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Richard D. Gary

Edgar M. Roach Jr.

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THE PROPER REGULATORY TREATMENT OF INVESTMENT IN CANCELLED UTILITY PLANTS


INTRODUCTION

In the early 1970's, the demand for electricity in this country was expected to increase approximately seven percent annually for the foreseeable future.¹ At that rate, the demand for electric power would have doubled in less than ten years.² As a result of this projected increase, many electric utilities embarked on large-scale construction programs to build new plants. The forecasted growth in demand, however, did not occur. In the mid-1970's, the demand growth slowed to about two percent.³ Many utilities were left with excess capacity from plants already completed or were forced to cancel further construction of plants in various phases of completion.⁴

* Partners at Hunton & Williams, Richmond, Virginia and Raleigh, North Carolina, respectively. The authors wish to express their appreciation for the expert assistance provided by William D. Johnson, Laurence E. Skinner and Thomas E. Graham in the preparation of this article.

1. ENERGY INFORMATION ADMIN., OFFICE OF COAL, NUCLEAR, ELEC. & ALTERNATE FUELS, U.S. DEP’T OF ENERGY, NUCLEAR PLANT CANCELLATIONS: CAUSES, COSTS & CONSEQUENCES 7 (1983) [hereinafter cited as EIA REPORT].
3. Id. at 23.
4. From 1975 through 1982, 30 fossil units and 73 nuclear units, with a combined capacity of 100,917 megawatts, were cancelled. C.F. PHILLIPS, JR., THE REGULATION OF PUBLIC UTILITIES 17 (1984). Some commentators have characterized these plants that were later cancelled as “mistakes.” Pierce, The Regulatory Treatment of Mistakes in Retrospect: Cancelled Plants and Excess Capacity, 132 U. PA. L. REV. 497, 497-98 (1984). Professor Pierce discusses the legal and policy issues related to the investment in large capital intensive energy projects that were either cancelled or resulted in excess capacity and concludes that the projects were “mistakes in retrospect.” Id. at 498. This Article does not attempt to judge the wisdom of the utilities' investment in the projects. Rather, it provides a framework for utility commissions to deal with the recovery of the costs incurred. We must take exception, however, with Professor Pierce's characterization of cancelled plants as mistakes. This characterization employs a hindsight analysis and judges utility decisions solely in terms of result. See infra notes 26-27, 33-34, 37-43, 160-206 and accompanying text (discussing differences between a hindsight rationale, a standard of reasonableness under all of the circumstances at the time,

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Financial difficulties resulting from such large-scale construction programs contributed to the need to cancel further construction of generating plants.\(^5\)

When a utility decides to cancel a plant under construction, the regulatory commission having jurisdiction over that utility’s rates customarily reviews the decision to determine the appropriate ratemaking treatment for the investment in the project.\(^6\) This review usually occurs in a rate proceeding when the utility requests recovery of the investment in the unfinished plant.

A utility commission should use a two-step analysis to determine the treatment of the cost of a cancelled plant. First, the commission should apply the prudent investment test\(^7\) to determine if the utility may recover the costs it incurred. Second, if the commission determines that some or all of the costs were prudently incurred and are therefore recoverable, the commission should utilize a ratemaking method that permits the utility to recover fully its prudent investment. Section I of this Article analyzes the theory and application of the prudent investment test for determining whether any of the costs of a cancelled plant may be recovered.\(^8\) Section II discusses the proper method for achieving full recovery of those costs.\(^9\)

I. DETERMINATION OF THE PRUDENTLY INCURRED COSTS OF CANCELLED PLANTS

A fundamental precept of public utility regulation is that utilities should recover fully their prudently incurred expenses through

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5. See infra text accompanying notes 215-20 (discussing the five factors influencing utility decisions to cancel nuclear plants).
6. See infra notes 15-61 and accompanying text. The Energy Information Administration defines the abandonment cost of a cancelled nuclear power plant as:
that cost which would have been avoided if the project had never been undertaken.
Abandonment cost consists of the following components:
- Cash expenditures
- Allowance for Funds Used During Construction (AFUDC)
- Contract cancellation penalties
- Salvage value (a "negative" cost)
- Site shutdown costs.

The first two components account for most of the cost and are accurately known at the time of cancellation. The latter three components are generally not accurately known for months, or even years, following cancellation.

EIA REPORT, supra note 1, at xiii (footnote omitted).
7. See infra notes 24-43 and accompanying text.
8. See infra notes 15-225 and accompanying text.
9. See infra notes 132-225 and accompanying text.
the ratemaking process. The prudently incurred costs associated with a cancelled plant should be treated no differently. No uniform standard, however, is applied by utility commissions to determine whether the costs of cancelled plants should be recovered through rates. State utility commissions often fail to identify or explain the weight given to the factors they consider in deciding whether to allow recovery. Some decisions are announced with no accompanying rationale. Few commissions discuss or apply the same factors used by commissions of other jurisdictions; even factors considered in earlier decisions from the same jurisdiction may be ignored.

Some commissions, however, have articulated rationales for allowing or disallowing recovery of cancelled plant costs. A few of these commissions apply the used and useful test strictly and deny recovery. Other commissions, using several rationales, have allowed

11. See infra notes 152-59 and accompanying text.
the recovery of the prudent costs of a cancelled plant.\textsuperscript{16}

A. The Prudent Investment Test

The majority of state utility commissions addressing the issue of recovery of costs for plant cancellation have employed the prudent investment test,\textsuperscript{17} which requires a factual evaluation of a utility's actions concerning the planning and construction of the plant. This test allows a regulatory commission to analyze the inherent uncertainties and difficulties in the construction of technically complex generating facilities. The regulatory commission evaluates the appropriateness of discrete actions by utility management. If a management decision was prudent when made, the financial risks of that decision are passed on to the ratepayers; if, however, the decision was imprudent when made, the utility and its investors must bear the costs. The test ensures that ratepayers do not pay for imprudent actions by utility companies. The prudence of an action is determined by evaluating the decision-making process rather than the final result of that process.

A utility's recovery of operating expenditures, as well as costs associated with plant abandonment, should be disallowed only when the expenditures are shown to have been unreasonable.\textsuperscript{18} As the court stated in \textit{Alabama Public Service Commission v. Southern Bell Telephone & Telegraph Co.}:\textsuperscript{19}

In the absence of a showing of inefficiency, improvidence, waste or bad faith on the part of management, the Commission cannot legally ignore the necessary, fair and reasonable expenses of operations incurred in the rendition of service by the utility but must give heed to, consider and allow all such expenses constituting charges upon income during the term of the regulation.\textsuperscript{20}

\textsuperscript{16}See infra notes 147-51 and accompanying text.
\textsuperscript{17}See \textit{EIA REPORT}, supra note 1, at 41, 52.
\textsuperscript{18}See, e.g., \textit{West Ohio Gas Co. v. Public Util. Comm'n}, 294 U.S. 63, 68 ("A public utility will not be permitted to include negligent or wasteful losses among its operating charges."). The Energy Information Administration states: "Of all the costs incurred during the [nuclear facility] project period, only a small amount is normally disallowed for being unnecessary or uneconomic. Examples of these costs are advertising, public relations expenses, and political lobbying expenses." \textit{EIA REPORT}, supra note 1, at 39 (footnote omitted).
\textsuperscript{19}253 Ala. 1, 42 So. 2d 655 (1949).
\textsuperscript{20}Id. at 23, 42 So. 2d at 674.
Similarly, Professor Priest stated that expenditures may be disallowed:

(1) if the questioned outlays represent "inefficiency" or "improvidence," or (2) managerial discretion has been abused, or (3) the action taken has been "arbitrary," or "inimical to the public interest," or (4) there has been "economic waste," or (5) such outlays were not legitimate operating expenses because they were "in excess of just and reasonable charges."\(^{21}\)

Like operating expenses, investments in a plant may not be excluded from rates unless unreasonably incurred. Justice Brandeis recognized this in his dissenting opinion in *Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission*:\(^{22}\)

The term "prudent investment" is not used in a critical sense. There should not be excluded from the finding of the base, investments which, under ordinary circumstances, would be deemed reasonable. The term is applied for the purpose of excluding what might be found to be dishonest or obviously wasteful or imprudent expenditures. Every investment may be assumed to have been made in the exercise of reasonable judgment, unless the contrary is shown.\(^{23}\)

The New York Public Service Commission adopted the prudent investment test as early as 1964\(^{24}\) and has consistently applied it in evaluating utility actions.\(^{25}\) As articulated by the Commission in Opinion No. 79-1:\(^{26}\)

[T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problems prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.\(^{27}\)


\(^{22}\) 262 U.S. 276 (1923) (Brandeis, J., dissenting).

\(^{23}\) Id. at 289 n.1 (Brandeis, J., dissenting).


\(^{27}\) Id., slip op. at 5-6.
This language has been cited repeatedly by the New York Public Service Commission and by commissions in other jurisdictions.28

Although the New York Attorney General has recently argued for the adoption of the used and useful test, a New York appellate court affirmed the Commission's rejection of that standard for analyzing the costs of abandoned or cancelled plants.29 In Abrams v. Public Service Commission,30 Consolidated Edison requested recovery of the costs incurred in developing a pumped storage hydroelectric generating plant that was cancelled in 1980.31 The New York Public Service Commission found that Consolidated Edison acted prudently, and authorized recovery of the expenditures.32 On appeal, the Attorney General argued for denial of recovery because the plant was never used and useful in supplying service to the ratepayers.33 In rejecting this argument, the court stated:

The guiding concept applicable to the facts of this case was stated by Justice Brandeis in his [dissenting] opinion in Southwestern Bell Tel. Co. v. Public Serv. Comm. . . . [when he stated that] “the thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise.” It follows that the test of whether expenditures may be deemed used and useful is not whether the expenditures have resulted in a facility providing electric service to the public, but whether the expenditures were prudently undertaken toward that end.34


29. Abrams v. Public Serv. Comm'n, 104 A.D.2d 135, 137-38, 483 N.Y.S.2d 785, 787-88 (1984). The court concluded that to adopt the used and useful test would give the Commission more authority than it was granted by law. Id. at 137, 483 N.Y.S.2d at 787.


31. Id. at 136, 483 N.Y.S.2d at 786-87.

32. Id. at 136, 483 N.Y.S.2d at 787.

33. Id. at 137, 483 N.Y.S.2d at 787.

34. Id. at 137-38, 483 N.Y.S.2d at 787-88 (citation omitted).
Other jurisdictions have also rejected the used and useful test. The prudent investment test is the proper test for determining the treatment of the costs of cancelled plants. In addition to being theoretically sound, the test allows a regulatory commission the flexibility to thoroughly examine the facts and circumstances of management’s decisions, and produces a fair result. In contrast, the used and useful test strips the regulatory commission of all authority and discretion. The commission must blindly deny all recovery, notwithstanding the potentially devastating effect such a decision might have on the utility.

B. Application of the Prudent Investment Test

A determination of whether a decision by utility management was prudent requires an inquiry into whether the decision was prudent when made. In making that inquiry, a number of guidelines must be observed. In reviewing the reasonableness of expenditures, good faith on the part of the utility must be presumed. Management must, of course, be responsible for its actions, but decisions must be viewed from the perspective that management will act appropriately in its duty to assure adequate service to the ratepayers. Justice Car- dozo, delivering the opinion of the Court in *West Ohio Gas Co. v. Public Utilities Commission*, stated that “[g]ood faith is to be presumed on the part of the managers of a business. . . . In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay.”

In addition, care must be taken to view management decisions on the basis of facts known at the time, not on the basis of hindsight or knowledge of events subsequent to the decisions at issue. A judgment based on hindsight is neither appropriate, fair, nor legally sound. The Wisconsin Supreme Court, in *Wisconsin Telephone Co.*
v. Public Service Commission," stated that "the Commission may not ignore actual expenses because in the light of experience and present conditions, it is possible to say that some part of the expense might have been avoided." The same view was expressed by the Hawaii Public Utilities Commission over sixty years ago:

Courts and Commissions too often take the position of examining the entire situation from the standpoint of the date of the examination and, in the light of present knowledge as to the past happenings, wisely, learnedly, and sometimes caustically criticizing and penalizing for honest mistakes in judgment that under the circumstances would perhaps have been made with fully as great facility by the court or the Commission had such court or Commission been in the shoes of the management . . . .

In order to produce an accurate assessment of reasonableness or prudence, management decisions must be viewed in the context in which decision-making occurred.

Finally, the inquiry into prudence should assess whether the utility's decision-making process was reasonable, not whether the decisions produced an unfortunate result or whether some other course of action might have produced a better result. As the District of Columbia Public Service Commission stated: "[The parties opposing the utility are] contending that where hindsight can demonstrate an arguably superior alternative to the one selected by the utility, then the utility has acted imprudently. This standard seems unduly harsh. . . . This reasoning tends to hold the utility absolutely liable for any plant cancellation."

C. Decisions Subject to a Determination of Prudence

The determination of prudence involves a factual analysis that commissions approach in various ways. Some commissions have apparently looked only at the initial decision to build the plant. If

40. Id. at 368, 287 N.W. at 167.
that decision was prudent, all costs related to the plant may be recovered. Other commissions may examine both the decision to build and the decision to cancel. If both decisions were prudent, the utility may recover the cost of the cancelled plant. Still other commissions engage in a more detailed analysis and examine the major decisions in the plant construction process: the decision to build, decisions during construction, and the decision to cancel. Under this latter approach, all management decisions in the process must be prudent before costs associated with those decisions may be recovered. As the New York Public Service Commission stated: "[W]e will consider the prudence of petitioners' actions in view of the circumstances prevailing at the time each significant decision to pursue the project further was made . . . ."

The most significant points in the decision-making process include the decision to build, the decisions during construction, and the decision to cancel. The factors used to determine whether these decisions were prudent are discussed below.

1. The Decision to Build. — The initial decision to add generating capacity is usually based on the need to meet increasing demand. Often the determination of prudence will depend on the procedures used for projecting load growth or the accuracy of demand forecasts. In jurisdictions that have such procedures, the review by a siting board for a certificate to construct the plant will often indicate that the decision to build was prudent.

45. See, e.g., In re San Diego Gas & Elec. Co., 31 P.U.R.4th 435 (Cal. P.U.C. 1979). The court found that the plant was not imprudent in its "inception, continuation, and termination." Id. at 499.
48. See In re Detroit Edison Co., 52 P.U.R.4th 318, 320 (Mich. Pub. Serv. Comm'n 1983). Cf. EIA REPORT, supra note 1, at 39 ("Generally, there is little debate over the prudence of the decision to build the plants because when most of these plants were planned, nuclear power appeared to offer the cheapest source of baseload electricity.").
50. The nature and extent of the siting board's duties and scope of power depends upon the authority granted to it by the particular state's enabling statute. Power facility site selection must reconcile consumer needs with environmental concerns and, depending upon the state, requires numerous permits from many state agencies or consideration by only one state agency. For a full listing of various state processes, see 1 H. GREEN, ENERGY LAW SERVICE § 5.22 (1978-1980).
In New York, a certificate issued by the siting board creates a strong presumption that management's decision to build was prudent. In *In re Rochester Gas & Electric Corp.*, the New York Public Service Commission conducted an extensive examination of Rochester Gas & Electric's (RG&E) actions in planning to construct and subsequently cancelling construction of a nuclear generating unit at the Sterling site. In January, 1978, the siting board issued a certificate of public need granting RG&E authority to construct the plant. In May, 1978, the siting board suspended that authorization in order to reconsider the need for additional capacity. After lengthy hearings, the siting board cancelled the certificate in 1980, denying the company authority to construct the plant.

In a subsequent proceeding to determine the treatment of the resulting loss, the New York Public Service Commission found that all costs incurred before the siting board's suspension of the certificate were prudent. The Commission based this finding on the siting board's determination of need. RG&E did not have to present evidence of the prudence of its actions prior to the initial issuance of the certificate in January, 1978, because the decision of the siting board was proof of the need for the facility. Those expenditures could be challenged, but the burden was on the challengers to prove imprudence. After the certificate was issued, until it was suspended in May, 1978, the presumption of prudence was not as strong because RG&E was aware that conditions bearing on the question of need were changing. Nevertheless, the Commission found those actions prudent. After the siting board suspended the certificate, however, the burden shifted to RG&E to prove that any subsequent

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52. Id. at 438.
53. Id. at 446-52.
54. Id. at 441.
55. Id.
56. Id. at 442 & n.5. Based on growth projections, the siting board concluded that only half the capacity represented by plant advocates would be needed, and not until much later than had been predicted. Id.
57. Id. at 444-46.
58. Id.
59. Id. at 446.
60. Id. The Commission concluded that general expenditures during this time period were prudent. They deferred decision on the prudence of certain individual expenditures, however, until Phase II of the proceeding was completed. Id. at 449. Phase I was devoted to examining general expenses, and Phase II to analyzing individual items in detail. Id. at 440.
expenditures were prudent. The effect of the siting board’s issuance of the certificate was to provide strong evidence of the prudence of expenditures for the plant.

The Connecticut Department of Public Utilities (CDPU), in In re United Illuminating Co., deferred totally to the approval of the Public Utilities Control Authority (the Authority), which periodically reviewed the utility’s continued participation in a nuclear project. The CDPU’s opinion, in part, dealt with the utility’s involvement in the cancelled Pilgrim II nuclear plant. Since all of the utility’s expenditures were made during the period when the Authority was overseeing the utility’s actions, the expenditures were deemed prudent and the utility was allowed recovery. The effect of monitoring by the Authority was similar to review by a siting board.

The utility commissions in the two preceding cases correctly apportioned responsibility for decisions concerning cancelled plants that were made jointly by public service commissions and utility companies. If a commission has authorized the company to proceed with a project by issuing a siting permit, or has otherwise overseen the company’s actions in undertaking a project, that commission should be estopped from denying the prudence of the company’s decision to construct. Commissions should not be able to disavow their prior approval of the project, based on subsequent events.

Failure to obtain siting board approval before incurring certain costs can result in a finding of imprudence and denial of recovery. In In re Idaho Power Co., the utility, Idaho Power, purchased a boiler for a proposed plant before obtaining a certificate of convenience and necessity to construct the plant. When the project was later cancelled, the public service commission refused to allow the utility to recover the cost of the boiler because the cost was not reasonably incurred. Idaho Power did not introduce any evidence to show the

61. Id. at 449.
62. Id. at 446.
64. Id. at 259-60, 268. The Authority consisted of three of the CDPU’s five commissioners. Id. at 254.
65. Id. at 268.
66. Id.
68. Id., slip op. at 36. Accord Pacific Power & Light Co. v. Public Serv. Comm’n, 677 P.2d 799 (Wyo. 1984). The court found that the utility must bear the burden of the plant failure since it had not sought approval by the Public Service Commission prior to its investment. Id. at 808-09.
69. Case No. U-1006-185, Order No. 17499, slip op. at 36-38.
necessity of ordering the boiler when it did to ensure delivery or save costs. The commission stated that there was "not one shred of evidence to show that Idaho Power Company could not have waited until the Commission's decision [regarding the certificate of convenience and necessity] . . . to secure a boiler for that plant." 71

Although the rationale in Idaho Power — that utilities should not commit to major expenditures before necessary — is appealing, the fact that expenditures are made before siting board approval is not conclusive proof that the expenditures were imprudent. Many expenditures are required to enable a utility to present a full explanation of the proposed project to regulatory and licensing agencies. Preliminary engineering and design plans, environmental testing, and options on or purchase of potential sites — all sizeable expenditures — are often required to complete a presentation to these authorities. In addition, companies attempting to build duplicate or replicate plants often have to commit to procurement obligations prior to the issuance of a siting board permit in order to ensure that the duplicate or replicate components will be available. The need to make pre-permit expenditures is also exacerbated by the often lengthy permit hearing process. If reasonable managers would have made these expenditures, recovery of the costs should be allowed regardless of the ultimate decision concerning the plant.

2. Decisions Made During Construction. — Utilities periodically review the progress and continued need for new capacity during the construction process. A utility will frequently begin a new project and then decide to delay further construction because of revised load forecasts or problems in financing. In such cases, a commission must determine whether decisions to delay and to resume construction activity were prudent.

In In re Detroit Edison Co., the Michigan Commission reviewed utility decisions to delay and then resume construction. 74 The

70. Id., slip op. at 37-38.
71. Id.
72. See, e.g., In re Central Ill. Light Co., 57 P.U.R.4th 351 (Ill. Commerce Comm'n 1983). In this case, the utility repeatedly deferred the projected operation date of its new plant because of significant decreases in usage and peak demand requirements after the 1973 oil shortage. Id. at 353-54. For a review of the management decisions involved, see id. at 358-61.
75. Id. at 324-26.
utility began the Greenwood nuclear project in 1971. In 1974, the utility was forced to delay construction due to financing problems. Forecasts indicated, however, that the unit would be needed at a later date. In 1978, the utility resumed engineering and licensing activities but the project was further delayed by the moratorium on licensing following the incident at Three Mile Island. The project was finally terminated because of uncertainty in economic conditions and financial markets. The Michigan Commission found that, given the long lead times for constructing new facilities and continued forecasts of a demand for additional capacity, the decisions to delay and subsequently resume construction were prudent. The Commission refused to substitute its judgment for that of the board of directors.

In In re Central Illinois Light Co., the Illinois Commerce Commission reviewed Central Illinois Light Company’s (CILCO) decisions concerning the planned construction of the Duck Creek II generating unit. CILCO’s 1972 load forecast indicated a need for an additional unit. The utility began engineering work in 1973, and placed an order for a generator with a 1977 delivery date. CILCO elected to defer manufacture of the generator in 1975 because forecasts indicated that the plant would not be needed until 1982.

In 1978, CILCO asked the generator manufacturer to begin fabrication in order to meet the projected plant in-service date of 1982. Later, CILCO twice more deferred the in-service date. The project was deferred indefinitely in May, 1982. While CILCO re-

76. Id. at 319-20.
77. Id. at 320.
78. Id.
79. Id. According to the EIA REPORT, supra note 1, at 26, “[a]fter the Three Mile Island nuclear accident, there was a 10-month moratorium on the issuance of operating licenses . . . .”
80. 52 P.U.R.4th at 320.
81. Id. at 325-26.
82. Id. at 325.
84. Id. at 352, 358-62.
85. Id. at 353.
86. Id.
87. Id. at 354.
88. Id.
89. Id.
90. Id.
91. Id.
peatedly deferred the in-service date, the generator was completed and placed in storage.62

CILCO's decision to approve manufacture of the generator in 1978 was challenged by the Commission staff and intervenors in the case. The Commission found that CILCO acted prudently in continuing manufacture of the generator, noting that it was cheaper to complete the generator and store it until needed than to suspend its manufacture.93 The Commission also found that, since CILCO did not determine until 1982 that it would not need the plant at all, authorizing continued manufacture of the generator prior to that time was prudent.94

3. The Decision to Cancel. — The factors used to determine whether the decision to cancel the plant was prudent are similar to those used to evaluate the initial decision to build a plant, i.e., whether the plant is needed and economical to complete. For example, in In re Virginia Electric and Power Co.,86 the Virginia Commission found that projected load growth had declined considerably and that the cost of completing North Anna Unit 4, a proposed nuclear facility, had nearly tripled.96 Therefore, the Commission found the decision to cancel North Anna Unit 4 proper.97 And in Atlantic City Electric Co.,98 the utility decided to cancel construction of the Hope Creek II nuclear facility because its construction so weakened cash flow that completion of Hope Creek I was jeopardized.99 The New Jersey Board of Public Utilities found this decision prudent and allowed recovery of the costs associated with the abandonment.100

The timing of the decision to cancel is significant in determining prudence. Utilities have been penalized for delaying the decision and incurring unnecessary costs.101 In In re Long Island Lighting Co.,102

92. Id.
93. Id. at 358, 361.
94. Id. at 361-62.
96. Id. at 49. The EIA Report, supra note 1, at 7, states: "Significant downward revision in the forecasted growth in peak load was the reason most frequently cited, being involved in about half the units cancelled . . . . By the end of 1982, almost half of the utilities cancelling nuclear units cited this as a reason for their cancellations." See also id. at 11-15 (Table 4).
97. 44 P.U.R.4th at 49.
99. Id. at 115.
100. Id.
101. The Energy Information Administration stated:
Finally, by the time a plant is cancelled, it is usually clear that the cancellation decision was sound, but there is often debate over whether the plant should have
the utilities involved requested recovery of the cost of the cancelled New Haven nuclear generating plant.\textsuperscript{103} When the New York State Board on Electric Generation Siting and the Environment (the Siting Board) rejected the application to construct the plant in 1979, the utilities cancelled the project.\textsuperscript{104} The New York Public Service Commission found that expenditures on the plant should have been halted in 1977 because changes in load forecasts showed that the plant was not needed.\textsuperscript{105} The Commission stated that, by late 1977, the utilities should have been aware that the New Haven plant was unnecessary and that further construction was unreasonable.\textsuperscript{106}

The record in this proceeding also indicates, however, that the companies were insufficiently diligent with respect to their responsibility to promptly cease incurring expenditures on this project once it became reasonably clear that the project no longer made planning or economic sense. Rather than terminating this project and minimizing the cost to consumers as we believe they should have, the companies' actions culminated in the filing of an [application for Siting Board approval] even though one of the partners no longer knew whether it would have a continuing interest in the project. This action by LILCO caused us to say, in our order recommending dismissal of the [Siting Board application], that the companies' posture with regard to New Haven seemed, \textit{at the time}, to be "close to irresponsible."\textsuperscript{107}

Because the plant was not cancelled until 1979, the Commission limited recovery to seventy percent of the costs incurred.\textsuperscript{108}

In \textit{In re Central Illinois Light Co.},\textsuperscript{109} the Illinois Commission noted that the Central Illinois Light Co. (CILCO) quickly terminated further construction activity when it appeared that the Duck Creek II project should be deferred indefinitely, and promptly noti-
vided the Commission when the project was cancelled. Since the record indicated that CILCO acted reasonably and prudently, the Commission found all costs incurred on the project prudent.

A continuum of events leads to the cancellation of a plant, with each event triggering a review of management's decisions. From the time of the initial decision to construct, during the actual construction, and through cancellation, the utility must act reasonably in light of the facts known at the time. If a utility acts reasonably, costs incurred in the construction are considered prudent and are recoverable. If a utility does not act reasonably, then the avoidable costs incurred after a utility's imprudent action should not be recoverable.

D. Quantifying the Acts of Imprudence

When a commission determines that a utility's decision was imprudent, the usual remedy is denial of recovery of the costs related to that decision. The quantification of the costs resulting from acts of imprudence must be performed by computing what costs the customers would have incurred but for the imprudent act. In some cases, the determination of what costs customers would have incurred is a fairly simple matter. In In re Idaho Power Co., the Idaho Commission refused to allow Idaho Power to recover the costs of a boiler. The cost of the decision which was held to be imprudent — the cost of the boiler — was easily calculated.

Imprudence is sometimes found in the decision to continue construction when the plant is no longer needed. In In re Houston Lighting and Power Co., the utility began planning the Allen's Creek Nuclear generating station in 1972. The project was suspended in 1975 because national economic conditions deflated the utility's expectation of future load increases. It was restarted in 1976, but subsequently cancelled in 1982. The Commission found that the project should have been cancelled in late 1979 or early

110. Id. at 361.
111. Id. at 362.
114. Case No. U-1006-185, Order No. 17499, slip op. at 37-38.
116. Id. at 188.
117. Id.
1980, based upon increased licensing difficulties and cost increases. The Commission disallowed recovery of all costs incurred after January 1, 1980 — approximately $160 million of the total $361.1 million.

The Massachusetts Department of Public Utilities (MDPU) similarly ruled that a project should have been cancelled sooner. In In re Boston Edison Co., the MDPU analyzed Boston Edison’s decisions regarding the Pilgrim II plant. Boston Edison began the project in 1971 and cancelled it in 1981. The Commission found that the project should have been cancelled in June, 1980. The Commission stated that, given financing problems and the uncertainty of obtaining a construction permit, cancellation in 1980 was the only prudent course of action. Therefore, recovery of expenses incurred after July 1, 1980, was denied.

A time line approach is useful for determining the remedy for imprudent actions. All avoidable direct expenditures after an imprudent decision to continue construction should not be recoverable, with the exception of cancellation costs required to shut down the construction project. These shut down costs, such as contract termination payments, site restoration costs, and the like, would be incurred regardless of when the project was terminated and should be allowed even when expended after cancellation.

This time line approach was not followed by the New York Public Service Commission. In In re Long Island Lighting Co., the New York Commission denied recovery of thirty percent of the costs related to the New Haven plant because the utilities failed to respond to changes in forecasted demand and delayed cancellation of the project. No rationale, however, was given for the choice of this

118. Id. at 200. The EIA REPORT, supra note 1, at 26, states that after the Three Mile Island accident, “a new NRC ruling ... required the completion and approval of state and local emergency evacuation plans prior to licensing. Additional standards emerged as a result of follow-up studies, which caused more delays in construction programs.”
119. 50 P.U.R.4th at 200.
121. Id. at 433.
122. Id.
123. Id. at 433-34.
124. Id. at 470-71.
125. Id. at 470.
126. Id. at 470-71.
127. Carrying charges (allowance for funds used during construction) on the prudently incurred expenditures, however, should continue to accrue until their recovery through rates.
129. Id., slip op. at 41, 51-52.
amount. The Commission apparently estimated the amount to be recovered without any analysis of the actual harm from the imprudent decision. The date of the imprudent decision should have been determined and all costs incurred after that date, with the exception of cancellation costs, made non-recoverable.

II. RATEMAKING TREATMENT OF PRUDENTLY INCURRED COSTS

Once the amount of the prudent investment in the cancelled plant is determined, a regulatory authority should allow the utility full recovery of that amount. Full recovery of a prudent expenditure can occur in either of two ways. The expenditure can be recovered through rates in a single year, or it can be amortized into the cost of service over a period of years with a return on the unrecovered balance. Because of the large dollar amounts involved, the prudently incurred costs of a cancelled plant should normally be recovered under the latter method. Whatever method is employed, the utility should be entitled to full recovery of all costs incurred for prudent investments in cancelled plants.

A. The Need for Full Cost Recovery

One of the primary goals of utility regulation is to ensure that the utility is able to provide the level of service demanded by its customers. A denial of full cost recovery of a utility's prudent in-

130. Id., slip op. at 51-52.
131. Id., slip op. at 52, 59. The record did not demonstrate that the utility so deviated from the applicable standard of care to warrant total disallowance but also failed to show entitlement to recover all the costs. Id., slip op. at 59.
132. For example, in In re Boston Edison Co., 46 P.U.R.4th 431, 471-73 (Mass. Dep't Pub. Utils. 1982), Boston Edison was allowed to amortize its prudent expenditures on the cancelled Pilgrim II unit into its costs of service and earn a 14% return on the unamortized balance. The Massachusetts Department of Public Utilities gave great weight to Boston Edison's need to meet the future demands of its customers:

The primary mandate that rates balance the interests of consumers and investors must be applied here based upon our judgment of the appropriate factors that affect such a balancing. It seems indisputable to us that no mathematical formula, including one that evenly divides dollar losses, can properly and logically effect a meaningful balance of interests. After considerable review, we have concluded that the factors which properly bear on the allocation of the loss at issue here are the following:

a. the prudence of the company's actions throughout the history of the project;

b. the equity and fairness of any proposed allocation; and

c. the necessity of adjusting the financial impacts of any allocation to ensure the adequacy of future service.

Id. at 461 (emphasis added). The DPU continued:

Because of the unusual magnitude of the Pilgrim II abandonment costs, our concern
vestment in a cancelled plant severely undercuts that goal by creating both economic disincentives for the utility to commence construction of a large project, and reluctance to cancel a project already begun. The Indiana Public Service Commission summarized the problem as follows:

Indiana utilities are under statutory mandate to serve . . . . If, in order to comply with the law, a utility must begin construction of generating projects many years in advance of the need for the power, it is the Commission's responsibility to assure that the risk in doing so is not so great as to discourage the endeavor.133

Since construction of base-load electric generating capacity requires the investment of mammoth amounts of capital over possibly a decade or longer before a kilowatt-hour is generated,134 sufficient incentive exists for prudent action by the utility without imposing the further risk of cost disallowance. New York Administrative Law Judge Frank S. Robinson set forth the risks inherent in undertaking a construction project:

You do want to make sure the utility is not going to try to build a white elephant; but looking at the industry in 1982, I don't think this is the real problem. Any utility that contemplates major construction certainly faces an uphill struggle, contending with political opposition, financing difficulty, and the very real prospect that even if all goes well, the utility will never really earn a compensa-
tory return for the undertaking. I think that we already have ample disincentives concerning unnecessary construction.\(^\text{135}\) In fact, the bias against construction is already evident in the capital markets where the stocks of utilities with ongoing nuclear construction programs are selling at substantial discounts below book value and their debt ratings are lower than utilities without construction. This situation increases the cost of capital for those utilities with large construction projects underway.\(^\text{136}\)

Furthermore, the differentiation in the capital markets between utilities with and without major construction programs illustrates another adverse result of regulatory policies that penalize prudent util-


\(^{136}\) Dr. Charles M. Studness summarized investors' responses to the risks of construction as follows:

In retrospect, it is apparent that investors were oblivious to how alarmed ratepayers had become by the escalating budgets of nuclear plants under construction, and the crisis mentality [in investor confidence] developed when nuclear plant cost escalations and cancellations in late 1983 abruptly demonstrated that the utilities building nuclear plants had far greater rate problems than investors previously believed. Correspondingly, the crisis mentality disappeared as investors adjusted their expectations . . . .

By midyear [1984] the crisis atmosphere had pretty well vanished, but a legacy remained. First, utility stock prices relative to each other had been restructured, and this was reflected in an unusually large internal dispersion of utility stock yields and stock price-to-book value ratios.

Second, the events that precipitated the crisis led to severe financial deterioration for utilities heavily involved in troubled nuclear plants . . . .

Finally, stiff resistance of ratepayers to nuclear plant costs had made recovery of those costs in rates a critical regulatory issue.

Studness, *The Market for Electric Utility Stocks in 1984*, PUB. UTIL. FORT., Jan. 24, 1985, at 39. See also Eased Inflation, Lower Interest Rates Seen as Cause of Boost in Utility Stocks, ELECTRIC UTIL. WEEK, Oct. 15, 1984, at 1, 2 (noting the improved stock prices of utilities without big construction programs). Credit ratings also distinguish between utilities with and without construction in progress. For example, Moody's Investors Service has forecast improved credit ratings for utilities that are free of the financing burdens of major construction programs. *Moody's Sees Credit Ratings Rising for Utilities Not Involved in Construction*, ELECTRIC UTIL. WEEK, Oct. 8, 1984, at 6. Accord EIA REPORT, supra note 1, at 19 (footnote omitted), contending that:

[N]uclear plant cancellations have raised the cost of new debt and the associated cost of electricity production for all utilities participating in the ownership of nuclear plants under construction. While the publicly owned utilities can float new bond issues without seriously jeopardizing their financial stability, a saturated marketplace will demand higher interest rates on new bond issues for either type of utility, particularly for enterprises with higher perceived risks due to their involvement in nuclear projects.

*Id.*
ity decisions: Customers of a utility with an ongoing construction program are forced to pay higher electric rates because of higher costs of capital, even though that utility may be well-managed and even though that construction program may result in needed cost-effective power. As explained by the Vermont Public Service Board, "[i]nvestors’ perception of risk is to a large degree influenced by regulatory trends nationwide."137

In other words, regulators should not view themselves in isolation. They should consider the broader implications of any decision to disallow prudently incurred costs. A decision allowing a utility to fully recover its prudent cancellation costs directs the impact of the cancellations to that utility and its customers. On the other hand, requiring investors to bear all or part of a utility’s prudent cancellation costs affects all utilities by creating an additional risk premium.138

The bias against construction, created by severe regulatory treatment of cancelled construction projects, carries with it a nationwide threat of energy deficiencies. In order to adequately serve the projected demands of consumers, utilities must continue constructing new generating capacity. Peak summer electrical demand in the United States is projected to grow by 111,844 megawatts from 1983 to 1993.139 To meet this expected demand growth and to replace the 15,051 megawatts of planned capacity retirements,140 utilities will

139. NORTH AM. ELEC. RELIABILITY COUNCIL, 1984 ANNUAL DATA SUMMARY REPORT: ELECTRIC POWER SUPPLY & DEMAND 1984-1993, 11 (1984). Actual 1983 summer demand was 447,526 megawatts. Id. As of January 1, 1984, the peak demand projected for 1993 was 559,370 megawatts. Id. This represents an average annual growth rate of only 2.5%. Id. At least two experts, John Sillin and John Siegal, dispute this projected growth rate as too low, claiming that a five percent annual growth through the 1980’s could be reached. Utility Industry Is Underbuilding Warn A Pair of Experts and DOE’s Hodel, ELECTRIC UTIL. WEEK, Mar. 26, 1984, at 5-6. This would require double the amount of new generating capacity that is expected by the early 1990’s. Id. Sillin and Siegal projected new capacity requirements of between 450,000 and 700,000 megawatts this decade as compared to the industry’s expected additional capacity of 105,000 megawatts during the same period. Id. In a recent update to their report, Sillin and Siegal revised the load growth forecast to increase between seven and nine percent, up from their original forecast of between five and eight percent. Accounting Consultant, Nuclear Power Booster Raise the High Growth Estimates, ELECTRIC UTIL. WEEK, Aug. 20, 1984, at 11.
140. NORTH AM. ELEC. RELIABILITY COUNCIL, supra note 139, at 152.
need to construct 130,767 megawatts of new capacity.141 But, as of January 1, 1984, only 58,900 megawatts of the required new capacity were more than fifty percent complete.142 Significantly, of that 58,900 megawatts, 44,500 megawatts consist of nuclear units,143 some of which may never be placed in service because of the financial stress created by financing the construction and passing the regulatory obstacles.144 For regulators to take any action creating disincentives to the planning for and construction of new capacity would be extremely short-sighted.145 Rather than creating disincentives, regulators should be acting to ensure that the planning and construction required to meet future needs is properly encouraged.146

141. Id. at 124. Because of capacity sales and capacity out of service in shutdown status, a net increase in capacity resources from 1983 to 1993 of only 107,756 megawatts is expected. Id. at 14-15.

Although a need to construct capacity has been recognized, a utility bias against construction already exists. For example, in October, 1984, former Consolidated Edison chairman Charles Luce told utility executives at the Edison Electric Institute's 19th Annual Financial Conference "to do everything possible to avoid [constructing] large new baseload plants." Utilities Retain the Moral — If Not Legal — Obligation to Serve, Says Luce, ELECTRIC UTIL. WEEK, Oct. 29, 1984, at 7. See also Hodel Offers Some Ideas for Curing 'Paralysis' of New Plant Construction, ELECTRIC UTIL. WEEK, Dec. 3, 1984, at 3 (Energy Secretary Hodel discusses proposed alternatives to current policies in order to counter "present obstacles to economically efficient investment in new generating capacity"); Delmarva P & L Does Not Want to Build a New Plant Until 'The Public is Clamoring,' ELECTRIC UTIL. WEEK, June 11, 1984, at 5 (Delmarva Power & Light Co. president expresses the view that the utility places little reliance on load forecasting generally and would not add a new baseload plant until public demand so warranted).


143. Id.

144. Id. at 14. See also In re Detroit Edison Co., 52 P.U.R. 4th 318, 320 (Mich. Pub. Serv. Comm'n 1983) (partially constructed nuclear facility cancelled because of financing and licensing difficulties). The situation in New York is similar to that expected nationally. Currently the state has 30,000 megawatts of installed capacity and has a historic peak of 21,867 megawatts. N.Y. Engineers Favor Nuclear, Energy Daily, Feb. 5, 1985, at 3, col. 2. In 15 years, 8,000 megawatts of the installed capacity will have been retired or will be ready for retirement. Id. Therefore, even without considering growth in the demand for electricity, the capacity reserve will fall to a mere 133 megawatts.

145. Fortunately for New Yorkers, the New York Public Service Commission has consistently allowed full recovery of the prudently incurred costs associated with cancelled generating units. See, e.g., In re Long Island Lighting Co., No. 84-25, slip op. at 52 (N.Y. Pub. Serv. Comm'n Sept. 19, 1984) (noting that denial of a return did not constitute a change in policy but was intended to achieve a desired level of write-offs); In re Rochester Gas & Elec. Corp., 45 P.U.R.4th 386, 393-95 (N.Y. Pub. Serv. Comm'n 1982) (permitting recovery of prudent expenditures even after suspension of siting board certification).

146. The inability to fully recover prudently invested funds might increase the risk that unneeded capacity will be built. A utility faced with the possibility of either no recovery or only a partial recovery of the costs of a cancelled unit might, if the decision to cancel is a close
B. Proper Ratemaking Treatment

Costs prudently incurred in furtherance of a public purpose are appropriately considered expenses for ratemaking purposes. Full recovery requires that the utility recover all of its prudently invested capital, as well as a proper return on the unrecovered balance of those costs. Notwithstanding a finding that the costs were prudently incurred, such a return on the unrecovered balance has most often been disallowed. A smaller number of states have allowed a return on

one, have an incentive to complete construction. The incentive to complete construction is even greater when the used and useful doctrine is rigidly applied since the plant, once completed, will be able to produce power and hence will stand a chance of being found to be used and useful.


148. According to the EIA REPORT, supra note 1, at 37:
Most of [the capital invested during the planning and construction of a nuclear plant] is borrowed in the form of debt and preferred stock which require annual interest and dividend payments. The remainder is provided by common equity shareholders who also require a return on their investment, though not entirely in the form of current annual cash dividends. The costs of using funds from all of these sources are accumulated and treated as part of the plant's total cost along with its cash expenditures. These capital carrying charges are typically referred to as interest during construction (IDC) or as allowance for funds (used) during construction (AFDC or AFUDC) . . . . Because AFUDC is a calculated charge derived from direct expenditures, it is also known fairly accurately by the utility owners at the time of cancellation.

Id. Full cost recovery also entails a recovery of the capitalized allowance for funds used during construction (AFUDC), since AFUDC is just as much a prudent cost of construction as the other direct costs, such as engineering fees and wages to workers. See In re Northern Ind. Pub. Serv. Co., No. 36689, slip op. at 15 (Ind. Pub. Serv. Comm'n Aug. 11, 1982) (approved amortization of the cancelled nuclear plant including AFUDC). See also In re Northern States Power Co., 46 P.U.R.4th 110, 111-12, 116-17 (Fed. Energy Regulatory Comm'n 1981) (reversed decision excluding AFUDC from the costs of the abandoned Tyrone Energy Park electric generating facility and found that costs could be included in the utility's rates); In re Central Vt. Pub. Serv. Corp., Nos. 4496/4504, slip op. at 14 (Vt. Pub. Serv. Bd. Dec. 4, 1981) (approved amortization of the cancelled facility including AFUDC). But see In re San Diego Gas & Elec. Co., 31 P.U.R.4th 435, 446-47 (Cal. P.U.C. 1979) (adhered to its long-standing policy on AFUDC by disallowing, as a recoverable expense, accumulated AFUDC in connection with an uncertificated and indefinitely deferred proposed project, noting that it was inappropriate and unreasonable for investors to realize a capitalized return on invested funds because the project did not come to fruition); In re Central Me. Power Co., Nos. 80-25, 80-66, slip op. at 38-39 (Me. P.U.C. Oct. 31, 1980), aff'd, 433 A.2d 331 (Me. 1981) (excluded AFUDC from the amortization amount to balance fairly the risk of noncompletion between the ratepayers and the shareholders).

149. According to the EIA REPORT:
[T]he option most commonly chosen by regulators has been to amortize the plant's abandonment loss over a fixed period (usually about 10 years) but not to allow the utility to earn a return on the unamortized balance. This approach is usually justified on the grounds that it yields an equitable sharing of the costs between utility

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on all or a part of the unrecovered balance.¹⁵⁰

ratepayers and shareholders.

EIA REPORT, supra note 1, at 57. But see id. ("The only consistent exception to the generally adopted practice has been that of the New York Public Service Commission, which has allowed a fully compensatory return to be earned, thereby virtually indemnifying the utility investor against absorbing any of the cost.").


¹⁵⁰ In re Gulf Power Co., No. 800001-EU(CR), slip op. at 6-7, (Fla. Pub. Serv. Alert. Vol. 13, Iss. 3 [1985], Art. 2

http://scholarlycommons.law.hofstra.edu/hlr/vol13/iss3/2
Full recovery of cancellation costs through amortization into the cost of service and by allowing a return on the unrecovered balance is justified where the costs were prudently incurred. In fact, some plant cancellation decisions have allowed full cost recovery based solely on a finding of prudence with little or no additional discussion. This result is the proper one, as an analysis of the reasoning behind, and impact of, amortizing cancelled plant costs over a period of years demonstrates.

Expenses prudently incurred are generally included in the cost of service. Large, extraordinary expenses, such as storm damage or management studies, however, are often amortized over a number of years to prevent variations in the revenue requirement as a result of these extraordinary events. Cancelled plant costs should be treated like other extraordinary expenses. Although cancelled plant costs could, theoretically, be recovered from ratepayers in a single year,
recovery will generally be spread over a period of years, because of the large dollar amount normally associated with cancelled plants. The trend towards amortization of large expenses was noted by the Washington Utilities & Transportation Commission:

Simply because an expense is very large does not mean that by size alone it is a rate base item. It is still an expense. However, size is a factor in determining whether to amortize or to allow the expense in a single year. To avoid rate shock, the prudent project expenses . . . should be amortized. The trend across the nation seems to be where amortization is allowed to amortize expenses of this sort over ten years.

Amortization alone, however, does not allow the utility to fully recover its costs. Full recovery must also include a return on the unrecovered balance to cover the associated carrying costs. Otherwise, "[w]hile the dollar value of the prudent expense is recovered, the time value of money indicates [that] the present value of that expense is not recovered." For example, a $100 investment is not recovered by payments of $5 per year over twenty years since the present value of those payments will be significantly less than $100.

154. See EIA Report, supra note 1, at 36 (table summarizing cancelled plant with abandonment costs in excess of $50 million).
159. Using a passbook rate of return (5.25%), the present value of annual $5 payments over 20 years amounts to only $61. The present value is even lower if more realistic rates of
The utility industry must construct a tremendous amount of new capacity over the next decade in order to meet expected demands. A regulatory policy that penalizes utilities for the prudent costs of cancelled plants will increase the risks and thereby the financing costs of new construction. Regulators can mitigate this result by allowing full recovery of prudent cancellation costs through amortization of those costs and by permitting a return on the unrecovered balance to compensate investors for the time value of money.

C. Misguided Rejection of Full Cost Recovery

Denial of full cost recovery for cancelled plants has been based on a number of theories. Each theory fails to consider the effect such a denial has on a utility's willingness to undertake such costly and risky projects in the future.

1. The Cancelled Plant Is Not Used and Useful. — A maxim of public utility regulation requires that property be used and useful in providing service to the public before that property can be included in rate base. This rule had its genesis in *Smyth v. Ames*,\(^\text{160}\) where the Court held:

\[
\text{[T]he basis of all calculations as to the reasonableness of rates to be charged by a corporation . . . must be the fair value of the property being used by it for the convenience of the public . . . . What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience.}\quad \text{161}
\]

The used and useful test\(^\text{162}\) has been applied to cancelled plants in two ways. A few jurisdictions have applied the used and useful test, rather than the prudent investment test, to bar utilities from recovering any of their prudently incurred investments in cancelled plants.\(^\text{163}\) When applied to deny any recovery of prudent costs, the

\[\text{[C]ompletely disallow[ing project abandonment costs] for ratemaking purposes, thereby forc[es] the utility investors and income taxpayers to bear the entire cost. More specifically, the sharing of these costs between investors and taxpayers arises because the utility writes off the cost as an extraordinary loss in the year of cancellation, thereby reducing its tax liability for that year. The actual cost to utility investors is reduced by the amount of the tax saving - up to 50 percent of the project's abandonment cost - which depends on the utility's unused investment tax credits and tax losses carried forward from previous years. Because of the foregone tax}\]

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160. 169 U.S. 466 (1897).
161. *Id.* at 546-47.
163. *See cases cited supra* note 15. *See also* EIA REPORT, supra note 1, at 40, which states:

[C]ompletely disallow[ing project abandonment costs] for ratemaking purposes, thereby forc[es] the utility investors and income taxpayers to bear the entire cost. More specifically, the sharing of these costs between investors and taxpayers arises because the utility writes off the cost as an extraordinary loss in the year of cancellation, thereby reducing its tax liability for that year. The actual cost to utility investors is reduced by the amount of the tax saving - up to 50 percent of the project's abandonment cost - which depends on the utility's unused investment tax credits and tax losses carried forward from previous years. Because of the foregone tax
used and useful test produces an unnecessarily harsh result for a utility. For the most part, jurisdictions relying on the used and useful test to deny any recovery have acted pursuant to that particular state's ratemaking statute. In *Office of Consumers' Counsel v. Public Utilities Commission*, the Ohio Supreme Court refused to allow recovery of the costs of four cancelled nuclear plants because Ohio's ratemaking statute did not allow recovery of costs that were not service related. The Ohio Public Utilities Commission had allowed recovery of the investment in the plants because it found the expenditures prudent under the prudent investment test. In reversing the Commission, the court noted that although the overwhelming majority of decisions from other jurisdictions supported the Commission's position, the prudent investment test was not the proper test under the Ohio statute. The court viewed the utility's petition for recovery as a request to treat the costs of the cancelled plant as service-related even though those expenditures never produced any service for customers.

The Supreme Court of Wyoming also relied on a statutory used and useful test to affirm the decision of the Public Service Commission (PSC) denying recovery of the costs of the cancelled nuclear plants in the Washington Public Power Supply System. The PSC found that the projects could never become used and useful, and that therefore the costs could not be considered in establishing a rate base.

... revenues, a transfer occurs from utility investors to taxpayers.

*Id.*


166. *Id.* at 163-64, 423 N.E.2d at 826-27. This denial was based upon a state statute, which provided in relevant part: "The public utilities commission, when fixing and determining just and reasonable rates, fares, tolls, rentals and charges shall determine . . . [t]he cost to the utility of rendering the public utility service for the test period . . . ." *OHIO REV. CODE ANN.* § 4909.15(A) (Page 1977).

167. 67 Ohio St. 2d at 163, 423 N.E.2d at 826.


169. 67 Ohio St. 2d at 164, 423 N.E.2d at 827. Interestingly, in a later case, the Ohio Commission allowed the utility an increased rate of return as a result of the losses associated with the cancellation. Consumers' Counsel v. Public Util. Comm'n, 4 Ohio St. 3d 111, 114, 447 N.E.2d 749, 753 (1983) (per curiam). Therefore, the costs were recovered indirectly instead of through direct amortization.


172. *Id.* at 804-05.
PROPER REGULATORY TREATMENT

The Indiana Court of Appeals reached a similar result when it reversed the decision of the Indiana Public Service Commission and denied any recovery of the costs of the cancelled Bailly N-1 nuclear unit.\textsuperscript{173} Although Indiana has a statute requiring property to be used and useful,\textsuperscript{174} the court did not find that it was compelled to deny recovery on that basis.\textsuperscript{175} It merely adopted the used and useful test, stating that the cancelled project was intended to be a capital expenditure and capital items could only be recovered by depreciation once the facility went into service.\textsuperscript{176} Because the plant was cancelled before going into service, the utility could not recover its investment.\textsuperscript{177}

Application of a used and useful statute to deny all recovery appears to be the minority position.\textsuperscript{178} Commissions in many jurisdictions with a ratemaking statute incorporating the used and useful concept have refused to adopt the test.\textsuperscript{179} These commissions either ignore the statute or construe it not to apply to cancelled plants. \textit{Pennsylvania Public Utility Commission v. Duquesne Light Co.}\textsuperscript{180} is illustrative of the latter approach. Pennsylvania has a statute providing that the cost of construction of new facilities shall not be made a part of rate base nor otherwise included in the rates charged until the facility is used and useful in service to the public.\textsuperscript{181} When Duquesne Light requested recovery of the costs of cancelled generating plants, the Office of Consumer Counsel argued that the statute pre-

\begin{itemize}
  \item \textsuperscript{174} IND. CODE ANN. § 8-1-2-6 (West 1982).
  \item \textsuperscript{175} 472 N.E.2d at 947.
  \item \textsuperscript{176} Id. at 946-47.
  \item \textsuperscript{177} See supra note 146 (discussing the disincentive to cancel created by this rationale).
  \item \textsuperscript{179} See, e.g., In re Carolina Power & Light Co., 55 P.U.R.4th 582, 600-01 (N.C. Utils. Comm'n 1983). Cf. State ex rel. Union Elec. Co. v. Public Serv. Comm'n, [1983-1985 Transfer Binder, State] UTIL. L. REP. (CCH) § 24,720 at 59,296 (Mo. Feb. 26, 1985). The court found that a state statute prohibiting an electric utility from making any change based upon the costs of construction in progress before the generating facility was fully operational and used for service did not have the purpose, nor the effect, of divesting the Missouri Public Service Commission of the authority to make an allowance for the abandoned construction of the nuclear generating plant. Id. at 59,300. The Commission was entitled to consider the prudence of the expenditures and the abandonment, but the court expressed no opinion as to how the Commission should exercise its authority. Id.
  \item \textsuperscript{180} 52 P.U.R.4th 644 (Pa. P.U.C. 1983).
  \item \textsuperscript{181} 66 PA. CONS. STAT. ANN. § 1315 (Purdon Supp. 1985).
\end{itemize}
vented recovery of those costs.\textsuperscript{182} The Pennsylvania Commission found that the statute only precluded inclusion of construction work in progress in rate base and did not apply to the cost of cancelled plants.\textsuperscript{183} The Commission noted that a literal interpretation of the statute would exclude from the rate base any structure not utilized in the generation, transmission and distribution of service, and that such a result would be contrary to legislative intent.\textsuperscript{184} Therefore, the Commission did not apply the used and useful test.\textsuperscript{186}

A second approach, used by most jurisdictions applying the used and useful test, follows a two step analysis. First, the prudent costs of the cancelled plant are established and amortized into a utility's cost of service. Many of the commissions permit recovery of prudent cancellation costs in this manner, then look to the used and useful doctrine for the sole purpose of denying a return on the unrecovered balance of cancellation costs.\textsuperscript{186} This application of the used and useful test, however, should not foreclose the investors from recovering a return on the unamortized balance during the amortization period. First of all, a regulatory commission can allow a utility a return on the unrecovered balance in order to assure that investors are compensated for the time value of money, without technically including this balance in the rate base.\textsuperscript{187} Second, application of the used and useful doctrine to unrecovered cancellation costs expands the scope of the doctrine beyond its original intent. Finally, the doctrine itself may no longer apply to many current ratemaking issues, including the treatment of cancelled plant costs.

Allowing a return on unrecovered cancellation costs is not necessarily equivalent to placing those unrecovered costs into rate base. The New York Public Service Commission has long recognized this

\textsuperscript{182} 52 P.U.R.4th at 649.
\textsuperscript{184} Duquesne Light Co., 52 P.U.R.4th at 650 & n.2.
\textsuperscript{185} Id. at 651. Cf. State ex rel. Union Elec. Co. v. Public Serv. Comm'n, [1983-1985 Transfer Binder, State] UTIL. L. REP. (CCH) ¶ 24,720.04 at 52,299 (Mo. Feb. 26, 1985) (language of statute did not explicitly deal with abandoned projects, thus statute did not divest state regulatory commission of authority to make an allowance for such costs in rate base).
\textsuperscript{187} See infra text accompanying notes 188-94.
distinction. For example, in the early 1960's, changes in the gas industry resulted in the retirement of a coke oven plant prior to the end of its depreciable life. The New York Commission excluded the unamortized balance of the cost of the coke oven plant from rate base, while allowing a return on the unrecovered balance of the asset's cost at an interest rate equal to that on the company's mortgage debt, which had been incurred at the time of the extraordinary loss. The Commission noted that "[i]t would seem that all parties, the customers and the stockholders, would be fairly treated if this amount were excluded from the rate base but sufficient return allowed to meet the carrying charges thereon."

Some commissions have found the distinction between allowing a return on the unamortized balance and including the unamortized balance in the rate base to be a matter of semantics. The distinction is important, however, because the rate of return necessary to compensate investors for the time value of money is not necessarily equal to the rate of return allowed on the utility's rate base. The standards applied in evaluating a rate of return on rate base have been summarized as follows: "At a minimum, a public utility must be afforded the opportunity not only of assuring its financial integrity so that it can maintain its credit standing and attract additional capital as needed, but also of achieving earnings comparable to those

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188. See infra text accompanying notes 189-90.
190. Id. at 222. The New York Commission later reaffirmed the distinction:
In this proceeding, the evidence reviewed hereinbefore must lead to the conclusion that there be considered as a proper part of the cost of service both the amortization of the unrecovered property losses and also some recognition of the related investment until the amortization is concluded. However, property retired and transferred to a suspense account such as "extraordinary property losses" cannot be claimed as being "used and useful," nor is it necessary that such property be included in a rate base in order to allow reasonable recognition of the fact that the investment therein has not been recouped. A return on such unrecouped investment, if warranted, can be provided by a carrying charge allowance similar to that made for other items excluded, for special or unusual reasons, from the rate base.
192. For example, the 14% return allowed Boston Edison on the unamortized costs of Pilgrim II represented an estimate of the cost of shorter term debt. In re Boston Edison Co., 46 P.U.R.4th 431, 472 n.149 (Mass. Dep't Pub. Utils. 1982). Boston Edison's overall rate of return was 10.94%. Id. at 476-77.
of other companies having corresponding risks.”

Thus, including the unrecovered portion of cancellation costs in the rate base, while an appropriate method, is not the only method to compensate investors for the use of their money during the amortization period. Such compensation should not be denied simply because a regulatory authority believes that the used and useful principle forbids inclusion of the unamortized costs in the rate base.

Utilizing the used and useful test to deny a rate of return on unamortized cancellation costs is a misapplication of that doctrine. The used and useful doctrine is not meant to exclude every non-operating asset from a rate base. Rather than focusing on whether a particular asset is operating, the “[m]uch more important [focus is] whether the investment was made with a view toward providing utility service. Properly applied, the rule merely excludes from rate base any investments that are unrelated to utility functions.” A utility’s prudent investment in a generating plant clearly meets this standard, even if the plant is later cancelled.

Inclusion of non-operating prudent investments in a utility’s rate base is not new. After a thorough review of the used and useful doctrine, the District of Columbia Circuit Court of Appeals, in Washington Gas Light Co. v. Baker, permitted the District of Columbia Public Utilities Commission to employ a prudent investment valuation of rate base. The court summarized the Commission’s analysis as follows:

Here, the Commission adopted the prudent investment theory of rate base valuation rather than the reproduction cost method. Appraisal of the former theory reveals that the “used and useful” standard is no necessary part of it. Primary emphasis is now being placed not on “specific property, tangible and intangible” but on capital prudently invested and embarked on an enterprise in the

193. C.F. PHILLIPS, JR., supra note 4, at 331.
194. See supra text accompanying notes 188-93.
195. For example, all utility plant, and particularly electric generation plant, is subject to outage, both planned and unplanned. These outages can be over in minutes or they can extend for months. It has never been a principle or practice that the rate base fluctuates as plant goes on or off the line.
196. Avery, The Costs of Nuclear Accidents and Abandonments in Rate Making, PUB. UTIL. FORT., Nov. 8, 1979, at 17, 18.
198. Id. at 17-20.
If a unit of property resulting from prudent investment becomes obsolete before it has been recovered in full by the investor (either through annual depreciation charges or through returns sufficient to compensate for such inadequacy), it is not necessarily erroneous as a matter of law for the Commission to include it in the rate base until such recovery has occurred. Such a course may be necessary in order to assure efficiency and progress in the art and continued attraction of capital to the enterprise.\footnote{\textsuperscript{199}}

Although \textit{Washington Gas Light Co.} involved an abandonment of property previously in service, its rationale is properly applicable to the ratemaking treatment of unamortized cancellation costs. The underlying issue in both situations is the same — whether a return should be allowed on an investment made with a view toward providing utility service.\footnote{\textsuperscript{200}}

Rigid application of the used and useful doctrine is no longer practical and has been abandoned in several other significant areas of ratemaking.\footnote{\textsuperscript{201}} For example, a plant held for future use is not, by definition, currently used and useful. But, as noted by Professor Priest, prudent investments in a plant held for future use belong in the rate base: “As a matter of sound business judgment, utilities often must build beyond their immediate needs. If their investments are provident and are made both in good faith and in the best interests of the area served, they plainly belong in rate base.”\footnote{\textsuperscript{202}}

An important trend allows some or all of construction work in progress to be included in rate base.\footnote{\textsuperscript{203}} The Federal Energy Regulatory Commission (FERC), in its order allowing up to fifty percent of construction work in progress to be included in rate base, noted the following need for flexibility in applying the used and useful doctrine: “[I]t must be reemphasized that the ‘used and useful’ concept, if administered inflexibly and without regard to other equitable and policy considerations, may fail the interests of both the electric util-

\footnotesize{199. \textit{Id.} at 19 (footnotes omitted).}
\footnotesize{200. \textit{See In re Virginia Elec. & Power Co.}, 29 P.U.R.4th 65, 95-96 (Va. State Corp. Comm'n 1979) (Shannon, Comm'r, dissenting in part). Commissioner Shannon reasoned that investors in property devoted to public use are entitled to just compensation, i.e., to be compensated for the use of their capital. \textit{Id.} at 96. “The investor is constitutionally entitled to just compensation for prudent expenditures. The rate-making mechanism must provide for a return on the investment and the return of the investment. Because depreciation rates are not calculated to include the probabilities of extraordinary property losses, it is necessary to amortize the loss of [cancelled plants].” \textit{Id.} at 96 n.35.}
\footnotesize{201. \textit{See infra} text accompanying notes 202-06.}
\footnotesize{202. 1 \textit{A.J.G. PRIEST, supra} note 21, at 181.}
\footnotesize{203. Avery, \textit{supra} note 195, at 18 (footnote omitted).}
ity industry and its ratepayers." Because the ratemaking treatment of cancelled plant costs involves substantially the same public interest objectives considered by the FERC in adopting its construction work in progress policy, the same flexible application of the used and useful doctrine is proper.

2. Sharing of the Burden. — Another theory denying full cost recovery for the costs of cancelled plants seeks to apportion the burden between investors and ratepayers. In a recent case, the Washington Utilities and Transportation Commission found a denial of a return during the amortization period to be a mechanism for dividing the cancelled plant costs between investors and ratepayers, despite the fact that all of the costs were found to have been prudently incurred. The Commission reasoned that "this is a proper mechanism to provide an incentive (or disincentive) to the company to be sure that its initiation and management of large construction programs are in all respects prudent." The logic of penalizing a utility when it has acted in a prudent manner so that a utility will act in

205. The FERC considered the following objectives:
(1) Mitigation of any bias against the construction of new generating facilities;
(2) Providing for electric rates to more accurately reflect the costs of providing future service, allowing the need for new capacity to be tested, so far as possible, by the market place; and
(3) Furthering the goal of rate stability by providing for smoother increases in electric rates to consumers.
Id., at 30,497.
206. At one time, the North Carolina Utilities Commission applied such a flexible approach:

Therefore, the commission concludes that, just as working capital has been construed by the supreme court of this state to fall within the meaning of the term "property used and useful . . . in providing service" as used in GS 62-133(b)(1), it is also appropriate, both as a matter of law and as a matter of equity, to allow CP&L to adjust and increase the working capital portion of its rate base to the extent set forth hereinafore for the reason that the carrying charges in question form a fair and reasonable part of CP&L's cost of service which must be paid upon investor funds prudently advanced for plant costs and that such funds, even though invested in a plant later abandoned, should technically, and as a matter of law, be considered "property used and useful . . . in providing service" within the meaning of GS 62-133(b)(1).


208. Id. at 587.
a prudent manner in the future is elusive. The state of Washington, however, is not alone in its desire to “share costs” or “balance the risks” between utility investors and ratepayers as a justification for denying a return on the unrecovered costs.209

Another reason cited for sharing costs is that plant cancellation costs are “extraordinary in nature.”210 This rationale, however, does not support imposing costs on investors for prudent decisions of a utility’s management and fails to consider the capital intensive nature of the electric utility industry. Because the industry is so capital intensive, each major capacity addition undertaken creates the risk of cancellation and extraordinary loss. If these “extraordinary losses” cannot be recovered, a utility and its investors will be unwilling to risk investment in new capacity.211

3. Management Control of Plant Construction. — Regulators who have denied a return on some212 or all213 of the unamortized balance of plant cancellation costs have done so because the investors control the company management and thus, the decision to build as well as the subsequent decision to cancel the plant. Absent impru-

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211. See generally supra notes 132-46 and accompanying text.


213. See, e.g., In re Northern States Power Co., 42 P.U.R.4th 339, 362 (Minn. P.U.C. 1981). The Minnesota Commission, however, was reacting to a Wisconsin Public Service Commission denial of certification for the Tyrone plant. Id. at 35. This is evidenced by the Minnesota Commission’s approval, in the same docket, of the amortization of the costs associated with the prudently cancelled Sherco 4 Unit. Id. at 362-64.
dence on the part of management, this rationale, like the sharing of the burden rationale, makes little sense. In such a case, investors are penalized for the prudent actions of management. The rational response by investors is to reward those managers who delay or forego the decision to invest in new plant capacity.214

The management control rationale makes even less sense than the sharing of the burden rationale, because prudent decisions to build, to continue building and then either to complete or cancel a plant are largely molded by forces outside of a utility’s control. This is especially true for nuclear plant cancellation decisions which have resulted primarily from five factors:215

1. decreases in forecasted demand growth resulting from the economic slowdown and a national conservation trend following the Arab oil embargo;216

2. regulatory change and uncertainty resulting in longer lead times before commercial operation and costly redesign and backfitting to meet new or changed regulations;217

3. erosion of the economic advantages of nuclear generation because of escalating costs and lengthening lead times;218

4. constraints on the ability of investor-owned utilities to raise the capital necessary to finance lengthy construction programs because of high interest rates, escalating costs, construction delays and regulatory change and uncertainty;219 and

5. denial of the necessary state certifications for plants because of the aforementioned factors or because of political opposition to nuclear power.220

The burden of costs related to these factors, which are not within a utility’s control, should not fall on the utility’s investors.

4. Traditional Business Would Not Earn a Return. — The Virginia State Corporation Commission analogized a nonregulated business to a regulated utility and concluded that because a nonregu-

214. See supra notes 136, 141.
215. See EIA REPORT, supra note 1, at 4-32.
216. Id. at 7-17.
217. Id. at 25-26.
218. Id. at 26-30.
219. Id. at 17-25.
220. Id. at 31-32.
lated business would not earn a return on a cancelled investment, a regulated utility should not earn a return on its unamortized cancellation costs.\textsuperscript{221} The analogy is inappropriate because the framework of regulation changes the opportunities, options, burdens and risks confronting a regulated utility. Unlike the nonregulated business, a utility cannot choose its markets, products, and, most importantly, its level of productive capacity. A utility’s duty to serve the public compels that a utility make investments in capacity in order to provide the cheapest power necessary to meet the demands of its customers.\textsuperscript{222}

The FERC considered and rejected any analogy to nonregulated business in establishing its construction work in progress policy:

In the Commission’s opinion, there are significant differences between free market operations and the conditions under which regulated utilities operate. Accordingly, it may not be fruitful to attempt to defend either AFUDC or CWIP policies on the basis of a similarity to competitive markets, and we decline to do so.\textsuperscript{223}

In fact, the FERC noted that the inability of utilities to adjust prices to reflect increasing demand, as a nonregulated firm would be able to do, was partially responsible for the unrealized demand forecasts on which the original decisions to build the later cancelled plant were based: “Customers, on the other hand, attribute current difficulties to reductions in demand forecasts. Yet, these overstated demand projections are, to some degree, a natural consequence of a regulatory scheme which effectively conceals from consumers the high costs of

new service until after those costs have already been incurred.\textsuperscript{224} It is both inaccurate and inappropriate to utilize an analogy to nonregulated business as the basis for denying a regulated utility full recovery of its prudently incurred costs.\textsuperscript{225}

CONCLUSION

Regulatory commissions should analyze utility plant cancellations in the same manner in which they analyze other utility managerial decisions, that is, on the basis of the facts and circumstances existing at the time of the decision. If the decisions were the result of prudent, reasonable analysis, then the utility should not be financially penalized for that decision.

Specifically, if the decisions to build the plant, to continue the planning and construction of the plant and, finally, to cancel the plant were all prudent, then the costs associated with the cancelled construction project should be recoverable from the utility’s customers over a reasonable period of time. During the period when these costs are being recovered, investors should be allowed a return on their unrecovered investment. Any ratemaking treatment short of this full recovery by investors penalizes utility investors and, ultimately, discourages utilities from undertaking costly, risky projects for new plant construction that are necessary to meet the nation’s energy requirements.

\textsuperscript{224} Id. at 30,493.

\textsuperscript{225} Professor Bonbright considered whether competition should serve as a guide for regulation and concluded that the competitive model cannot and should not be adopted by the regulator. J.C. BONBRIGHT, PRINCIPLES OF PUBLIC UTILITY RATES 93-108 (1961).