the likelihood of new environmental regulations and the risk of higher future costs associated with the emission of greenhouse gases, such as carbon dioxide, when it considers utility proposals to acquire resources); *see also* MINN. STAT. § 216B.243 subdivs. 3, 3(a) (2008) (explaining that when a public utility proposes to build a nonrenewable generating plant, the utility must factor in the risk of environmental costs over the expected useful life of the plant and how the utility plans to allocate those costs).

119. *See* N.D. CENT. CODE § 49-02-23 (1999) (providing that the North Dakota Public Utility Commission may not use environmental cost externalities, including possible costs of complying with future, not yet enacted, environmental laws, in planning or selecting electric resources or establishing rates for service).

120. For example, American Electric Power (AEP) merged with Central and Southwest Corporation in 2000. Am. Elec. Power Co. & Ctr. Sw. Corp., Opinion No. 442, 90 FERC ¶ 61,242, 61,776 (2000), *order on reh'g* 91 FERC ¶ 61,129 (2000), *aff'd sub nom.* Wabash Valley Power Ass'n, Inc. v. FERC, 268 F.3d 1105 (D.C. Cir. 2001). AEP currently operates in eleven states: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia. AEP, About Us, http://www.aep.com/about/ (last visited Mar. 28, 2010).

121. *See supra* notes 118, 119.

122. *See infra* Part IV.E.

cies and inconsistent approaches between different states can also trigger other constitutional concerns, heightening the level of legal and political tensions that can result in inconsistent treatment.[123]

*2. Regional Cap-and-Trade programs*

Some state legislatures have also conferred jurisdiction in the state regulatory commissions to regulate carbon through cap and trade mechanisms. Two regional cap-and-trade programs currently dominate in the United States: the Regional Greenhouse Gas Initiative (RGGI) and the Western Climate Initiative (WCI).[124]

RGGI is the country's first mandatory regional carbon cap-and-trade program, including ten states located in the eastern part of the United States.[125] In addition, as a mandatory program RGGI is viewed as the closest model in the United States for a federal cap-and-trade program.[126]

All fossil fueled electric power generation plants located in the

123. For example, the State of North Dakota has announced its intent to bring suit over the constitutionality of Minnesota's statute that requires the consideration of carbon in resource selection, as it creates higher electricity rates for retail customers. Dale Wetzel, *North Dakota Lawsuit Likely Over Minnesota Carbon Dioxide Tax*, THE ASSOCIATED PRESS, Dec. 29, 2009, http://www.ajc.com/business/nd-lawsuit-likely-over-261425.html. This is not the first time that the Minnesota courts have reviewed a policy conflict between Minnesota and North Dakota over the issue of using carbon values. *See In re* Quantification of Envtl. Costs, 578 N.W.2d 794, 802 (Minn. Ct. App. 1998) (upholding the MPUC's order setting carbon dioxide values and deferring a decision on constitutional issues).

124. *See* Existing Cap and Trade Programs to Cut Global Warming Emissions, Union of Concerned Scientists, http://www.ucsusa.org/global_warming/solutions/big_picture_solutions/regional-cap-and-trade.html (last visited Mar. 28, 2010) [hereinafter Existing Cap and Trade Programs]. The Midwest Governors' Association also commenced a regional climate change policy process. *See* Midwestern Greenhouse Gas Reduction Accord, http://www.midwesternaccord.org (last visited Mar. 28, 2010) [hereinafter Midwestern Accord]. If ACES were to be enacted, however, then these regional cap-and-trade programs would be preempted. *See* HR. 2454, 111th Cong. § 861 (2009).

125. Regional Greenhouse Gas Initiative, About RGGI, http://www.rggi.org/about (last visited Feb. 18, 2010) [hereinafter About RGGI]. The ten participating states include: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. *Id.*

126. *See* Tracey D. Samuelson, *What A National Cap –and-Trade Program Might Look Like*, CHRISTIAN SCI. MONITOR, June 27, 2009, http://www.csmonitor.com/World/Global-Issues/2009/0627/p25s12-wogi.html (stating that many pieces of RGGI's working model have been included in ACES); Hal Weitzman, *RGGI: Mandatory Scheme Makes Modest Gains in North-West*, FIN. TIMES, Dec. 14, 2009, at 2 ("As Washington has debated the subject, it has often looked to RGGI as the closest US model for its legislation. The programme's backers say it has always been intended to be a path to a federal regime.").

ten state region that are greater than twenty-five megawatts are required to participate,[127] which amounts to approximately 225 generating facilities.[128] Allowances are allocated to individual states based primarily on average annual emission occurring from 2002–2004.[129] The participating states have generally agreed to contribute all of their allowances to centrally administered auctions and use the proceeds to fund efficiency improvement and renewable energy projects.[130] Beginning in 2009, regional carbon emissions were capped at approximately 180 million tons; the cap begins declining by 2.5% per year in 2015, achieving the program's overall goal of reducing emissions 10% in 2018.[131] To date, RGGI has conducted five auctions.[132]

Of the ten states participating in RGGI, two have generically addressed the recovery of resulting carbon costs for the public utilities operating in their states, and the remaining eight states have adopted retail electric competition.[133] New Hampshire's enabling statute states

127. *See* Regional Greenhouse Gas Initiative, Overview of RGGI $CO_2$ Budget Trading Program 2 (Oct. 2007), http://rggi.org/docs/program_summary_10_07.pdf [hereinafter RGGI Overview]; Regional Greenhouse Gas Initiative, Regional Greenhouse Gas Initiative Model Rule, subpart 1.4 (Dec. 31, 2008), http://rggi.org/docs/Model%20Rule%20Revised%2012.31.08.pdf [hereinafter RGGI Model Rule].

128. Regional Greenhouse Gas Initiative, RGGI Fact Sheet, http://www.rggi.org/docs/RGGI_Executive%20Summary_4.22.09.pdf (last visited Mar. 28, 2010) [hereinafter RGGI Fact Sheet].

129. *See* RGGI Overview, *supra* note 127.

130. RGGI Fact Sheet, *supra* note 128.

131. RGGI Overview, *supra* note 127.

132. RGGI has auctioned more than 110 million allowances since the first auction in September 2008, raising $366.5 million. Mary Esch, *Greenhouse Gas Auction Nets $104 Million*, ASSOCIATED PRESS, June 19, 2009, http://www.thestreet.com/story/10521467/greenhouse-gas-auction-nets-104-million.html. "The states are using the proceeds to weatherize low-income homes, hire and train energy efficiency auditors, subsidize energy efficiency upgrades for small businesses and educate contractors, among other things." *Id.*

133. *See* Regional Greenhouse Gas Initiative, Participating States Regulation, http://rggi.org/states/state_regulations (last visited Mar. 28, 2010) [hereinafter RGGI State Regulations] (listing the Regional Greenhouse Gas Initiative participating states and the specifics for each state's corresponding regulatory scheme). In these states, state regulatory commissions still set transmission and distribution rates charged by public utilities, but they have ceded rate authority over generation to the competitive markets. Because the RGGI compliance is the responsibility of electric generators, compliance costs in these states are embedded in the price customers pay for the generation of electricity. For states that have not implemented retail competition, state regulatory commissions retain jurisdiction over the generation component of electric service. *See* Paul Davidson, *Shocking Prices Follow Deregulation; States that Dropped Price Caps Watch and Worry as Rates Soar*, USA TODAY, Aug. 10, 2007, at 1B (of-

that RGGI compliance costs are recoverable in default service rates.[134] Although lacking a specific statute directing its decision, the Vermont Department of Public Service has also indicated it believes RGGI compliance cost should be recoverable.[135] Both of these state pronouncements recognize that the compliance costs are legitimate costs of providing electricity service to be borne by the end user.

In addition to RGGI, seven states in the western United States have also formed a cap-and-trade program.[136] In February 2007, the governors of five western states entered into an agreement to form the Western Climate Initiative.[137] Since the original agreement was signed, two additional states and four Canadian provinces have become fully participating members.[138] In early 2009, WCI circulated design recommendations for its cap-and-trade program, which are currently under review at the state level.[139] Under these proposed plans, sources that emit 25,000 metric tons of carbon annually will be covered under the WCI program, which is scheduled to commence

fering more information regarding deregulation effects); *see also* Electricity Basics, Texas Electric Choice Education Program, http://www.powertochoose.org/_content/_about/electricity_basics.asp (last visited Mar. 28, 2010) (giving background information regarding Texas' Electric Choice Education Program and offering an example of the competitive market for electricity service in one particular state); Coping With High Energy Prices, Penn State College of Agricultural Sciences, http://energy.cas.psu.edu/facts.html (last visited Mar. 28, 2010) (outlining facts and information about deregulation legislation in Pennsylvania).

134. *See* N.H. REV. STAT. ANN. § 125-O:28 (LexisNexis Supp. 2009) (stating that "all prudently incurred cost of complying" with the RGGI program will be recovered through the utility's default service charge).

135. *See* VERMONT DEPT. OF PUB. SERV., VERMONT COMPREHENSIVE ENERGY PLAN 2009, PUBLIC REVIEW DRAFT III-81 (May 2008) http://publicservice.vermont.gov/planning/CEP%20%20WEB%20DRAFT%20FINAL%206-4-08.pdf (stating that because "the acquisition of these certificates effectively becomes a cost of doing business for generators, the cost of certificates will become embedded in the market price for electricity").

136. *See* Western Climate Initiative, About the WCI, History, http://www.westernclimateinitiative.org/history (last visited Mar. 28, 2010) [hereinafter WCI History].

137. *Id.*

138. *Id.* Current partners include Arizona, California, Montana, New Mexico, Oregon, Utah, and Washington; and the Canadian provinces of British Columbia, Manitoba, Ontario, and Quebec. *Id. See also* Western Climate Initiative, About the WCI, WCI Partners, www.westernclimateinitiative.org/wci-partners (last visited Mar. 28, 2010) [hereinafter WCI Partners].

139. *See* Western Climate Initiative, Partner Climate Action Plans, http://www.westernclimateinitiative.org/climate-action-plans (last visited Mar. 28, 2010) (displaying the individual state action plans for participating partners) [hereinafter WCI Climate Action Plans].

January 1, 2012.[140]

One of the WCI participating states has also generically addressed cost recovery for compliance with the program. The California legislature has mandated that all base-load resources must be as efficient (on a carbon basis) as a combined-cycle unit, and that the costs of complying with this mandate are to be treated as compliance costs.[141]

### *D. Non-ACES Federal Agency Rulemaking*

Separate from any rulemaking that may occur as a result of passing ACES, the EPA is currently considering rules and findings related to greenhouse gas emissions. First, on October 30, 2009, the EPA promulgated a rule that requires certain facilities to report greenhouse gas emissions to the EPA.[142] "The data collected by this rule will also improve the U.S. government's ability to formulate climate policies, and to assess which industries might be affected, and how these industries might be affected by potential policies."[143] Complying with the proposed rule has related costs, but many public utilities already track or report greenhouse emissions through EPA voluntary partnership programs[144] or through state and regional programs.[145] Whether such costs are to be recovered in a public utility's retail rates, however, is still ultimately subject to the state regulatory commission's review and approval.

On December 7, 2009, the EPA Administrator signed findings that greenhouse gases, including carbon dioxide, endanger public health and welfare.[146] In *AEP*, discussed above, the Court considered

140. *See id. See also* WESTERN CLIMATE INITIATIVE, DESIGN RECOMMENDATIONS FOR THE WCI REGIONAL CAP-AND-TRADE PROGRAM (2008), http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/design-recommendations (describing the design recommendations for the WCI regional cap-and-trade program) [hereinafter WCI Design Recommendations].

141. CAL. PUB. UTIL. CODE §§ 8340–41(West Supp. 2010). *But see* Rebecca Smith & Keith Johnson, *U.S. News: California Ties Cash to Energy*, WALL STREET J., Jan. 12, 2010, at A2 (explaining that a state panel proposes to compensate customers for higher energy prices essentially by collecting an emissions tax and paying the dividends to consumers).

142. Mandatory Reporting of Greenhouse Gases, 74 Fed. Reg. 56,260, 56,264–65 (Oct. 30, 2009) (to be codified at 40 C.F.R. pts. 86, 87, 89).

143. *Id.* at 56,265.

144. *Id.*

145. *Id.* at 56,266.

146. Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 2020(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,516 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1). The EPA Administrator also found that greenhouse gas emissions from new motor vehicles contribute to greenhouse gas pol-

whether the plaintiff's nuisance cause of action had been displaced by federal legislation.[147] The Court specifically considered EPA's (at the time) proposed endangerment findings and concluded that because "[a] proposed finding has no effect in law that would affect any rights at issue here" the litigation could proceed.[148] The Court, however, did not foreclose the possibility that climate change litigation could be displaced by regulation or legislation in the future—"[i]n sum, at least until EPA makes the requisite findings, for the purposes of our displacement analysis the CAA does not (1) regulate greenhouse gas emissions or (2) regulate such emissions from stationary sources"—but it refused to opine on the issue were such regulations to be enacted.[149] As such, the EPA's rules could increase ACES-like compliance costs, but may also reduce the potential for injunction-related costs resulting from a judicial order.[150]

## IV. COST RECOVERY FOR CARBON COSTS

For public utilities dependent in any part on coal-fired generation for electricity, the costs of complying with an injunction, federal cap and trade legislation, or other type of carbon regulation are likely to be substantial.[151] Public utilities, however, are regulated entities[152]

lution and threaten public health and welfare. *Id.* at 66,536. These findings are an outgrowth of *Massachusetts v. EPA*, 549 U.S. 497 (2007).

147. Connecticut v. Am. Elec. Power Co. (*AEP*), 582 F.3d 309, 371–88 (2d. Cir. 2009).

148. *Id.* at 379.

149. *Id.* at 381.

150. This conclusion is based on the assumption that the EPA will be allowed to move forward with its regulations to limit greenhouse gas emissions. *See* Siobhan Hughes, *Murkowski Holds Out Option of Vote on Plan to block EPA*, WALL STREET J., Jan. 12, 2010, http://online.wsj.com/article/SB126332127536126375.html (stating that Sen. Lisa Murkowski may seek a vote to stop the EPA's regulations, and that the U.S. Chamber of Commerce may sue the EPA over its decision to declare greenhouse gases a danger to the public).

151. Current cost estimates for public utilities that are dependent on coal-fired electric generation are based on their annual carbon emissions. For example, the largest current estimate is for Southern Co. which produces 149 million tons of $CO_2$ a year. Such an output would result in a potential $393 million annual cost under ACES. *See* Cassandra Sweet, Southern Co. to Lose, Exelon to Gain Under US Cap and Trade-Study, http://www.nasdaq.com/aspx/company-news-story.aspx?storyid=200911021655dowjonesdjonline000389 (last visited Mar. 28, 2010). Additionally, utilities such as Duke and AEP are estimated to incur carbon costs equal to eleven and five percent of their operating incomes respectively. Posting of John Lorinc to N.Y. Times Green Inc. Blog, http://greeninc.blogs.nytimes.com/209/11/02/winners-and-losers-of-cap-and-trade (Nov. 2, 2009, 14:44 EST). It is unlikely that a public utility could absorb the disallowance of such costs without it affecting their ability to maintain a

and thus are typically unable to change their retail rates for service to recoup such costs without first demonstrating to a state regulatory commission that such a change is just and reasonable.[153] Because such increases in retail rates are quite likely to be significant, they are also likely to be contested by some stakeholders.

State regulatory commissions will be guided by state law and traditional regulatory principles to determine the reasonableness of a rate change that includes carbon costs. In that context, state regulatory commissions will also be required to decide the appropriate method of implementing new environmental initiatives (such as ACES), which will include decisions on the recovery of related costs. On review, such decisions will be compared against long-standing precedent directing that rates must be reasonable for both customers and public utilities.

### *A. Public Utilities: A Business "Affected with a Public Interest"*

For most private enterprise, the rates charged for goods and services are determined by competitive forces that reflect market supply and demand. Public utilities operate as monopolies within a geographic area and generally are not subject to the control of competitive forces. As a result, their rates for service are set through a quasi-legislative process involving review by state regulatory commissions acting under broad powers conferred by the state legislature to determine just and reasonable rates through an examination of the public utility's costs, which includes approving a reasonable rate of return on its investment. While the rates set through this process are subject to judicial review, courts generally give deference to the expertise of the state regulatory commissions in its determination of fact in ratemaking proceedings.[154]

reasonable return and to attract capital for future investments on reasonable terms.

152. Currently, fourteen states have adopted electric deregulation allowing for customer choice among electricity service providers. *See* Status of Electric Restructuring by State, U.S. Energy Information Administration, http://www.eia.doe.gov/cneaf/electricity/page/restructuring/restructure_elect.html (last visited Mar. 28, 2010); *see supra* note 133 and Part IV (addressing classic rate regulation concepts applicable to public utilities operating in states that have not deregulated electric service).

153. *See, e.g.*, MINN. STAT. § 216B.03 (2008); OR. REV. STAT. ANN. § 757.282 (West 2003); *see also In re* Commonwealth Edison Co., No. 05-0159, 2006 WL 192550, *35 (Ill. Commerce Comm'n 2006) (citing 16 U.S.C. § 824(e) (2008)); *In re* Tex. Util. Elec. Co., No. 11735, 20 Tex. P.U.C. Bull. 1029, § XV (Tex. P.U.C. 1994).

154. *See, e.g.*, Ass'n of Oil Pipe Lines v. F.E.R.C., 83 F.3d 1424, 1431 (D.C. Cir. 1996) ("Because the subject of our scrutiny is a ratemaking—and thus an agency de-

It is well established that a state may, under its police power, regulate a business affected with the public interest.[155] Because the prime characteristic of a public utility is that of public use or service, a state may regulate and control a public utility to protect the public interest and to promote the health, comfort, safety, and welfare of its inhabitants.[156] This concept of regulating utility services is well established. In 1876, the U.S. Supreme Court stated:

> When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created. He may withdraw his grant by discontinuing the use; but, so long as he maintains the use, he must submit to the control.[157]

In its analysis, the Supreme Court relied heavily on English common law concepts which preserved in the Crown the right to regulate private property where its use was offered for the public good.[158] The Court also cited to English precedent that found where a monopoly existed for the public service, the importance of governmental oversight was even more critical to ensuring reasonable terms in the absence of competitive forces.[159]

cision involving complex industry analyses and difficult policy choices—the court will be particularly deferential to the Commission's expertise.") (quoting Time Warner Entm't Co. v. F.C.C., 56 F.3d 151, 163 (D.C. Cir. 1995)). This deference also applies generally. *See, e.g.*, Kan. Gas & Elec. v. State Corp. Comm'n, 720 P.2d 1063, 1075 (Kan. 1986) (noting that the KCC "must be afforded a wide discretion in the methodology to be utilized in approaching the complex problems involved. The field of public utility regulation is a highly complex field and requires a great amount of expertise in arriving at a result which is fair and just to all interested parties.").

155. *See* Munn v. Illinois, 94 U.S. 113 (1876) (upholding the right of the state legislature to fix the maximum charge for the storage of grain in public warehouses). *See also* Chicago & G. T. Ry. Co. v. Wellman, 143 U.S. 339 (1892) (addressing the reasonableness of operating expenses in setting maximum passenger rates for railroad companies).

156. *See, e.g.*, Great N. Ry. Co. v. Washington, 300 U.S. 154 (1937); State v. Traffic Tel. Worker's Fed'n of N.J., 66 A. 2d 616 (N.J. 1949); People's Org. for Wash. Energy Res. v. Wash. Util. & Transp. Comm'n, 711 P.2d 319 (Wash. 1985).

157. *Munn*, 94 U.S. at 126.

158. *Id.* at 126 (citing Lord Chief Justice Hale, *De Portibus Maris*, *in* 1 A COLLECTION OF TRACTS RELATIVE TO THE LAW OF ENGLAND, FROM MANUSCRIPTS 45, 78 (Francis Hargrave ed., 1787)).

159. *Id.* at 127–28 (citing Aldmutt v. Inglis, (1810) 12 East 527, 537 (Eng. Rep.) (stating that where a monopoly exists, the provider has a duty to perform the service on reasonable terms).

### *B. Traditional Utility Rate Regulation*

The principals from historical cases continue to guide the regulation of public utilities, where the regulation of retail rates for service offered to the public remain subject to the oversight of a state regulatory commission.[160] Utility retail rates must be reviewed by the state regulatory commission and found reasonable before those rates can be charged to customers. In consideration of the reasonableness of a rate, the state regulatory commission will examine the costs of operation and the value of the utility property being used, and will determine a reasonable return on equity.[161]

Rate regulation is based on the cost of providing service to customers. In formulaic terms, the principle of rate regulation can be expressed as:

$$R = O + (V - D)*r$$

*R* is the total revenue required to recover costs; *O* represents the operating costs, like fuel and labor; *V* is the value of the utility property; *D* is the accrued depreciation on that property; and *r* is the rate of return.[162] Thus, a utility is generally allowed to recover operating costs and its investments in property (e.g., generation facilities). The utility is also authorized to earn a return on its property investment. Establishment of the total revenue that a utility is authorized to earn involves determination of (1) the costs of operation, (2) the value of the property minus accrued depreciation (known as rate base), and (3) determination of a reasonable rate of return.[163]

#### *1. The Costs of Operation and Rate Base*

Operating expenses must be considered in determining whether rates are reasonable and provide a fair return to a public utility.[164] "[T]he Commission must examine every aspect of the [public] utility's operations and the economic environment in which the utility

160. It is well established that the state regulatory commissions retain authority to regulate intrastate retail rates for utility service. *See* Fed. Power Comm'n v. S. Cal. Edison Co., 376 U.S. 205, 214–15 (1964); Pub. Utils. Comm'n of R.I. v. Attleboro Steam & Elec. Co., 273 U.S. 83, 91 (1927) (Brandeis, J., dissenting).

161. *See, e.g.*, *In re* Municipality of Anchorage, 19 P.U.R.4th 278, 281–82, 288 (Alaska P.U.C. 1977).

162. PHILLIPS, *supra* note 3, at 255.

163. *Id. See also* State *ex rel.* Utils. Comm'n v. Carolina Utils. Customers Ass'n, 524 S.E.2d 10, 17–18 (N.C. 2000).

164. Office of People's Counsel v. Md. Pub. Serv. Comm'n, 733 A.2d 996, 999 (Md. 1999).

functions to ensure that the [current or operating expense] data it has received [from the public utility] are representative of operating conditions that will, or should, prevail in future years."[165] In that process, the state regulatory commission will determine what specific charges and expenses to allow as costs of operation.[166]

A public utility's "rate base" is the amount of investment on which it is entitled to an opportunity to earn a fair and reasonable return. It represents the total investment in, or the fair value of, the used and useful property that it necessarily devotes to rendering the regulated services.[167]

In general, prudently incurred costs for operations and investments related to the provision of electricity service are included in retail rates as part of the cost of generating the electricity used by customers.[168] The courts, however, have not set out specific line items to be included in retail electric rates as reasonable costs.

The exact definition of prudence used when examining the public utility's decisions may vary by jurisdiction, but generally involves a review of the public utility's actions at the time a decision was made that resulted in incurring a cost or making an investment.[169] Such a determination is not intended to be a substitution of judgment for that of the public utility's managers, and must be supported by a finding that the public utility knew or should have known that its actions

165. U. S. Gypsum, Inc. v. Ind. Gas Co., Inc., 735 N.E.2d 790, 798 (Ind. 2000) (citing City of Evansville v. S. Ind. Gas & Elec. Co., 339 N.E.2d 562, 570–71 (Ind. Ct. App. 1975)).

166. *See* Ford Motor Co. v. Pub. Serv. Comm'n, 562 N.W.2d 224, 229–30 (Mich. 1997) (allowing utility to begin amortizing expenses accrued during a prior year for postretirement benefits was not unlawful or unreasonable).

167. *See* Missouri *ex rel.* Sw. Bell Tel. Co. v. Pub. Serv. Comm'n of Mo., 262 U.S. 276, 291(1923); Chesapeake Utils. Corp. v. Del. Pub. Serv. Comm'n, 705 A.2d 1059, 1066 (Del. Super. Ct. 1997); City of Miami v. Fla. Pub. Serv. Comm'n, 208 So. 2d 249 (Fla. 1968); Heater of Seabrook, Inc. v. Pub. Serv. Comm'n of S.C., 503 S.E.2d 739, 741–42 (S.C. 1998).

168. *See*, *e.g.*, Galveston Elec. Co. v. Galveston, 258 U.S. 388, 399–400 (1922) (explaining that state and federal taxes are operating costs); Bus. & Prof'l People v. Ill. Commerce Comm'n, 585 N.E.2d 1032 (Ill. 1991) (explaining that fuels costs are perhaps the most significant operating expenses).

169. For example, one state regulatory commission defined this review as:

> The company's conduct should be judged by asking whether the conduct was reasonable at the time, under all of the circumstances, considering that the company had to solve its problems prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the task that confronted the company.

PHILLIPS, *supra* note 3, at 341 (citing *In re* Consol. Edison Co. of N.Y., No. 79-1, at 5–6 (N.Y. 1979)).

were imprudent at the time of its decision.[170] Absent a showing of imprudence, the public utility is presumed to have acted in good faith.[171]

*2. Rate of Return*

Generally, a public utility secures a fair return when its revenues are sufficient to pay operating expenses, to attract new investors, and to pay a fair return to its existing investors.[172] Rates fixed by state regulatory commissions that are not sufficient to yield a fair or reasonable return to a public utility are considered to be unjust, unreasonable, and confiscatory, and their enforcement will deprive the public utility company of its property in violation of the Federal Constitution.[173] In this respect, the Fifth and Fourteenth Amendments to the Federal Constitution safeguard private property against a taking for public use, and neither the nation nor the state may take such property of a public utility by means of the fixing of rates or charges that do not allow the public utility a reasonable rate of return upon the value of its property. In determining the reasonable rate of return on rate base, two U.S. Supreme Court cases remain seminal authorities on this issue.

*a.* Bluefield Water Works & Improvement Co. v. Public Service Commission

In *Bluefield Water Works & Improvement Co. v. Public Service Commission*,[174] the U.S. Supreme Court provided a list of factors to be considered when setting a just and reasonable rate of return that have since been applied by federal and state regulatory commissions. Bluefield Water Works & Improvement Company provided water to Bluefield,

170. *Id.* at 340–41 (citing *In re* W. Mass. Elec. Co., 80 P.U.R.4th 479, 501(Mass. D.P.U. 1986)).

171. W. Ohio Gas Co. v. Pub. Util. Comm'n of Ohio, 294 U.S. 63, 72 (1935) ("In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay.").

172. United Water Del., Inc. v. Pub. Serv. Comm'n, 723 A.2d 1172, 1174 (Del. 1999) (citing Pub. Serv. Comm'n of State of Del. v. Wilmington Suburban Water Corp., 467 A.2d 446, 447 (Del. 1983)); *In re* Petition of PNM Gas Servs., 1 P.3d 383, 391 (N.M. 2000).

173. *See* West v. Chesapeake & Potomac Tel. Co. of Balt. City, 295 U.S. 662, 668–69 (1935); Ga. Power Co. v. Ga. Pub. Serv. Comm'n, 396 S.E.2d 562, 580–81 (Ga. Ct. App. 1990); KN Energy, Inc. v. Cities of Broken Bow, 505 N.W.2d 102, 107 (Neb. 1993).

174. Bluefield Waterworks & Imp. Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923).

West Virginia.[175] The Public Service Commission of West Virginia set rates for the Bluefield Water Works considering lower construction costs in 1915 before World War I, instead of the higher construction costs in 1920 when Bluefield Water Works applied for the rate increase.[176] The company challenged the Public Service Commission's rate order in the West Virginia Supreme Court of Appeals.[177] Bluefield Water Works argued that the order violated the Fourteenth Amendment because it denied Blue Water Works property without just compensation and without due process of law.[178] The West Virginia Supreme Court of Appeals denied relief and dismissed the case.[179] Bluefield Water Works appealed the case to the U.S. Supreme Court.[180]

In holding that the rate of return on Bluefield Water Works' investment was too low and thus confiscatory,[181] the Court explained:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding, risks and uncertainties, but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.[182]

The Court continued, "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties."[183] *Bluefield Water Works*, along with *Hope*, continue today to provide the basic standard for the determination of the rate of return on rate base.

175. *Id.* at 683.
176. *Id.* at 689.
177. *Id.* at 683.
178. *Id.*
179. *Id.*
180. *Id.*
181. *Id.* at 695. The Court also held that the West Virginia Supreme Court of Appeals erred in failing to consider the higher costs of construction after World War I. *Id.* at 692. This error is related, but not central to, the Court's holding on the rate of return discussed *infra* notes 1822 and 1833 and related text.
182. *Bluefield Water Works*, 262 U.S. at 692–93.
183. *Id.* at 693. *Cf.* Mkt. St. Ry. Co. v. R.R. Comm'n, 324 U.S. 548 (1945) (refusing to extend *Bluefield Water Works*'s holding to a business failure due to economic forces).

*b.* Federal Power Commission v. Hope Natural Gas Co.[184]

The U.S. Supreme Court's decision in *Federal Power Commission v. Hope Natural Gas Co.*[185] involved the Court's consideration of a rate order issued under the Natural Gas Act by the Federal Power Commission.[186]

In 1938, the cities of Cleveland and Akron, Ohio filed complaints with the Federal Power Commission (FPC) alleging that the rates being collected by Hope Natural Gas Company through an affiliate distributing natural gas in Ohio were excessive and unreasonable.[187] Later that same year, the FPC instituted an investigation to determine the reasonableness of the rates charged.[188] In 1939, the Public Utility Commission of Pennsylvania also filed a complaint with the FPC charging that the rates collected by Hope Natural Gas Company through an affiliate for natural gas service in Pennsylvania were unreasonable.[189] At the conclusion of its investigation in 1942, the FPC issued an order requiring a $3,609,857 annual reduction in future rates, and established "just and reasonable" rates for each of the five affiliate companies providing retail natural gas service.[190]

The FPC had found that 6.5% was a fair rate of return on the company's investment.[191] The Court of Appeals for the Fourth Circuit set aside the FPC's order.[192] In *Hope*, the Supreme Court reversed. The New Hope Gas Company failed to convince the Court that the FPC's Order provided the company an unjust and unreasonable return on its investment.[193]

184. 320 U.S. 591 (1944).

185. *Id.*

186. *Id.* at 593. The Federal Power Commission was the predecessor to the Federal Energy Regulatory Commission. Department of Energy Organization Act, Pub. L. No. 95-91, 91 Stat. 567 (1977) (codified at 42 U.S.C. §§ 7101–7382f (2008)). Even though *Hope* focuses specifically on the Natural Gas Act, it has broader implications because the Court further defined the meaning of "just and reasonable" rates. *Hope*, 320 U.S. at 617.

187. *Id.* at 594.

188. *Id.*

189. *Id.* at 594–95.

190. *Id.* at 595. In addition, the FPC established an interstate rate base of $33,712,526 that it found "represented the 'actual legitimate cost' of the company's interstate property less depletion and depreciation and plus unoperated acreage, working capital and future net capital additions." *Id.* at 596.

191. *Id.* at 599.

192. *Id.* at 599–600.

193. *Id.* at 605. *See also id.* at 602 (explaining that rate orders by the commission carry a presumption of validity "[a]nd he who would upset the rate order under the Act carries the heavy burden of making a convincing showing that it is invalid because

While the Court did not cite *Bluefield Water Works* specifically, the Court echoed its holding:

> The rate-making process under the Act, i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and consumer interests. Thus we stated in the Natural Gas Pipeline Co. case that "regulation does not insure that the business shall produce net revenues." But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor of company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[194]

### *C. Recovery of Carbon-Related Costs*

The potential costs incurred by public utilities to comply with carbon initiatives are not discretionary, but rather will be a fixed requirement of their continued operations. As such, the determination of whether those costs should be included in retail rates is not just a determination of whether the public utility was prudent in incurring the expense; it must also recognize that the expense is a critical component of providing electricity service to its customers.

#### *1. Injunction Costs*

If a public utility is enjoined from emitting carbon, it will have an immediate and dramatic impact on its operations. To meet the demand of its customers for electricity, it will need to purchase replacement power that is carbon neutral while it determines a new resource plan. Carbon-neutral replacement power is likely to be more costly than the power generated from the coal-fired generation that it will replace.[195] Ultimately, the public utility will also likely incur costs re-

it is unjust and unreasonable in its consequences") (citations omitted).

194. *Id.* at 603 (citations omitted).

195. *See* LAZARD, LTD., LEVELIZED COST OF ENERGY ANALYSIS—VERSION 2.0 (2008), http://www.narucmeetings.org/Presentations/2008%20EMP%20Levelized%20Cost

lated to building new generation facilities or modifying existing facilities to generate electricity from a resource that emits less carbon.

Unless shown to be imprudent, costs for purchasing power and building and maintaining generation facilities have traditionally been included in the cost of service and included in rates.[196] In judging the prudency of the decision to incur costs, the state regulatory commissions examine the circumstances under which the public utility made the decision to incur the cost.[197] Because the decision to incur a cost will be the direct result of the public utility's compliance with a judicial order, the prudency of the costs should be viewed in the context of ensuring continued power supply for customers under the conditions set forth by the court. Therefore, while these decisions may increase the cost of service and ultimately rates, the resulting costs should be recoverable.

*2. Compliance Costs*

If ACES or a similar federal carbon regulation is enacted, a public utility will have to consider the options previously outlined or purchase carbon allowances to comply with the new regulation. Including the costs of carbon allowances in ratemaking would be consistent with the precedent supporting the recovery of compliance costs stemming from emission reduction and other environmental costs[198] and the specific cost-recovery policies in some of the RGGI/WCI states.

For example, implementation of amendments to the Clean Air Act (CAA) resulted in a number of cases that confirmed the inclusion of costs resulting from the public utility's compliance with federal environmental regulation in the determination of retail rates.[199] These

%20of%20Energy%20-%20Master%20June%202008%20(2).pdf.

196. *See, e.g.*, MINN. STAT. § 216B.1636 (2008) (allowing recovery of electric utility infrastructure costs when a project replaces or modifies existing infrastructure and is shown to conserve energy or use energy more efficiently); MINN. STAT. § 216B.1645 (2008) (allowing recovery of purchase power costs from ratepayers of utility, to the extent they are not offset by certain utility revenues); Mississippi Power & Light Co. v. Mississippi *ex rel.* Moore, 487 U.S. 354 (1988).

197. *See supra* Part IV.B.

198. *See supra* note 196 and accompanying text.

199. *See* Fla. Cities Water Co. v. State, 705 So. 2d 620, 623 (Fla. Dist. Ct. App. 1998) (noting that the utility commission must add the cost of environmental improvements that are required by federal or state government regulations to the rate base, to the extent that these improvements were made "in the public interest"); *In re* Conn. Light & Power Co., 191 P.U.R.4th 373, 494 (Conn. P.U.C. 1999) (allowing the utility to recover, in its rate base, costs incurred in purchasing emissions allowances

decisions acknowledge that while the state regulatory commissions have jurisdiction over retail intrastate rates, compliance with federal laws or regulations is generally considered a reasonable cost of operation. Carbon regulation is thus analogous to CAA regulation of other emissions.

Additionally, the carbon regulation process outlined in ACES is analogous to a type of environmental tax on generation. Public utilities have traditionally recovered validly imposed taxes as operating expenses for rate-making purposes,[200] including property tax paid for a generation facility.[201] The recognition of this expense in retail rates is based on the fact that payment of a legitimate tax is a requirement of the public utility's continued operation of that facility. Absent compliance, the facility would be closed. The regulation of carbon under ACES would have a similar impact on generation facilities.

Operating costs can also include costs for items not actually used in the generation of electricity if such items are found to be necessary for the operation of the generation plant. In *Senior Citizens Coalition of Northeastern Minnesota v. Minnesota Public Utilities Commission*,[202] the Minnesota Supreme Court found that the costs of constructing public recreational facilities were a necessary part of generating electricity service from three hydroelectric plants.[203] While the record reflected that the recreational facilities were not actually used in the generation of electricity or as part of the public utility's generation or transmission facilities, they were required as a condition of the hydroelectric license granted by FERC.[204] The court found that such facilities were

for compliance with federal Clean Air Act Amendments of 1990); *In re* Ky. Utils. Co., 242 P.U.R.4th 301, 315 (Ky. P.S.C. 2005) (holding that utility can recuperate, through a surcharge, money spent on emissions allowances necessary to comply with Clean Air Act Amendments of 1990). *But see In re* Duke Energy Corp., 210 P.U.R.4th 311, 323 (N.C. U.C. 2001) (holding that expenses related to purchase of federal emissions allowances cannot be charged as fuel costs).

200. McCardle v. Indianapolis Water Co., 272 U.S. 400 (1926); Miller v. R.R. Comm'n, 70 P.2d 164 (Cal. 1937); Office of People's Counsel v. Md. Pub. Serv. Comm'n, 733 A.2d 996 (Md. 1999); Minnegasco v. Minn. Pub. Utils. Comm'n, 549 N.W.2d 904, 909 (Minn. 1996).

201. *See In re* Consumers Energy Co., 222 P.U.R.4th 303, 306 (Mich. P.S.C. 2002) (citing *In re* Provisions of § 10a(10) of 2000 PA 141, No. U-12639, 2001 WL 96161, exs. S-23, S-25, S-27, S-29 (Mich. P.S.C. Jan. 4, 2001)) (noting that plant property taxes are included in the category of "fixed costs"—along with generation and related regulatory assets, and production-related depreciation and amortization—that is recoverable through rate base via stranded cost computation); *see also In re* Detroit Edison Co., No. U-13350, 2003 WL 21791601, at *1 (Mich. P.S.C. July 31, 2003).

202. 355 N.W.2d 295 (Minn. 1984).

203. *Id.*

204. *Id.* at 299–300.

useful due to their mandatory nature, and stated:

> The problem with the PUC's reasoning is that it defined "used . . . in rendering service" to require that an item must actually generate, transmit or distribute electricity, or aid in doing so. We reject that definition as being overly technical and inflexible. . . . Under general principles of utility law, the "used and useful" standard simply requires (1) that the property be "in service," and (2) that it "be 'reasonably necessary' to the efficient and reliable provision of utility service." Thus, where, as here, an item of property is necessary for the continued operation of an electric generating facility according to valid federal licensing standards, we hold that such an item is "used and useful" . . . .[205]

Under the reasoning in *Senior Citizens Coalition*, the costs of purchasing carbon allowances should be included in the cost of service because purchasing an allowance is necessary for the continued operation of the plant. Absent cost recovery, the public utility is placed in the position of having to choose between compliance with federal regulations and being able to afford such compliance.

Similarly, mandated pollution-control facilities are not essential for the actual generation of electricity, but there is precedent supporting the inclusion of such costs in rates.[206] In some states, these costs are explicitly recoverable from customers through rate riders authorized by statute.[207]

Further, disallowance of the cost of complying with federal carbon regulations will frustrate the purpose of those regulations by creating a related financial penalty for the public utility's compliance. Past treatment of this issue has been to include the costs of compliance in rates.[208] Accordingly, if a public utility chooses to modify an existing coal-fired generation plant to use another resource that emits less carbon, or invest in other technology to reduce its carbon output, such costs should be considered in light of that utility's overall efforts to comply with federal carbon emission regulations. Otherwise, the

205. *Id.* at 300 (citations omitted).

206. *See* Senior Citizens Coal. of Ne. Minn. v. Minn. Pub. Utils. Comm'n, 355 N.W.2d 295, 300 (Minn. 1984); Green v. Pa. Pub. Util. Comm'n, 473 A.2d 209, 213–14 (Pa. Commw. Ct. 1984); *In re* Ky. Utils. Co., 242 P.U.R.4th 301, 315 (Ky. P.S.C. 2005) (authorizing the utility to recover costs associated with constructing four scrubbers and for any new or additional pollution control equipment).

207. *See, e.g.*, MINN. STAT. § 216B.683 (2008) (allowing cost recovery for additional costs in related to mercury reduction); MINN. STAT. § 216B.1692 (2008) (providing recovery of costs related to a qualifying emissions-reductions project).

208. *See supra* notes 199, 206–07 and accompanying text.

disallowance of cost can have a chilling effect on its capital investments,[209] which could include new technologies that are necessary to substantively address the issue of climate change.[210] In such an outcome, the negative effects of a regulatory disallowance would be felt by a broader group than just public utilities and their customers, and would likely also impact the environmental cause that the carbon policy is meant to help.

Finally, the examples found in the RGGI or WCI states that explicitly allow compliance costs to be recovered through retail rates confirm the necessity of providing public utilities with the means of recovering costs associated with carbon compliance in order to give effect to their carbon policy initiatives.[211] The states of Vermont, New Hampshire, and California all explicitly allow recovery of costs of complying with regional greenhouse gas initiates.[212] These state statutes and regulatory pronouncements confirm that the need to ensure cost recovery is inseparable from effective carbon regulation. If, however, stakeholders advocate against the inclusion of costs stemming from ACES in ratemaking, the outcome may violate state laws that allow for the recovery of prudently incurred costs[213] and raise

209. *See* Katarzyna Klimasinska, *FPL Falls After Florida Ruling in Rate Case (Update 1)*, BUSINESS WEEK, Jan. 14, 2010, http://www.businessweek.com/news/2010-01-14/fpl-falls-after-florida-ruling-in-utility-rate-case-update2-.html (stating that FPL Group Inc. would suspend $10 billion in capital projects in Florida over the next five years after state regulators denied nearly all of its requested $1.3 billion rate increase request); Press Release, Florida Power & Light (FPL), Citing Deteriorating Regulatory Environment, FPL Halts Billions of Dollars in Capital Expenditures in Florida (Jan. 13, 2009), http://www.fpl.com/news/2010/011310.shtml.

210. Press Release, Duke Energy, Duke Energy Tests Solar Panels and New Smart Grid Technology in Charlotte (June 16, 2009), http://www.duke-energy.com/news/releases/2009061602.asp; Press Release, Pac. Gas & Elec. Co., PG&E to Study Wave Power In Humboldt & Mendocino (Feb. 28, 2007), http://www.pge.com/about/news/mediarelations/newsreleases/q1_2007/070228.shtml; Press Release, Xcel Energy, Xcel Energy Launches Groundbreaking Wind-to-Battery Project (Feb. 28, 2008), http://www.xcelenergy.com/Colorado/Company/Newsroom/News%20Releases/Pages/Xcel_Energy_launches_groundbreaking_wind_to_battery_project.aspx; Press Release, Xcel Energy, Xcel Energy Announces Six-Month Test Drive of Plug-in Hybrid Electric Vehicles (Oct. 22, 2007), http://www.xcelenergy.com/New%20Mexico/Company/Newsroom/News%20Releases/Pages/Xcel_Energy_announces_six_month_test_drive_of_plug_in_hybrid_electric_vehicles.aspx.

211. *See supra* Part III.C.2.

212. *See supra* notes 134, 135, 141 and accompanying text.

213. *See, e.g.*, MD. CODE ANN., PUB. UTIL. COS. § 4-101(3) (2009); MICH. COMP. LAWS ANN. § 460.06a(2)–(7) (West 2002 & Supp. 2009); MINN. STAT. § 216B.16, subdiv. 6 (2008); 220 ILL. COMP. STAT. ANN. 5/9-211 to -213 (West 2007); S.D. CODIFIED

constitutional issues.[214]

### *D. Mitigating Rate Impact*

All commentators agree that ACES will increase the cost for energy and energy-intensive goods and services; the debate among them is in regard to the amount that increase may take.[215] Estimates range from $98 to $3100 per household annually, leaving one certainty: the impact of ACES will be significant. The impacts from other types of carbon regulation discussed in this article have not been similarly estimated but are also likely to be significant.

ACES itself appears to acknowledge the rate impact potential by offering two forms of customer relief: (1) the bill allocates more than one-third of the total allowances to retail natural gas and electric utility companies to provide their customers with relief on their utility bills; (2) proceeds from the sale of fifteen percent of the emissions allowances to provide targeted assistance to low-income households for the higher costs they will face for energy and energy-intensive goods and services.[216] Whether these measures are sufficient to fully mitigate the scope of expected rate increases will vary depending on the facts of each individual case.

The issue of mitigating rate impact resulting from cap and trade regulation has been raised previously in the context of RGGI and WCI. In New York, the state legislature is considering a bill that would allocate $112 million received from auctioning carbon credits under RGGI to subsidize home energy-efficiency renovations for energy customers, thus reducing energy usage and the related amount owed for benefiting households.[217] California has a proposal to contribute seventy-five percent of an expected $20 billion in annual

LAWS § 49-34A-100 (Supp. 2009); TEX. UTIL. CODE ANN. §§ 36.051, 36.052 (Vernon 2007).

214. *See infra* Part IV.E.

215. *See* D'Angelo Gore, *Cap-And-Trade Cost Inflation*, FACTCHECK.ORG, May 28, 2009, http://www.factcheck.org/2009/05/cap-and-trade-cost-inflation/ (quoting various cap and trade cost estimates); *see also* Op-Ed, *Who Pays for Cap and Trade?* WALL ST. J., Mar. 9, 2009, at A18 (stating that a 15% cut in carbon emissions would result in price increases of $680, or 3.3% of after-tax income for households in the bottom-income quintile, $800 and $1,500, or 2.9% to 2.7% for the three middle quintiles, and a 1.7% increase for the top quintile).

216. American Clean Energy & Security Act of 2009, H.R. 2454, 111th Cong. § 782 (2009).

217. Posting of Steve Zweig to HeatingOil.com, http://www.heatingoil.com/blog/york-bill-cap-trade-income-energysaving-projects/#more-2600 (Sept. 15, 2009, 15:48 EST).

revenue from the state's proposed cap-and-trade measures back to state residents.[218] The California proposal addresses many of the concerns surrounding carbon regulation, including the expectation that an energy tax will have the greatest impact on low-income households in that state.[219] These efforts and others are clearly a response to the increases expected in energy and energy-intensive goods and services from carbon regulation.

If ACES is enacted, or other forms of carbon regulation result in significant costs, the impact to electricity customers should be considered holistically in order to determine whether these or other measures should occur to mitigate the potential for rate impact. In that debate, the state regulatory commissions are well situated to convene a generic stakeholder proceeding to consider such mitigating options as increases in customer aid for low-income and fixed-income customers, conservation assistance, and timing any rate increase with credits. Ideally, a comprehensive approach would be determined prior to the need for a rate increase request by a public utility operating in the state. Such coordination would facilitate the state regulatory commission's full consideration of both the rate increase and the existing options for mitigating the potential for negative consequences to customers of the related rate impact.

### *E. The Constitutional Significance of the Result*

If a state regulatory commission order were to exclude costs resulting from carbon regulation from the public utility's cost of service, the reasonableness of such a decision would generally be reviewed under state law or traditional regulatory standards.[220] If, however, the financial result of an adverse regulatory decision is significant, affecting the risk to the public utility's investors, it may also raise constitu-

218. Posting of Margot Roosevelt to L.A. Times Greenspace Blog, http://latimesblogs.latimes.com/greenspace/2010/01/cap-and-trade-california.html (Jan. 11, 2010, 17:23 PST) (citing a report from an advisory committee to the California Air Resources Board).

219. Rebecca Smith & Keith Johnson, *California: May Pay Consumers for Carbon Cuts*, WALL ST. J., Jan. 11, 2010, at A2 (stating that a family of four would receive an estimated $388 in 2012, rising to $1036 by 2020).

220. Deference is generally shown by a reviewing court to a state regulatory agency's determination of facts related to its area of expertise. *See* Reserve Mining Co. v. Herbst, 256 N.W.2d 808, 824 (Minn. 1977) (finding that an agency's expertise is entitled to deference from reviewing courts and that the agency's decision is presumed correct); Brinks, Inc. v. Minn. Pub. Utils. Comm'n, 355 N.W.2d 446, 449 (Minn. Ct. App. 1984) (stating that substantial deference is accorded to the fact finding process of an administrative agency); *see also supra* note 154.

tional issues.

In *Hope*, the Supreme Court focused on the *result* of the rate review, rather than the *process* by which the rates were analyzed, and emphasized that the end result was critical in determining the reasonableness of rates:

> The fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid. It does, however, indicate that "fair value" is the end product of the process of rate-making, not the starting point as the Circuit Court of Appeals held. The heart of the matter is that the rates cannot be made to depend upon "fair value" when the value of the going enterprise depends on earnings under whatever rates may be anticipated.[221]

In explaining its focus, the Court drew an important distinction between adherence to a particular formula and the actual impact of the rate order. If the total effect of the rate order is not unreasonable, the Court determined that any subsequent judicial inquiry on constitutional grounds as to the method used to reach that result was at an end. The fact that the method employed may contain what it termed as "infirmities" was unimportant.[222]

In examining the effect of the FPC's order on Hope Natural Gas Company, the Court reversed the judgment of the court of appeals, determining that the rates authorized were just and reasonable, holding that "[r]ates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called 'fair value' rate base."[223]

The conclusion literally drawn from this language is that a state regulatory commission need not use any specific standard for the determination of the value of rate base nor allow recovery of specific operating expenses to satisfy constitutional requirements, so long as the end reached is reasonable.

Forty-five years after *Hope*, the Supreme Court issued another crit-

221. Fed. Power Comm'n v. Hope Natural Gas, 320 U.S. 591, 601 (citations omitted).

222. *Id.* at 602; *see also* Duquesne Light Co. v. Barasch, 488 U.S. 299, 310 (1989) (citing *Hope* to affirm that the fact that "the method employed to reach that result may contain infirmities is not then important").

223. *Hope*, 320 U.S. at 319.

ical opinion on the constitutional standards for review of regulated rates in *Duquesne Light Co. v. Barasch*,[224] which involved the state public utilities commission decision to allow the inclusion of costs incurred by two power company participants to a joint venture formed to build seven nuclear power plants.[225] Four of the seven planned plants ultimately were not built and were not used in the provision of electricity to customers. On appeal, the Consumer Advocate argued against the inclusion of costs associated with these canceled plants in rates for electricity because these plants were never "used and useful" in service to the public.[226] The Supreme Court of Pennsylvania agreed with the arguments raised by the Consumer Advocate and reversed the decision of the Commonwealth Court.[227] In doing so, the court rejected the power company's arguments that disallowing rate recovery would constitute an unlawful taking and was unconstitutional.[228]

In affirming the Pennsylvania court, the U.S. Supreme Court affirmed its past statements in *Hope* that the effect of the decision, not its components, determined its constitutional status.[229] The Court did not absolve the state regulatory commission of its obligation to make a sound decision based on a developed record, so much as acknowledge that the only way to evaluate the soundness of that decision is to weigh the effect of the final outcome:

> The economic judgments required in rate proceedings are often hopelessly complex and do not admit of a single correct result. The Constitution is not designed to arbitrate these economic niceties. Errors to the detriment of one party may well be canceled out by countervailing errors or allowances in another part of the rate proceeding. The Constitution protects the utility from the net effect of the rate order on its property. Inconsistencies in one aspect of the methodology have no constitutional effect on the utility's property if they are compensated by countervailing factors in some other aspect.[230]

In *Duquesne*, the Court found that neither power company had al-

224. 488 U.S. 299 (1989).
225. *Id.* at 305. In 1980 and 1981, Duquesne Light Company sought to amortize over a ten-year period $34,697,389 in costs related to the canceled power plants. *Id.* at 302. Penn Power also sought the opportunity to amortize $9,569,665 over a ten-year period for similar costs. *Id.* at 304.
226. Cohen v. Pa. Pub. Util. Comm'n, 494 A.2d 58, 61 (Pa. Commw. Ct. 1995).
227. Barasch v. Pa. Pub. Util. Comm'n, 532 A.2d 325 (Pa. 1987).
228. *Dusquesne*, 488 U.S. at 305.
229. *Id.* at 310.
230. *Id.* at 314.

leged that the total effect of the rate order was either unjust or unreasonable, and that the overall effect was well within the bounds of *Hope* even with the total exclusion of the costs associated with the canceled plants.[231] Accordingly, the Court affirmed the lower court's decision.[232]

After *Hope* and *Duquesne*, the determinative question on review of a rate order issued by a state regulatory commission is not whether a specific cost was prudently incurred and useful in the provision of service, but whether the omission of that cost by the state regulatory commission triggered an overall result that is so unreasonable as to confiscate property in violation of the Takings Clause under either the Fifth or Fourteenth Amendments.[233]

Not all costs excluded by a state regulatory commission in rate making proceedings rise to this level. The anticipated costs resulting from the implementation of a federal cap-and-trade regulation, however, are estimated to be considerable. Denial of costs representing a significant amount of a public utility's annual income could implicate constitutional protections.

## V. CONCLUSION

Historically, operating costs associated with the production of electricity have been included in the rate making process overseen by the state regulatory commissions.[234] The inclusion of these costs recognizes that public utilities provide a service to customers for which they should be compensated. Where the federal or state government has implemented environmental restrictions on the generation of electricity, these costs have been included in the calculation of retail

231. *Id.* at 311. Duquesne was authorized to earn a 16.14% return on common equity and an 11.64% overall return on a rate base of nearly $1.8 billion. *Id.* Its $35 million investment in the cancelled plants comprised of roughly 1.9% of its total base, and the denial of plant amortization reduced its annual allowance by 0.4%. *Id.* at 312.

232. *Id.* at 316.

233. *Id.* at 307–08 (citing Covington & Lexington Tpk. Rd. Co. v. Sandford, 164 U.S. 578, 597 (1896) (declaring that a rate is too low if it is "so unjust as to destroy the value of [the] property for all the purposes for which it was acquired," and in so doing "practically deprive[s] the owner of property without due process of law")); FPC v. Texaco Inc., 417 U.S. 380, 391–392 (1974) ("All that is protected against, in a constitutional sense, is that the rates fixed by the Commission be higher than a confiscatory level."); FPC v. Natural Gas Pipeline Co., 315 U.S. 575, 585 (1942) ("By long standing usage in the field of rate regulation, the 'lowest reasonable rate' is one which is not confiscatory in the constitutional sense.").

234. *See* discussion *infra* Part IV.B.

rates paid by customers to give effect to those regulations.[235] Including these costs in retail rates recognizes that environmental policies will not be successful without also providing a means for the affected utility to continue to provide service and earn a reasonable return.

At this point, the ultimate cost impacts of carbon initiatives are far from clear and depend largely on individual facts and future action by courts, Congress, federal agencies, and state regulatory commissions.[236] But the issue of cost recovery is of critical importance to the success of any carbon regulation. Without assurances that these costs will be recognized for ratemaking purposes, public utilities face considerable risks related to their investment status and, as a result, the future costs of their operations. Thus, it is crucial that a comprehensive approach to cost recovery should be developed. This comprehensive approach can be developed through the Senate's consideration of ACES (or similar federal legislation), subsequent rulemaking by federal agencies, or through consistent application by the state regulatory commissions in regulatory ratemaking proceedings.

Also important is recognizing that the recovery of carbon regulation costs will significantly increase the rates paid by electricity customers.[237] This issue cannot be effectively managed by disallowing cost recovery for such costs. While a disallowance of cost may temporarily reduce the potential rate impact for customers, it would also have significant impacts on the public utility's operations and result in potential judicial challenges. Additionally, the public utility would likely see a degradation of its credit status, which will necessarily result in increases to the cost of credit and investment and, ultimately, higher retail rates. The public utility may also have to suspend its capital investments, including any investments in new technologies that are necessary to address the issue of climate change. A better alternative is to consider both the rate increase and rate impact mitigation (such as ACES allowances) together. This allows for the development of a comprehensive implementation strategy that supports full realization of the environmental policy.

For these reasons, efforts to mitigate the impact of carbon regulation on public utilities and electricity customers should not occur piecemeal or on an ad hoc basis, but as a part of a holistic approach to

235. *See* discussion *infra* Part IV.C.
236. *See* discussion *infra* Part IV.
237. *See* discussion *infra* Part IV.E.

implementing new federal policy on carbon regulation. The ultimate success of such legislation will depend on a consistent solution.