

NUCLEAR POWER RATE REGULATION AFTER *EASTERN ENTERPRISES*: ARE RATEPAYERS BEING TAKEN FOR A RIDE?

CLAIRE A. WATKINS*

Abstract: The electric industry's monopolistic reign is coming to an end. The movement toward deregulation is exposing as flawed the electric industry's decision to build nuclear power plants for the generation of electricity. One such flaw is the miscalculation of decommissioning costs. Without a monopoly, nuclear power plant owners have no guaranteed rate base to pay the high costs of decommissioning. As a result, owners are lobbying the state legislatures and Congress to require recovery of these costs. This comment questions whether it is constitutional to require ratepayers to pay for such costs after they no longer receive service from a power plant. Through an analysis of Justice O'Connor's opinion in *Eastern Enterprises v. Apfel*, which establishes that economic regulation can be a taking, the argument is presented that ratepayers may be able to challenge rate regulation after the termination of service as an unconstitutional taking.

INTRODUCTION

Under the electric industry's regulatory regime, utilities have always assumed that ratepayers should pay for costs incurred by a nuclear-powered utility.¹ However, as deregulation becomes a reality in some states² and with a proposed federal deregulation bill before the

* Managing Editor, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, 2000-01.

¹ See generally P. Barker, *Who Pays? An Analysis of the Allocation of the Costs of Canceled Nuclear Plants After Duquesne Light Co. v. Barasch*, 50 Ohio L.J. 999 (1989) (describing how a nuclear utility covers its operating expenses). The costs of construction, maintenance and decommissioning are incorporated into a utility's base rate and are amortized over a period of time. As long as the rate is reasonable and fair, a utility consumer must pay it. See *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 310 (1988); *Federal Power Co. v. Hope*, 320 U.S. 591, 602 (1944) (holding that a rate must be "just and reasonable"); *Smyth v. Ames*, 169 U.S. 466, 546 (1898). Additional evidence indicates that courts will only interfere if the rate order does not compensate a utility. See Barker, *supra* at 1012.

² Twenty-four states have deregulation laws on the books. *Legislative Affairs* (visited Nov. 19, 1999) <<http://www.nado.org/legaffair/utility>> [hereinafter *www.nado.org*].

House,³ perhaps it is time to challenge this assumption. Recently,⁴ consumers have been protesting against the policy decisions requiring ratepayers to pay all or a portion of a nuclear powered utility's costs.⁵

This article will discuss how ratepayers of nuclear powered electric utilities could construct a legal argument in support of their policy position. Section I describes the rise and fall of nuclear power within the electric industry. Section II explores the costs incurred as well as the regulatory mechanism used in addressing the costs incurred by nuclear plants. Section III explains deregulation, the current status of the deregulation process, and how the process may affect a nuclear utility. Section IV sets forth the jurisprudence regarding rate regulation. Finally, Section V questions the constitutionality of requiring ratepayers to pay for the stranded cost of nuclear utilities.

I. THE RISE AND FALL OF NUCLEAR POWER

This section is divided in three parts. First, Part A describes the history of the regulation of the electric industry. Next, Part B illustrates the socio-political factors that favorably influenced the public's perception of nuclear power. Finally, Part C shows that the factors in Part B that created the positive attitudes toward nuclear power may have been recklessly misleading to the public.

A. *Regulation of Electric Utilities*

The electric industry has been regulated since the turn of the 20th century.⁶ One reason for regulating the electric industry is that electric utilities are considered "natural monopolies."⁷ A natural mo-

³ H.R. 1828, 106th Cong. (1999). The Comprehensive Electricity Competition Act, H.R. 1828, was introduced to the House on May 17, 1999 and is currently in committees.

⁴ See generally SAFE ENERGY COMMUNICATION COUNCIL, *THE GREAT RATEPAYER ROBBERY: HOW ELECTRIC UTILITIES ARE MAKING OUT LIKE BANDITS* (1998) (describing how utilities are taking advantage of ratepayers) [hereinafter *THE GREAT RATEPAYER ROBBERY*]. Ever since deregulation has been discussed as a real possibility, consumers have begun to question the legitimacy of the regulation requiring ratepayers to pay for certain costs.

⁵ See *id.*

⁶ See *Energy Issues/News: Historical Background* (visited Dec. 15, 1999) <<http://www.eei.org/issues/history.htm>> [hereinafter *eei history*]. In 1898, it was proposed to the National Electric Light Association that electric companies be regulated. See *id.* By 1916, 33 states had regulatory agencies. See *id.*

⁷ See *ELECTRIC POWER: DEREGULATION AND THE PUBLIC INTEREST* 4 (John C. Moorhouse ed. 1986).

nopoly is one that has an economy of scale.⁸ An economy of scale exists when a single company has the lowest cost of production because the more the company produces, the less expensive it is for the company to produce.⁹ Thus, economies of scale preclude competition because a single company can supply the entire market demand at a lower cost than could two or more companies supplying the market.¹⁰ Regulation of natural monopolies is therefore necessary (or so goes the theory) to reduce the cost of providing the energy.

Another theory supporting the regulation of the electric industry is that competition would waste resources.¹¹ In the early 1900s, the utilities competed for customers.¹² This competition created not only a potential for complete duplication of infrastructure (because every utility would have its own generating stations, power distribution network, and so on), but also a potential for systems that were not compatible.¹³ However, the movement toward deregulation has rejected this theory because proponents of deregulation believe that competition will lower the costs of supplying electricity.¹⁴

Thus, the result of regulation is a "monopoly,"¹⁵ otherwise known as a "regulatory bargain" or "compact"¹⁶ that grants a utility certain rights in exchange for certain obligations.¹⁷ A public utility's first right under regulation is to collect a reasonable rate for its service.¹⁸ Second, utilities have the right to provide service at reasonable rates but are subject to regulation.¹⁹ Third, when a utility provides adequate

⁸ See *ELECTRIC POWER*, *supra* note 7, at 4; Margaret Jess, *Restructuring Energy Industries: Lessons from Natural Gas* (visited Dec. 15, 1999) <ftp.eia.doe.gov/pub/oil_gas>.

⁹ See Jess, *supra* note 8.

¹⁰ See *ELECTRIC POWER*, *supra* note 7, at 4.

¹¹ *Deregulation* (visited Dec. 15, 1999) <<http://www.energyland.net/deregulation/intro.as>> [hereinafter *Deregulation*].

¹² See *eei history*, *supra* note 6.

¹³ See *id.* Companies used different equipment, voltages and frequencies. See *id.*

¹⁴ See *Deregulation*, *supra* note 11.

¹⁵ See *ELECTRIC POWER*, *supra* note 7, at 43. Some people doubt whether the electric utilities were ever a natural monopoly. See *id.*

¹⁶ Adam D. Thierer, *Electricity Deregulation: Separating Fact From Fiction in the Debate Over Stranded Cost Recovery* (visited Dec. 15, 1999) <<http://www.heritage.org/library/categories/regulation>>.

¹⁷ See CHARLES F. PHILLIPS JR., *THE REGULATION OF PUBLIC UTILITIES: THEORY AND PRACTICE* 109-10 (1988).

¹⁸ See *id.* at 110.

¹⁹ See *id.* at 111.

service, it has the right to be protected from competition.²⁰ Fourth, most public utilities have been given the right of eminent domain.²¹

In exchange for these four rights, a utility has four obligations.²² First, a utility is required to serve everyone who requests service.²³ Second, utilities are required to provide safe and adequate service.²⁴ Third, a utility must serve all customers on the same terms.²⁵ Fourth, utilities are obligated to charge no more than "just and reasonable" prices for the service they provide.²⁶ Therefore, by creating a regulatory compact, legislators and utility companies enter into an enforceable contract²⁷ granting the utilities these rights and imposing these responsibilities.²⁸

B. *The Rise of Nuclear Power*

The socio-political climate of the 1950s and 1960s laid the fertile ground for the development of nuclear power.²⁹ Four of the most notable factors affecting this favorable climate were: (1) "Cold War" beliefs;³⁰ (2) public trust in business and the government;³¹ (3) public faith in science;³² and (4) a belief that electricity sales would double every ten to fifteen years.³³ "Cold War" beliefs, for example, encouraged the development of nuclear power because of the potential benefits such power would provide to national security.³⁴ The McCarthy era, however, discouraged research into nuclear power hazards. Indeed, concern over the radiation dangers of atomic testing was often attacked as subversive.³⁵

Moreover, during the 1960s, the socio-political climate was ready for the development of nuclear power. The public had faith that busi-

²⁰ See *id.*

²¹ See *id.*

²² See PHILLIPS, *supra* note 17, at 110.

²³ See *id.* at 109–10.

²⁴ See *id.* at 110.

²⁵ See *id.*

²⁶ See *id.*

²⁷ See Thierer, *supra* note 16.

²⁸ See PHILLIPS, *supra* note 17, at 110.

²⁹ See STEVEN MARK COHN, *TOO CHEAP TO METER: AN ECONOMIC AND PHILOSOPHICAL ANALYSIS OF THE NUCLEAR DREAM* 17 (Roger S. Gottlieb ed. 1997).

³⁰ See *id.* at 17.

³¹ See *id.*

³² See *id.*

³³ See *id.* at 69.

³⁴ See COHN, *supra* note 29, at 17.

³⁵ *Id.* at 17–18.

nesses and political leaders "would do right most of the time."³⁶ The government and corporate promoters of nuclear power took advantage of this period of business credibility by "transforming corporate marketing claims about nuclear economics into conventional wisdom."³⁷

The 1960s was also characterized by a faith in the ability of science and technology to solve social and economic problems.³⁸ Both laypersons³⁹ and scientists believed nuclear power was a "Faustian bargain for global affluence."⁴⁰ This idea led many people to adopt the concept that nuclear energy was a means to achieving utopia.⁴¹ Moreover, the belief that electric sales would double every ten to fifteen years for the foreseeable future also promoted a favorable climate for the development of nuclear power.⁴² To accommodate this anticipated expansion, a new source of electric energy was believed to be necessary.⁴³

Finally, in addition to favorable socio-political conditions, the promise of nuclear power was very compelling.⁴⁴ Nuclear energy was heralded as a new, clean and inexpensive source of power.⁴⁵ Moreover, it was offered by its proponents as a panacea: "it will give us all the power we need and more. Power seemingly without end . . . [po]wer

³⁶ *Id.* at 18. In 1964, only 22% of those surveyed agreed with the statement, "You cannot trust government to do right most of the time." *Id.*

³⁷ *Id.*

³⁸ *See id.*

³⁹ *See* COHN, *supra* note 29, at 18. Students for a Democratic Society declared, "Our monster cities, based historically on the need for mass labor, might now be humanized . . . by nuclear energy . . ." *Id.*

⁴⁰ *See id.* at 18.

⁴¹ *See id.*

⁴² *See id.* at 69. Some believed the demand for electricity was expected to increase by approximately seven percent annually for the foreseeable future. *See* Richard J. Pierce, *Regulatory Treatment of Mistakes in Retrospect: Canceled Plants and Excess Capacity*, 132 U. PA. L. REV. 497, 500 (1984). Others believed that electricity sales would continue to double every decade. *See* Richard Goldsmith, *Utility Rates and Takings*, 10 ENERGY L.J. 241, 241 (1989).

⁴³ *See* GREGORY B. ENHOLM & J. ROBERT MALKO, *ELECTRIC UTILITIES MOVING INTO THE 21ST CENTURY* 15 (1994). This projected growth was never realized. In fact, sales for electricity fell from six to eight percent to two percent. *See* COHN, *supra* note 29, at 15. Another result of the forecasted increase in electric sales was that the nation's electric utilities began an ambitious program of expansion. *See* Goldsmith, *supra* note 42, at 241. In 1967, the Atomic Energy Commission ("AEC") foresaw 1000 nuclear plants on line in the United States by the year 2000. *See* COHN, *supra* note 29, at 127.

⁴⁴ *See infra* notes 45–46 and accompanying text describing nuclear power as a panacea.

⁴⁵ Leigh A. Riddick, *Upside Down: Who Should Bear the Unanticipated Costs of Nuclear Decommissioning?*, 132 No. 8 FORTNIGHTLY 31.

to do everything man is destined to do. We have found what might be called *perpetual youth*.”⁴⁶

As a result of this promise, the federal government began encouraging the development of nuclear energy⁴⁷ in three ways: research and development; subsidies; and pro-nuclear regulatory incentives.⁴⁸ Between 1951 and 1974 the federal government spent \$23 billion⁴⁹ on nuclear research and development.⁵⁰ During the same time period, the federal government's subsidies reduced expected nuclear power generating costs by at least fifty percent.⁵¹ While the government aid was intended to reduce or defer nuclear power costs, “[t]he Atomic Energy Commission (AEC) continued to characterize nuclear plant investments as ‘without practical value’ as late as 1970, in order to maintain this assistance and to protect the nuclear industry from anti-trust review.”⁵² Simultaneously, the regulatory commissions treated the nuclear utilities favorably.⁵³ As one economist stated: “When a commission is responsible for the performance of an industry, it is under [inescapable] pressure to protect the health of the companies it regulates, to assure a desirable performance”⁵⁴ Commentators have suggested that this government aid resulted from the belief that “abundant energy was . . . [the] prerequisite for permanent economic growth and nuclear power was a prerequisite for abundant energy.”⁵⁵

⁴⁶ See COHN, *supra* note 29, at 19. While there was opposition to nuclear power, “[t]hese countercurrents were submerged as nuclear promoters assembled a critical mass of social support for nuclear technology and subsequently constructed assessment centers in industry, the National Laboratories, and nuclear engineering departments that were dominated by technological aesthetics congenial with nuclear power expansion.” *Id.* at 20.

⁴⁷ See *id.* at 63.

⁴⁸ See *id.* at 63–83.

⁴⁹ See *id.* at 63 (1990 dollars).

⁵⁰ See *id.* While government aid influenced utilities to construct nuclear power plants, the decision to build a plant was up to the utility. See Pierce, *supra* note 42, at 508. Furthermore, the utilities had a strong economic incentive to construct nuclear power plants. See THE GREAT RATEPAYER ROBBERY, *supra* note 4, at 19. In some instances, utilities litigated to force regulatory agencies to allow them to build plants. *Id.*

⁵¹ See COHN, *supra* note 29, at 75. This government cost reduction kept people from realizing the full cost of nuclear power. See *id.*

⁵² See *id.*

⁵³ See ENHOLM & MALKO, *supra* note 43, at 236.

⁵⁴ See Thierer, *supra* note 16.

⁵⁵ See COHN, *supra* note 29, at 69.

C. *The Fall of Nuclear Power*

From 1967 to 1974, utilities ordered 196 new nuclear plants to be constructed.⁵⁶ However, all forty-one reactors ordered after 1973 were cancelled and more than two-thirds of all nuclear plants ordered after January 1970 were cancelled.⁵⁷ Some economists attribute the decline in nuclear power to a variety of reasons, including: the Organization of Petroleum Exporting Countries (OPEC) oil embargo;⁵⁸ growing fear of nuclear reactors after the Three Mile Island incident;⁵⁹ inflation;⁶⁰ and/or the fact that the expected demand for electricity never materialized.⁶¹

The focus on external economic and social factors (described above in part B) to explain the rise of nuclear power, permits a financially unstable utility to claim that its investment in a nuclear power plant was prudent⁶² and that any failure of the plant was due to unforeseeable, external factors.⁶³ This popular notion is represented by the findings of the Pennsylvania Public Utility Commission (PUC) in *Duquesne Light Co. v. Barasch*.⁶⁴ The PUC found that Duquesne could not be faulted for initiating the construction of more nuclear generating capacity at the time they joined the Central Area Power Coordination Group (CAPCO) project in 1967.⁶⁵ The PUC also found that the intervening events (the oil embargo, the Three Mile Island incident, and inflation) that ultimately confounded the predictions of increased electricity could not have been predicted.⁶⁶ Based on the foregoing, the PUC ultimately found that CAPCO acted prudently.⁶⁷

⁵⁶ See *id.* at 127.

⁵⁷ See ENHOLM & MALKO, *supra* note 43, at 13.

⁵⁸ See *id.* at 13–15.

⁵⁹ See Michael R. Lettrich, *Popowsky v. Pennsylvania Public Utility Commission: The Supreme Court Holds That the Costs of Decommissioning TMI-2 may be Classified as "Operating Expenses" Properly Chargeable Consumers*, 5 WIDENER J. PUB. L. 865, 865 (1996).

⁶⁰ See ENHOLM & MALKO, *supra* note 43, at 16.

⁶¹ See *id.* at 15. By the mid-1980s, forecasted growth had declined from six to eight percent to around two percent. See Pierce, *supra* note 42, at 503.

⁶² See *Duquesne*, 488 U.S. at 302–03; Pierce, *supra* note 42, at 502. Many utilities claim that the decision to build a nuclear plant was reasonable and prudent.

⁶³ See *Duquesne*, 488 U.S. at 303. This is the argument made by most utilities.

⁶⁴ See *id.* at 302–03.

⁶⁵ See *id.* at 302.

⁶⁶ See *id.* at 303.

⁶⁷ See *id.*

However, at least one scholar denounces this interpretation of the failure of nuclear power⁶⁸ as mistaking "a facilitating condition for an underlying cause. While these external factors played a role in derailing nuclear power, the level of regulatory support necessary to transcend these obstacles was no greater than that which nuclear power had previously enjoyed."⁶⁹ According to this analysis, these factors merely triggered the decline of nuclear power and were not the cause of that decline.⁷⁰

According to Steven Mark Cohn, associate professor of economics at Knox College, nuclear power declined because there was no reliable indication that new energy sources were needed⁷¹ and because the research and development of nuclear power focused solely on the positive aspects of nuclear power.⁷² Cohn argues that it is misleading to focus on external economic and social factors that portray the country's large nuclear power investment of the 1950s and 1960s as a response to a concern over available energy sources.⁷³ As evidence of this claim, Cohn points to the 1958 National Planning Association's study, *Nuclear Energy and the U.S. Fuel Economy 1955-1980*, which reported there were ample fuel sources in the U.S. for centuries.⁷⁴

Similarly, in 1959, during a private presidential briefing, the AEC (the precursor to the Nuclear Regulatory Commission (NRC)) reported, "[f]or our own economy, with but few exceptions, we do not need atomic energy power in the foreseeable future."⁷⁵ Also, in 1964, the *Cambel* study of the U.S. Energy Research and Development concluded, "[t]he findings of this staff study indicate no grounds for serious concern that the Nation is using up its stocks of fossil fuels too rapidly; rather there is the suspicion that we are using them up too slowly."⁷⁶

Additionally, representatives of the conventional fuel industries and utilities testified annually during the 1950s that no pressing need existed for alternative energy development.⁷⁷ Thus, Cohn argues that

⁶⁸ See COHN, *supra* note 29, at 143. Steven Mark Cohn, author of *TOO CHEAP TO METER*, disagrees with this superficial analysis of the decline of nuclear power. See *id.*

⁶⁹ *Id.* at 143.

⁷⁰ See *id.*

⁷¹ See *id.* at 22-23.

⁷² See *id.* at 17, 54.

⁷³ See COHN, *supra* note 29, at 143; see also *supra* notes 59-64 and accompanying text.

⁷⁴ See COHN at 22. "Coal reserves in the U.S. are ample for centuries." *Id.*

⁷⁵ See *id.*

⁷⁶ *Id.*

⁷⁷ See *id.*

the concern over available resources was unfounded since there were ample fuel sources available.⁷⁸ Moreover, according to Cohn, there was no compelling economic case for investment in nuclear power to replace other sources.⁷⁹

Instead, Cohn argues that the impetus for the expansion of nuclear energy was the apparent security of nuclear fuel resources (the United States felt there were abundant supplies of uranium in the U.S., Canada, Australia and South Africa) and the expected absolute advantage of U.S. corporations in international nuclear competition.⁸⁰ Cohn further argues that the decline of nuclear power occurred because the industry had not properly researched the cost estimates for nuclear plants.⁸¹ While nuclear power was promoted, research into the hazards of nuclear power was discouraged.⁸²

Through the late 1960s, there was no operating experience data from which to derive cost estimates for commercialized nuclear plants. Popular projections were based on optimistic scaling and learning curve assumptions. These predictions gave only cursory attention to the economic implications of containing nuclear externalities, such as accident hazards and thermal pollution. Waste disposal and decommissioning uncertainties were totally ignored in economic forecasts.⁸³

Thus, in the 1960s and 1970s, many utilities focused almost exclusively on development of nuclear power without sufficient consideration of the costs and concerns. For example, Bechtel, an electric equipment manufacturer, spent ten percent of its pre-tax profits on nuclear development and training⁸⁴ without researching negative aspects of nuclear power.⁸⁵ The utilities' focus on overly optimistic aspects of nuclear power were

more errors of omission than commission and reflect the [utility's] participation in a socially created realm of discourse, which was bounded by a collective failure to investigate the economic implications of the technology's negative

⁷⁸ See *supra* notes 74–77 and accompanying text.

⁷⁹ See COHN, *supra* note 29, at 24.

⁸⁰ See *id.* at 25.

⁸¹ See *id.* at 23.

⁸² See *id.* at 17.

⁸³ *Id.* at 23–24.

⁸⁴ See COHN, *supra* note 29, at 53.

⁸⁵ See *id.*

externalities and an engineering hubris that minimized the potential problems posed by the technology's extreme novelty.⁸⁶

Therefore, Cohn argues that the decline of nuclear power had more to do with the industry's internal problems (failure to research all aspects of nuclear power, including costs) than any unforeseeable external factors.⁸⁷ Many of a utility's internal problems were the result of the costs associated with nuclear power. These various costs are discussed in the following section.

II. COSTS ASSOCIATED WITH NUCLEAR POWER

This Section discusses the different costs involved in constructing, maintaining, and decommissioning a nuclear power plant. Part A addresses the procedure used by utilities to finance these costs; part B focuses on the cost of decommissioning a nuclear power plant; part C discusses the costs of canceled nuclear power plants; and part D addresses stranded costs.

A. *Ratemaking and Amortization*

As with any other industry, nuclear utilities have various expenses.⁸⁸ Under a regulatory regime, the costs are recovered through the rates charged to ratepayers through a process called amortization.⁸⁹ Whether a cost will be completely or partially amortized depends on whether the cost is included in the calculation of the rate.⁹⁰ The standard rate is equal to the rate base multiplied by the utility's rate of return plus the utility's operating costs. Thus, the standard ratemaking formula is:

$R = O + (B \times r)$ where R represents the utility's allowed revenue requirement; O represents the utility's operating costs;

⁸⁶ *Id.*

⁸⁷ *See id.*

⁸⁸ Plant construction, maintenance, and decommissioning are a few examples of expenses.

⁸⁹ *See Barker, supra* note 1, at 999-1000. Technically, "amortization is the process in which capital outlay is recovered in installments by converting the depreciation in value of a capital asset into a current expense, with the entire amount being recouped by the end of the amortization period." *Id.* at 1001.

⁹⁰ *See id.* at 1001.

B represents the utility's permitted rate base; and r the utility's cost of capital (rate of return).⁹¹

While it is customary to incorporate all prudently incurred operating expenses used in providing utility service to consumers into the rate base; the assumption of what expenses are prudently incurred is often the subject of litigation.⁹² The classification of a particular cost will determine whether a utility will recover the cost.⁹³ If the cost is added into the rate base (B), the utility will recover all the cost plus a return on the investment.⁹⁴ This places the whole burden on the ratepayer, while alleviating the utility's investors of any loss.⁹⁵

Alternatively, if the cost is not included in the rate base, the investors must cover the entire cost.⁹⁶ In between is an option where the ratepayers pay for the cost, but the investors do not receive a return on that portion of their investment. This approach allows the investors and ratepayers to share in the burden of covering the cost.⁹⁷ The decision whether to include a cost into the rate base is left not to the utility, but rather to be determined by a regulatory commission.⁹⁸ Usually, the decision is based on whether the cost provided the consumer with a service and thus had been "used and useful."⁹⁹

B. Decommissioning

The utilities rely on the amortization process to recover the costs for one of the most expensive functions of a nuclear power plant: decommissioning.¹⁰⁰ Decommissioning is the safe removal of a facility from service and the reduction of residual radioactivity to a level that

⁹¹ See *id.* at 1000.

⁹² See *Duquesne*, 488 U.S. at 613–14. In this case there was a question as to whether certain operating expenses have been prudently incurred. See *id.*

⁹³ See Barker, *supra* note 1, at 1001.

⁹⁴ See *id.*

⁹⁵ See *id.*

⁹⁶ See *id.*

⁹⁷ See *id.* at 1003.

⁹⁸ See Barker, *supra* note 1, at 1001.

⁹⁹ *Id.* The used and useful rule is a "bedrock principle of public utility rate regulation. It requires that costs associated with electric power plants be paid by the ratepayers who benefit from the plant." See Lettrich, *supra* note 59, at 868. Whether a cost is used or useful has been the topic of much litigation but is outside the scope of this article.

¹⁰⁰ See *The Decommissioning Crunch* (visited Nov. 11, 1999) <<http://www.bwgi.com/energyarticle.html>> [hereinafter *The Decommissioning Crunch*].

permits the termination of the Nuclear Regulatory Commission (NRC) license.¹⁰¹ The NRC grants licenses for forty-year periods.¹⁰²

The costs of decommissioning can be analyzed in at least two settings: (1) in the context of a nuclear plant that has reached the end of its license; or (2) in the context of a nuclear plant that closes down prematurely. The cost of decommissioning is high.¹⁰³ In the next fifteen years, seventy nuclear plants will be decommissioned, requiring a cost of an estimated \$20 billion.¹⁰⁴ While the estimated cost of completely decommissioning the country's nuclear plants is highly speculative,¹⁰⁵ some authorities suggest the decommissioning costs could be up to 100% of the initial cost of construction.¹⁰⁶

The calculation of a utility's decommissioning cost can be problematic because regulators assume that the plant will operate for the full life of its license.¹⁰⁷ However, out of the twenty-seven nuclear plants to shut down to date, not one has reached the expiration of its license.¹⁰⁸ In fact, the average nuclear plant shuts down fifteen years prematurely.¹⁰⁹ Because regulators overestimate the life of nuclear plants in determining the rates each plant may charge, most utilities will not have had ample time to amortize the total costs of decommissioning before the plant closes prematurely.¹¹⁰

To combat this problem, the NRC has established rules to attempt to ensure that each utility has a decommissioning fund

¹⁰¹ See 10 C.F.R. § 50.2 (2000); see also *Staff Responses to Frequently Asked Questions on Decommissioning Nuclear Power Reactors* (visited Nov. 12, 1999) <<http://www.nrc.gov/NRC/NUREGS/SR1628/part06.html>> [hereinafter *Staff Responses*].

¹⁰² See *Staff Responses*, *supra* note 101.

¹⁰³ See *The Decommissioning Crunch*, *supra* note 100.

¹⁰⁴ See *id.*

¹⁰⁵ See *Decommissioning* (visited Nov. 11, 1999) <http://www.greenpeace.org/_commons/no.nukes/decommi.html> [hereinafter *Decommissioning*]. Decommissioning costs are highly speculative because the detail and sophistication employed in developing an estimate varies greatly and a lack of standardization makes comparison difficult.

¹⁰⁶ See *id.*

¹⁰⁷ Bruce Biewald & David White, *Stranded Nuclear Waste: Implications of Electric Industry Deregulation for Nuclear Plant Retirements and Funding Decommissioning and Spent Fuel* (visited Nov. 19, 1999) <<http://www.citact.org/nucrep.html>>. Many plants close prematurely due to their bad financial state, resulting from poor management decisions. See THE GREAT RATEPAYER ROBBERY, *supra* note 4, at 1.

¹⁰⁸ See Gary M. Becker, *Surviving Nuclear Decommissioning*, 136 No. 13 PUB. UTIL. FORT. 22, 22 (1998); U.S. NRC INFORMATION DIGEST, app. B at 103-04 [hereinafter NRC INFORMATION DIGEST].

¹⁰⁹ See NRC INFORMATION DIGEST, *supra* note 108, app. B at 103-04. Many plants close down before the expiration of their license because of poor management. See *id.*

¹¹⁰ See Biewald & White, *supra* note 107.

sufficient to cover its future costs.¹¹¹ Despite the NRC's efforts, however, there has been a funding shortfall for each of the nuclear plants that have been closed to date.¹¹² Estimates of the costs of unfunded decommissioning for various plants range from 2.7 billion dollars¹¹³ to 24 billion dollars.¹¹⁴

A difficult problem concerning unfunded decommissioning costs is deciding who will pay them, the ratepayers or investors. According to the used and useful rule, ratepayers should not pay for costs that are not attached to services received.¹¹⁵ In a scenario where ratepayers are expected to continue paying the utility after a premature shutdown, the ratepayers are no longer paying for services received.¹¹⁶ Instead, it is argued, the decision to make ratepayers pay when there is no service provided is tantamount to a bailout of the utilities.¹¹⁷ The problems associated with amortizing the costs of nuclear plants are exacerbated when the plants are never completed in the first place because this means the plants do not provide a service nor do they generate revenue.

¹¹¹ See 10 C.F.R. pt. 30 (1975); 10 C.F.R. pt. 50 (1963).

¹¹² See Biewald & White, *supra* note 107.

¹¹³ See Regulatory Analysis on Decommissioning Financial Assurance Implementation Requirement for Nuclear Power Reactors, 10 C.F.R. § 3.2.2.

¹¹⁴ See Biewald & White, *supra* note 107.

¹¹⁵ The used and useful rule is a "bedrock principle of public utility rate regulation. It requires that costs associated with electric power plants be paid by the ratepayers who benefit from the plant." See Lettrich, *supra* note 59, at 868.

¹¹⁶ If a ratepayer is required to pay after a plant is canceled, then they are not paying for services received. Some argue that it is fair to require ratepayers to continue to pay after a utility shuts down because they are essentially still paying for a service—the safe closure of the plant. This argument misses the mark. Ratepayers have already been paying for the service of decommissioning through their prior rates. It is no fault of the ratepayer that a utility makes the decision to shutdown prematurely and causes it to lose its security. If the utility makes the unilateral decision to prematurely shutdown, its investors should bear the burden of that decision. Furthermore, it can be argued that ratepayers have already paid their share of the utility's costs. For those nuclear plants that cost several billion dollars to construct, it is not accurate to say that consumers bearing the brunt of those construction costs are "benefiting" as a result of receiving the excessively high priced electricity from the facility. See Biewald & White, *supra* note 107; Pierce, *supra* note 42, at 504–06. After all, nuclear power, which was once believed to be less expensive than conventional power, is typically more expensive. See Riddick, *supra* note 45, at 1.

¹¹⁷ See "Stop the Bailout" Coalition Statement/Participants, *Stop the Bailout!: Don't Charge Consumers for Utilities' Past Mistakes* (visited Dec. 15, 1999) <<http://www.local.org/stopbail.htm>> [hereinafter *Stop the Bailout!*].

C. Construction Costs of Canceled Plants

A utility must obtain approval from the NRC before building a new nuclear power plant. The decision to construct a new nuclear plant is the utility's to make, however, and "the scope of the NRC's authority is limited and does not encompass the utility's need for additional generating capacity."¹¹⁸ Similarly, the decision to cancel a plant is the utility's.¹¹⁹ As mentioned above, over 100 nuclear plants have been canceled.¹²⁰ The cost of these cancellations is estimated to be five to eight billion dollars.¹²¹ The most problematic issue regarding these costs is whether the ratepayer or the investor should carry the financial burden of the canceled plants.¹²²

Normally, a new plant can be added to a rate base if it passes the prudent investment test and/or the used and useful test.¹²³ The prudent investment test states that if a utility makes an investment decision that is imprudent based on information reasonably available to it at the time of its decision, all costs associated with that decision are disallowed in determining the rates the utility can charge.¹²⁴ The used and useful test, however, has historically excluded from the rate base those investments in plants that are: (1) not yet operable; (2) no longer used; or (3) provide benefits to parties other than consumers of regulated services.¹²⁵

The cost of canceled construction plants do not usually pass the used and useful test,¹²⁶ but often pass the prudent investment test.¹²⁷ Many experts believe that utility decisions are:

rarely blatantly imprudent when viewed in light of the knowledge and alternatives reasonably available to the utility's management at the time of the decision. . . . The conditions forecast by experts in the 1970's suggest that the utili-

¹¹⁸ Pierce, *supra* note 42, at 508.

¹¹⁹ See *id.* at 510.

¹²⁰ See *id.* at 498.

¹²¹ See Barker, *supra* note 1, at 999. Additionally, each abandoned project costs \$50 million.

¹²² See *id.* The author believes that utilities should be allowed to recover all costs of canceled plants. However, ratepayer organizations contest this view. See generally *Stop the Bailout!*, *supra* note 117.

¹²³ See Pierce, *supra* note 42, at 511.

¹²⁴ See *id.* at 511-12.

¹²⁵ See *id.* at 512.

¹²⁶ See *id.* A plant that was canceled before it went on line cannot be seen as used and useful since it never produced a service.

¹²⁷ See Pierce, *supra* note 42, at 511-12.

ties' decisions to build new plants during that period were reasonable and prudent at the time they were made.¹²⁸

Thus, the prudent investment test is easily satisfied and the construction cost may be added to the rate base. As a result, the ratepayer is required to pay for this cost through amortization.¹²⁹

D. Stranded Costs

Stranded costs are investments or assets owned by regulated electric utilities that are likely to become inefficient or uneconomic under deregulation.¹³⁰ Under a regulated regime, the utilities expected to recoup any losses sustained by raising rates on their captive customers who did not have the ability to switch to an alternate, cheaper supplier.¹³¹ However, if the goal of deregulation—a competitive marketplace—is realized, consumers will be free to seek out new suppliers.¹³² This change means utilities will be burdened with significant debts and no captive consumer base from which to recoup losses.¹³³

The estimates for full stranded cost recovery vary from \$10 billion to \$500 billion.¹³⁴ Most utilities believe that the consumer should pay for the utility's recovery of stranded or transition costs.¹³⁵ Supporters of this position offer the following reasons: (1) recovery of transition costs is a normal part of an industry's movement to competition; (2) recovery of transition cost would ensure that consumers have the best selection of electric suppliers; and (3) the regulatory

¹²⁸ See *id.* at 512. The belief that the decision to build new plants was reasonable supports the notion that ratepayers should compensate the utilities for their investment decisions. This notion, analyzed in Section V of this article, has been challenged by Steven Mark Cohn. See *supra* notes 71-89.

¹²⁹ See Barker, *supra* note 1, at 1002. Courts have found the decision to build a nuclear plant was reasonable and prudent based on the popular misconception that electric sales were going to increase. See *Duquesne*, 488 U.S. at 303-04. However, even at that time, this popular belief may not have been reasonable. See *supra* notes 62-68.

¹³⁰ See Thierer, *supra* note 16. Stranded costs actually include the costs of decommissioning canceled plants, and any other expenditures or investments of the utility that will not be recoverable when the plant lowers its rates in a competitive market.

¹³¹ See *id.*

¹³² See www.nado.org, *supra* note 2.

¹³³ See Thierer, *supra* note 16.

¹³⁴ See *id.*

¹³⁵ See generally *Energy Issues/News, Recovering Transition Costs: Key to Advancing Electricity Competition* (visited Dec. 15, 1999) <http://www.eei.org/issues/comp_reg/power6.htm> [hereinafter *eei recovery*].

bargain or compact is an enforceable contract that requires the recovery of stranded costs.¹³⁶

Under regulation, utilities invested and incurred expenses that had been approved by regulators and were incorporated into the rate base.¹³⁷ The move from regulation to deregulation will produce transition costs that would have been recovered under the old regulatory system, but are not recoverable in a competitive market. Thus, utilities argue that if policymakers mandate deregulation, they must also provide utilities with an opportunity to recover these legitimate transition costs.¹³⁸ Moreover, they argue that transition costs of the nuclear industry should be recovered¹³⁹ since utilities recovered transition costs when the telecommunications, natural gas, airline, and trucking industries were deregulated.¹⁴⁰

According to the utilities, if stranded costs are not recovered from the consumers, consumers will not be guaranteed the best selection of electric suppliers.¹⁴¹ Indeed, consumers will be unable to compare electricity prices from different suppliers to choose the most efficient, inexpensive suppliers because they will be comparing the utility prices of suppliers burdened by regulation with those of suppliers who are not.¹⁴² Moreover, the recovery of stranded costs from consumers is required as part of the regulatory bargain that is believed¹⁴³ to exist between utilities and states.¹⁴⁴ In exchange for exclusive rights to a geographic area, utilities were required to provide electric service immediately, on demand, to every consumer living or working in their service area.¹⁴⁵ Thus, the utilities believe that anything less than full

¹³⁶ See *id.*

¹³⁷ See *id.*

¹³⁸ See *id.*

¹³⁹ See *id.*

¹⁴⁰ See *eei recovery*, *supra* note 135. This assertion is contested. Some sources claim that the other industries did not recover transition costs. See *Stop the Bailout!*, *supra* note 117.

¹⁴¹ See *eei recovery*, *supra* note 135.

¹⁴² See *id.* Existing utilities argue that they will be at a disadvantage because of their former status as regulated utilities. See *id.* Conversely, new firms contend that they will be disadvantaged because "the cost of capital (or the cost of raising or borrowing money for firms) would likely be artificially lower for firms enjoying generous stranded cost recovery, which would mean new rivals would have a more difficult time raising the money needed to compete with the incumbent utilities." See Thierer, *supra* note 16. Thus, regardless of the view, a difference in financial status between new and previously regulated utilities will exist.

¹⁴³ See Thierer, *supra* note 16.

¹⁴⁴ See *eei recovery*, *supra* note 135.

¹⁴⁵ *Id.*

recovery would be a breach of this bargain, which the utilities often claim to be an implicit contract.¹⁴⁶

The view that consumers should pay for 100% of the stranded costs¹⁴⁷ is not shared by everyone.¹⁴⁸ Nor is the idea of a regulatory bargain or compact accepted by all.¹⁴⁹

[T]he actual validity of a "regulatory compact" is highly suspect and has been questioned repeatedly by numerous experts in the field because American electricity consumers were never asked to sign such an agreement. Certainly, no utility can produce a document that proves customers are forever obligated to purchase power from them and them alone. . . . This so-called compact is one-sided; ratepayers were never asked if they wanted to take part in it, nor did they ever sign such an agreement.¹⁵⁰

Even the experts that do believe in the "compact" argue that its existence does not mean utilities should be compensated for future losses.¹⁵¹ Moreover, as examinations of the origins and content of the regulatory compact indicate, there is "little basis for the claim that utilities are always entitled to cost recovery and a return on their past investments."¹⁵² Rather, some believe that it is the pro-nuclear stance of the regulatory commissions that has lulled the utilities into believing that they are entitled to full compensation.¹⁵³

Proponents of stranded cost recovery are trying to create a workable standard for determining who pays when costs may be recov-

¹⁴⁶ See *supra* notes 16-28; see *infra* notes 149-153 and accompanying text.

¹⁴⁷ See *eci* recovery, *supra* note 135.

¹⁴⁸ See Thierer, *supra* note 16. A recent poll conducted by Research/Strategy/ Management Inc. for the Sustainable Energy Coalition shows that seventy percent of the respondents believe that utilities should be responsible for their own inefficient past investments. See *id.*

¹⁴⁹ See *id.*

¹⁵⁰ *Id.*

¹⁵¹ See *id.*

¹⁵² Thierer, *supra* note 16. "Because regulatory commissions across the United States gradually came to the unstated conclusion that it was more important to protect the health of the companies they regulated than the interests of customers, an entitlement mentality was born and nurtured among the utilities . . . many utilities have come to believe they have a right to be compensated for all their inefficient or unprofitable investments." *Id.*

¹⁵³ See *id.* "Because so many commissions have allowed utilities to amortize their expenses by raising prices on their captive customer base at will, many utilities have come to believe they have a right to be compensated for all their inefficient or unprofitable investments." *Id.*

ered.¹⁵⁴ For example, one such standard is whether “a utility can show that it made an investment only at the insistence of regulators, and that it actively had resisted the action but was forced to move forward anyway.”¹⁵⁵ Here, if the utility makes the proper showing, it recovers the entire investment. Most utilities would be denied recovery, however, since they actively chose to pursue nuclear power.¹⁵⁶

Conversely, opponents of stranded cost recovery claim that historical precedent does not require the recovery of stranded costs.¹⁵⁷ Moreover, they argue that the refusal of such recovery will not destroy the electric utility as the utilities claim.¹⁵⁸ Rather, in the deregulated market, capitalism will prevail and new, more fiscally sound utilities¹⁵⁹ will take the place of failed ones.¹⁶⁰

III. DEREGULATION OF THE ELECTRIC INDUSTRY

A. *Public Utilities Regulatory Policy Act of 1978*

All of the costs associated with nuclear power would be affected by the deregulation of the electric industry.¹⁶¹ “Deregulation” is the restructuring of the electric power industry in an effort to eliminate the monopoly that has existed under regulation¹⁶² and to replace it with competition.¹⁶³ The theory underlying deregulation is the belief that competition will bring increased efficiency to the industry.¹⁶⁴ More likely, the deregulation of the electric industry followed the deregulation of telecommunications, natural gas and the airline industries.¹⁶⁵ This restructuring process requires utilities to allow free access

¹⁵⁴ *See id.*

¹⁵⁵ *Id.* This test was approved by Dr. Jake Haulk, Research Director for Allegheny Institute for Public Policy. *See id.*

¹⁵⁶ *See id.*

¹⁵⁷ *See Thierer, supra* note 16.

¹⁵⁸ *See id.*

¹⁵⁹ *See id.* The new utilities will be more fiscally sound because they will not be relying on the false security created by regulation. *See supra* notes 47-55 and accompanying text.

¹⁶⁰ *See Thierer, supra* note 16.

¹⁶¹ *See eei* recovery, *supra* note 136.

¹⁶² *See Electric Power Deregulation* (visited Dec. 15, 1999) <<http://www.pitneysoft.com/products/SWdereg.html>> [hereinafter pitneysoft].

¹⁶³ *See id.*

¹⁶⁴ *See Comprehensive Electricity Competition Plan* (visited Dec. 15, 1999) <<http://www.home.doe.gov/policy/ceca.htm>> [hereinafter Plan].

¹⁶⁵ *See Electricity Deregulation, a Current Event* (visited Nov. 19, 1999) <<http://www.About.com>> [hereinafter *Current Event*].

to their distribution and transmission wires for all qualified sellers.¹⁶⁶ The transmission and distribution of electricity are not deregulated; only the generation of electricity is restructured for competition.¹⁶⁷

The deregulation process began with the Public Utility Regulatory Policies Act (PURPA), which was signed into law in 1978.¹⁶⁸ PURPA began the process of deregulation by ending promotional rate structures, encouraging energy conservation,¹⁶⁹ and establishing unconventional "Qualifying Facilities" (QFs).¹⁷⁰ These changes effectively created new rate structures, as well as new guidelines and incentives for more efficient and environmentally friendly power generation.¹⁷¹

PURPA also required that utilities buy power from industries that generated power as a byproduct of their business.¹⁷² Thus, PURPA opened generation markets to independent power producers (IPPs).¹⁷³ This indirectly ended the monopolization enjoyed by utilities by allowing any unregulated cogenerator or renewable energy producer that could sell electricity into the power grid, with regulated utilities helpless to dictate the terms of their entrance into the industry.¹⁷⁴

PURPA, however, was limited in its effect. It did not create a competitive market for electrical power.¹⁷⁵ PURPA QFs did not actually compete with regulated utilities since those companies were required by law to purchase whatever power came their way from the cogenerators.¹⁷⁶ Nevertheless, PURPA had a large impact because the QFs represented a source of power the utilities could not control.¹⁷⁷

¹⁶⁶ See Plan, *supra* note 164.

¹⁶⁷ See *id.*

¹⁶⁸ See *Current Event*, *supra* note 165.

¹⁶⁹ See *Powering a Generation: Understanding Deregulation #1: Restructuring or Deregulation?* (visited Nov. 21, 1999) <<http://www.si.edu/nmah/csr/powering/dereg 1.html>> [hereinafter *Powering a Generation*].

¹⁷⁰ See *Powering a Generation*, *supra* note 169. QFs are independent power producers under PURPA. See Thierer, *supra* note 16.

¹⁷¹ See *Current Event*, *supra* note 165.

¹⁷² See *id.*

¹⁷³ See www.nado.org, *supra* note 2.

¹⁷⁴ See *Powering a Generation*, *supra* note 169.

¹⁷⁵ See *id.*

¹⁷⁶ See *id.*

¹⁷⁷ See *id.*

B. 1992 Energy Policy Act

The 1992 Energy Policy Act¹⁷⁸ ("the Act") moved the electric industry even closer to deregulation by requiring competition among wholesale producers.¹⁷⁹ The Act mandated wholesale generation of power over the transmission grid from one electric utility to another.¹⁸⁰ It also required utilities that owned transmission lines to allow others to access the lines.¹⁸¹ (This means that a new generator of electricity could use the already existing transmission lines constructed and operated by other utilities, rather than building its own.)¹⁸² Again, though, these requirements only affected wholesale transactions.¹⁸³ Despite this limitation, the Act left open the option for competition on the retail level by allowing state legislatures and regulatory commissions to deregulate when and if they chose to do so.¹⁸⁴

C. Comprehensive Electricity Competition Act

On March 25, 1998, the Clinton Administration released its original "Comprehensive Electricity Competition Plan."¹⁸⁵ The subsequent bill, The Comprehensive Electricity Competition Act (CECA), was introduced to Congress on June 26, 1998.¹⁸⁶ As of 1999, CECA was still in committee.¹⁸⁷

The purpose of the proposed legislation is to ensure that state-by-state deregulation of retail nuclear power creates a truly competitive market so that the industry operates as efficiently as possible.¹⁸⁸ It embodies the Clinton Administration policy of "encourag[ing] all [s]tates and non-regulated utilities to consider and embrace the benefits of retail competition, while retaining the flexibility to address local needs."¹⁸⁹ This idea is accomplished by requiring each utility to permit retail customers to independently choose a supplier by Janu-

¹⁷⁸ 42 U.S.C. § 13201; 16 U.S.C. § 797; 25 U.S.C. § 3505.

¹⁷⁹ See www.nado.org, *supra* note 2.

¹⁸⁰ See *id.*

¹⁸¹ See *id.*

¹⁸² That is the end result of requiring utilities to open their transmission lines to other producers.

¹⁸³ See www.nado.org, *supra* note 2.

¹⁸⁴ See *id.* at 6.

¹⁸⁵ See Plan, *supra* note 164.

¹⁸⁶ See *id.*

¹⁸⁷ See H.R. 1828, 106th Cong. (1999).

¹⁸⁸ See Plan, *supra* note 164.

¹⁸⁹ *Id.*

ary 1, 2003.¹⁹⁰ However, a flexible provision permits states and non-regulated utilities to opt out of this requirement if consumers would be better served by an alternative policy or the current monopoly system.¹⁹¹

Additionally, the proposed legislation contains a proposal that would allow (but not guarantee) utilities to "recover prudently incurred, legitimate, and verifiable retail stranded costs arising from the transition to retail competition, if such costs cannot reasonably be mitigated."¹⁹² This policy provision has been implemented with respect to wholesale costs.¹⁹³ However, the states would continue to determine recovery of stranded costs under state law.¹⁹⁴ Nevertheless, the Administration recommends that the Federal Energy Regulatory Commission (FERC) be given authority to provide a back-up mechanism for stranded cost recovery where a state lacks authority to provide such recovery due to state constitutional constraints or other jurisdictional gaps.¹⁹⁵ Thus, the Act supports and encourages stranded cost recovery for the utilities, but it requires the states to fashion their own recovery procedures.

D. *State Progress: Survey of Current Status of States' Deregulation*¹⁹⁶

Thus far, the restructuring of the retail electric industry has been accomplished on a state-by-state basis.¹⁹⁷ To date, twenty-four states have deregulated their electricity markets,¹⁹⁸ and the remaining states are currently considering such legislation.¹⁹⁹ Although all states are not at the same stage in the deregulation process, most states permit or are considering the permissibility and/or appropriateness of stranded cost recovery.²⁰⁰ A few states even allow for full recovery of

¹⁹⁰ See *id.*

¹⁹¹ See *id.*

¹⁹² *Id.*

¹⁹³ See Jess, *supra* note 8. "FERC has ruled that electric utilities should recover 100% of their legitimate and verifiable stranded wholesale costs." *Id.*

¹⁹⁴ See Plan, *supra* note 165.

¹⁹⁵ See *id.*

¹⁹⁶ See generally *Status of State Electric Industry Restructuring Activity as of Dec. 1, 1999* (visited Dec. 15, 1999) <http://www.eia.doe.gov/cneaf/electricity/chg_str/regmap> [hereinafter *Status of State*].

¹⁹⁷ See generally Plan, *supra* note 165.

¹⁹⁸ See www.nado.org, *supra* note 2.

¹⁹⁹ See *Status of State*, *supra* note 197.

²⁰⁰ See *id.*

stranded costs without requiring utilities to mitigate their losses.²⁰¹ This means utilities would not share the burden of recovering stranded costs.

The mechanisms for recovering stranded costs are varied. Some of these mechanisms include requiring exit fees,²⁰² securitization,²⁰³ reasonable mitigation measures,²⁰⁴ nonbypassable customer transition charges,²⁰⁵ and/or using a formula for recovering lost revenue.²⁰⁶ Whichever method is used, partial or full recovery for a utility's stranded costs are ensured.

IV. SUPREME COURT CASES ESTABLISHING RATE REGULATION JURISPRUDENCE

A. *Traditional Takings Jurisprudence*²⁰⁷

Traditional jurisprudence holds that unreasonable rates constitute unconstitutional takings of a utility's property.²⁰⁸ The first case to address utility regulation is *Smyth v. Ames*.²⁰⁹ In that case, the Court held that a public utility was deprived of its property without due process when the regulatory commission did not allow the utility to raise its rates.²¹⁰ The Court relied on the 14th Amendment's "takings" provision, which prohibits the deprivation of property without due proc-

²⁰¹ See *id.* Alabama, Texas and Massachusetts allow for 100% of stranded cost recovery. See *id.*

²⁰² See *id.* Alabama is an example of this. See *id.* The Michigan proposal allows for full recovery of stranded costs using exit fees through 2007. See *id.*

²⁰³ See Thierer, *supra* note 16. Securitization is the process by which a utility is allowed to sell bonds to cover stranded costs. Connecticut requires securitization. See *Status of State*, *supra* note 196.

²⁰⁴ See *Status of State*, *supra* note 196. Maine is an example. See *id.*

²⁰⁵ See *id.* Montana and Ohio are examples of this. See *id.* Rhode Island permits a customer transition charge of 2.8 cents per kilowatt-hour. See *id.*

²⁰⁶ See *id.* Illinois uses such a formula. See *id.*

²⁰⁷ These cases are characterized as traditional since these cases establish rate regulation jurisprudence. There is a distinction between these cases and *Eastern Enterprises*, which is not a rate regulation case.

²⁰⁸ See *generally* *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1988) (holding rate regulation is constitutional if the total effect of the rate order cannot be said to be unreasonable); *Federal Power Co. v. Hope*, 320 U.S. 591 (1944) (holding rate regulation is constitutional if the total effect of the rate order cannot be said to be unreasonable); *Smyth v. Ames*, 169 U.S. 466 (1898) (holding rate regulation is constitutional if the utility receives a fair return on the value of that which it employs for public convenience).

²⁰⁹ 169 U.S. 466 (1898); see Goldsmith, *supra* note 42, at 243.

²¹⁰ *Smyth*, 169 U.S. at 523.

ess of law.²¹¹ The Court held that a utility was entitled to a fair return on "the fair value of the property being used by it for the convenience of the public."²¹² However, the Court warned that the rights of the public should not be ignored.²¹³

The public cannot properly be subjected to unreasonable rates in order simply that stockholders may earn dividends. . . . If a corporation cannot maintain such a [facility] and earn dividends for stockholders, it is a misfortune for it and them which the Constitution does not require to be remedied by imposing unjust burdens upon the public.²¹⁴

The *Smyth* "fair value" test was used to determine reasonable rates until 1944. In that year, the landmark case, *Federal Power Comm'n v. Hope Natural Gas Co. City of Cleveland*,²¹⁵ replaced the fair value test with what came to be known as the "end result" test.²¹⁶ This test did not consider the theory behind the regulation, but rather focused on the impact of the rate order.²¹⁷ "If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end."²¹⁸ Like the *Smyth* Court, the *Hope* Court acknowledged the interests of consumers. In dicta, the Court stressed the importance of a rate that balances investor and consumer interests.²¹⁹ However, this balance could be set aside if the "total effect"²²⁰ of the rate order was "unjust and unreasonable in its consequences."²²¹

Based on the *Hope* test, an investor could argue that there is an "unconstitutional taking of property when a utility that has made a

²¹¹ See *id.*

²¹² *Id.* at 546.

²¹³ See *id.* at 545.

²¹⁴ *Id.* The Court's acknowledgement of the ratepayers' interest is routinely repeated throughout the traditional cases. While the quoted material appears to create a basis for ratepayers to construct an argument, the ratepayers' interest has always been ignored. See Drobak, *From Turnpike to Nuclear Power: The Constitutional Limits on Utility Rate Regulation*, 65 B.U. L. REV. 65, 67 (1985). While Supreme Court cases have established in dicta protection of the public interest, the prevailing analysis has focused on only the part of the doctrine that protects investors. See *id.*

²¹⁵ 320 U.S. 591.

²¹⁶ *Id.* at 602.

²¹⁷ See *id.*

²¹⁸ *Id.*

²¹⁹ See *id.* at 603.

²²⁰ *Hope*, 320 U.S. at 602.

²²¹ *Id.* at 602; see Goldsmith, *supra* note 42, at 249. Although a balance between investors and consumers was required, most jurisprudence focused only on the part of the doctrine that protects investors. See Drobak, *supra* note 214, at 67.

substantial investment in serving the public interest is denied recovery of its investment from ratepayers."²²² However, the test does not require that a utility recover all or any of its costs.²²³ The test merely states that as long as the rate, in the aggregate, allows for a just and reasonable return on its capital, the rate is constitutional.²²⁴ Therefore, as the Ohio Supreme Court observed,²²⁵ "the Constitution no longer provides any special protection for the utility investor."²²⁶

In *Duquesne Light Co. v. Barasch*,²²⁷ the Supreme Court affirmed the holding of *Hope*, finding that the proper focus of ratemaking is the end result of the rate, and not on the method used to determine the rate.²²⁸ *Duquesne* arose after the Pennsylvania legislature passed Act No. 335, which provided that:

the costs of construction or expansion of a facility undertaken by a public utility producing . . . electricity shall not be made a part of the rate base nor otherwise included in the rates charged by the electric utility until such time as the facility is used and useful in service to the public.²²⁹

The utility claimed that this Act constituted an unconstitutional taking under the Fifth Amendment because the Act prohibited the recovery of certain costs.²³⁰ However, the argument failed because the *Duquesne* Court interpreted the *Hope* rule, that the constitutional inquiry is focused on the end impact and not the method, to mean that the states are free to enact any method of ratemaking so long as the end result is fair and reasonable.²³¹

This line of traditional regulation jurisprudence may be affected by *Eastern Enterprises v. Apfel*.²³² While *Eastern Enterprises* involves the coal mining industry (rather than the electric industry), its holding has the potential to alter the takings jurisprudence of the more traditional cases.²³³

²²² See Barker, *supra* note 1, at 1006.

²²³ See *id.* at 1006-07.

²²⁴ See *id.*

²²⁵ See Drobak, *supra* note 214, at 116.

²²⁶ Dayton Power & Light Co. v. Public Util. Comm'n, 447 N.E.2d 733, 740 (1989).

²²⁷ 488 U.S. 299 (1989).

²²⁸ 488 U.S. at 310.

²²⁹ 66 PA. CONS. STAT. § 1315 (Supp. 1988).

²³⁰ 488 U.S. at 305.

²³¹ See Barker, *supra* note 1, at 1011. Fair and reasonable for whom? The jurisprudence assumes that the question of reasonableness is phrased to protect the utility.

²³² 524 U.S. 498.

²³³ See *id.* at 522-23.

B. *The Effect of Eastern Enterprises v. Apfel on Rate Regulation Jurisprudence*

For most of the twentieth century, employers in the coal industry have negotiated with the United Mine Workers of America (UMWA) regarding the provision of employee benefits to coal miners.²³⁴ Eastern Enterprises ("Eastern") was founded in 1929, at a time when coal operators provided health care to their employees through a prepayment system funded by payroll deductions.²³⁵ Beginning in the 1930s and continuing into the 1990s, the issue of health benefits created tension between the miners and the coal industry.²³⁶ After several failed attempts to create a benefits plan that would be agreeable to the miners and the industry, Congress intervened and passed the Coal Act.²³⁷ The Coal Act incorporated clauses from two earlier failed agreements²³⁸ that mandated that signatories of the agreements would be required to contribute as long as they remained in the coal business, regardless of whether they signed a subsequent agreement.²³⁹

From 1929 until 1965, Eastern conducted extensive coal mining operations.²⁴⁰ As a signatory to both earlier agreements, Eastern made contributions of over \$ 60 million to the coal miner funds.²⁴¹ In 1963, Eastern transferred its coal-related operations to a subsidiary, Eastern Associated Coal Corporation (EACC).²⁴² EACC had agreed to assume all of Eastern's coal mining liabilities.²⁴³ Eastern retained its stock interest in EACC through a subsidiary, Coal Properties Corporation (CPC) until 1987.²⁴⁴ In 1987, Eastern sold its interest in CPC.²⁴⁵ CPC and EACC agreed to assume responsibility for payments to the Benefit Plan.²⁴⁶ Therefore, Eastern was no longer in the coal industry, but was considered "in business" within the meaning of the Coal Act.²⁴⁷

²³⁴ See *id.* at 504.

²³⁵ See *id.*

²³⁶ See *id.* at 504–15.

²³⁷ See *Eastern Enterprises*, 524 U.S. at 504.

²³⁸ See *id.* at 510.

²³⁹ See *id.*

²⁴⁰ See *id.* at 514–16.

²⁴¹ See *id.* at 516.

²⁴² See *Eastern Enterprises*, 524 U.S. at 516.

²⁴³ See *id.*

²⁴⁴ See *id.*

²⁴⁵ See *id.*

²⁴⁶ See *id.*

²⁴⁷ See *Eastern Enterprises*, 524 U.S. at 516.

After the enactment of the Coal Act in 1992, Eastern was assigned responsibility for paying the premiums of over 1000 retired miners.²⁴⁸ In response, Eastern sued the Commissioner, the Combined Fund, and its trustees.²⁴⁹ Eastern claimed that the Coal Act, either on its face or as applied, violated substantive due process and constituted a taking of its property in violation of the Fifth Amendment.²⁵⁰ The District Court granted summary judgment for the respondents (the employees) on all claims, upholding the Coal Act's constitutionality.²⁵¹ The Court of Appeals for the First Circuit affirmed.²⁵²

In a plurality decision announced on June 25, 1998, four members of the Supreme Court held that the Coal Act amounted to an unconstitutional taking,²⁵³ while a fifth justice, Justice Kennedy, wrote that although there was no taking, the Coal Act violated substantive due process.²⁵⁴ Justice O'Connor's opinion broke new ground as she extended the application of the Takings Clause to economic regulation.²⁵⁵ Justice O'Connor reached this decision by focusing on the justice and fairness of the action.²⁵⁶ To do this, O'Connor identified three factors: "the economic impact of the regulation, its interference with reasonable investment backed expectations, and the character of the governmental action."²⁵⁷

V. ANALYSIS

This Section embodies the legal analysis and the policies supporting the argument that stranded cost recovery is not permissible under the Takings Clause.

²⁴⁸ *See id.* at 517.

²⁴⁹ *See id.*

²⁵⁰ *See id.*

²⁵¹ *See id.*

²⁵² *See Eastern Enterprises*, 524 U.S. at 517.

²⁵³ *See id.* at 538.

²⁵⁴ *See id.* at 549.

²⁵⁵ *See id.* at 522-23.

²⁵⁶ *See id.*

²⁵⁷ *Eastern Enterprises*, 524 U.S. at 522-23 (quoting *Kaiser Aetna v. United States*, 444 U.S. 164, 175 (1979)).

A. *Potential Implications of Deregulation and Eastern Enterprises on the Ratemaking Process*

Until now, any discussion of an unconstitutional rate assumed that ratepayers had to pay a reasonable rate to a utility.²⁵⁸ In light of *Eastern Enterprises* and the reality of deregulation, it may be possible for ratepayers to formulate a legal argument that certain rates are impermissible because they amount to an unconstitutional taking of a ratepayer's property. The constitutionality of rate regulation is based upon the assumption that ratepayers pay a reasonable rate for services. A rate that was not reasonable was considered confiscatory and amounted to an unconstitutional taking of the utility's property without just compensation.²⁵⁹ Now it may be possible to argue that rate regulation is an unconstitutional taking of ratepayers' property.

1. The Holding of *Eastern Enterprises* Can Be Applied to Rate Regulation

Unlike the traditional cases, including *Smyth*, *Hope*, and *Duquesne*, *Eastern Enterprises v. Apfel*, is not a typical rate regulation case.²⁶⁰ In fact, *Eastern Enterprises* does not involve a public utility.²⁶¹ However, the case is applicable to the nuclear power industry because of the plurality's unique approach to a subject analogous to the rate regulation of public utilities.

The economic regulation of the Coal Act is analogous to the rate regulation of Public Utility Commissions (PUCs) because both situations involve a third party mandating that someone (i.e., ratepayers in rate regulation or coal businesses in *Eastern Enterprises*) pay a fixed amount to another party (i.e., a utility or retired coal mine workers). Although the two situations may appear to be inversely related (in the rate regulation context, individuals are paying a company; in the *Eastern* situation, a company was paying individuals), the analogy holds

²⁵⁸ See *Hope*, 320 U.S. at 602 (stating, "if the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry is at an end"). The constitutional question relating to rate regulation focused primarily on the reasonableness of the rate as it affected the utility. While superficial attention was given to the interests of the ratepayer in the form of a "balancing test," the consumer's interest would be swiftly ignored if the result was a confiscatory rate. See *Duquesne*, 488 U.S. at 307-08. Therefore, the courts started with the assumption that a rate must be paid, the only real question was how much.

²⁵⁹ *Duquesne*, 488 U.S. at 307-08.

²⁶⁰ See *Eastern Enterprises*, 524 U.S. at 522-23.

²⁶¹ See generally *Eastern Enterprises*, 524 U.S. 498 (1998) (*Eastern Enterprises* discusses the impact of economic regulation that effects a taking).

true. First, both cases involve a prescribed transfer of property from one person to another. In addition, companies are treated as individuals under the Fourteenth Amendment.²⁶²

Justice O'Connor noted that the facts of *Eastern Enterprises* did not present the "classic taking"²⁶³ "in which the government directly appropriates private property for its own use."²⁶⁴

Although takings problems are more commonly presented when "the interference with property can be characterized as a physical invasion by government, than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good," economic regulation such as the Coal Act may nevertheless effect a taking.²⁶⁵

Furthermore, Justice O'Connor quickly dismissed the idea that a taking does not occur simply because the law takes property from A and gives it to B, instead of giving it to the government.²⁶⁶ Rather, a taking can occur even though economic regulation requires that the property be given to a third party rather than the government.²⁶⁷

According to Justice O'Connor, in order for a government action to effect a taking, the "justice and fairness"²⁶⁸ of the action must be examined.²⁶⁹ The three factors that determine "justice and fairness" are: (1) the economic impact of the regulation; (2) its interference with reasonable investment backed expectations; and (3) the character of the governmental action.²⁷⁰ Assessing the economic impact of a regulation, Justice O'Connor found that the Coal Act forced a considerable financial burden upon Eastern since Eastern's cumulative payments under the Act would be between \$50 to \$100 million.²⁷¹

²⁶² See *Smyth*, 169 U.S. at 522.

²⁶³ See *Eastern Enterprises*, 524 U.S. at 522-23. Justice O'Connor's takings analysis, however, did not comprise a majority of the Court. Justice Kennedy, who concurred in the result but not in the reasoning, analyzed the issue under substantive due process. See *id.* Under Kennedy's analysis, the Coal Act was unconstitutional because it was retroactive in nature. See *id.* at 548.

²⁶⁴ *Id.* at 522-23 (quoting *United States v. Security Indus. Bank*, 459 U.S. 70, 78 (1982)).

²⁶⁵ *Id.* (citations omitted).

²⁶⁶ See *id.*

²⁶⁷ See *Eastern Enterprises*, 524 U.S. at 522-23.

²⁶⁸ See *id.*

²⁶⁹ See *id.*

²⁷⁰ *Id.* (quoting *Kaiser Aetna*, 444 U.S. at 175).

²⁷¹ See *id.* at 529.

Moreover, while the liability of Eastern was not a permanent physical occupation of its property, Justice O'Connor noted that the "statutory liability for multiemployer plan benefits should reflect some 'proportionality to its experience with the plan.'" ²⁷² Justice O'Connor emphasized that Eastern "ceased its coal mining operations in 1965 and neither participated in negotiations nor agreed to make contributions in connection with the Benefit Plan under the 1974, 1978, or subsequent National Bituminous Coal Wage Agreement (NBCWA)." ²⁷³ Thus, Eastern's financial obligations under the Coal Act constituted an unfair economic burden.

2. The Economic Impact of a Regulation

As in *Eastern Enterprises*, nuclear power ratepayers could argue that the economic impact of the rates that they are required to pay, which are designed to recover stranded costs, amounts to an unreasonable financial burden. The aggregate cost of decommissioning is estimated in excess of \$20 billion, ²⁷⁴ the total estimate of stranded costs is \$200 to \$300 billion, ²⁷⁵ and the estimated costs of canceled plants are \$15.3 billion. ²⁷⁶ Similarly, ratepayers could argue that rate regulations requiring ratepayers to pay for transition costs lack proportionality when ratepayers have already paid for the "benefits" of nuclear power. ²⁷⁷ After all, ratepayers have been paying for the service of the electricity they have received. It is disproportional to force ratepayers to pay additional rates for services for which they have previously paid. Finally, ratepayers could also argue that they neither participated in nor agreed to the regulatory bargain or compact that the utilities claim exists. ²⁷⁸

²⁷² *Eastern Enterprises*, 524 U.S. at 528–29.

²⁷³ *Id.* at 530.

²⁷⁴ See *The Decommissioning Crunch*, *supra* note 100.

²⁷⁵ See *Stop the Bailout!*, *supra* note 117.

²⁷⁶ See Public Citizen, *Study Shows Electricity Deregulation Could Cause Unfunded Nuclear Waste Liabilities That May Exceed \$50 Billion* (visited Dec. 15, 1999) <<http://www.citizen.org/press/pr-elec3.htm>> [hereinafter Public Citizen].

²⁷⁷ See Biewald and White, *supra* note 107. New nuclear plants did not lower costs as originally promised. Instead, the plants raised costs by 50 percent in some cases. See Pierce, *supra* note 42, at 505.

²⁷⁸ See *Stop the Bailout!*, *supra* note 117; Thierer, *supra* note 16.

3. Interference with Reasonable Investment-Backed Expectations

With respect to the second factor, investor-backed expectations, Justice O'Connor focused mainly on the retroactivity of the Coal Act in *Eastern Enterprises*.²⁷⁹ Since retroactive legislation can deprive citizens of legitimate expectations and upset settled transactions, it presents problems of unfairness that are more serious than those posed by prospective legislation.²⁸⁰ Justice O'Connor found that the Coal Act operated retroactively by divesting Eastern of property long after the company believed its liabilities under the 1950 agreement were settled.²⁸¹

Analogously, the ratepayers could argue that their expectations are unfairly disrupted by retroactive rate regulation.²⁸² First, ratepayers can claim that they had settled expectations: they had invested their share of money by paying rates to the utilities when they were captive ratepayers. Indeed, the ratepayers were forced to pay higher rates, sometimes by fifty percent, so that utilities could recover the costs of new nuclear plants even though the plants did not lower the cost of electricity as promised.²⁸³

Additionally, ratepayers could argue that rate regulation, which requires consumers who have stopped receiving power from a nuclear power source to continue paying that source for its past benefits, is unfair. Ratepayers have already paid for (or "invested" in) the benefit of the power through the amortized rates they had previously paid to the source. Requiring the ratepayer to pay the source after it has

²⁷⁹ See *Eastern Enterprises*, 524 U.S. at 532–33.

²⁸⁰ See *id.*

²⁸¹ See *id.* at 535–36.

²⁸² The utilities' investment-backed expectations likewise support the conclusion that ratepayers should not have to pay transitional costs. Put simply, there is no reasonable basis on which utilities can rely to expect to recover stranded costs after deregulation. The regulatory bargain and compact, while a myth, will not even be arguably applicable after deregulation because deregulation will end the utility's monopoly. This means that without captive ratepayers, no utility should expect to recover all costs. Another reason for supporting the theory that utilities have no investment backed expectations is that after *Hope*, the possibility of the public interest outweighing the investor interest was real. See *Hope*, 320 U.S. at 603. Therefore, anyone investing in utilities after *Hope* either knew or should have known of the risk that profits would be withheld someday to further the public interest. See Drobak, *supra* note 214, at 106. Furthermore, requiring consumers to continue to pay an old source when it is receiving no benefit is patently unfair. Some may argue that the whole community benefits from the safe and responsible decommissioning of the plant, and thus, the old ratepayers are receiving a benefit from their rates. However, I argue that since the whole community is benefiting, the whole community, and not just old ratepayers, should pay for the cost of decommissioning.

²⁸³ See Pierce, *supra* note 42, at 505.

changed to another source is retroactive. When a ratepayer leaves the nuclear source, that relationship has ended and the ratepayer is left with the expectation that his or her responsibility to pay rates has terminated. Therefore, an argument can be made to support the theory that rate regulation affects the investment-backed expectations of ratepayers.

4. Character of the Government Action

With respect to the third factor, the character of the government action, Justice O'Connor found the nature of the governmental action in *Eastern Enterprises* quite unusual.²⁸⁴

That Congress sought a legislative remedy for what it perceived to be a grave problem in the funding of retired coal miners' health problem in the funding of retired coal miners' health benefits is understandable; complex problems of that sort typically call for a legislative solution. *When, however, that solution singles out certain employers to bear a burden that is substantial in amount, based on the employers' conduct far in the past, and unrelated to any commitment that the employers made or to any injury they caused, the governmental action implicates fundamental principles of fairness underlying the Takings Clause.*²⁸⁵

Justice O'Connor's rationale for finding the government's action to be unfair and violative of the Takings Clause is arguably applicable to nuclear ratepayers because the continued recovery of stranded costs places a burden on some ratepayers and not others and therefore is unfair.

With the fear that deregulation will cause some utilities to become financially unstable, utilities have asked state legislatures and Congress to ensure their recovery of stranded costs.²⁸⁶ Thus far, the response has been that the states, the PUCs and/or possibly Congress²⁸⁷ have allowed for stranded cost recovery.²⁸⁸ This recovery re-

²⁸⁴ See *Eastern Enterprises*, 524 U.S. at 537.

²⁸⁵ *Id.* (emphasis added).

²⁸⁶ See *supra* notes 155-186 and accompanying text. See generally *Status of State*, *supra* note 196; Plan, *supra* note 164.

²⁸⁷ See Plan, *supra* note 164. If and when the Comprehensive Electricity Competition Act is passed in its original form, it will allow for stranded cost recovery. See *id.*

²⁸⁸ See *supra* notes 192-200 and accompanying text.

quires present consumers to carry the burden of fixing financial problems relating to nuclear energy.

The unfairness²⁸⁹ of this solution is twofold. First, it is unfair to force an individual to pay for a utility's future costs based on an individual's past or present use of power.²⁹⁰ Second, the utilities (with the help of the government) created nuclear energy plants.²⁹¹ While it may be true that the government's aid influenced some utilities to build the plants,²⁹² these plants were built with the intention of making a financial return. However great the government influence, utilities ultimately chose to build the plants²⁹³ that are not charging ratepayers who no longer benefit from the utilities' service. It is time to stop the corporate welfare²⁹⁴ and treat these utilities as any other investment that does not receive special treatment from the government.²⁹⁵ After all, it does not make sense to continue sinking money into an investment that is not only losing money, but is also dangerous.²⁹⁶

5. Alternate Substantive Due Process Analysis

As noted above, Justice O'Connor's opinion did not represent a majority of the court.²⁹⁷ Justice Kennedy reached the same conclusion

²⁸⁹ See *Eastern Enterprises*, 524 U.S. at 523–24. Justice O'Connor's opinion speaks of the inquiry into the fairness of the government action in question. The inquiry into fairness "require[s] that economic injuries caused by public action must be compensated by the government, rather than remain disproportionately concentrated on a few persons." *Id.*

²⁹⁰ This is unfair because a former consumer should not have to pay for future costs from which the consumer may not be benefiting if they change utilities. Moreover, it is discriminatory. "[T]he decision to charge present ratepayers for [future costs] unjustly discriminates against present ratepayers by charging them for the cost associated with electricity provided to past consumers." Lettrich, *supra* note 59, at 877.

²⁹¹ See *supra* notes 33–55.

²⁹² See *supra* notes 47–55 and accompanying text. Without the subsidies, favorable regulation, and money for research and development—which cut the cost of nuclear generating costs by fifty percent—some utilities would not have been able to afford to build nuclear plants. See COHN, *supra* note 29, at 75.

²⁹³ See Pierce, *supra* note 42, at 508.

²⁹⁴ The term "corporate welfare" is used by the "Stop the Bailout" Coalition to describe the stranded cost bailout. See *Stop the Bailout!*, *supra* note 117.

²⁹⁵ Even if one argues that nuclear power plants are a societal concern because their safe decommissioning is important to the welfare of all, the solution needs to include everyone, and not just those individuals who may or may not have received a service from the utility but are within the utility's region.

²⁹⁶ Unquestionably, nuclear power plants are dangerous. There have been at least three major nuclear plant problems: (1) at Three-Mile Island; (2) at Chernobyl; and (3) in Japan.

²⁹⁷ See *Eastern Enterprises*, 524 U.S. at 538.

as O'Connor but used a substantive due process analysis.²⁹⁸ A due process analysis offers support to the ratepayers' argument that a regulation requiring payment for previous service (which has already been paid for) is retroactive and thus patently unfair under a due process analysis.²⁹⁹ This theory offers the possibility for ratepayers to argue that a rate regulation requiring recovery to stranded costs is unconstitutional because it is retroactive in nature and therefore violates substantive due process.³⁰⁰ Therefore, a ratepayer wishing to challenge the constitutionality of a rate might argue that the rate is unconstitutional because it violates both the Takings Clause and the due process clauses.

B. Policy Arguments

With deregulation a reality in some states, regulatory commissions no longer set the rates.³⁰¹ Instead, market competition establishes the rates.³⁰² As a result, consumers are free to choose the source that is cheapest.³⁰³ Although this freedom hurts utilities that formerly had a captive rate base and relied on the expectation that the consumer base would remain constant in determining the appropriate distribution of costs over the time of their governmental lease, ratepayers argue that a utility should not be able to harness in present or former ratepayers by requiring them to pay for lost transition costs (or stranded costs) even though they may have changed suppliers.³⁰⁴ To many, this effort by the utilities to recover their losses is a gross inequity and should be challenged.³⁰⁵

1. Ratepayers Should Not Be Responsible for the Unreasonable and Imprudent Decisions of Utilities

The justification for making the ratepayers pay for the utilities' stranded costs is that the utilities acted prudently and reasonably when they invested in the nuclear plants.³⁰⁶ This popular notion is

²⁹⁸ See *id.* at 546-49.

²⁹⁹ See *id.* The Due Process Clause forbids retroactive legislation. See *id.*

³⁰⁰ See *supra* notes 284-285 and accompanying text.

³⁰¹ See *supra* notes 162-165 and accompanying text.

³⁰² See *id.*

³⁰³ See *id.*

³⁰⁴ See generally THE GREAT RATEPAYER ROBBERY, *supra* note 4 and accompanying text.

³⁰⁵ See *Stop the Bailout!*, *supra* note 117.

³⁰⁶ See *Duquesne*, 488 U.S. at 302-03; *Pierce*, *supra* note 42, at 502, 511; *Barker*, *supra* note 1, at 1005.

represented by the finding of the Pennsylvania Public Utility Commission (PUC) that Duquesne could not be faulted for initiating the construction of more nuclear generating capacity at the time they joined the Central Area Power Coordination Group (CAPCO)³⁰⁷ project in 1967.³⁰⁸ The PUC also found that the intervening events that ultimately confounded the predictions (the oil embargo, the Three-Mile Island incident, and inflation) could not have been predicted and therefore the utility had been reasonable in its decision to invest in nuclear power.³⁰⁹ Based on the foregoing, the PUC ultimately found that CAPCO acted prudently.³¹⁰

However, this popular notion is based on the fact that people in the industry deliberately *chose* to be ignorant of the negatives of nuclear power.³¹¹ This type of blind ignorance is unacceptable in tort cases.³¹² It should be unacceptable that utilities turned a blind eye to the negative aspects of nuclear energy. If investors and other members of the nuclear industry did not make fully informed decisions about their investments in nuclear power, these investments can hardly be called reasonable or prudent. Nuclear energy was a new source of power that needed much research.³¹³ Refusing to do this research was unreasonable and imprudent. Furthermore, even if nuclear plants had been prudent investments, there is no law or rationale that states that utilities should recover 100% of costs. Indeed, the case law does not require such a result.³¹⁴

³⁰⁷ See *Duquesne*, 488 U.S. at 302. The CAPCO project involved four utilities that planned to construct seven large nuclear generating plants. See *id.*

³⁰⁸ See *id.*

³⁰⁹ See *id.* at 303.

³¹⁰ See *id.*

³¹¹ See *supra* notes 35, 72 (discussing the focus on positive research only).

³¹² See ZYGMUNT J.B. PLATER, *ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY* 895-97 (2d ed. 1998) (citing *United States v. Park*, 421 U.S. 658 (1975)). In environmental tort cases, the defendant may not claim as a valid defense that he or she deliberately remained ignorant of disposal methods of hazardous waste. See *Park*, 421 U.S. at 671-72. *Park*, the president of Acme Markets, Inc., was charged with violating the Federal Food, Drug & Cosmetic Act, 21 U.S.C.A. § 332. See *id.* *Park's* defense was that he had delegated the job of monitoring sanitary conditions to others. According to the court that, "the defendant had, by reason of his position in the corporation, responsibility and authority either to prevent in the first instance, or promptly to correct, the violation complained of, and that he failed to do so." PLATER, *supra* at 895-97.

³¹³ See *supra* notes 49-55 and accompanying text (discussing federal funding for nuclear research).

³¹⁴ Professor Drobak's article suggests the current interpretation of rate regulation cases is not the only interpretation. See also *Duquesne*, 488 U.S. at 301-02; *Federal Power Co. v. Hope*, 320 U.S. 591, 602 (1944); *Smyth v. Ames*, 169 U.S. 466, 546 (1898). Their holdings only require that investors receive a reasonable return, not a full return. See *id.*

Nor can investors argue that they had no choice but to invest in nuclear power. Individuals invested in nuclear plants because they believed money could be made. Any more of an altruistic description is inaccurate.³¹⁵ Unlike the investors who gambled with their money by making the choice to invest, consumers had no choice and took no part in the decision to build the plants.³¹⁶ The choice to invest should neither be under-estimated nor under-analyzed. As the Court in *Smyth* stated, the investment is the responsibility of the investors; if the investment fails, "it is a misfortune for . . . them which the [C]onstitution does not require to be remedied by imposing unjust burdens upon the public."³¹⁷

2. Utilities Are Not Guaranteed a Profit Under Regulation

The utilities claim that they deserve to recover stranded costs in a deregulated, competitive market, even though under regulation, these same utilities were not guaranteed a profit.³¹⁸ "The U.S. Supreme Court has been clear: losses in the market place are the result of the operation of market forces, not of the state."³¹⁹ If regulation, with its pro-utility slant,³²⁰ did not insulate utilities from lost revenues, why should deregulation—the process of creating a free market—protect the utilities from market forces?

3. Regulatory Compacts Are Void as Against Public Policy

Utilities have no right to hold consumers hostage in a monopolistic system where the consumers had no part of the decision. There is nothing fair about asking individuals, hospitals, and schools to pay for services they neither asked for nor need.³²¹ Consumers were never asked to take part in any "agreement."³²² These "agreements," or "compacts," are one-sided, obligating a consumer to purchase elec-

³¹⁵ The characterization of a public utility as private property that is devoted to public use is misleading: the utility is not "devoted" to the public but rather is "devoted" to the idea of making a profit.

³¹⁶ The decisions were those of the utilities and the regulatory commission. See *Pierce*, *supra* note 42, at 508.

³¹⁷ *Smyth*, 169 U.S. at 545.

³¹⁸ See *Hope*, 320 U.S. at 603. "Regulation does not ensure that a business shall produce net revenues." *Id.*

³¹⁹ THE GREAT RATEPAYER ROBBERY, *supra* note 4.

³²⁰ See *supra* notes 53-55 and accompanying text.

³²¹ See *Stop the Bailout!*, *supra* note 117.

³²² See Thiercer, *supra* note 16.

tricity from one utility forever. In the alternative, if there ever was a "compact," one could easily argue that it was a contract of adhesion because the ratepayer had no bargaining power, and no choice to accept or reject the "compact." The doctrine of unconscionability determines that contracts of adhesion are void. Therefore, ratepayers should not be obligated to pay the utilities for stranded cost recovery.

4. The Imposition of Costs on Investors Improves Utility Efficiency

Regulatory reasons exist to justify the imposition of costs on the investors, as opposed to the customers. "First, this cost allocation would reduce the incentive for excessive capital investment thought to exist in utility regulation. Second, it would also stimulate the response of the competitive market to wasted investment."³²³ Finally, it causes shareholders to "bear the risk of changes in the energy and capital markets and the regulatory risks inherent in the use of such a potentially dangerous and heavily regulated product as nuclear power."³²⁴ Thus, holding the utilities accountable for their past investments might ensure that they proceed more carefully with investments in the future.

5. Consumers Have Paid Enough to Utilities

Consumers have paid enough to the utilities.³²⁵ Nuclear energy did not fulfill its promise of being "too cheap to meter."³²⁶ The cost of construction was sometimes ten times the estimated price, and the price of the electricity was sometimes fifty percent more than before the utility was built.³²⁷ Who paid for these costs? The consumers, of course. For example, due to the Three-Mile Island accident, consumers were required to pay \$433 million for the reactor's construction costs, \$125 million for cleanup of the accident, and \$1 billion in replacement power costs.³²⁸ In addition, the consumers were required to pay the cost of decommissioning the plant.³²⁹ Thus, it is hard to say that consumers, bearing the brunt of these costs, are "benefiting" as a

³²³ See Drobak, *supra* note 214, at 123.

³²⁴ *Id.*

³²⁵ See Lettrich, *supra* note 59, at 876-77.

³²⁶ See COHN, *supra* note 29.

³²⁷ See Pierce, *supra* note 42, at 505.

³²⁸ See Lettrich, *supra* note 107, at 876-77.

³²⁹ See *id.*

result of receiving the excessively high-priced electricity from the facility.³³⁰

6. Refusal of Cost Recovery Will Not Destroy the Industry

Finally, the electric industry will survive even if stranded costs are not recovered.³³¹ As a scare tactic, the industries claim that anything short of 100% recovery will destroy the industry.³³² While it is true that some utilities may not survive deregulation if their stranded costs are not recovered, why would society continue to support fiscally unsound utilities? If a plant cannot survive deregulation, it probably should not be allowed to continue to operate.³³³ Moreover, stranded cost recovery could endanger the future of a competitive market.³³⁴ "[I]f every new rival [utility] that wanted to enter a new service region and offer competing service were forced to pay hefty stranded cost recovery tax to the incumbent utility, fewer firms would be likely to look to enter the market."³³⁵

CONCLUSION

Nuclear power, as an energy source, had been heralded as a safe, cheap, and clean source of power that would become a panacea for our nation's energy needs. However, nuclear power was adopted by the government and utilities before the requisite investigation and research needed to make an informed decision were performed. Along with the government's interest in nuclear power came the government's financial support. After a utility's decision to construct a nuclear power plant, the government would provide financial aid to the utility.

Shortly after the first nuclear power plants were built, both the government and utilities learned that the "perceived" or "expected" benefits of nuclear power were not materializing and would not mate-

³³⁰ See Biewald & White, *supra* note 107.

³³¹ See *Stop the Bailout!*, *supra* note 117. In fact, some believe stranded cost recovery will stifle competition, not improve it. *Id.*

³³² See generally eei recovery, *supra* note 135. Stranded cost recovery is needed to keep utilities competitive in competitive market. *Id.* As a response to this claim, the FERC has ruled that electric utilities should recover 100% of legitimate and verifiable stranded costs. See Jess, *supra* note 8.

³³³ Many nuclear power plants are fiscally unsound. See THE GREAT RATEPAYER ROBBERY, *supra* note 4.

³³⁴ Thierer, *supra* note 16.

³³⁵ See *id.*

rialize. Ultimately, this disappointment meant that creating and supplying the energy via nuclear power plants was not as cost effective for the utilities as they had originally anticipated. The government and the regulatory commissions, having realized the difficult financial situation of the utilities, continued to support and regulate them in a manner that would allow the utilities to continue to survive their fiscal difficulties.

In light of current deregulation, there will be no regulatory commissions to support the financially unsound utilities. Consequently, many utilities will not survive in a deregulated, competitive market. The only way for these struggling utilities to remain viable is to recover their stranded costs. However, stranded cost recovery is unacceptable. While it is true that the government encouraged nuclear plant construction, the ultimate choice to build a plant was up to the utility. Thus, the utilities made the decision to invest in nuclear power. The fact that these determinations were based on insufficient information is unfortunate. However, it was the utilities' mistake. The rate-payers should not be held responsible for mistakes of the utilities, nor should they be held responsible for a utility's poor decisions.