

STATUTES PROHIBITING COST
RECOVERY FOR CANCELLED NUCLEAR
POWER PLANTS: CONSTITUTIONAL?
PRO-CONSUMER?

CONSTANCE A. OLSON*

Electric utilities have a duty to meet the power needs of their service areas.¹ To fulfill this duty, utilities estimate future power needs and respond to predictions of increased consumption by constructing new generating facilities, expanding current facilities, or purchasing power from other utilities.² In the late 1960s and early 1970s, forecasts³ of high power need and the economic attractiveness of nuclear generating plants⁴ prompted electric utilities to place over two hundred orders for nuclear plants.⁵ Lower than anticipated power consumption, escalat-

* B.S., Taylor University, 1980; J.D., M.S.W. (expected), Washington University, 1986.

1. See Sommers, *Recovery of Electric Utility Losses from Abandoned Construction Projects*, 8 WM. MITCHELL L. REV. 363, 374 (1982). See generally 1 A. PRIEST, PRINCIPLES OF PUBLIC UTILITY REGULATION 227-83 (1969) (obligation to furnish adequate service).

2. See generally BERKSHIRE COUNTY REGIONAL PLANNING COMMISSION, EVALUATION OF POWER FACILITIES: A REVIEWER'S HANDBOOK (1974) (reviews the entire process of planning for power needs and selecting technology for future power needs) [hereinafter cited as EVALUATION OF POWER].

3. Pierce, *The Regulatory Treatment of Mistakes in Retrospect: Canceled Plants and Excess Capacity*, 132 U. PA. L. REV. 497, 500-01 (1984).

4. See *infra* text accompanying note 111. See generally Larson, *Present State and Future Outlook of Nuclear Power Generation in the United States*, 12 ATOM. ENERGY L.J. 274 (1970) (describing the positive features and promises of nuclear power).

5. See CONG. Q., ENERGY POLICY 84 (2d ed. 1981) [hereinafter cited as ENERGY

ing costs, and the effects of federal safety regulations⁶ have forced the cancellation of over one hundred nuclear plants.⁷

Nuclear generating plant cancellations raise the question of who should pay for useless, abandoned plants. In most cases, consumers have been assessed all or part of a utility's cancellation costs.⁸ In some states, however, courts have interpreted and applied purportedly consumer-oriented statutes to prevent cancellation cost recovery.⁹ In response, utilities are challenging the constitutionality of these statutes, contending that failure to include prudently-incurred costs in their rates is confiscatory.¹⁰

This Note examines the interpretation, constitutionality, and effect of statutes purporting to deny cost recovery for cancelled nuclear power plants. Section I explains the ratemaking process¹¹ and its constitutional boundaries.¹² Section II surveys the problems affecting the vitality of the electric power industry.¹³ This discussion explains why the industry has experienced financial difficulties, and summarizes the growth and demise of optimism regarding nuclear power as an economical and safe power source. Section III examines administrative and judicial treatment of utility costs recovery requests in cancelled plant cases.¹⁴ Section IV analyzes the applicability of the statutory language relied on to deny cost recovery in some states,¹⁵ the constitution-

POLICY]. This figure includes plants that are licensed to operate, are licensed for testing, or have construction permits issued or requested.

6. See *infra* notes 69-76 and accompanying text.

7. Kester, *Money Problems Plague Nuclear Plants*, St. Louis Post-Dispatch, Jan. 8, 1984, at II, col. 6-7 (Atomic Industrial Forum data).

8. See *infra* notes 128-34 and accompanying text.

9. See, e.g., MO. REV. STAT. § 393.135 (1978); OHIO REV. CODE ANN. § 4909.15 (Page 1977). Statutory denial of cost recovery is discussed *infra* at notes 139-59 and accompanying text.

10. See, e.g., *Cleveland Elec. Illum. Co. v. Public Util. Comm'n*, 4 Ohio St. 3d 107, 447 N.E.2d 746, *appeal dismissed*, 104 S. Ct. 47 (1983); *Dayton Power & Light Co. v. Public Util. Comm'n*, 4 Ohio St. 3d 91, 447 N.E.2d 733 (1983); *Pennsylvania Pub. Util. Comm'n v. Duquesne Light Co.*, 52 P.U.R. 4th 644 (Pa. P.U.C. 1983); Brief of Realtor, *Missouri ex rel. Union Elec. Co. v. Public Serv. Comm'n*, Case No. CV 183-1064cc (1984) (appealing Commission decision in *In re Union Elec. Co.*, Case No. ER-83-163 (1983)). These cases are discussed *infra* at notes 185-200 and accompanying text.

11. See *infra* notes 19-46 and accompanying text.

12. See *infra* notes 47-63 and accompanying text.

13. See *infra* notes 64-123 and accompanying text.

14. See *infra* notes 124-61 and accompanying text.

15. See *infra* notes 162-84 and accompanying text.

ality of such provisions,¹⁶ and the probable impact of cost recovery denial on consumers.¹⁷ Section V recommends that existing statutes not be interpreted to cover cancelled plants, and offers suggestions for preventing, and responding to, the cancellation phenomenon.¹⁸

I. THE RATEMAKING FORMULA AND CONSTITUTIONAL LIMITS TO RATE REGULATION

Electric utility regulation is largely the responsibility of state public utility commissions (PUCs),¹⁹ which monitor utility operations, adequacy of service and financial practices,²⁰ and set maximum utility rates.²¹ Regulation has displaced competition in the electric utility market because a utility enjoys a natural monopoly; consequently, if an electric utility desires to raise its rates it must file a rate request with its PUC.²² In the rate proceeding, the PUC computes the utility's revenue requirements²³ based on evidence presented, and develops an equitable

16. See *infra* notes 185-200 and accompanying text.

17. See *infra* notes 201-10 and accompanying text.

18. See *infra* notes 211-19 and accompanying text.

19. A state's regulatory agency also may be called a "Public Service Commission," or "Commerce Commission," or "Corporation Commission." In this Note, "Public Utility Commission" (PUC) refers generally to the agency responsible for utility regulation in any given state. See 1 A. PRIEST, *supra* note 1, at 25-30.

20. Jones, *Judicial Determination of Public Utility Rates: A Critique*, 54 B.U.L. REV. 873, 894 (1974); EVALUATION OF POWER, *supra* note 2, at 296.

21. See EVALUATION OF POWER, *supra* note 2, at 296-308. See also Comment, *Rates Follow Service: The Power of the Public Utility Commission to Regulate Quality of Service*, 28 BAYLOR L. REV. 1137, app. (1976) (charts give PUC title, source of authority, jurisdictional description, and data on each state's method of computing allowable utility rates); OFFICE OF UTILITY SYSTEMS, ECON. REGULATORY ADMIN. U.S. DEP'T OF ENERGY, *TECHNIQUES FOR ANALYZING THE IMPACTS OF CERTAIN ELECTRIC UTILITY RATEMAKING AND REGULATORY POLICY CONCEPTS: REGULATORY LAWS AND POLICIES* (1980) (state by state analysis of electric utility regulatory policies).

22. Hanson & Davies, *Judicial Review of Rate of Return Calculations*, 8 WM. MITCHELL L. REV. 499, 501 (1982). In addition to obtaining PUC approval of proposed rate increases, a utility "must accept and abide by reasonable standards and practices to make sure that their facilities will promote the safety, convenience and best interests of ratepayers, employees and the public generally." 1 A. PRIEST, *supra* note 1, at 32.

For a history of the development of public utility regulation, see *id.* at 25-33; Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 429-501 (1979).

23. 1 A. KAHN, *THE ECONOMICS OF REGULATION* 26 (1970). See *infra* notes 26-46 and accompanying text for a summary of this process.

rate design.²⁴ Similarly, the Federal Energy Regulatory Commission (FERC) regulates the interstate aspects of the electric power industry.²⁵

A. Calculating Utility Rates

When a PUC faces an electric utility's request for a rate increase, it applies a formula that can be summarized as follows:

[Rate Base x Rate of Return] + Operating Expenses = Operating Revenues.²⁶

Only an order by a regulatory agency can alter the variables of this equation. Most states, however, also provide for separate fuel adjustment revenue that is automatically responsive, without PUC review, to

24. Jones, *supra* note 20, at 875. For discussions of rate design, a subject not treated in this Note, see generally *id.* at 884-92; Huntington, *The Rapid Emergence of Marginal Cost Pricing in the Regulation of Electric Utility Rate Structures*, 55 B.U.L. REV. 689 (1975); Lander, *Public Utility Rate Design: The Cost of Service Method of Pricing*, 19 ST. LOUIS U.L.J. 37 (1974).

25. M. WALLACE & R. PENNOYER, DIRECTORY OF FEDERAL REGULATORY AGENCIES 24 (1978). The Federal Power Commission (FPC) previously performed FERC's role. The Water Power Act, ch. 285, 41 Stat. 1063 (1920) (codified at scattered sections of 16 U.S.C.), had created the FPC. The Public Utility Act of 1935, ch. 687, 49 Stat. 803 (1935), gave the FPC control over the interstate sale of electricity. The Department of Energy Organization Act, 42 U.S.C. § 402(a)(1)(B) (1982), transferred this authority to FERC. See Note, *The Constitutionality and Effectiveness of the Electric Utility Provisions of the Public Utility Regulatory Policies Act of 1978*, 47 GEO. WASH. L. REV. 787, 788-89 (1979).

For a summary of the elements of the "federal energy policy for states" as contained in the National Energy Act, see Woychik, *State Opportunities to Regulate Nuclear Power and Provide Alternate Energy Supplies: Part II*, 15 U.S.F.L. REV. 441, 444 n.15 (1981).

For a discussion of Title I (retail sales by electric utilities) of the Public Utility Regulatory Policies Act of 1978, see Joskow, *Public Utility Regulatory Policy Act of 1978: Electric Utility Rate Reform*, 19 NAT. RESOURCES J. 787 (1979). See also *FERC v. Mississippi*, 456 U.S. 742 (1982) (upholding the constitutionality of Titles I, III, and § 210 of Title II of PURPA; describes PURPA's content); Note, *supra* (effectiveness and constitutionality of both Titles I and II of PURPA).

26. ECONOMIC DIV. CONG. RESEARCH SERVICE, 97TH CONG., 2D SESS., CONSTRUCTION WORK IN PROGRESS IN ELECTRIC BASE RATE 33 (Comm. Print 1982) [hereinafter cited as CWIP IN ELECTRIC BASE]. See generally J. BONBRIGHT, PRINCIPLES OF PUBLIC UTILITY RATES (1961); 1 A. PRIEST, *supra* note 1 (explanations of rate making process). See also Mello, *Public Utility Rate Increases: A Practice Manual for Administrative Litigation*, 8 CLEARINGHOUSE REV. 411 (1974) (describes ratemaking and gives advice on preparing for trial of a rate case).

changes in fuel costs.²⁷ A PUC estimates a utility's revenue requirement by using a test year.²⁸ This twelve-month period, which may reflect actual or projected revenues,²⁹ supplies data on the utility's expenses, income, and investments for use at the rate hearing.³⁰ Against this analytical backdrop, the PUC calculates the values that it will plug into its rate formula.³¹

The rate base represents the utility's investment in fixed assets that are used and useful³² in providing electric service.³³ While the value can be computed in several ways,³⁴ most jurisdictions use the original cost method, which sets the rate base at an amount equal to the original cost of the investment, less depreciation, plus a sum for working

27. CWIP IN ELECTRIC BASE, *supra* note 26, at 33; CONG. Q., ENERGY POLICY 99 (1979) [hereinafter cited as ENERGY POLICY (1979)]. A given jurisdiction may allow other types of adjustment clauses. See OFFICE OF UTILITY SYSTEMS, ECON. REGULATORY ADMIN. U.S. DEP'T OF ENERGY, TECHNIQUES FOR ANALYZING THE IMPACTS OF CERTAIN ELECTRIC UTILITY RATEMAKING AND REGULATORY POLICY CONCEPTS: GLOSSARY 3 (1980) [hereinafter cited as GLOSSARY].

28. Huntington, *supra* note 24, at 699; Jones, *supra* note 20, at 876-81. A "test year" figure approximates the "total revenues" that a utility is permitted to take in. 1 A. KAHN, *supra* note 23, at 26. "On the basis of this total, adjusted as much as possible for known or readily predictable changes between the test year and the period for which the rates are to be ascertained, the company is ordered or permitted to propose the required adjustments in its rate schedules." *Id.*

29. GLOSSARY, *supra* note 27, at 96.

30. Huntington, *supra* note 24, at 699.

31. GLOSSARY, *supra* note 27, at 96.

32. Each state has its own standard for determining whether to include particular utility investments in the rate base. Each state that employs "used and useful" language has its own interpretation of that language's meaning. The following passage provides insight:

Historically, the used and useful test was employed primarily to exclude the rate base investments in plants that are not yet operable, investments in assets that provide benefits exclusively to parties other than consumers of regulated services, and investments in plants that are no longer used because of obsolescence, chronic mechanical failure, or an order from a government agency requiring termination of operations for a sustained period of time.

Pierce, *supra* note 3, at 512-13. See also 1 A. PRIEST, *supra* note 1, at 174-90 (used and useful concept discussed).

33. Webb, *Utility Rate Base Valuation in an Inflationary Economy*, 28 BAYLOR L. REV. 828, 840 (1976); GLOSSARY, *supra* note 27, at 85.

34. The reproduction cost method uses an estimate of replacement cost at current prices to compute the rate base. GLOSSARY, *supra* note 27, at 85, 88. A fair value rate base "is a judgment figure which may involve considering reproduction cost, original cost, replacement cost, market value, assessed value, or other elements." *Id.* at 44.

While these methods, like the original cost method, focus on property value, the current value method bases valuation on investment dollars, not property. The funds in-

capital.³⁵ Investments in generating plants and equipment constitute roughly half of the utility's revenue requirement.³⁶

The rate base is then multiplied by the rate of return,³⁷ which represents the profit that the utility has an opportunity to earn³⁸ on its base—the return on its investment.³⁹ Some commentators view the rate of return as a balancing element subjectively applied by PUCs to ensure an overall fair result.⁴⁰ Generally, however, the PUC calculates the rate of return by the cost of capital approach.⁴¹ This method identifies and totals the costs of each element of the utility's capital structure,⁴² which is composed of some proportion of debt and equity.⁴³ The calculated cost should reflect the total amount the utility must pay

vested in utility facilities determine the rate base. Webb, *supra* note 33, at 840. See also 1 A. PRIEST, *supra* note 1, at 140-66 (valuation formulas).

For an overview of the development of rate base calculation theories, see 1 A. KAHN, *supra* note 23, at 35-41. This development has been intertwined with the constitutional principles that govern utility regulation. See *infra* notes 47-63 and accompanying text.

35. Huntington, *supra* note 24, at 699.

36. Jones, *supra* note 20, at 895.

37. The rate of return is "the percentage by which a utility's rate base is multiplied to determine the wages of capital." 1 A. PRIEST, *supra* note 1, at 191. Setting an equitable rate of return involves "reaching an acceptable compromise between the interests of investors on the one hand and consumers on the other." 1 A. KAHN, *supra* note 23, at 42. The rate of return must permit the utility to attract capital, but this standard is "an elastic one." *Id.* See *infra* notes 41-47 and accompanying text (cost of capital approach and subjective elements).

38. While the rate of return generally represents "the return . . . to which investors in the utility enterprise are reasonably entitled," 1 A. PRIEST, *supra* note 1, at 45, this amount is not guaranteed and merely suggests potential utility earnings. *Id.* at 202, 22.

39. Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679, 692-93 (1923).

40. Jones, *supra* note 20, at 882-83.

41. Mello, *supra* note 26, at 415. This may be deceptively objective, however, as there are various methods available for calculating the cost of capital. Christy & Christy, *Does the Capital Attraction Argument Suffice?*, PUB. UTIL. FORT., Mar. 29, 1979, at 24, 25.

42. Jones, *supra* note 20, at 881. See also 1 A. KAHN, *supra* note 23, at 42-54 (economic and regulatory issues in cost of capital calculations).

43. Mello, *supra* note 26, at 415. "This method involves a determination of the utility's cost of embedded debt (that is, debt already committed to the enterprise) and cost of equity. Those two costs then apply to the company's capital structure to arrive at the composite cost of capital (overall rate of return)." *Id.* Debt capital represents "funds obtained . . . by borrowing money, primarily through the sale of bonds." GLOSSARY, *supra* note 27, at 28. Equity is the portion of capitalization represented by stock ownership. *Id.* at 41, 42.

to procure capital.⁴⁴

The PUC then adds the utility's operating expenses to the product of the rate of return multiplied by the rate base.⁴⁵ Operating expenses include depreciation, taxes, labor costs, materials, amortization of extraordinary losses and other debts, insurance, and maintenance costs.⁴⁶ When a PUC computes expenses and the other elements of the revenue formula, it must act within certain constitutional constraints. The following section summarizes these constitutional principles.

B. *Constitutional Limits on the Ratemaking Process*

The PUCs' power to set rates is limited by constitutional prohibitions against taking private property without due process of law or without just compensation.⁴⁷ Within constitutional limits, PUCs must equitably resolve conflicting consumer and utility interests.⁴⁸ Regulation may reduce the utility's property value and severely limit its return on investments.⁴⁹ Nevertheless, the return calculated by PUCs must fall within a "zone of reasonableness" and must not be confiscatory.⁵⁰

44. Huntington, *supra* note 24, at 700. Mello charts a simplified cost of capital calculation for a utility with a 60% debt ratio:

TYPE OF CAPITAL	% OF TOTAL		COST RATE		COST OF CAPITAL
Debt	60%	×	8%	=	4.8%
Equity	40%	×	10%	=	4.0%
Total					8.8%

Mello, *supra* note 26, at 415.

45. 1 A. PRIEST, *supra* note 1, at 45. See generally *id.* at 47-138; 1 A. KAHN, *supra* note 23, at 26-35 (discussion and definition of operating expenses). Costs charged as operating expenses are "charged directly and thus included in annual revenue requirements dollar for dollar." *Id.* at 27. Those costs are capitalized and recouped "in the form of annual allowances for depreciation and return on the undepreciated portion of the investment [rate base]." *Id.*

46. Hanson & Davies, *supra* note 22, at 501; GLOSSARY, *supra* note 27, at 74.

47. St. Joseph Stock Yards Co. v. United States, 298 U.S. 38, 51 (1936); U.S. CONST. amend. V; U.S. CONST. amend. XIV, § 1. States must permit judicial review of administrative rate decisions where a taking is alleged. Ohio Valley Water Co. v. Ben Avon Borough, 253 U.S. 287, 289 (1920).

48. Permian Basin Area Rate Cases, 390 U.S. 747, 767 (1968).

49. 390 U.S. at 769. Furthermore, a utility "has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures." Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679, 692-93 (1923). Neither does regulation "insure that the business shall produce net revenues." Federal Power Comm'n v. Natural Gas Pipeline Co., 315 U.S. 575, 590 (1942).

50. *Natural Gas Pipeline*, 315 U.S. at 585.

The development of Supreme Court decisions on confiscatory utility rates⁵¹ culminated forty years ago in two cases⁵² that form the *Hope-Bluefield* test. Against this standard, courts examine confiscation claims in utility rate cases.

The *Hope-Bluefield* test requires that a rate yield a reasonable return on property that the utility uses to provide service to its customers.⁵³ *Hope* overruled the "fair return" on "fair value" method of setting utility rates.⁵⁴ Under *Hope*, courts examine the result reached rather than the method employed,⁵⁵ hence a rate order is constitutional if its "total effect" is just and reasonable.⁵⁶ This result-oriented analysis requires that a rate of return be adequate to: 1) preserve the utility's financial integrity; 2) provide a return similar to that of other industries with similar risks; 3) reward investors for the risks they assume; and 4) permit the utility to remain attractive to investors and credible to lenders.⁵⁷ This constitutionally adequate return is customarily calculated on the basis of property that the utility actually uses in providing ser-

51. For a brief history, see Hanson & Davies, *supra* note 22, at 531-36 (Changes since the pre-1945 utility confiscation cases "make [the] broad standards insufficiently focused to address the complexit[ies] of the 1980's.").

52. Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944); Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679 (1923).

53. *Bluefield*, 262 U.S. at 690.

54. Parker, *The Regulation of Public Utilities*, 10 NAT. RESOURCES J. 828, 829 (1970). The inference is that "regulatory commissions may establish rates in any way that will produce reasonable end results." *Id.* (emphasis in original). Pontz & Sheller, *The Consumer Interest—Is It Being Protected by the Public Utility Commission?*, 45 TEMP. L.Q. 315, 316-28 (1972) (criticizes the fair value rule, Pennsylvania's retention of the rule, and notes other states' acceptance of the freedom to set rates using methods of their choosing). The fair value rule originated with *Smyth v. Ames*, 169 U.S. 466 (1898), and applied in various confiscation cases predating *Hope*. "The net effect of [*Hope*] was to significantly diminish the role that the judicial branch would play in future litigation." Stiner & Cegara, *Utility Asset Valuation*, 23 S.D.L. REV. 326, 335 (1978). See also 1 A. KAHN, *supra* note 23, at 36-41 (history of rate regulation culminating with *Hope*); 1 A. PRIEST, *supra* note 1, at 489-93.

55. *Hope*, 320 U.S. at 602. *Accord Natural Gas Pipeline*, 315 U.S. at 575, 586; *West Ohio Gas Co. v. Public Util. Comm'n*, 294 U.S. 63, 70 (1935).

56. *Hope*, 320 U.S. at 602. See also *Permian Basin*, 390 U.S. at 770.

57. Christy & Christy, *supra* note 41, at 24; *accord Hope*, 320 U.S. at 603; *Bluefield*, 262 U.S. at 692-93.

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties. . . . The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under

vice to customers;⁵⁸ in most states, utility assets must be "used and useful" to qualify for rate base treatment.⁵⁹

A utility seeking review of a rate of return that it alleges is confiscatory will carry a heavy burden of proof.⁶⁰ Courts will reverse a rate order only if a utility clearly proves that the order's total effect results in a taking.⁶¹ PUCs may exclude from the rate formula imprudent expenditures—that is, those that are wasteful or made in bad faith.⁶²

efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. *Bluefield*, 262 U.S. at 692-93. "[T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital." *Hope*, 320 U.S. at 603.

58. See *Bluefield*, 262 U.S. at 690; *Willcox v. Consolidated Gas Co.*, 212 U.S. 19, 41 (1909); *Smyth*, 169 U.S. at 546. The Constitution, however, merely requires that the "end result" fairly compensate the utility. See *supra* notes 55 and 56.

59. See *Avery, The Costs of Nuclear Accidents and Abandonments in Rate Making*, PUB. UTIL. FORT., Nov. 8, 1979, at 17, 18. Avery notes two modern exceptions to the "used and useful" requirement: inclusion of CWIP costs in the rate base before a plant goes on line; and power outages in generating plants. *Id.* In general, nuclear and coal plants are unavailable 15% of the time due to unscheduled outages, 10% for scheduled outages, and available for service 75% of the time. HOUSE SUBCOMM. ON ENERGY CONSERVATION AND POWER OF THE COMM. ON ENERGY AND COMMERCE, 98TH CONG., 1ST SESS., A PERSPECTIVE ON ELECTRIC UTILITY CAPACITY PLANNING 247 (Comm. Print 1983) [hereinafter cited as PERSPECTIVE].

60. *Permian Basin*, 390 U.S. at 767; *Hope*, 320 U.S. at 602. A commission's order is presumed valid unless the utility fulfills the "heavy burden" of showing that it is invalid because it is unjust and unreasonable in its consequences. *Hope*, 320 U.S. at 602. One commentator noted that "[i]f, for example, the revenues which a company has been given an opportunity to earn will demonstrably not be enough to maintain its credit and to attract capital, the regulatory agency's order should be struck down as confiscatory, but the going will be ruggedly uphill." 2 A. PRIEST, *supra* note 1, at 493-94.

61. *Hope*, 320 U.S. at 602; *St. Joseph Stock Yards*, 298 U.S. at 53. Adequate evidence must exist in the record to support a confiscation claim. *Beaumont S.L. & W. Ry. v. United States*, 282 U.S. 74, 89 (1930). See also *Hope*, 320 U.S. at 602 ("If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry . . . is at an end."); *St. Joseph Stock Yards*, 298 U.S. at 53 (utility must make "a convincing showing" and a "court will not interfere with the exercise of the ratemaking power unless confiscation is clearly established").

62. *Acker v. United States*, 298 U.S. 426, 430-31 (1936); *West Ohio Gas*, 294 U.S. at 72. One author suggests that prudence "refers to good judgment relating to the need of the procured service, material or equipment, the competitiveness of the price and general vigilance exercised in the procurement process, and the overall care and wisdom exercised in controlling capital investments and adding to the rate base." Gartman, *How "Prudent" Is the Investment?*, PUB. UTIL. FORT., Nov. 19, 1981, at 15, 16. See also *Pierce*, *supra* note 3, at 511-12 (prudence in the context of determining whether to construct a new generating plant).

While PUCs generally include all prudent utility expenditures in the rate formula, the Constitution does not mandate this; it simply requires that the "end result" be just.⁶³

II. FINANCIAL PROBLEMS FACING THE ELECTRIC POWER INDUSTRY

The ratemaking policy process is affected by actual power needs, utility decision-making, and changing capital markets. Analysis of the constitutional problems associated with nuclear plant cancellations requires consideration of the recent changes affecting electric utilities and the nuclear power industry.

A. *Electric Utilities*

Privately-owned utilities supply about eighty percent of this country's electric power needs.⁶⁴ Utility projects account for one-fifth of the nation's total construction expenditures.⁶⁵ The electric utility industry, the largest consumer of primary energy,⁶⁶ is also the most capital intensive.⁶⁷ Consequently, market and technology changes during

63. See *supra* note 55 and accompanying text.

64. ENERGY POLICY (1979), *supra* note 27, at 98. Investor-owned electric utilities account for 77% of the nation's total generating capacity; the federal government (11.5%), nonfederal public bodies (10.5%), and rural electric cooperatives provide the remaining generating capacity (1%-2%). Huntington, *supra* note 24, at 692 n.17. See generally EVALUATION OF POWER, *supra* note 2 (details modern power systems and the electric utility industry structure).

65. *Utility Financing: Hearings Before the Subcomm. on Energy Conservation and Power of the House Comm. on Energy and Commerce, 97th Cong., 1st Sess. 90 (1981)* (testimony of Peter Navarro) [hereinafter cited as *Utility Financing*]. In addition, the utility industry accounts for one-third of all long-term private financing in the United States, and for one-half of all new common stock issued. *Id.*

66. CONGRESSIONAL RESEARCH SERVICE, U.S. ENERGY OUTLOOK: A DEMAND PERSPECTIVE FOR THE EIGHTIES 258 (1981) [hereinafter cited as U.S. ENERGY OUTLOOK]. Because electric utilities convert, rather than produce energy, they are both consumers and suppliers. *Id.* at 243.

67. S. NOVICK, THE ELECTRIC WAR: THE FIGHT OVER NUCLEAR POWER 123 (1976). "An industry is capital intensive if the amount of investment needed to produce a unit of revenue is greater than average." Webb, *supra* note 33, at 830.

As of 1980, investor-owned electric utilities had invested an average of \$2.63 in utility plant to support each \$1 of annual revenue from kilowatt-hour sales. In contrast, in 1980 General Motors Corporation had a fixed asset investment of 16 cents per dollar of sales revenue and Exxon had an investment in plant, property, and equipment of 31 cents per dollar of sales revenue.
CWIP IN ELECTRIC BASE, *supra* note 26, at 24-25.

the last two decades have especially affected electric utilities.

Until the mid-1960s, unit costs for electricity were declining, plant construction was modest and easily financed, lead times for construction were short, and rate challenges were infrequent.⁶⁸ Then the conditions in the electric power industry changed drastically.⁶⁹ The per kilowatt cost of plant construction skyrocketed and inflation outpaced the economies of scale.⁷⁰ Lead times for plant construction stretched, in many cases, to ten years.⁷¹ Power demands increased rapidly.⁷² Environmental controls forced tremendous new costs and delays.⁷³ The capital markets tightened and utility bond ratings fell⁷⁴ at a time when utilities needed more outside capital to finance construction projects.⁷⁵ Finally, during the 1970s, reduced power needs collided with escalating costs, causing electric utilities to cancel many construction projects.⁷⁶

68. Hansen & Davies, *supra* note 22, at 506; Hobelman, Knapp & Walsh, *Regulatory Review of Electric Utility Plant Construction Programs in Rate-making Context* 67, 75 in PRACTISING LAW INSTITUTE, *ELECTRIC POWER: CURRENT ISSUES IN REGULATION AND FINANCING* (D. Allen, Chr. 1982) [hereinafter cited as *ELECTRIC POWER*].

69. For an account of the response of one utility to the rapid changes, see Sillin, *Managing in Adversity: Utilities in an Inflationary Economy*, PUB. UTIL. FORT., Apr. 1, 1982, at 13.

70. ENERGY POLICY (1979), *supra* note 27, at 98-99; Hanson & Davies, *supra* note 22, at 506. In 1969, rising utility costs began to outstrip further technological gains, and the average cost of electricity to the consumer turned upward. Since 1969, and particularly during 1974, utility cost increases accelerated. Huntington, *supra* note 24, at 692.

71. S. NOVICK, *supra* note 67, at 123; Hanson & Davies, *supra* note 22, at 506.

72. Hanson & Davies, *supra* note 22, at 506.

73. In 1974, for example, environmental requirements consumed 9% of total capital expenditures. Huntington, *supra* note 24, at 694. In one particular case, this amount exceeded 50% of plant costs. Hanson & Davies, *supra* note 22, at 506 n.12.

74. See *Utility Financing*, *supra* note 65, at 83 (testimony of Peter Navarro); Foster, *Fair Return and Estimation*, 28 BAYLOR L. REV. 883, 904 (1976); Hanson & Davies, *supra* note 22, at 506.

75. *Utility Financing*, *supra* note 65, at 15-19 (testimony of Matthew Holden).

76. CWIP in ELECTRIC BASE, *supra* note 26, at 7. For these reasons, "99 new electric plants either planned or under construction were canceled." *Id.* See also Pierce, *supra* note 3, at 502-06 (events of the 1970s and 1980s affecting electric utilities).

For analyses of future power demand forecasting and estimates for the 1980s and 1990s see PERSPECTIVE, *supra* note 59; U.S. ENERGY OUTLOOK, *supra* note 66; DIVISION OF POWER SUPPLY AND RELIABILITY, ECON. REGULATORY ADMIN. U.S. DEP'T OF ENERGY, PROPOSED CHANGES TO GENERATING CAPACITY 1980-1989 FOR THE CONTIGUOUS UNITED STATES (1980); STAFF OF SENATE COMM. ON ENERGY AND NATURAL RESOURCES, 95TH CONG., 2D SESS., *ELECTRIC POWER: AN UNCERTAIN FUTURE* (Comm. Print 1978, N. Franssen) [hereinafter cited as *ELECTRIC POWER: AN UNCERTAIN FUTURE*].

Ambitious construction programs, long lead times, rising costs, and inflation have presented many utilities with a capital crisis.⁷⁷ Utilities, forced to rely increasingly on outside capital sources,⁷⁸ must carefully position the capital structure fulcrum between debt and equity.⁷⁹ Heavy borrowing burdens utility customers with high interest rates⁸⁰ and causes investor concern over high debt ratios.⁸¹ On the other hand, utilities with high debt to equity ratios pay a high price for investors' perceptions of investment risk,⁸² because investors seek a return

77. See *supra* notes 70, 71, 73-76 and accompanying text. Some analysts also blame regulation for exacerbating the industry's capital woes. See *Utility Financing, supra* note 65, at 55 (testimony of John Bryson). If utilities could freely change their prices as needed, investors might perceive fewer risks in utility investment. Foster, *supra* note 74, at 929. One study demonstrated that utilities operating in less restrictive states have lower capital costs than those in more restrictive states. Archer, *The Regulatory Effects on Cost of Capital in Electric Utilities*, PUB. UTIL. FORT., Feb. 26, 1981, at 36.

78. Lerner & Breen, *The Changing Significance of AFUDC for Public Utilities*, PUB. UTIL. FORT., Jan. 1, 1981, at 17. Rather than looking to the cash flow generated through retained earnings as a source of funds, companies have borrowed additional sums or drawn down their working capital to generate the funds required to pay their dividends. *Id.* at 22.

79. See Mello, *supra* note 26, at 416. Too much debt makes a utility a riskier investment, which results in high costs of capital. *Id.* Too much equity inflates the cost of capital because of the higher cost of equity. *Id.*

Equity is composed of preferred stock, which is easily calculable because it carries a fixed yield, 1 A. PRIEST, *supra* note 1, at 208-09, and common stock, or "risk capital," *id.* at 209, which benefits from "all profits after fixed charges" but also has all "losses come out of its hide." *Id.*

80. *Utility Financing, supra* note 65, at 19 (testimony of Matthew Holden).

81. Foster, *supra* note 74, at 899. Because creditors have a prior claim on earnings and assets, the financial risk borne by the equity owner increases as the equity declines. *Id.* The result is an even higher cost for equity, *id.*, because the proportion of gross income absorbed by debt requirement increases as the margin of protection afforded bondholders decreases. *Id.* at 898.

82. Mello, *supra* note 26, at 416. "Most investors believe that equity investments contain greater risks than debt instruments." Dukes & Chandy, *Rate of Return and Risk for Public Utilities*, PUB. UTIL. FORT., Sept. 1, 1983, at 40. Inflation and a decreasing "drawdown ratio" (the proportion of gross income available for common equity) are major causes of the high cost of common equity. See Foster, *supra* note 74, at 904. Similarly, coverage ratios are falling:

The interest coverage ratio—i.e., the ratio of operating income to interest—has fallen sharply, weakening the credit rating of the utility. The dividend coverage ratio—i.e., the ratio of net income to dividends—has fallen to a point where dividends are now greater than cash profits for over half of the companies in the industry.

Lerner & Breen, *supra* note 78, at 23. These coverage ratio declines have been caused by: "1) [T]he level and trend of earnings on total capital; 2) the rising ratio of long-term debt to total capital; 3) the higher cost rate at which additional long-term capital has

on their investment commensurate with the higher risk they assume in the investment.⁸³ Although analysts disagree on a prognosis for the electric industry's capital ills,⁸⁴ it appears that investors consider some

been obtained; and 4) the rate of growth in new capital requirements." Foster, *supra* note 74, at 888. A lower coverage ratio means less protection for creditors and lower bond ratings. *Id.* Furthermore, utilities that sell more common stock to raise capital dilute the earnings of current stockholders, Platt, *The Electric Utility Outlook to the Year 2000*, PUB. UTIL. FORT., Jan. 15, 1981, at 19, as well as the market value of their shares, Foster, *supra* note 74, at 886.

83. See Foster, *supra* note 74, at 887.

The less the risk, the less the right to any unusual returns upon the investments. One who invests his money in a business of somewhat hazardous character is very properly held to have the right to a larger return . . . than can be obtained from an investment in Government bonds or other perfectly safe security.

Willcox, 212 U.S. at 48-49. *Accord Missouri ex rel. Southwestern Bell Tel. v. Public Serv. Comm'n*, 262 U.S. 276, 307 (Brandeis, J., concurring). A recent study of utility firms and PUCs demonstrates that the required return for utilities has increased in the last ten years. Dukes & Chandy, *supra* note 82, at 41. Half of the utilities studied indicated that the return on equity adjusted for inflation declined in the last decade. *Id.*

Two main categories of risk are associated with investment: business risk, which is related to the fluctuations of a firm's operations, and financial risk, which relates to the proportion of debt in the capital structure of the firm. Chandrasekaran & Dukes, *Risk Variables Affecting Rate of Return of Public Utilities*, PUB. UTIL. FORT., Feb. 26, 1981, at 33. Other risks include the investment market risk, inflation risk, money rate risk (interest rates), and regulatory risk (lag, mistake, oppression). Christy & Christy, *Who Says Utilities are Less Risky?*, PUB. UTIL. FORT., May 8, 1980, at 12-13.

Business risk includes all the economic, political, technological, and physical hazards involved in an investment. Foster, *supra* note 74, at 897. Competition is a major source of business risk. *Id.* at 902. Being a natural monopoly does not make a utility risk-free, however, because other unique business risks confront utilities. *Id.* at 898. The need to obtain large amounts of new capital, often without regard to the market conditions for their securities and regulatory limits on their ability to readily adjust prices to offset rising costs are risks unique to utilities. *Id.*

Financial risk, the other major risk factor, is associated with capital structure leverage. *Id.* The risk of business is unequally distributed, depending on what types of securities it issues to the different investor classes, and investors are aware of their position in the risk-ranking caused by the capital structure. *Id.*

84. One commentator, for example, demonstrates that actual earnings on utility equity were several points too low when considered in light of earnings on comparable industrials. See Lerner, *Competition for the Funds of Investors and the Cost of Capital for Utilities*, PUB. UTIL. FORT., Feb. 28, 1980, at 18. He notes that the median return on a Standard & Poor's industrial in 1978 was 14.9%, while it was 13.2% for utilities. *Id.* at 16.

Others contend that utilities are doing well, given that American industry is not in the best shape at the present time. See *CWIP in FERC Electric Rate Base: Hearing on H.R. 5755 Before the Subcomm. on Energy Conservation and Power of the House Comm. on Energy and Commerce*, 97th Cong., 2d Sess. 13 (1982) [hereinafter cited as *CWIP in FERC*] ("Investment in utilities has recently increased, and the performance of some utilities is very good."). *Id.* at 14-15; Richards & Fraser, *The Persistence of Public*

utilities risky investments.⁸⁵

An increasingly prominent factor in the electric industry's capital saga is allowance for funds used during construction (AFUDC). AFUDC is an accounting method by which the financing costs of construction work in progress on a new generating plant accumulate in an AFUDC account and later are charged to the consumers who use the electricity generated by the plant.⁸⁶ Both debt and equity funds used to finance construction are capitalized.⁸⁷ Although the utility actually receives no cash during the AFUDC accumulation period, the utility records the amount as income.⁸⁸ In recent years, AFUDC has greatly

Utility Profitability, PUB. UTIL. FORT., Feb. 14, 1980, at 36 (discusses data showing that certain utilities have had consistently high profits).

Many utilities still are excellent investment choices. See Leckey, *Good Buys in Electric Utilities*, St. Louis Post-Dispatch, Mar. 2, 1984, at 14A, col. 1. Others, namely those "facing a dire nuclear situation," are not. *Id.* "Income speculators" may find high dividends if they invest carefully in "the thrills and chills of the nuclear age." Quinn, *Utility Stocks in the Spotlight*, NEWSWEEK, June 18, 1984, at 80.

Claiming that electric utilities are not "unambiguously riskier than industrials," one analyst cautions that risk assessment should be done on a case-by-case basis." Beedles, *Are Utilities Less Risky? A Reexamination*, PUB. UTIL. FORT., Aug. 4, 1983, at 28.

85. See Christy & Christy, *supra* note 83, at 12, 18. Investors and bond-rating agencies have reacted adversely to changes in the electric industry. Lerner & Breen, *supra* note 78, at 23-24. A survey of investment bankers revealed the factors relied on in assessing risk and showed a consensus that utilities are risk investments. Chandrasekaran & Dukes, *supra* note 83. Consolidated Edison's one-time failure to pay quarterly dividends "shattered" investor confidence; and, despite a remarkable recovery, as of 1981 its stock still sold below book value. Robinson, *Utility Fiascoes—Who Should Pay?*, PUB. UTIL. FORT., Dec. 17, 1981, at 20. For a summary of the financial, management, operating, and regulatory highlights of investor-owned utilities for the past three years, see generally P.U.R. ANALYSIS OF INVESTOR-OWNED ELECTRIC AND GAS UTILITIES (S. Johnson, ed. 1983).

86. Trout, *A Rationale for Preferring Construction Work in Progress in the Rate Base*, PUB. UTIL. FORT., May 10, 1979, at 22.

Under this method of accounting, the firm recovers the investment during the construction period by capitalizing the interest costs of both debt funds used and an imputed interest cost for the equity funds used. The firm receives cash income on this investment once the project is placed in service through a return on rate base and depreciation on the accumulated AFUDC funds.

Id. at 22-23. It is the accumulation and subsequent recovery of AFUDC that results in construction financing costs being allocated over time through rates to the customers that actually receive the benefit of the construction. *Re Fitchburg Gas & Elec. Light Co.*, 52 P.U.R. 4th 197, 222 (Mass. D.P.U. 1983).

87. Lerner & Breen, *supra* note 78, at 17. These authors suggest that while capitalizing the interest costs is a recognized practice, "[c]apitalizing the implicit equity costs is a more questionable practice because no specific cash outlays are involved in the process." *Id.*

88. *Utility Financing*, *supra* note 65, at 26 (testimony of Matthew Holden). The

increased as a percentage of utility operating income,⁸⁹ causing investors to view many affected utilities as investment risks.⁹⁰ This exacerbates the utilities' problems in securing outside capital.

In an attempt to circumvent the capital attraction problems associated with AFUDC, many states now permit an exception to the "used and useful"⁹¹ rule: construction work in progress (CWIP).⁹² Under CWIP, the utility recovers its return on the uncompleted plant during the period when it actually incurs the construction financing costs.⁹³ Current ratepayers, then, pay the financing costs for the plant before it

consequence is that "a growing proportion of the reported profits of utilities is not available to finance dividends, debt service charges, capital outlays, or any other expenditure." Lerner & Breen, *supra* note 78, at 21.

89. AFUDC accounted for 3.9% of utility income in 1965. By 1975, this amount had increased to 32%. *Utility Financing*, *supra* note 65, at 29 (testimony of Matthew Holden). This figure stood at 46% in 1981. *Id.* at 1. Some companies report that 100% of their profits came from AFUDC. Chandy & Davidson, *AFUDC and its Impact on the Profitability of Electric Utilities*, PUB. UTIL. FORT., Aug. 4, 1983, at 28.

90. See Chandy & Davidson, *supra* note 89, at 36. "The capital markets, with or without good reason, have come to regard 'real earnings' as more valuable than AFUDC." *Ex parte* Gulf States Util. Co., 40 P.U.R. 4th 593, 597 (La. P.S.C. 1980). Several other factors also account for investors' perceptions that high AFUDC firms are riskier. Trout, *supra* note 86, at 23. First, AFUDC may not be compounded; hence the overall return on AFUDC is lower. In addition, the allowed return on AFUDC is lower. Finally, there is a risk that the commissions will reduce later high rates when the plant goes on line. *Id.* at 26.

Bond ratings appear to correlate with the percentage of AFUDC. "Utilities with a 'double A' bond rating, for example, show AFUDC percentages of 33.5% as compares with a 50.2% AFUDC component for companies with a 'BBB' bond rating." Hobelman, Knapp & Walsh, *supra* note 68, at 95. See also Chandy & Davidson, *supra* note 89, at 35-36 (security analysts see AFUDC as significant risk factor; the industry relies too heavily on AFUDC); Lerner & Breen, *supra* note 78 (statistics, charts, and graphs showing the changes in AFUDC and subsequent effects on utilities and shareholders).

91. See *supra* note 32 and accompanying text.

92. Hobelman, Knapp & Walsh, *supra* note 68, at 70. As of late 1980, 28 states permitted utilities to pass along current construction costs to consumers. In some states, the legislature mandated the pass-through of construction costs. In most states, however, the public service commissions (PSCs) make a case-by-case determination, based upon a company's financial need. *Id.* See also Muhs & Schauer, *State Regulatory Practices with Construction Work in Progress: A Summary*, PUB. UTIL. FORT., Mar. 27, 1980, at 29 (gives a state-by-state summary of CWIP policies and practices between 1973 and 1977); Comment, *supra* note 21, at app. (source containing charts of each state's regulatory practices). For debate on including CWIP in the FERC rate base, see CWIP IN ELECTRIC BASE, *supra* note 26; CWIP in FERC, *supra* note 84.

93. Hobelman, Knapp & Walsh, *supra* note 68, at 69.

goes on line.⁹⁴ CWIP recovery is premised on the theory that CWIP will reduce future costs for facilities,⁹⁵ thereby producing an overall savings to ratepayers.⁹⁶

CWIP opponents, however, argue that this savings has not yet been proven.⁹⁷ Ratepayers, they argue, should pay only for costs associated with facilities that actually provide service to them.⁹⁸ The financial markets, according to CWIP opponents, send relevant signals to utilities.⁹⁹ These messages, they contend, should not be ignored by placing an involuntary investment risk on ratepayers that have no voice in the utility's management.¹⁰⁰ Improving market conditions¹⁰¹ and alterna-

94. *Id.*

95. *Utility Financing, supra* note 65, at 29 (testimony of Matthew Holden).

[CWIP] in rate base has a two-fold benefit for the utility and its customers. The total cost of projects is reduced because as the investment is included in the rate base, interest charges against the portion so included cease. The reduced total cost of the projects requires a smaller stream of . . . costs that ultimately redounds to the benefit of consumers.

Comtois, *Construction Work in Progress in the Rate Base: A Benefit to the Consumer*, PUB. UTIL. FORT., May 8, 1980, at 19-20.

96. See Johnson, *Construction Work in Progress: Planning for the Rate Case*, PUB. UTIL. FORT., Aug. 2, 1979, at 18; Trout, *supra* note 86, at 25. One commentator argues that because CWIP avoids certain costs associated with AFUDC, consumers almost always will benefit under CWIP even if the current and expected future costs of capital for consumers substantially exceed these costs for the utility. Johnson, *supra*, at 19. These costs include property taxes, increasing tax rates, tax carry-forwards, and increasing capital costs. *Id.* at 17-18.

97. See *CWIP in FERC, supra* note 84, at 78. For a presentation of the arguments against CWIP, see Hobelman, Knapp & Walsh, *supra* note 68, at 106-42.

98. Hobelman, Knapp & Walsh, *supra* note 68, at 120-29. Ratepayers argue that abandoning the "used and useful" rule results in intergenerational inequities because present and future customers are not necessarily the same group. *Id.* In addition, consumers are forced to pay for projects that the utility never finishes. *Id.* at 129-34. Utilities are tempted to "build and buy everything in sight," resulting in wasteful management decisions. *CWIP in FERC, supra* note 84, at 18. Furthermore, a CWIP policy is unlike the marketplace, where a business could not include the costs of financing new construction in current prices because the firm would price itself out of the market. *Id.* at 86.

99. See *CWIP in FERC, supra* note 84, at 12.

100. *Id.* at 91-92. "The ratepayer contribution is involuntary. It earns no return. . . . And he receives none of the other incidents of investment in a private corporation—he cannot sell or trade his interest, he has no say in management, he has no claim on company assets." *Id.* at 92. With CWIP, the consumer bears the risk; with AFUDC, the utility bears the risk. *Utility Financing, supra* note 65, at 169 (testimony of Peter Navarro). Stockholders' say in management is probably more figurative than real. J. BONBRIGHT, *supra* note 26, at 263-64.

101. Hobelman, Knapp & Walsh, *supra* note 68, at 111-15.

tives to large plant construction programs, opponents claim, should eliminate any need for CWIP.¹⁰²

During a period of plant cancellations, CWIP indeed appears disadvantageous to consumers.¹⁰³ CWIP proponents argue, however, that consumers are ultimately harmed when investors bear the loss for cancelled projects.¹⁰⁴ Furthermore, in the current capital climate, it appears fairly certain that consumers will benefit from CWIP.¹⁰⁵ CWIP provides increased internal cash flow,¹⁰⁶ prevents dilution of equity earnings,¹⁰⁷ and improves utility bond ratings.¹⁰⁸ CWIP proponents also dismiss the burden-benefit mismatch argument as wrong or at least unimportant.¹⁰⁹ On balance, including CWIP in the rate base during an acute capital crisis probably will put utilities in a better position to provide economical, quality service to consumers.¹¹⁰

102. See *CWIP in FERC*, *supra* note 84, at 916. "[A] utility granted a return on CWIP has no motivation [sic] to share the risk of new construction with other utilities through joint ventures or to pursue alternative strategies such as energy conservation, load management, cogeneration or pooling arrangements." *Id.* See also *infra* notes 118-19 (utilities exploring alternatives to large plant construction are financially healthy).

103. *CWIP IN ELECTRIC BASE*, *supra* note 26, at 9.

104. See *infra* notes 195-97 and accompanying text. See generally Hobelman, Knapp & Walsh, *supra* note 68, at 74-106 (pro-CWIP arguments).

105. See *CWIP IN ELECTRIC BASE*, *supra* note 26, at 21. In addition, CWIP will help avoid the "capital attrition" problem that faces utilities when plants go on line. Jones, *supra* note 20, at 879. When the plant comes on line, the AFUDC added to the rate base appears to increase greatly the rate base, which causes a reduction in the rate of return. *Id.* The result is a return thought to compensate the utility inadequately for the construction costs. *Id.*

106. Hobelman, Knapp & Walsh, *supra* note 68, at 75-83. CWIP also minimizes overall capital costs. *Id.* at 94-99.

107. *Id.* at 85-88, 90-91.

108. *Id.* at 88-89.

109. See Allison, *Judging the Prudence of Constructing Nuclear Power Plants: A Report to the Oklahoma Corporation Commission*, 15 TULSA L.J. 262, 271 (1979).

The significant issue is not whether CWIP is fair to those few customers who relocate outside a given utility service area, but whether it is fair to the vast majority who stay and to the utility, which must continue to operate and plan its system to serve all its customers.

Hobelman, Knapp & Walsh, *supra* note 68, at 105-06. This burden-benefit argument against CWIP is absurd if one considers that no roads, municipal buildings, etc. would be built if only those that would actually use them pay for them.

110. Johnson, *supra* note 96, at 17. Of course, this position requires close regulatory supervision to ensure that waste does not occur. It also requires a determination whether a particular utility actually needs CWIP to ensure its financial integrity.

B. Nuclear Power

In the early 1970s, electric utilities were optimistic about the promises of nuclear energy. They anticipated that investments in nuclear plants would reduce generating costs, provide large quantities of energy, eliminate atmospheric pollution, reduce needs for fuel transfer and storage, and reduce dependence on limited fossil fuels through increased reliance on abundant, inexpensive nuclear fuels.¹¹¹ Proponents of nuclear power expected nuclear plants to produce over fifty percent of the nation's power by the next century.¹¹² Visions of economic and technical gains, however, have faded rapidly.¹¹³ The conditions crippling many utilities have especially handicapped nuclear projects.¹¹⁴ Between 1972 and 1979, nuclear plant cancellations averaged eight per year.¹¹⁵ Since the Three Mile Island accident,¹¹⁶ cancellations have averaged over eleven per year.¹¹⁷ Shortages of electricity may be among the consequences of plant cancellations.¹¹⁸

111. Larson, *supra* note 4, at 276-77.

112. *Id.* at 277-78.

113. Huntington, *supra* note 24, at 694-95. Long delays in the planning, licensing, and construction process are common. *Id.* at 695. New technical and safety requirements add significantly to the estimated costs of nuclear plants, and operating problems have reduced the number of completed plants. *Id.*

114. See *supra* notes 69-76 and accompanying text. In addition to reduced power needs and high capital costs, licensing delays, interest group opposition, and state opposition to plant siting and waste management has slowed and stopped construction of nuclear projects. ELECTRIC POWER: AN UNCERTAIN FUTURE, *supra* note 76, at 35. High interest rates and high construction costs especially affect lengthy nuclear projects. Larson, *supra* note 4, at 282-83. See generally H.R. REP. NO. 1090, 95th Cong., 2d Sess. (1978) (elements of nuclear costs; costs of alternate power sources).

115. See Kester, *supra* note 7, at B1, col. 5-6.

116. See ENERGY POLICY, *supra* note 5, at 84-88. See also Brooks & D'Souza, *Electric Utility Returns and Risk in the Light of Three Mile Island*, PUB. UTIL. FORT., Nov. 11, 1982, at 26 ("investors associate a decline in future profitability or increased risk with nuclear-associated utilities"); *Financial Fallout from Three Mile Island: Hearings on H.R. 2512 Before the Subcomm. on Energy Conservation and Power of the House Comm. on Energy and Commerce*, 97th Cong., 1st Sess. (1981) (debate over supplemental insurance for remedial action); *Financing the Cleanup of the Three Mile Island Nuclear Powerplant: Joint Hearing on S. 1606 Before the Senate Comm. on Energy and Natural Resources and the Subcomm. on Nuclear Regulation of the Senate Comm. on Envir. and Public Works*, 97th Cong., 1st Sess. (1981) (bill to require plant licensees to contribute to cleanup).

117. See Kester, *supra* note 7, at B1, col. 5-6.

118. See DIVISION OF POWER SUPPLY AND RELIABILITY, ECON. REGULATORY ADMIN. U.S. DEP'T OF ENERGY, ELECTRIC POWER SUPPLY AND DEMAND FOR THE CONTIGUOUS UNITED STATES 1980-1989, § I.1-3 (1980). Nuclear plant delays and

Plant cancellations also have damaged many utilities' positions in capital markets.¹¹⁹ While PUCs find that nearly every cancellation decision is prudent¹²⁰ and nearly always permit recovery of the investment through rate increases,¹²¹ analysts consider utilities heavily involved in failed nuclear projects investment risks.¹²² Electric utilities that shunned the appeal of nuclear power and pursued conservation and alternative supply arrangements may be among the most stable utilities today.¹²³ In sum, the capital crisis of the last two decades has especially affected utilities struggling with the losses from nuclear plant cancellations. It is against these industry conditions that PUC rate orders should be viewed when considering utility claims of confiscation.

III. NUCLEAR POWER PLANT CANCELLATION COST RECOVERY

Most states allow utilities to recover the loss on investments in cancelled plants by amortizing the loss over a period of years, without including the unamortized balance in the rate base.¹²⁴ Other states permit both a return of, and a return on, the investment by including the unamortized portion of cancellation expenses in the rate base.¹²⁵

cancellations will result in the consumption of large quantities of fossil fuel. *Id.* at 3. See generally *id.* at § VII.9 (detailed regional analysis of the delays in issuing licenses).

119. Brooks & D'Souza, *supra* note 116, at 26.

120. See *infra* notes 128-34 (examples of cancellation cases holding that the nuclear decision was prudent). It is assumed, for discussion, that these findings of prudence are accurate. It is clear, however, that at least some of the risks were apparent long before many utilities became cautious. See, e.g., Bloch, *Nuclear Power Plant Proliferation*, 2 ENVTL. L. 376, 376-81 (1972); R. NADER & J. ABBOTTS, *THE MENACE OF ATOMIC ENERGY* 212, 216-263 (1977). See generally Allison, *supra* note 109 (detailed discussion on whether nuclear plants are prudent investments).

121. See *infra* notes 128-34 and accompanying text.

122. See, e.g., Leckey, *Good Buys in Electric Utilities*, St. Louis Post-Dispatch, Mar. 2, 1984, at 14A, col. 1. But see Brooks & D'Souza, *supra* note 116, at 31.

123. See *Utility Financing*, *supra* note 65, at 57 (testimony of John Bryson). See generally *id.* (discusses whether future power needs can be met by conservation, cogeneration, load management techniques, and diversification of utilities); Huntington, *supra* note 24, at 695 (alternatives to extensive utility investment); Thompson, *The Strategic Dilemma of Electric Utilities—Part II*, PUB. UTIL. FORT., Apr. 1, 1982, at 21 (advocates slow growth strategy and greater utilization of existing capacity); Woychik, *supra* note 25, at 442-43 (states must reduce need and incentive for nuclear power); PERSPECTIVE, *supra* note 59 (surveys "least cost" methods to reduce capacity requirements).

124. See *infra* notes 128-29 and accompanying text.

125. See *infra* notes 132-34 and accompanying text.

The few cases denying cost recovery have cited either imprudence¹²⁶ or statutory prohibitions against cost recovery¹²⁷ to support the denial of cost recovery.

A. Cost Recovery Permitted

Most state PUCs, as well as FERC, permit electric utilities to recover the amounts invested in a cancelled project but prohibit any return on the investment.¹²⁸ This is accomplished by amortizing the loss

126. See *infra* notes 135-37 and accompanying text.

127. See *infra* notes 138-59 and accompanying text.

128. See *In re* Arizona Pub. Serv. Co., No. U-1345 (Ariz. Corp. Comm'n 1976) (five year amortization of Kaiparowitz costs); *Re* Atlantic City Elec. Co., 51 P.U.R. 4th 109 (N.J. Bd. P.U. 1983) (amortization of Hope Creek II costs); *Re* Bungler Hydro-Elec. Co., 46 P.U.R. 4th 503 (Me. P.U.C. 1982) (amortization amount excluded AFUDC); *Re* Central Me. Power Co., No. 80-25 (Me. P.U.C. 1980) (five year amortization for Sears Island plant; AFUDC excluded from costs), *aff'd*, *Central Me. Power Co. v. Public Util. Comm'n*, 433 A.2d 331 (Me. 1981); *Re* Central Me. Power Co., Nos. 81-127 and 81-206 (Me. P.U.C. 1982) (permitted amortization of Montague plant costs); *Re* Central Vt. Pub. Serv. Corp., Nos. 4496 and 4504 (Vt. P.S. Bd. 1981) (five year amortization of Montague costs); *Re* Central Vt. Pub. Serv. Corp., 49 P.U.R. 4th 372 (Vt. P.S. Bd. 1982) (10 year amortization of Pilgrim II costs); *Re* Commonwealth Elec. Co., 47 P.U.R. 4th 229 (Mass. D.P.U. 1982) (three year amortization, excluding equity AFUDC, on Montague I and II; two year amortization on prudent Pilgrim II expenses—those incurred prior to July 1980); *Re* Connecticut Light & Power Co., Nos. 810602 and 810604 (Conn. D.P.U. 1981) (amortization excluding imprudent expenses); *Re* Consumers Power Co., 14 P.U.R. 4th 370, *adopting* Order F-700 (Mich. P.S.C. 1975) (10 year amortization of Quanicassee plant); *Re* Detroit Edison Co., 52 P.U.R. 4th 318 (Mich. P.S.C. 1983) (10 year amortization of Greenwood II and III; rate base decision deferred); *Re* Duke Power, 49 P.U.R. 4th 483 (N.C. Util. Comm'n 1982) (five year amortization of Perkins costs); *Re* Duke Power Co., No. 82-50E (S.C. P.S.C. 1983) (10 year amortization of Perkins and Cherokee II and III plants); *Re* Pennsylvania Pub. Util. Comm'n v. Duquesne Light Co., 52 P.U.R. 4th 644, *aff'g*, 51 P.U.R. 4th 198 (Pa. P.U.C. 1983) (upheld amortization of Davis Besse III and IV, Erie I and II plants); *Re* Fitchburg Gas & Elec. Light Co., 52 P.U.R. 4th 197 (Mass. D.P.U. 1983) (permitted amortization of all Fitchburg costs; amortization only if prudent—up to July 1980—Pilgrim II costs; disallow equity portion of AFUDC); *Re* Gulf Power Co., 43 P.U.R. 4th 15 (Fla. P.S.C. 1981) (five year amortization of Caryville costs), *aff'd*, *Gulf Power Co. v. Cresse*, 410 So. 2d 492 (Fla. 1982); *Re* Houston Lighting & Power Co., 50 P.U.R. 4th 157 (Tex. P.U.C. 1982) (10 year amortization excluding imprudent costs—Jan. 1980 to Aug. 1982—of Creek I plant); *Re* Houston Lighting & Power Co., No. 2001 (Tex. P.U.C. 1978) (amortization of Creek II plant); *Re* Iowa-Illinois Gas & Elec. Co., Nos. RPU-80-19 and 80-29 (Iowa S.C.C. 1981) (recognizing stipulation to five year amortization for Quad Cities Station); *Re* Jersey Cent. Power & Light Co., 44 P.U.R. 4th 54 (N.J. Bd. P.U. 1981) (15 year amortization of Forked River costs); *Re* Northern Ind. Pub. Serv. Co., No. 36689 (Ind. P.S.C. 1982) (15 year amortization of Bailly costs; statute forbids rate base treatment); *Re* Northern States Power Co., 46 P.U.R. 4th 110 (FERC 1981) (five year amortization of Tyrone costs), *aff'd sub nom.* South Dakota

over a period of years¹²⁹ without placing the balance in the rate base, thereby allowing a return of, but not on, the investment.¹³⁰ In this

Pub. Util. Comm'n v. FERC, 690 F.2d 674 (8th Cir. 1982); *Re Northern States Power Co.*, No. 10, 233 (N.D. P.S.C. 1982) (10 year amortization permitted because FERC approval preempted North Dakota's original denial of Tyrone costs); *Re Northern States Power Co.*, No. F-3422 (S.D. P.U.C. 1983) (amortization of Tyrone costs); *Re Northern States Power Co.*, No. CA-5447 (Wis. P.S.C. 1981) (five year amortization of Tyrone costs); *Northern States Power Co. v. Hagen*, 314 N.W.2d 32 (N.D. 1981), *rev'g* No. 10,017 (N.D. P.S.C. 1980) (where FERC permitted amortization of Tyrone expenses, the PUC must do likewise); *Re Potomac Elec. Power Co.*, 29 P.U.R. 4th 517 (D.C. P.S.C. 1979) (10 year amortization of Douglas Point costs); *Re Public Serv. Elec. & Gas Co.*, No. 794-310 (N.J. Bd. P.U. 1980) (20 year amortization of Atlantic costs); *Re Public Serv. Elec. & Gas Co.*, No. 8012-914 (N.J. Bd. P.U. 1982) (15 year amortization of Hope Creek II costs); *Washington Util. & Transp. Comm'n v. Puget Sound Power & Light Co.*, No. U-82-38 (Wash. P.S.D. 1983) (10 year amortization of Pebble Springs WPPSS V costs); *Re San Diego Gas & Elec. Co.*, 31 P.U.R. 4th 435 (Ca. P.U.C. 1979) (five year amortization of Sundesert costs); *Re San Diego Gas & Elec. Co.*, No. 87639 (Cal. P.U.C. 1977) (five year amortization of Kaiparowits costs); *Re Southern Cal. Edison Co.*, No. 89711 (Cal. P.U.C. 1978) (five year amortization of Kaiparowits costs); *Re Union Elec. Co.*, No. ER-77-154 (Mo. P.S.C. 1978) (five year amortization of Rush Island III and IV costs); *In re Union Elec. Co.*, No. U-558 (Iowa C.C. 1975) (amortize Rush Island III and IV costs during life of oil plant); *Re Union Elec. Co.*, No. 82-0525 (Ill. C.C. 1983) (five year amortization of Callaway II costs); *Union Elec. Co. v. FERC*, 668 F.2d 389 (8th Cir. 1981) (permitted amortization of Callaway II costs); *Re Virginia Elec. & Power Co.*, 44 P.U.R. 4th 46 (Va. St. C.C. 1981) (amortization of North Anna IV costs); *Re Virginia Elec. Power Co.*, 29 P.U.R. 4th 65 (Va. St. C.C. 1979) (10 year amortization of Surry III and IV costs); *Re Wisconsin Elec. Power Co.*, No. 05-CE-3 (Wis. P.S.C. 1980) (three year amortization of Haven costs); *Wisconsin Elec. Power Co. v. Wisconsin P.S.C.*, No. 79-1929 (Wis. 1982) (reversed cost denied for Koshkonong plant). Joint Appendix, *Missouri ex rel. Union Elec. Co. v. Public Serv. Comm'n*, Case No. CV 183-1064cc (cites cases listed *supra*).

See also Bruder, *Recovery of Losses on Cancelled Projects: Basic Issues* 167, 185-87 in ELECTRIC POWER, *supra* note 68 (abandonment loss cases); Sommers, *Recovery of Electric Utility Losses from Abandoned Construction Projects*, 8 WM. MITCHELL L. REV. 363, 371 n.43 (1982) (abandonment loss cases); Wilson, *Ratemaking Treatment of Abandoned Generating Plant Losses*, 8 WM. MITCHELL L. REV. 343, 352-58 (1982) (summary of state cancellation proceedings); *id.* at 345-52 (summary of FERC cancellations); *id.* at 349-52 (Minnesota's resolution of Tyrone case discussed); Comment, *Allocation of the Risk of Constructing Electric Power Plants*, 1976 WASH. U.L.Q. 517 (criticizes decision to permit cost recovery in a Michigan decision).

129. Without rate base treatment, the length of the amortization period is significant; "the longer the amortization period, the fewer current dollars ratepayers have to pay." *Re Central Vt. Pub. Serv. Corp.*, 49 P.U.R. 4th 372, 392 (Vt. P.S. Bd. 1982).

130. Because an electric utility may not earn returns higher than those necessary "to attract capital and provide service at reasonable rates," it lacks financial resources to absorb the loss of the investment. *Re Public Serv. Co. of Okla.*, No. 27068, Order 206560, 57 (Okla. Corp. Comm'n 1982). A utility exchanges the obligation to serve franchised areas for monopoly status—not a guaranteed return on investments. *Washington Util. & Transp. Comm'n v. Puget Sound Power & Light Co.*, No. U-82-38, 20

manner, investors and ratepayers share the burden of cancellation costs. In many cases, a PUC may hold that utilities cannot recover certain cost components or require that losses be offset by any resulting savings.¹³¹

A minority of state PUCs permit both recovery of the funds invested in abandoned plants and a return on the investment.¹³² The unamortized balance is included in the rate base, like a plant in service, and each year the utility recovers a portion of that amount through operating expenses, like depreciation.¹³³ These PUCs generally permit recovery on the theory that prudently invested funds are "used and useful" and, therefore, appropriate for inclusion in the rate base.¹³⁴ This rationale assumes that if an investment is prudent, it is also used and useful. Commissions permitting recovery without rate base treatment

(Wash. P.S.D. 1983). "It is illogical to allow shareholders to earn a return based on the riskiness of their investment, and, at the same time, insulate them from risk by allowing them a return on all substantial recovered expense items." *Re Connecticut Light & Power Co.*, Nos. 810602 and 810604, 42 (Conn. D.P.U. 1981). This method of cost recovery is considered an equitable sharing of losses between ratepayers and investors. *Puget Sound Power*, No. U-82-38, at 20.

131. See, e.g., Bruder, *supra* note 128, at 177-81 (description of net-of-tax and gross-of-tax amortization).

132. *Re Boston Edison Co.*, 53 P.U.R. 4th 349 (Mass. D.P.U. 1983), *modifying* 46 P.U.R. 4th 431 (Mass. D.P.U. 1982) (recovery of Pilgrim II costs); *Re Carolina Power & Light Co.*, 49 P.U.R. 4th 188 (N.C. Util. Comm'n 1982) (only costs supported by long-term debt permitted in rate base; Harris III and IV plants); *Re Carolina Power & Light Co.*, No. 81-163E (S.C. P.S.C. 1982) (10 year amortization of South River costs); *Re Gulf Power Co.*, 43 P.U.R. 4th 15 (Fla. P.S.C. 1981) (five year amortization of Caryville costs); *Re Lake Superior Dist. Power Co.*, No. CA-5447 (Wis. P.S.C. 1981) (five year amortization of Tyrone costs); *Re Long Island Lighting Co.*, No. 27811 (A.L.J. 1981) (amortization of New Haven costs); *Re New York State Elec. & Gas Corp.*, Nos. 26432 and 26433 (N.Y. P.S.C. 1974) (amortization of Bell costs); *Re Northern States Power Co.*, F-3422 (S.D. P.U.C. 1983) (20 year amortization for Tyrone costs; rate base treatment for debt but not equity); *Re Potomac Elec. Power Co.*, 50 P.U.R. 4th 500 (D.C. P.S.C. 1982) (amortization of Dickerson costs); *Re Public Serv. Co. of Okla.*, No. 27068, Order 206560 (Okla. Corp. Comm'n 1982) (amortization of Black Fox costs; return on debt, but not on equity); *Re Rochester Gas and Elec. Corp.*, 45 P.U.R. 4th 386 (N.Y. P.S.C. 1982) (amortization of Sterling costs; Niagara Mohawk Power Corp., three years; Central Hudson Gas & Elec., five years; Orange & Rockland Utilities, Inc., 10 years; Rochester Gas & Elec. Corp., five years); *Re Virginia Elec. & Power Co.*, 48 P.U.R. 4th 327 (N.C. Util. Co. 1982) (10 year amortization of North Anna IV costs). See Joint Appendix, Missouri *ex rel. Union Elec. Co. v. Public Serv. Comm'n*, CV 183-1064cc.

133. *Re Gulf Power Co.*, 43 P.U.R. 4th 15, 17 (Fla. P.S.C. 1981).

134. *Re Carolina Power & Light Co.*, 49 P.U.R. 4th 188 (N.C. Util. Comm'n 1982); Sommers, *supra* note 128, at 374-77.

acknowledge the prudent investment, but refuse to label the investment "used and useful."

B. *Cost Recovery Denied*

A few state utility commissions have denied cancellation cost recovery, some by use of the imprudence rationale, others by perceived statutory mandate. In Arizona, the state commission prohibited cost recovery for Palo Verde IV and V because: 1) the Public Service Company (PSC) presented insufficient evidence to justify the expense; 2) the expense was unusual and nonrecurring; 3) ratepayers should not be responsible for mistakes in shareholder management decisions; and 4) the cancellation decision resulted largely from adverse regulatory conditions in California, which the utility should have anticipated.¹³⁵ Similarly, the Maine PUC prohibited Central Maine Power's recovery of Pilgrim II costs because of imprudence.¹³⁶ The Minnesota PUC reached a similar finding, thereby thwarting Northern States Power's effort to recover costs of the Tyrone plant.¹³⁷ While these decisions turn primarily on the issue of prudence, another line of cost denial cases turn on whether state law permits cost recovery.

While some efforts to defeat recovery by reliance on state statutes have been unsuccessful,¹³⁸ a few state PUCs have found sufficient stat-

135. *Re Arizona Pub. Serv. Co.*, 38 P.U.R. 4th 547, 555-56 (Ariz. Corp. Comm'n 1980).

136. *Re Central Me. Power Co.*, Nos. 81-127 and 81-206, 30 (Me. P.U.C. 1982).

137. *Re Northern States Power Co.*, 42 P.U.R. 4th 339, 362 (Minn. P.U.C. 1981). The Commission found that abandonment expenses were not a "reasonable expense," and refused to make ratepayers "insulate the owners from financial risk." *Id.* See also *Re Iowa Power & Light Co.*, Nos. RPU-78-27, 78-30, and 80-36 (Iowa S.C.C. 1981) (recovery prohibited at the time because utility failed to show costs were not offset by the value of the land).

138. Generally, these statutes are anti-CWIP statutes that have a limited scope of authority to deny recovery. In *Re Detroit Edison Co.*, 52 P.U.R. 4th 318 (Mich. P.S.C. 1983), the PSC found that "provisions of the Michigan Electric Act, MICH. COMP. LAWS § 460.551 (1979), did not prohibit cost recovery." *Id.* at 322.

An appeal to statutory authority also failed in *Pennsylvania Pub. Util. Comm'n v. Duquesne Light Co.*, 52 P.U.R. 4th 644 (Pa. P.U.C. 1983). At issue was 66 PA. CONS. STAT. § 1315 (1979), which provides, in part:

[T]he cost of construction or expansion of a facility undertaken by a public utility producing, generating, transmitting, distributing, or furnishing 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. [E]xcept as stated in this section, no electric utility property shall be deemed used and useful until it is presently providing actual utility service to the customers.

utory authority to deny recovery. In 1981 the Ohio Supreme Court held, in *Consumers' Counsel v. Public Utilities Commission*,¹³⁹ that cost recovery denial was mandated statutorily. The court ruled that, irrespective of the utility's duty to render service,¹⁴⁰ the question under the statute is whether the cancelled plant was a "cost to the utility of rendering the public utility service for the test period."¹⁴¹ According to the Ohio Supreme Court, it was not. The statute, it declared, excluded unusual, nonrecurring expenses from the rate calculation.¹⁴² Therefore, the PUC exceeded its authority when it permitted cancellation cost recovery.¹⁴³ The court recognized the "gloomy" position of the utility in the capital markets, but noted that the legislature, unlike the PUC or the courts, retained the power to change the law.¹⁴⁴

The day after the *Consumers' Counsel* decision, Cleveland Electric's bond rating dropped.¹⁴⁵ In 1983 the Ohio PUC raised the utility's rate of return, partly to compensate for investors' perception of investment risk.¹⁴⁶ The Ohio Supreme Court held that the PUC may raise the rate of return based on the increase in perceived risk to investors resulting from the decision in *Consumers' Counsel*.¹⁴⁷ The dissent charged that the majority had condoned what *Consumers' Counsel* condemned,¹⁴⁸ and noted that the court had circumvented its 1981 decision.¹⁴⁹

Id. The court found that the intent of the disjunctive language "is merely designed to prohibit both the inclusion of construction work in progress in rate base and any alternative rate-making action, which would accomplish the same or similar result." *Id.* at 650.

139. 67 Ohio St. 153, 423 N.E.2d 820 (1981).

140. *Id.* at 163, 423 N.E.2d at 826.

141. *Id.* at 163-64, 423 N.E.2d at 827.

142. *Id.* at 164, 423 N.E.2d at 827.

143. *Id.* at 166, 423 N.E.2d at 828.

144. *Id.* at 167, 423 N.E.2d at 828-29.

145. Bruder, *supra* note 128, at 172.

146. See Cleveland Elec. Illum. Co. v. Public Util. Comm'n, 4 Ohio St. 3d 107, 109, 447 N.E.2d 746, 748 (1983), *appeal dismissed*, 104 S. Ct. 47 (1984).

147. *Consumers' Counsel v. Public Util. Comm'n*, 4 Ohio St. 3d 111, 115, 447 N.E.2d 749, 753-54 (1983).

148. *Id.* at 116, 447 N.E.2d at 754 (Lochner, J., dissenting).

149. *Id.* at 117, 447 N.E.2d at 755 (Lochner, J., dissenting).

We should have summarily reversed because the PUCO's holding as to investor CEI is *res judicata*. That is, CEI stands for the proposition that ratepayers are not to pay for these cancelled nuclear plants. This rule should apply whether the mechanism used to subvert the "used and useful" principle is called "amortization" or anything else.

Id. (emphasis in original).

A statutory prohibition against granting cost recovery similarly restricts the Oregon PUC.¹⁵⁰ Oregon's Ballot Measure Nine excludes all costs of ventures that never reach fruition.¹⁵¹ Likewise, the Montana PSC denied cancellation cost recovery to Pacific Power & Light¹⁵² based on the "actually used and useful" language in a Montana statute.¹⁵³ The PSC explained that prudence was not at issue when a statutory prohibition applied,¹⁵⁴ and noted that the utility's quid pro quo for its obligation to serve was monopoly status, not risk-free investments.¹⁵⁵

Missouri recently seized on a statutory basis for cost recovery denial.¹⁵⁶ The Missouri PSC denied Union Electric Company recovery of costs for the Callaway II nuclear power plant¹⁵⁷ on the authority of Proposition One,¹⁵⁸ which prohibits charges for any property "before it is fully operational and used for service."¹⁵⁹ The Missouri Circuit

150. *Re Pacific Power & Light Co.*, 49 P.U.R. 4th 82 (Or. P.U.C. 1982). *See also Re Portland Gen. Elec. Co.*, 49 P.U.R. 4th 274 (Or. P.U.C. 1982) (forbidding rate increase to compensate for plant cancellation); *Washington Utils. & Trans. Comm'n v. Pacific Power & Light Co.*, 52 P.U.R. 4th 148 (Wash. U.T.C. 1983) (permitting increased rate of return for investors' perception of risk from Oregon statute). *But cf. Re Portland Gen. Elec. Co.*, No. 79-055 (Or. P.U.C. 1979) (statute only prohibited rate base treatment for dam cancellation costs).

151. 49 P.U.R. 4th at 91. The measure provides that a utility may not charge rates derived from a rate base that includes costs of future improvements. OR. REV. STAT. § 757.355 (1982).

152. *Re Pacific Power & Light Co.*, 53 P.U.R. 4th 24 (Mont. P.S.C. 1983).

153. MONT. CODE ANN. § 69-3-109 (1983). The Montana statute is especially weak support for denying cost recovery:

The commission may, in its discretion, investigate and ascertain the value of the property of every public utility actually used and useful for the convenience of the public. The commission is not bound to accept or use any particular value in determining rates; provided, that if any value is used, such value may not exceed the original cost of the property.

Id.

154. 53 P.U.R. 4th at 28.

155. *Id.* at 28-29.

156. *See Re Union Elec. Co.*, No. ER-83-163 (Mo. P.S.C. 1983). *See also Buckeley, P.S. New Hampshire Can't Bill Customers for Costs of Unfinished Plants, Court Says*, Wall St. J., June 13, 1984, at 8, col. 2.

157. Order of the Mo. Pub. Serv. Comm'n, Case No. ER-83-163 (Oct. 21, 1983).

158. MO. REV. STAT. § 393.135 (1978).

159. *Id.* The full text of the statutes reads:

Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or any other cost associated

Court affirmed the PSC's decision,¹⁶⁰ and the case is currently pending before the Missouri Supreme Court.¹⁶¹ The Missouri Supreme Court must determine whether Proposition One applies to plant cancellations and, if so, whether the result is confiscatory. The next section analyzes these issues, as well as the resulting effect on consumers.

IV. ANALYSIS OF STATUTES AFFECTING COST RECOVERY

A. *Statutes Prohibiting Cost Recovery*

1. Applicability of Statutory Language to Plant Cancellations

Courts in Pennsylvania and Michigan have refused to read cost recovery prohibitions into their respective anti-CWIP and rate base calculation statutes.¹⁶² The Pennsylvania statute prohibits rate base treatment of CWIP costs until the facility is "presently providing actual utility service to customers."¹⁶³ It also prohibits inclusion of construction or expansion costs in the rate base.¹⁶⁴ The Pennsylvania PUC declined to stretch this language to prohibit cancellation cost recovery.¹⁶⁵ The PUC held that the statute is merely a thorough anti-CWIP provision that does not prohibit ultimate cost recovery.¹⁶⁶

with owning, operating, maintaining, or financing any property before it is fully operational and used for service, is unjust and unreasonable, and is prohibited.

Id.

160. Order of the Mo. Cir. Ct. of Cole County, Case No. CV 183-1064cc (Apr. 16, 1984).

161. Notice of Appeal to the Sup. Ct. of Mo., CV 183-1064cc (Apr. 16, 1984).

162. *In re Duquesne Light Co.*, 42 P.U.R. 4th 644 (Pa. P.U.C. 1983); *In re Detroit Edison Co.*, 52 P.U.R. 4th 318 (Mich. P.S.C. 1983).

163. 66 PA. CONS. STAT. § 1315 (Supp. 1982). The statute provides:

Except for such nonrevenue producing, nonexpense reducing investments as may be reasonably shown to be necessary to improve environmental conditions at existing facilities or improve safety at existing facilities or as may be required to convert facilities to the utilization of coal, the cost of construction or expansion of a facility undertaken by a public utility producing, generating, transmitting, distributing or furnishing 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. Except as stated in this section, no electric utility property shall be deemed used and useful until it is presently providing actual utility service to the customers.

Id.

164. *Id.*

165. 52 P.U.R. 4th at 649-50.

166. *Id.* at 650.

Michigan's statute is significantly different from the Ohio statutes¹⁶⁷ and more general than Pennsylvania's statute. In Michigan, the commission has the discretion to consider "all lawful elements" when fixing utility rates.¹⁶⁸ As in Pennsylvania, attempts to find a prohibition against cancellation cost recovery in the Michigan statutory language have been unsuccessful.¹⁶⁹

Although Oregon's statute¹⁷⁰ is similar to the Pennsylvania and Michigan statutes,¹⁷¹ the Oregon PUC held that the statute prohibits cancellation cost recovery.¹⁷² Like the Pennsylvania statute,¹⁷³ Oregon's statute merely prohibits basing rates on a rate base that includes property "not presently used for providing utility service to the consumer."¹⁷⁴ At best it appears that this statute is an anti-CWIP provision that may prohibit inclusion of unamortized cancellation recovery balances in the rate base. The statute does not, however, address cancellation cost recovery.

Similarly, the Montana PUC has found a cost recovery prohibition in language¹⁷⁵ that resembles Michigan's statute.¹⁷⁶ The "used and useful" language relied on by the Montana Commission to preclude Pacific Power & Light's recovery of cancellation costs¹⁷⁷ is set in the context of rate base valuation language, which prohibits setting rate base values that "exceed the original cost."¹⁷⁸ Montana's statute contains neither anti-CWIP language nor language prohibiting cancellation cost recovery. Thus, Oregon and Montana have gone beyond the

167. *Id.* at 322.

168. MICH. COMP. LAWS § 460.551 (1979).

169. *See* 52 P.U.R. 4th at 322.

170. 1980 Or. Laws 757.355. The statute provides:

No public utility shall, directly or indirectly, by any device, charge, demand, collect or receive from any customer rates which are derived from a rate base which includes within it any construction, building, installation or real or personal property not presently used for providing utility service to the customer.

Id.

171. 66 PA. CONS. STAT. § 1315 (Supp. 1982); MICH. COMP. LAWS § 460.551 (1979). *See supra* notes 163, 168 and accompanying text.

172. *See* 49 P.U.R. 4th at 90-91. *See also supra* note 150 and accompanying text.

173. 66 PA. CONS. STAT. § 1315 (Supp. 1982).

174. 1980 Or. Laws 757.355.

175. MONT. CODE ANN. § 63-3-103 (1983).

176. *See supra* note 168 and accompanying text.

177. 53 P.U.R. 5th at 27-29.

178. *See supra* note 175.

plain meaning of their respective statutes and have ignored their context by prohibiting cost recovery.

This appears to be the case in Missouri as well, where the PSC and a lower court have concluded that Proposition One¹⁷⁹ bars cost recovery.¹⁸⁰ The "or any other cost"¹⁸¹ language in Proposition One must be read in conjunction with the preceding language that refers to all elements of CWIP costs. The essence of Proposition One is that the utility is prohibited from making any CWIP charge before the investment is fully operational. It is not evident that this voter initiative anticipated unfinished projects. This may mean, as Union Electric is arguing, that the statute governs only the timing of cost recovery.¹⁸² While the PSC and intervenors present excellent arguments demonstrating that the "before" clause contemplates no recovery "until" the plant is operational,¹⁸³ Proposition One probably is only an anti-CWIP statute. Pennsylvania, which has the "until" language in its statute, declined to accept similar arguments.¹⁸⁴ If the Missouri Supreme Court concludes that Proposition One merely is an anti-CWIP statute, it not only will follow the apparent purpose of the statute, but also will avoid the constitutional question.

2. Constitutionality of Statutes Prohibiting Cost Recovery

In *Dayton Power & Light Co. v. Public Utilities Commission*,¹⁸⁵ the Ohio Supreme Court upheld the constitutionality of Ohio's statutory ban on cost recovery, as interpreted in *Consumers' Counsel*.¹⁸⁶ The court held that cost recovery denial is constitutional, even when the utility prudently incurred these costs, if the rate order in its entirety is just and the end result is not confiscatory.¹⁸⁷ Relying on the "used and

179. MO. REV. STAT. § 393.135 (1978).

180. Order of the Mo. Pub. Serv. Comm'n, Case No. ER-83-163 (Oct. 21, 1983); Order of the Mo. Cir. Ct. of Cole County, Case No. CV 183-1064cc (Apr. 16, 1984).

181. See *supra* note 179.

182. Brief of Relator, Case No. CV 183-1064cc, at 5-6.

183. Brief of Respondent Public Serv. Comm'n, at 2-4; Brief of Respondent-Intervenor MoPIRG, at 2-9; Brief of Respondent-Intervenor Office of the Public Counsel, at 1-4.

184. 52 P.U.R. 4th at 649-50.

185. 4 Ohio St. 3d 91, 447 N.E.2d 733 (1983). See also *Cleveland Elec. Illum. Co. v. Public Util. Comm'n*, 4 Ohio St. 3d 107, 447 N.E.2d 746, *appeal dismissed*, 104 S. Ct. 47 (1983) (similar constitutional attack repelled by authority of the *Dayton* case).

186. See *supra* notes 139-44 and accompanying text.

187. 4 Ohio St. 3d at 103, 105-06, 447 N.E.2d at 742-43, 745.

useful” language and “zone of reasonableness” concepts,¹⁸⁸ the court reasoned that prudent investments that never provide service could be constitutionally excluded from the rate calculation.¹⁸⁹

The arguments in the Missouri appeal are similar to those in the Ohio case. While Union Electric argues that prudently-incurred costs should be recovered as operating expenses,¹⁹⁰ the respondents contend that prudence is not an issue when a statute flatly prohibits recovery of costs for abandoned projects.¹⁹¹ To show that the statute results in a taking, Union Electric must prove that confiscatory results flow from the rate order. The utility must emphasize the elements of the *Hope-Bluefield* test that require the utility to present compelling evidence that the rate order will destroy the utility’s financial soundness and prevent the utility from attracting the capital necessary to ensure safe and reliable service to its customers.¹⁹² Union Electric should present solid statistics illustrating the utility’s current and probable post-order financial condition.¹⁹³ The utility would do well to analogize its condition to that of severely crippled utilities in other jurisdictions. Union Electric neglected, however, to build such a factual record before the PSC, and failed in its brief to allege any facts to establish a prima facie taking.¹⁹⁴ A court cannot find the “end result” of a rate order confiscatory if the complaining party cannot allege facts that prove confiscatory results.¹⁹⁵ While the policy decision to deny cancellation cost recovery probably is unwise, it is not unconstitutional—unless the “total effect”¹⁹⁶ of a PUC’s rate order fails to provide a return sufficient to satisfy the *Bluefield* criteria.¹⁹⁷

188. *Id.* at 97-99, 447 N.E.2d at 738-40. See *supra* notes 50-59 and accompanying text.

189. 4 Ohio St. 3d at 105-06, 447 N.E.2d at 744-45.

190. Brief of Relator, No. CV 183-1064cc, at 5-8.

191. Brief of Respondent-Intervenor MoPIRG, at 12.

192. See *supra* notes 53-63 and accompanying text.

193. A utility cannot prove confiscation by merely citing cases and concluding that the rate is confiscatory. It must present data demonstrating the state of the electric industry, effects of similar decisions on other utilities, and the probable consequences, in market terms, of the rate order. The utility should also show that the rate order will negatively affect the utility’s ability to ensure sufficient power supplies to meet future needs, as well as its ability to keep costs of service low.

194. Brief of Relator, No. C-V-183-1064cc, at 18-19.

195. See *supra* notes 60-61 and accompanying text.

196. See *supra* notes 55-56 and accompanying text.

197. See *supra* note 57 and accompanying text.

A statute that prohibits cancellation cost recovery is insulated effectively from constitutional attack, provided the regulatory commission has the latitude to set a rate that meets *Hope-Bluefield* standards. Therefore, if the utility properly prepares evidence proving confiscation,¹⁹⁸ the "end result" analysis would not compel a finding that the statute was unconstitutional. It simply would mean that the rate order was unconstitutional and that the PUC must make some alteration to produce a just and reasonable rate.¹⁹⁹ As in Ohio,²⁰⁰ the effect of a cost recovery prohibition on a rate proceeding is merely to prevent cancelled plant costs from appearing in the rate base or as operating expenses; yet these costs may be reflected ultimately in an increased rate of return.

B. *The Public Interest and Statutes Prohibiting Cost Recovery*

Although cost recovery bans are constitutional, nevertheless, they may harm both utilities and consumers. The cost recovery problem is similar to the CWIP/AFUDC debate.²⁰¹ Given present financial conditions,²⁰² it appears that, in the long run, prohibiting cost recovery ultimately will not benefit anyone.²⁰³ Utilities associated with failed nuclear projects, like those with large ratios of AFUDC to net income,²⁰⁴ struggle in the capital markets.²⁰⁵ The utility ultimately faces higher costs for capital.²⁰⁶ Higher capital costs will force PUCs, like the Ohio PUC,²⁰⁷ to give relief via increased rates of return to compensate utilities for the effects of denying recovery through operating expenses.

If utilities can recover profits resulting from highly successful ven-

198. See *supra* note 193 and accompanying text.

199. The adjustment likely would be an increased rate of return. See Robinson, *supra* note 85, at 22. For a critique of confiscation tests and suggestions for modern tests, see Hanson & Davies, *supra* note 22, at 529, 537-40.

200. See *supra* notes 145-49 and accompanying text.

201. See *supra* notes 86-110 and accompanying text.

202. See *supra* notes 64-85 and accompanying text.

203. See Foster, *supra* note 74, at 934; Sillen, *supra* note 69, at 18; Bouknight, *Balancing Risks and Rewards to Reduce Financial Disincentives to Power Plant Construction*, PUB. UTIL. FORT., Feb. 12, 1981, at 21.

204. See *supra* note 122 and accompanying text.

205. See *supra* note 90 and accompanying text.

206. See *Central Vermont*, 49 P.U.R. 4th at 392; Foster, *supra* note 74, at 891; Robinson, *supra* note 85, at 19.

207. See *supra* notes 145-49 and accompanying text.

tures, PUCs should require them to bear the burden of huge losses on prudent investments.²⁰⁸ But regulation limits utility windfalls.²⁰⁹ Therefore, it is inconsistent to contend that regulation should not limit the impact of extraordinary losses. The competitive market consequence of going out of business is not realistic for electric utilities.²¹⁰

V. RESPONDING TO AND PREVENTING MISTAKES

While it is not the purpose of this Note to evaluate the decisions to build, and cancel, the nuclear plants that have raised the issues discussed previously, a few suggestions for future decision-making are appropriate. During the 1960s and early 1970s, when the government encouraged the electric industry to pursue nuclear energy, evidence already was available indicating that the nuclear path would become littered with peril.²¹¹ What occurred, nevertheless, was a recklessly rapid commitment by many utilities to an insufficiently explored power source to the exclusion of other viable energy alternatives.²¹²

When balancing today's power demands with the need to ensure sensible, future power source choices, utilities must carefully consider consequences involved.²¹³ Government policies and regulatory practices that discourage careful decision-making or provide disincentives for conservation and source diversification must be avoided. Similarly, regulatory disincentives for careful utility management must turn into incentives.²¹⁴ These changes will result in more realistic power need

208. See Bouknight, *supra* note 203, at 22.

209. See *Re Public Service Co. of Okla.*, Case No. 27068, Order No. 206560 at 57 (Okla. Corp. Comm'n 1982).

210. Robinson, *supra* note 85, at 20.

211. See *supra* note 120.

212. See, e.g., Note, *Full Electric Utility Ownership of PURPA Qualifying Cogenerators: Trouble Down the Line?*, 27 WASH. U.J. URB. & CONTEMP. L. 321 (1984) (discusses utility ownership of cogeneration facilities).

213. It is difficult to believe, for example, that utilities made huge commitments to nuclear generating plant development without a careful analysis of the nuclear waste problem. This is a significant problem, given that nuclear waste will affect hundreds of generations. To assume that a proven solution would develop *after* the waste is produced is a serious abdication of planning responsibility.

Of course, this planning problem is not limited to nuclear power. What, for example, are the effects of encouraging increased use of woodburning stoves? Air pollution, increased timber demand, unit safety, and convenience are but a few relevant considerations.

214. See Pierce, *supra* note 3, at 506-07, 556-58.

forecasts.²¹⁵

Each state also must reevaluate the role of its PUC. Commissions and their staffs should become more technically adept and involved in careful evaluation of long-range utility planning. Alternatively, states should restructure their regulatory scheme to provide for efficient and effective planning by utilities. Interjurisdictional planning, as suggested by some commentators,²¹⁶ will become a more important factor in efforts to meet power and safety needs, and should be incorporated into modern planning schemes.

Objections to CWIP may wane if states develop incentives for better utility planning and management and improved regulatory supervision. Carefully-monitored CWIP provisions may become essential to avoid the effects of huge AFUDC accumulations. The effect of AFUDC on the utility and its investors is troublesome,²¹⁷ like the impact on consumers' utility bills when a new plant goes on line. The current climate demands experimentation with carefully supervised CWIP provisions. Current ratepayers, who have benefited from historically reasonable utility rates, should expect to bear part of the burden of bringing in new energy technologies to meet future power needs. The ratepayers also have a right to expect that electric utilities will develop only safe and efficient energy sources, and that the utilities will give careful thought to the future generations that must live with the consequences of today's decisions.

In retrospect, cancelled plants exist, and so do huge rate increases when finished plants go on line. Efforts to avoid rate shock in cases when there was no CWIP recovery during construction should focus not only on phasing in rate increases, but also on ensuring that total recovery by the utility provides due compensation.²¹⁸ A partial CWIP allowance, as Illinois has done,²¹⁹ might best diminish the rate shock problem.

The most stunning rate shock is, of course, paying a high utility bill

215. *Id.* at 509-10.

216. *See, e.g., id.* at 544-56.

217. *See supra* notes 88-90, 106-08.

218. For an example of an equitable plan, see Nellie, *Allocating Nuclear Power Costs Over Time*, PUB. UTIL. FORT., Sept. 29, 1982, at 22. These plans will, of course, generate controversy. *See, e.g.,* Ganey, *Electricity 'Rate Shock Bill' is Illegal, PSC Staff Says*, St. Louis Post-Dispatch, Jan. 26, 1984 at 4A, col. 3.

219. *See Re Commonwealth Edison Co.*, 50 P.U.R. 4th 221 (Ill. C.C. 1982). The Commission permitted the utility to recover part of its construction work in progress, stating that both current and future ratepayers ultimately would benefit. *Id.* at 236.

for a plant that provides no service. When the decisions to build and cancel are prudent, both ratepayers and investors must bear the burden of paying for abandoned plants. This shock hopefully will jolt utilities, investors, consumer groups, and the government into a reasoned discussion of the best way to meet energy needs without making economically, socially, and environmentally costly mistakes. The problem is undoubtedly more complex than each group realizes and unquestionably will require more concessions than each group may be willing to make.

VI. SUMMARY

Rapid changes during the past decades have made it difficult for many utilities to avoid, or recover from, a capital crisis. Nuclear plant cancellations and unwillingness on the part of PUCs to ease the capital strain during prolonged construction periods have retarded utilities' efforts to improve their financial health and provide adequate service. The use of statutory language to deny cost recovery for cancelled plants only worsens investors' negative perception of utilities involved in unsuccessful nuclear projects.

It is not clear that statutory language relied on by some PUCs to deny recovery is intended to apply to cancelled projects. If the statutory language is so applied, however, it is constitutional. While a utility, in the appropriate case, could prove that the "end result" of a rate order is confiscatory, the failure of the PUC to set an adequate rate of return, not the statute prohibiting cancellation cost recovery, would be the cause of the constitutional infirmity. A carefully prepared case by the utility could demonstrate the adverse effects on the utility of cost recovery. A PUC then must respond by adjusting the rate formula, probably by increasing the rate of return. Hence, in the long run, consumers end up paying—and paying twice—because what they gain by "saving" cancellation costs, they lose in higher rates of return, as well as in diminished utility stature in the capital markets.

VII. CONCLUSION

States that have not yet prohibited cancellation cost recovery by statute should avoid that path. Courts faced with construing utility statutes should avoid finding cost recovery prohibitions where none are evident in the statute. If a utility imprudently incurs any costs, they may be excluded constitutionally from rate calculations. Prudently-incurred costs should be recovered under operating expenses. In the

case of "prudent" mistakes, the unamortized balance should not be added to the rate base.

Careful regulatory supervision, along with prudent management, can promote careful decision-making on utility expansion at a project's inception and at its various stages. When mistakes occur, despite prudent decision-making, the public interest requires that the investor and consumer alike, who stand to benefit from a healthy utility, shoulder the consequences. Alternative approaches may weaken a utility's financial vitality and discourage creative long-term planning to meet future power needs.

EPILOGUE

On February 26, 1985, the Missouri Supreme Court held that Proposition One does not prohibit the Missouri Public Service Commission from including costs of the abandoned Callaway II nuclear power plant in charges to Union Electric's consumers, and remanded the case to the PSC. *State ex rel. Union Elec. Co. v. Public Serv. Comm'n*, — S.W.2d — (Mo. 1985) (en banc). *See supra* notes 156-61, 179-84, & 190-94 (discussion of *Union Electric*).

COMMENTS

