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EXCESS CAPACITY: A CASE STUDY IN RATEMAKING THEORY AND APPLICATION

Roger D. Colton*

Recent declines in electric demand growth rates have left many electric utilities with excess generating capacity. In many cases, state utility regulators have responded by disallowing the inclusion of the costs of the excess in rates charged to consumers. Mister Colton examines a 1984 Iowa Supreme Court decision and several recent administrative decisions which discuss the ratemaking treatment of excess capacity. He concludes that application of the historical used and useful test which excludes excess capacity from rate base is appropriate.

I. INTRODUCTION

In recent years, state public utility commissions have been forced to grapple with the issue of how to treat excess electric generating capacity for ratemaking purposes.¹ Public utilities nationwide have substantially overbuilt capacity.² Whether the surplus construction is attributable to the industry’s failure to foresee the recent series of economic recessions,³ or attributable to poor management planning,⁴ the overinvestment has...

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resulted in generating capacity which is not reasonably necessary to provide adequate and reliable service.\(^5\)

In 1981, the Missouri Public Service Commission stunned the utility industry when it denied a return on investment in a power plant determined to be excess capacity.\(^6\) In the ensuing years, public utility commissions in a myriad of states took the same action,\(^7\) and a substantial public debate arose regarding the proper ratemaking treatment of surplus investment.\(^8\) Today the regulatory process has reached the point where state appellate court decisions are now being rendered in the judicial challenges to those early excess capacity administrative decisions.\(^9\) The court opinions consider the lawfulness of excess capacity adjustments in light of constitutional and regulatory principles.

The Iowa Supreme Court's recent decision in *Iowa-Illinois Gas & Electric Co. v. Iowa State Commerce Commission*\(^10\) is an example of this recent line of state court cases. In *Iowa-Illinois*, the court was directly faced with a range of crucial issues involved in excess capacity litigation. The court addressed how to apply the traditional *used and useful* ratemaking test to surplus investment. It directly confronted a situation in which a utility's decision to construct additional capacity was prudent when made, and the utility had been encouraged to undertake capacity expansion by the very agency which later made the excess capacity adjustment.\(^11\)

The *Iowa-Illinois* court discussed the regulatory theories which underlie the ratemaking response to these issues. This Article examines the ratemaking theories explored by the court,\(^12\) and considers the court's

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10. *Id. at* 428.

11. *Id.* at 428.

12. The Iowa Supreme Court limited its holding by stating: "We decide only the constitutional issue. In deciding it we do not pass upon the method employed by the commission to determine
definition of excess capacity, its definition of the used and useful principle, and its application of these concepts in a determination of the appropriate ratemaking treatment.

The Iowa-Illinois decision provides an excellent case study of the definition and application of excess capacity principles. Where appropriate, this Article will assess how the decision contrasts with decisions around the nation which address particular excess capacity issues. As courts and administrative agencies continue to face these issues in the future, a review and analysis of the state of the law should be beneficial to regulators and industry practitioners alike. Before looking at the judicial decision in Iowa-Illinois, however, it is first necessary to review the state administrative decision to gain an understanding of the context within which the judicial consideration of the regulatory issues occurred.

II. THE ADMINISTRATIVE PROCEEDING

A. The Factual Background

In May 1981, Iowa-Illinois Gas and Electric Company (Iowa-Illinois) filed a request with the Iowa State Commerce Commission for permission to increase its retail electric rates by approximately fourteen million dollars. The president of Iowa-Illinois testified to the commission that the primary factor necessitating the rate hike was the completion and placement into commercial operation of the utility's Ottumwa Generating Station. The 650 megawatt (MW) coal-fired power plant pushed the available generating capacity of Iowa-Illinois to a record high. Ottumwa was placed into commercial operation in May 1981, its planning and construction had taken more than seven years. Iowa-Illinois' investment in the plant accounted for approximately 125 MW of

13. This Article focuses on judicial and administrative decisions which have been rendered since 1983. For a list of prior excess capacity decisions, see Colton, supra note 1, at 1133 nn.1-2.
18. 347 N.W.2d at 428.
19. For a general discussion of power plant construction duration, see C. KOMANOFF, POWER PLANT COST ESCALATION 227-34 (1981).
new generating capacity.\textsuperscript{20}

In the 1981 rate proceeding, the Iowa State Commerce Commission was faced with the issue of whether all of the company's investment in plant was necessary to provide reasonably adequate service.\textsuperscript{21} Consumer advocates argued that adequacy of service should be measured by whether the utility had the ability to produce sufficient electricity at the time of its peak demand.\textsuperscript{22} Peak demand is the greatest demand at any one time over the course of the year.\textsuperscript{23} For Iowa-Illinois, peak is associated with the hottest day of the summer.\textsuperscript{24} The Iowa commission found that Iowa-Illinois had an annual peak load of 953 MW.\textsuperscript{25}

The Iowa commission further found that Iowa-Illinois could reasonably maintain a capacity reserve margin of twenty-five percent over peak.\textsuperscript{26} A reserve margin is needed to provide a cushion to account for uncertainty in demand forecasting\textsuperscript{27} and to allow for the possibility that one or more of a utility's power plants might be unable to produce electricity at the time of the peak.\textsuperscript{28} According to the commission, only generating capacity exceeding 125\% of a utility's actual annual peak load was beyond that investment necessary to ensure reliability\textsuperscript{29} or provide economic benefits to existing customers.\textsuperscript{30} Using the 125\% guide,\textsuperscript{31} the commission found that Iowa-Illinois had 199 MW of excess

\begin{itemize}
\item \textsuperscript{20} 347 N.W.2d at 428.
\item \textsuperscript{21} 46 Pub. Util. Rep. 4th at 617-23.
\item \textsuperscript{22} Direct Testimony of Mr. Richard Cool, Record at 1007-14, Iowa-Illinois Gas & Elec. Co., 46 Pub. Util. Rep. 4th 616 (Iowa State Commerce Comm'n 1982). This testimony also discussed the need for a company to maintain adequate reserve margins.
\item \textsuperscript{23} Edison Electric Institute, Glossary: Electric Utility Rate Making and Load Management Terms 25 (1978); see Madison Gas & Elec. Co. v. Public Serv. Comm'n, 109 Wis. 2d 127, \_\_\_, 325 N.W. 2d 339, 341 n.6 (1982).
\item \textsuperscript{24} W. Marsh, Economics of Electric Utility Power Generation 67 (1980).
\item \textsuperscript{25} 46 Pub. Util. Rep. 4th at 622.
\item \textsuperscript{26} Id. at 621.
\item \textsuperscript{27} W. Marsh, supra note 24, at 90.
\item \textsuperscript{28} Madison Gas & Elec., 109 Wis. 2d at \_\_\_, 325 N.W.2d at 341 n.7. In 1984, the Pennsylvania Public Utilities Commission found:
\begin{quote}
An acceptable reserve generating capacity margin for any particular electric utility is dependent upon the generation mix, availability of generating units, peak-load requirements, the period during which the peaking capacity is required, rates of forced outages, transmission capabilities, interconnections with other utilities, and transfers of energy during emergency. These are some of the operating factors which must be considered when reaching a determination concerning an acceptable generating reserve margin.
\end{quote}
\item \textsuperscript{29} 46 Pub. Util. Rep. 4th at 620.
\item \textsuperscript{30} Id. at 621.
\item \textsuperscript{31} The 25\% reserve margin was to be used only for the purpose of testing the evidence in the case being decided. Utility companies were not to use that figure as a planning reserve in power plant certification proceedings. See id.
\end{itemize}
investment.  

In making its excess capacity adjustment, however, the Iowa commission made two specific findings of fact which served as the foundation for challenges to the rate decision brought by Iowa-Illinois on appeal. First, the initial decision to build the Ottumwa power plant was prudent. The commission found that the plant was constructed in response to concerns about potential electric energy shortages in the 1980's. Even the Iowa Supreme Court noted the concern of the commission and others when the decision to construct Ottumwa was made. Second, the company argued that each of the Iowa-Illinois power plants including Ottumwa was individually used and useful. Each plant was operated during the course of the test year and provided some benefit to company ratepayers. The commission expressly found that the Ottumwa plant was useful because it might operate more efficiently than the company's other plants. Iowa-Illinois later argued to the Iowa Supreme Court that these two findings of fact—both that the decision to build Ottumwa was prudent when made and that all company plants including Ottumwa were individually used and useful—should insulate the utility from any excess capacity adjustment.

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32. Id. at 622.
33. Id. at 621.
34. Id. In a prior proceeding, one commission member wrote:
I served on this commission in April 1972 when the prospect of severe electric shortages motivated me and my fellow Commissioners to order the convening of a conference of Iowa utilities to study how that shortage would be met. The Ottumwa Generating Station seemed a responsible solution to our concerns about shortages in the supply of electricity. In a relatively short period of time (10 years), we have witnessed almost a complete reversal of the problem of electric supplies. We have gone from a situation of near panic over the possibility of shortages of electricity to a situation where our concern is that of an excessive supply of power.


35. 347 N.W.2d at 428; accord Minnesota Power & Light Co., No E-015/GR-81-250, slip op. at 7 (Minn. P.U.C. Apr. 30, 1982).
39. 46 Pub. Util. Rep. 4th at 618-19. Analysts may question, however, whether the commission applied an appropriate test regarding the burden of proof. The commission found that Ottumwa was used and useful since the plant may operate more efficiently than other plants. Id. at 618. If the commission could only find that Ottumwa may operate more efficiently, it could also have found that Ottumwa may not operate more efficiently. If the commission had adopted the alternate holding, the burden of proving the plant's usefulness would not necessarily have been met.
40. 347 N.W.2d at 428.
B.  The Commerce Commission Decision

The Iowa State Commerce Commission adopted a cost-sharing approach to excess capacity in its rate decision regarding Iowa-Illinois Gas and Electric Company. The commission denied a full rate of return on the surplus investment by apportioning the costs of the excess between investors and ratepayers. The commission developed a formula for revenue adjustment which "had the effect of reducing the return on excess capacity on a graduated scale." Under the formula, the disallowed return increased at an accelerating rate as the excess capacity increased.

The commerce commission engaged in a two-step analysis in making its excess capacity adjustment. The first step was to determine whether and to what extent the utility had an excess. The second step was to determine how to apportion the costs associated with the excess.

1.  To What Extent Does Excess Exist

In determining to what extent Iowa-Illinois had excess capacity, the commerce commission considered both the need for plant to ensure reliability as well as the economic justification for generating capacity. There was little question as to what capacity was deemed appropriate for reliability purposes. The Mid-Continent Area Power Pool (MAPP), the regional reliability council, had previously established fifteen percent as

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42. 46 Pub. Util. Rep. 4th at 622. The Iowa State Commerce Commission adopted the following excess capacity adjustment formula: Return adjustment equals excess capacity divided by total generating capacity times net investment in total generating capacity times the weighted cost of common equity times the excess capacity divided by annual peak load. Id.
43. 347 N.W.2d at 428.
44. Id.
47. The North American Electric Reliability Council (NERC) was formed by the electric utility industry in 1968 to promote the reliability and adequacy of bulk power supply in the electric utility systems of North America. NERC consists of nine regional reliability councils and one affiliate encompassing virtually all of the power systems in the United States and Canada.

the proper reserve margin for this purpose. 48 Nevertheless, the commission determined that use of the fifteen percent figure alone would not be sufficient to establish a finding of excess capacity. By contract, MAPP required all of its member utilities to maintain a minimum reserve level of fifteen percent. 49 To declare all capacity above that figure as excess would also use the figure as a maximum amount. The commission concluded that setting the minimum and maximum allowable investment at the same level would require a level of planning precision which no utility manager could reasonably be expected to meet. 50

The commerce commission further held that reliability of a utility system is not the only criterion to use in assessing the desirability of increased reserve margins. Reserve margins maintained for reliability purposes must be economically justified. 51 The duty of a public utility is to maintain adequate service at the lowest cost. 52 The mere act of increasing reliability does not automatically further that end. Increased reliability is governed by the law of diminishing returns. The commerce commission stated: "As generating capacity rises above the 15 percent minimum reserve level, the marginal benefits to ratepayers decrease and additional reserves only add to the cost of the service." 53 The commission is to measure the costs and benefits of increasing capacity. 54 It expressly noted that "there is a point at which capacity clearly exceeds the requirements of the utility's customers." 55

The economics of reserve margins work two ways, however, as increased reserve margins can also be justified solely on nonreliability grounds. The commerce commission found that the minimum reliability level and the minimum cost level are not necessarily the same. 56 In looking at the economic justification of specific levels of capacity, the com-

49. Id. at 620.
50. Id.
54. See id. at 621.
55. Id. at 620.
56. Id. at 619.
mission decided to consider operating costs and benefits also.\textsuperscript{57} The Ottumwa plant, for example, was viewed to be used and useful since “consumers receive some benefit from the addition of [the Ottumwa unit] with its lower operational cost.”\textsuperscript{58} Moreover, the commission approvingly cited Iowa-Illinois’ evidence which indicated that some surpluses above the minimum reliability standard might be justified “by replacement of oil-fired capacity with nuclear and coal-fired plant.”\textsuperscript{59}

In the Iowa-Illinois administrative decision, the Iowa State Commerce Commission ultimately determined that capacity, which was neither necessary for reliability purposes nor justified on other economic grounds, was excess. A utility was not entitled to fully recover costs on such an investment.\textsuperscript{60} Thus the next inquiry was the type of cost-sharing scheme to be created.

2. To What Extent Do Investors or Ratepayers Pay for the Excess

The commerce commission decided that Iowa-Illinois ratepayers should be relieved of the burden of paying the full costs of investment which are not necessary for the public use.\textsuperscript{61} It refused, however, to adopt a number of proposals which would have put the bulk of the financial burden on investors. The commission rejected the notion that application of the used and useful test would require the excess to be excluded from rate base altogether. The commission said that this test “did not provide an answer to the question of whether ratepayers should reimburse Iowa-Illinois for its admittedly prudent investment in total capacity.”\textsuperscript{62} The commission also rejected the proposal that the company lose its entire common equity return on the excess, noting that this approach failed to recognize “the gradations in degree of management error inherent in decisions to increase capacity.”\textsuperscript{63}

In discussing gradations in management error, the commerce commission quite clearly tied its excess capacity revenue adjustment to equi-


\textsuperscript{63} 46 Pub. Util. Rep. 4th at 621.
table factors. One such factor was the utility’s culpability in having a surplus. The commission stated: “[C]ompanies which have exceeded an acceptable reserve margin by only 2 percent should not be so heavily penalized as companies which have grossly overestimated anticipated demand.” A second equitable factor was the actual financial harm to ratepayers which accrued from the presence of the excessive investment. The commission found that “customers of a company which acquires capacity only slightly in excess of an acceptable reserve are only slightly more disadvantaged than customers of a company who [sic] comes within one or two percentage points below the acceptable reserve margin.”

The purpose of a cost-sharing formula is to share the risk of capacity planning. The commerce commission noted that the Iowa-Illinois revenue adjustment was made within a context illustrating this risk. The case “showed a prudent decision to invest several years ago, the intervention of events not entirely within Iowa-Illinois’ power to control, and the ultimate surplus capacity.” The commerce commission expressly found that ratepayers should share the risks of capacity planning because the utility investment was undertaken for their benefit. In addition, the fact that the utility’s investment decision was based on more than mere gratuity had to be considered. Iowa-Illinois was “required to furnish reasonably adequate service and facilities,” and plant investment was “undertaken in response to its statutory obligation to provide adequate service.”

On the other hand, the commission said that utility “shareholders, like investors in any other private enterprise, do not make a risk-free investment.” A freely-functioning marketplace would tend to prevent

64. Id. Use of the term penalty is unfortunate and careless. See Colton, supra note 1, at 1150-51.
66. Id. There is a theory, however, which suggests that the concentration of analysis on risk is misplaced. The theory distinguishes risk from uncertainty, and advocates that risk can be minimized even in an uncertain planning environment. See Sawhill & Silverman, Build Flexibility—Not Power Plants, PUB. UTIL. FORUM, May 26, 1983, at 17; Schwartz & Colton, supra note 8, at 732-35.
the construction of excessive production facilities even when faced with the intervention of events not entirely within a company's power to control. The commission commented on the real world of competitive enterprise: "[M]anagement officials must continuously rethink prior decisions as new events unfold. Those who fail to stay on top of current events lose out to their competition." The commission viewed its role as a marketplace simulator: "Iowa utilities should also maintain surveillance over costs associated with a particular decision, and in the absence of the kind of incentive provided by a competitor, the responsibility falls upon us to provide the requisite incentive." As a result, the commission concluded that "shareholders must absorb a greater percentage of the risk as capacity expands further and further beyond a reasonable level."

It was within this context that Iowa-Illinois Gas and Electric Company advanced its arguments to the Iowa Supreme Court. The first issue is the application of the used and useful test; the second is the implication of the finding of prudent management in capacity expansion decision-making.

III. THE USED AND USEFUL CONCEPT

Application of the traditional used and useful ratemaking test has relevance to both substantive excess capacity issues as framed in Iowa-Illinois. Those issues include: (1) whether excess capacity exists in a utility system; and (2) whether investors or ratepayers should bear the cost of the surplus. The Iowa Supreme Court addressed each of these issues. Before looking at the application of the used and useful standard, however, it is beneficial to first determine the precise meaning of the phrase.

74. Id. But see supra text accompanying note 70.
75. 46 Pub. Util. Rep. 4th at 621. The Pennsylvania Public Utilities Commission (PPUC) strongly disagrees with this reasoning and its experience with Philadelphia Electric Company is instructive. In a 1979 rate case, the PPUC examined the 1977 demand forecasts made by Philadelphia Electric Company. It found that the company had substantially overprojected demand even when projecting only one year in advance. The commission found: "In the past, with customers paying for company errors in forecasts with resulting excess capacity, there has been no incentive for company planners to adopt a more responsible and reliable posture in their forecasts of load requirements." Philadelphia Elec. Co., 31 Pub. Util. Rep. 4th 15, 26 (Pa. P.U.C. 1979).
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A. Defining the Term

Elementary rules of statutory and legal construction indicate that the term used and useful creates a dipartite ratemaking test. As the phrase is structured in the conjunctive, it is to be assumed that different meanings attach to the differing words and that each test must be met independently.76 To do otherwise would render one of the words mere surplusage, a result to be neither assumed nor lightly adopted.77 Thus a utility investment must be both used and useful to be included in a utility’s rate base.78

To be used, a particular facility must be operational and actually providing reliable utility service. The term used was applied in administrative proceedings involving Council Bluffs Unit 3, a generating plant owned and operated by Iowa Power and Light Company.79 Iowa Power requested a rate increase to recover Council Bluffs Unit 3 costs, which necessitated substantial inquiry into when the plant had become used. In its decision, the Iowa State Commerce Commission said: “[U]ntil a new generating unit has been thoroughly tested under actual operating conditions and has been proven by such testing to meet its design requirements, the unit cannot be considered to be used and useful to provide utility service.”80 The power plant was not eligible for inclusion in rate base if it “did not represent dependable capacity upon which Iowa Power’s customers could rely . . . .”81 The commission ultimately concluded that, to be placed into rate base, a power plant must operate as designed and intended at various output levels82 and be considered a dependable source of power.83

The Iowa inquiry closely parallels a line of recent electric cases in various states in which the precise date on which power plants became operational was litigated.84 In a 1984 Union Electric Case,85 the Mis-

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76. “Where two or more requirements are provided in a section and it is the legislative intent that all of the requirements must be fulfilled in order to comply with the statute, the conjunctive ‘and’ should be used.” 1A C. Sands, Statutes and Statutory Construction § 21.14 (4th ed. 1972).
77. See 2A id. § 47.37 (1982).
78. See infra notes 96-110 and accompanying text.
80. Id. at 13.
81. Id.
82. Id. at 12.
83. Id. at 13.
souri Public Service Commission sought to establish "in-service criteria" to be used in determining whether the Callaway Nuclear Plant was fully operational and used for service.\(^{86}\) The Missouri commission found that "once [Callaway] is determined to be 'in-service,' it will be eligible for inclusion in rate base."\(^{87}\) Missouri law expressly "prohibits charges based on costs associated with property before the property is fully operational and used for service."\(^{88}\) The Missouri commission then established seven criteria to determine when the legal requirement had been met.\(^{89}\)

The Iowa Supreme Court, while recognizing this distinction in the construction of the terms used and useful, was not presented with the need to apply each part of the phrase in Iowa-Illinois. No question existed in that case as to the application of the term used. All portions of the generating facility were conceded to be fully operational. Indeed, the Iowa Supreme Court affirmatively noted that the Ottumwa plant was completed in May 1981,\(^{90}\) and was operating at the time of the rate inquiry.\(^{91}\) Instead, the Iowa court was faced with the task of reviewing the commission's application of the second half of the used and useful test.\(^{92}\)

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86. Id. at 2.
87. Id.
88. Id. at 11 (citing Mo. Rev. Stat. § 393.135 (1978)).
89. The criteria include:
   (1). The UE's Startup Testing Program . . . shall be successfully completed. This shall include a successful uninterrupted run of at least 100 hours during which power is furnished to the grid at a level between 95 percent and 100 percent.
   (2). The Preoperational Test program shall be successfully completed.
   (3). The plant and associated transmission facilities have been tested capable of supplying to the Company's Missouri customers their full share of its rated power and can do so with the single most critical transmission line out of service.
   (4). On the effective date of the Commission's order allowing rate recognition of the Callaway plant, all licenses in jurisdictions other than the Missouri FSC which are needed to allow the plant to operate continuously at full power shall have been issued or acceptable commitments obtained.
   (5). The plant's operating and NRC compliance history shows evidence of Company competence.
   (6). Exemptions from Criterion 1-5 [sic] may be granted or the determination made that the plant is 'fully operational' at some power level less than the rated full power originally proposed for good cause shown.
   (7). The plant is supplying electricity to the Company's system with output scheduled by the system load dispatcher.
81. This conclusion is implied in the court's notation that the commerce commission found the plant could operate more efficiently than the company's other generating facilities.
82. The court's inquiry regarding a facility's usefulness discussed whether a particular investment was necessary for or beneficial to company ratepayers. See infra notes 96-112 and accompanying text.
This emphasis is indicated in the court’s discussion of the commission finding “that the Ottumwa plant was useful to the ratepayers because it could operate more efficiently than other Iowa-Illinois generating facilities.”93 The court also said that in excess capacity litigation, it was not enough to simply look at the usefulness of particular facilities, but rather at the usefulness of the total facilities.94 Clearly, the Iowa Supreme Court distinguished between the terms used and useful, a distinction which is important in an excess capacity evaluation.95

The division of the used and useful test is well recognized in excess capacity litigation.96 The New Hampshire Public Utility Commission considered whether a transmission line constructed to serve the Seabrook Nuclear Station should be included in the rate base.97 The commission noted that the line had been energized in 1983, and that the entire line was used by Public Service Company of New Hampshire.98 This operational aspect of the line, however, was not deemed determinative of the rate base issue: “The parties do disagree . . . on whether or not the entire line is useful at this time.”99 The commission found that the line's function in enhancing reliability, reducing line losses, and enhancing the ability of the utility to provide wheeling services established the usefulness of the entire line.100

Similarly, Washington state utility regulators applied a divided used and useful test to assess whether new investment was eligible to be included in rate base. In Washington Utilities & Transportation Commission v. Pacific Power & Light Co.,101 the state utility commission considered whether that company’s share of the 700 MW Colstrip 3 power plant should be allowed in the rate base.102 The commission defined the regulatory test: “'Used' is defined as 'employed in accomplishing something'; 'useful' is defined as 'capable of being put to use: having

93. 347 N.W.2d at 428.
94. Id. at 429.
95. The used and useful test can be traced back nearly 100 years to the seminal case of Smyth v. Ames, 169 U.S. 466, 544 (1898). The Supreme Court reaffirmed the principle in 1938 when it held that a utility is not entitled to have included in its rate base any property not used and useful to render utility service. See Denver Union Stockyard Co. v. United States, 304 U.S. 470, 475 (1938).
96. The distinction between the two terms is widely recognized, even though the phrase as a whole is defined differently. See infra notes 101-09 and accompanying text.
98. Id.
99. Id.
100. Id. at 577.
102. Only 10% of Colstrip 3, a plant located in Montana, was owned by Pacific Power and Light Company. Id. at 190.
utility: advantageous: producing or having the power to produce good: serviceable for a beneficial end or object."\textsuperscript{103} The commission found that the plant was producing power and that the surplus might end in the near future.\textsuperscript{104} In applying the used and useful test, the commission held: "Colstrip 3 is used. It now produces power and has been used to meet the company’s power needs. Colstrip 3 is useful. It provides a source of reserves and is a relatively low-cost resource."\textsuperscript{105} The commission, however, then disallowed cost recovery for part of the plant in light of other ratemaking issues which had been litigated.\textsuperscript{106}

Finally, the Indiana Public Service Commission determined that the used and useful test created a dipartite ratemaking test by which to evaluate the rate base eligibility of the Gibson Unit No. 5, a generating station which consumer advocates claimed was excess capacity.\textsuperscript{107} The commission stated: "[The] ‘used and useful’ standard requires: (1) that the utility plant be actually devoted to providing utility service and (2) that the plant utilization be reasonably necessary to the provision of utility service."\textsuperscript{108} The Indiana proceeding was similar to those of Iowa, New Hampshire and Washington in that the plant at issue had been declared commercially operational and was presently devoted to providing utility service at the time of the rate case. The commission, however, refused to determine the usefulness of the facility merely by looking at the plant’s availability for beneficial ends; rather, the “dispute arose as to whether or not petitioner’s Gibson Unit No. 5 utilization is reasonably necessary for the provision of utility service to its ratepayers.”\textsuperscript{109}

It is thus apparent that the division of the used and useful test for purposes of determining the eligibility of excess capacity for rate base treatment is neither uncommon nor inappropriate. Indeed, the division seems to quite closely follow the normal lines of ratemaking inquiry. The used test is to be applied to the actual facility in order to ascertain whether the plant is actually operational. The useful test is to be applied to the capital investment in order to determine whether it is necessary or


\textsuperscript{104} Id.

\textsuperscript{105} Id.

\textsuperscript{106} Id. The Washington agency excluded portions of the Colstrip investment from rate base on other grounds. See id. at 194-95.


\textsuperscript{108} Id. at 10 (quoting City of Evansville v. Southern Ind. Gas & Elec. Co., 167 Ind. App. 472, 516, 339 N.E.2d 562, 589 (1975)).

\textsuperscript{109} Id.
beneficial.\textsuperscript{110}

B. Applying the Term

A determination of whether a utility’s investment in generating capacity is useful in practice requires a two-fold inquiry. In Iowa-Illinois, the Iowa Supreme Court first said that utility capital must be necessary to the ratepaying public; when a part of the investment turns out to be unnecessary, the cumulative investment is not useful.\textsuperscript{111} In evaluating power plants in particular, this analysis connotes an examination of reliability considerations. Capacity must be sufficient to assure that when customers demand electricity, the company will have adequate means to supply it.\textsuperscript{112} The second inquiry is whether the capital is beneficial. When a portion of the utility’s investment does not benefit ratepayers, the cumulative investment is not useful.\textsuperscript{113} For power plants, this analysis looks to the economic and cost consequences of new plant investment. At some point, consumers would prefer to face the remote chance of losing service rather than pay the increased costs of obtaining greater reliability.\textsuperscript{114}

In Iowa-Illinois, the court applied these tests to determine an appropriate rate base for the utility. The court stated: “‘Rate base’ is the utility’s investment in property, used and useful at the time of inquiry, in rendering utility service.”\textsuperscript{115} Thus, the determinative issue in excess capacity cases is whether the cumulative investment is used and useful.\textsuperscript{116} This approach to analyzing excess capacity is one of the most conceptually astute articulations of the issue ever proferred.

The Iowa Supreme Court’s excess capacity formulation centers on the requirement that a utility’s cumulative investment be used and useful. A rate base analysis should not examine all units viewed individually because that approach “ignores the distinction between the usefulness of

\textsuperscript{110} As shown by each of the above cases, the proper ratemaking inquiry is into the usefulness of the incremental capital. The regulator is to inquire whether the most recent investment of capital was necessary to provide service to ratepayers, or whether it provided some economic benefit to those ratepayers. The regulator is not to remanage the entire system to determine whether some capital is unnecessary or nonbeneficial.

\textsuperscript{111} 347 N.W.2d at 429.


\textsuperscript{113} 347 N.W.2d at 429.

\textsuperscript{114} See W. MARSH, supra note 24, at 90-97.

\textsuperscript{115} 347 N.W.2d at 427.

\textsuperscript{116} Id. at 429.
particular facilities and the usefulness of the total of those facilities.\textsuperscript{117} Instead, the determinants of usefulness are to be applied to the entirety of the investment. The analysis ascertains whether a part of the utility's investment is unnecessary or whether a portion of the investment does not benefit ratepayers.\textsuperscript{118} Even though all Iowa-Illinois power plants may have been used and useful when viewed individually, the cumulative investment in plant was not.\textsuperscript{119} In such a situation, the allotment of investment which is unnecessary or nonbeneficial is not useful.

This cumulative investment analysis quite logically flows from the Iowa court's concentration on an evaluation of investment and not of plant. The court applies the used and useful test to the investment in property and not to the property itself.\textsuperscript{120} In addition, the court distinguishes between looking at individual units and looking at the cumulative investment.\textsuperscript{121} The difference is crucial; investment is measured in dollars while plant is measured in megawatts. Although individual power plants may actually be operating and producing power, the total dollar investment in generating capacity may still be neither necessary nor beneficial. Since rate base is made up of dollars and not of megawatts,\textsuperscript{122} the

\begin{verbatim}
117. Id.
118. Id.
119. The Iowa Supreme Court decision contrasts with the decisions of the Minnesota and Washington regulatory commissions. The Minnesota commission found:

The Commission is solely concerned here with the question of whether [Minnesota Power and Light Company] chose to operate [new plants] in any way as part of its system during the test year. The Commission finds MP&L did so, and finds as a result of their operation that they were used and useful in providing service as part of that system during the test year.


120. The thrust of the Iowa court's analysis applies to a utility's investment. The Iowa-Illinois court stated that a utility's rate base is its investment in property. 347 N.W.2d at 427. The court also stated that the determinative issue in excess capacity litigation is whether the cumulative investment is used and useful. \textit{Id.} at 429. The court's language becomes confused, however, when the court states: "In the present case the commission factored the excess capacity return adjustment over all of Iowa-Illinois' units rather than pick out particular units for exclusion . . . ." \textit{Id.} This confusion, however, comes only in reciting the actions of the commerce commission; it does not purport to represent the analysis of the court.

121. \textit{Id.}

122. This analysis of rate base is the same as outlined in the major textbooks regarding utility rate regulation. For example, Messrs. Howe and Rasmussen state that the original cost standard has an emphasis on the principal invested in the public utility rather than an emphasis on physical property. K. Howe & E. Rasmussen, \textit{Public Utility Economics & Finance} 91 (1981). Messrs. Garfield and Lovejoy state: "[T]he property element in the rate base is the sum of the amounts actually spent for initial construction, acquisitions, and additions and betterments less depreciation." P. Garfield & W. Lovejoy, \textit{Public Utility Economics} 60 (1964). Professor Bonbright states that the rate base is "the total quantum of invested capital or of property 'values' on which the company is entitled to a reasonable rate of compensation." J. Bonbright, \textit{Principles}
\end{verbatim}
total investment in such an instance would not be considered used and useful and could not be included in the rate base.\footnote{123}

The genesis of this distinction between plant and investment can be traced to the United States Supreme Court decision in \textit{Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission}.\footnote{124} The Court considered methods through which property was to be valued for purposes of determining rate base;\footnote{125} however, the important analysis was made by Justice Brandeis in a dissenting opinion which discussed the elements of a utility's rate base.\footnote{126} He noted: "The Constitution does not guarantee to the utility the opportunity to earn a return on the value of all items of property used by the utility, or of any of them."\footnote{127} Moreover, Brandeis eschewed the idea of examining "the congeries of old machinery and equipment, called the plant . . . ."\footnote{128} Instead, he emphasized the capital that made up the rate base: "The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise."\footnote{129}

Historically, neither utility regulators nor jurists have been careful about making this important distinction when analyzing excess capacity issues. This failure is not delineated by who does and who does not make excess capacity adjustments. For example, the Washington Utilities and Transportation Commission concluded that Colstrip 3 was useful.\footnote{130} The New Hampshire Commission, in looking at the Seabrook line, recognized "the usefulness of the entire line."\footnote{131} The Indiana Commission found with regard to Gibson that the plant utilization was reasonably necessary.\footnote{132} Pennsylvania courts sought to determine whether "the

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\footnote{123}{Montana Power Co., No. 83.9.67, slip op. at 16 (Mont. Pub. Serv. Comm'n Sept. 13, 1984).}
\footnote{124}{262 U.S. 276 (1923).}
\footnote{125}{\textit{Id.} at 285-89.}
\footnote{126}{\textit{Id.} at 289-312; \textit{see also} J. SUELFLOW, \textsc{Public Utility Accounting: Theory and Application} 159-60 (1973) (discussion of accounting for utility property and plant).}
\footnote{127}{262 U.S. at 290.}
\footnote{128}{\textit{Id.} at 301.}
\footnote{129}{\textit{Id.} at 290; \textit{see also} Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 649 (1944) (Jackson, J., dissenting) ("The amount and quality of service rendered by the usual utility will, at least roughly, be measured by the amount of capital it puts into the enterprise. But it has no rational application where there is no such relationship between investment and capacity to serve.".).}
\footnote{130}{60 Pub. Util. Rep. 4th at 194.}
\footnote{131}{57 Pub. Util. Rep. 4th at 577. The Seabrook Scobie line is a 345 kilovolt transmission line. \textit{Id.} at 567.}
\footnote{132}{51 Pub. Util. Rep. 4th at 10-12. "Gibson" refers to a 625 MW coal-fired unit located in Gibson County, Indiana. \textit{Id.} at 10.}
property invested in will be used and useful . . .”133 Only the Michigan Supreme Court has recognized the Brandeis distinction. The Michigan court speaks of a determination of whether the costs of nuclear construction should be excluded from rate base, and the utility’s attempt to have the costs included.134 Even the Michigan court is inconsistent, however, as the court also refers to placing an unnecessary power plant in the rate base.135

This confusion or carelessness in discussing the structure of a utility’s rate base is puzzling in light of other commonly litigated ratemaking issues. Working capital is allowed as a rate base item even though no physical properties are involved.136 Customer-contributed capital, such as the deferred taxes associated with normalization accounting,137 results in a rate base reduction even though no change occurs in the physical plant.138 The gains on the sale of capital assets are often attributed to ratepayers on the theory that the investors own only the original capital, not the plant, and thus cannot benefit from appreciation in property value.139

The approach taken by the Iowa Supreme Court reaffirms the Brandeis distinction: “The thing devoted by the investor to the public use is not specific property, . . . but capital . . . in the enterprise.”140 Rate base is made up of dollars of investment, not megawatts of plant. As a result, regulators and courts involved in excess capacity litigation should seek to ascertain whether the cumulative investment, not an individual unit, is useful to ratepayers.141

C. Applying the Term: Who Should Bear the Cost?

A determination of whether investors or ratepayers should bear the cost of excess capacity directly flows from the application of the used and useful concept. According to the Iowa Supreme Court, “‘Rate base’ is the utility’s investment in property, used and useful at the time of in-

135. Id. at 411, 316 N.W.2d at 197.
136. See K. HOWE & E. RASMUSSEN, supra note 122, at 92-93.
137. Id. at 84-86.
138. Id. at 86.
140. 262 U.S. at 290 (Brandeis, J., dissenting); see supra notes 124-29 and accompanying text.
141. 347 N.W.2d at 429; see supra text accompanying notes 117-18.
quiry, in rendering utility service.\textsuperscript{142} The court also stated that the determinative issue in evaluating excess capacity situations is whether the cumulative investment is used and useful.\textsuperscript{143} The portion of the investment that is unnecessary or does not benefit ratepayers is not useful.\textsuperscript{144}

Historically, state utility regulators have been reluctant to engage in a strict application of the used and useful test to excess electric generating capacity on the administrative level.\textsuperscript{145} Recent judicial decisions, however, have not evidenced that same compulsion to avoid rate base exclusion for investment that is not used and useful. The Ohio Supreme Court, for example, considered whether the Davis-Besse plant was excess capacity.\textsuperscript{146} The issue was whether the unit was used and useful; a negative finding would result in the exclusion of the unit from the utility's rate base.\textsuperscript{147} The Michigan Supreme Court also considered the appropriate treatment for surplus investments.\textsuperscript{148} The court looked at the implications of the ratemaking treatment both before and after construction. In evaluating the proposed sale of securities for new construction, the court noted: "The ratepayers are already paying for the completion of these plants, by subsidizing the higher capital costs that reflect the capital markets' estimate of the risk that these plants, if and when completed, will not be included in rate base."\textsuperscript{149} In discussing ratemaking after plant construction has been completed, the court remarked:

Under the present regulatory scheme, the utilities may indeed be betting the company on the wisdom of their decisions to build nuclear generating plants costing several billion dollars. If they have made erroneous decisions and the cost of the additional generating capacity is not included, in whole or in part, in the rate base, stockholders or bondholders or both would lose, but the ratepayers would be largely

\textsuperscript{142} 347 N.W.2d at 427; see also Denver Union Stock Yard Co. v. United States, 304 U.S. 470, 475 (1938) (property not used and useful is to be excluded from rate base when calculating maximum rates permitted for stock yard services).

\textsuperscript{143} 347 N.W.2d at 429.

\textsuperscript{144} Id.


\textsuperscript{147} Id. at 59, 406 N.E.2d at 1374.


\textsuperscript{149} Id. at 416 n.57, 316 N.W.2d at 200 n.57 (emphasis in original); cf. Washington Water Power Co., 58 Pub. Util. Rep. 4th 126, 131 (Idaho P.U.C. 1984).
unaffected.\textsuperscript{150} The Pennsylvania Supreme Court has set forth the proper ratemaking test as well.\textsuperscript{151} In reviewing a state utility commission decision to remove excess capacity from rate base, the court stated: "The touchstone for determining whether or not a prudently constructed unit should be included in a utility's rate base is whether or not, during the test year involved the unit will be used and useful in rendering service to the public."\textsuperscript{152}

No court has permitted investment in excess capacity which is not used and useful to be included in rate base. The \textit{Iowa-Illinois} decision also follows this approach. Under the reasoning of \textit{Iowa-Illinois}, the allotment which is not necessary to provide service, or which generates no benefits to ratepayers, is to be excluded from rate base.\textsuperscript{153}

\section*{IV. The Prudent Management Concept}

Application of the traditional \textit{prudent management} ratemaking theory to an excess capacity analysis is relevant to the second issue in \textit{Iowa-Illinois}—whether investors or ratepayers should bear the costs associated with surplus capacity. The prudent management concept dictates that investors should bear no part of the cost of excess capacity when the construction was reasonably undertaken.\textsuperscript{154} \textit{Iowa-Illinois} urged such a theory in its challenge to the imposition of an excess capacity revenue adjustment by the Iowa State Commerce Commission. \textit{Iowa-Illinois} relied upon the commission's finding that the utility's decision to increase generating capacity was prudent when made.\textsuperscript{155} The efficacy of this theory was bolstered because the company had been encouraged during the previous decade to undertake the very capacity expansion which ultimately led to the finding of surplus.\textsuperscript{156} Consideration of this prudent management defense involves the application of both regulatory and constitutional principles.

\textsuperscript{150} Kelley, 412 Mich. at 418, 316 N.W.2d at 200.
\textsuperscript{152} \textit{Id.} at \textit{\ldots}, 433 A.2d at 623; \textit{accord} Madison Gas & Elec. Co. v. Public Serv. Comm'n, 109 Wis. 2d 127, \textit{\ldots}, 325 N.W.2d 339, 343 (1982).
\textsuperscript{153} See \textit{supra} notes 46-60 and accompanying text.
\textsuperscript{154} See Schwartz & Colton, \textit{supra} note 8, at 722.
\textsuperscript{155} 347 N.W.2d at 428-29.
\textsuperscript{156} \textit{Id.} at 428. The supreme court noted that the construction of the Ottumwa plant was "in response to concern by the commission and others about electrical energy shortages in the 1980's." \textit{Id.}
A. Defining the Term

Use of an imprudence analysis to determine whether investment in capacity should be excluded from rate base has historically involved an emphasis on whether the affected utility acted in good faith. Imprudence connotes something more than mere error of judgment; the utility's action must be characterized by misfeasance or malfeasance on the part of the decisionmakers.157 The prudent management theory was first articulated by Justice Brandeis in Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission.158 In the now famous "Brandeis footnote," he stated: "The term prudent investment is not used in a critical sense. . . . The term is applied for the purpose of excluding what might be found to be dishonest or obviously wasteful or imprudent expenditures."159 This approach, that prudence is measured by good faith, has been used by other courts in the past160 and continues to be utilized by public utility commissions today.161

B. Applying the Term

The major issue in application of the prudent management concept is determining when a utility must act with the prescribed duty of care.162 Substantial differences exist in the resolution of this query. Joseph Manzi recently set forth one school of thought on how this point in time should be measured.163 Noting that various problems with generating plant construction have led to extreme effects in power plant deferrals and terminations, as well as cost overruns and rate shock, Manzi observed: "[C]ommissions are now aggressively asking—to what extent

158. 262 U.S. 276 (1923).
159. Id. at 289 n.1.
160. In a 1930's excess capacity case, the Oregon Supreme Court held: "These facts do not disclose that [the company's] construction of additional plant was reckless or unwarranted." Pacific Tel. & Tel. Co. v. Wallace, 158 Or. 210, 234, 75 P.2d 942, 952 (1938). In an earlier excess capacity case, a federal district court sought to determine whether the company's actions could be characterized by "rascality." See Capital City Gaslight Co. v. City of Des Moines, 72 F. 829 (S.D. Iowa 1896).
163. The "prudent management" theory has been labeled the common law negligence theory of ratemaking. Pierce, supra note 2, at 511.
164. Joseph Manzi is a group manager for the Kellogg Corporation, a construction engineering and management consulting firm involved in the design and construction of power plants.
have the actions and inactions (or both) of the utility contributed to the severity of the causes? Stated another way, has the management of the utility been imprudent in their [sic] decision?" 164 Manzi stated that regulators should assess the prudence of capacity construction "at the time the decision was made." 165 When attention is so concentrated, regulators can more easily understand the industry investment in surplus generation. State commissions which have adopted the prudent management theory of ratemaking first consider the long lead times of power plant construction 166 and the inherent uncertainties in the plant planning process. 167 As one commission noted, "It is in the nature of things that projections of future circumstances are rarely precise." 168 Thus, these commissions hold that if the decision to initiate construction was prudent when made, no subsequent revenue adjustment should be imposed. 169

Use of the time at which the decision to build was made as a basis for reviewing the prudence of power plant construction decisions, however, is not limited to those regulators who decline to approve an excess capacity adjustment. 170 The Idaho Public Utilities Commission recently excluded Washington Water Power Company's entire investment in its Kettle Falls wood-fired generating plant from the utility's rate base. 171 Based on the information available at the time the decision to construct was made, the commission determined that a prudent utility planner would have realized that no plant was necessary. 172 It further concluded that the decision to build Kettle Falls was "imprudent and unreasonable from its inception." 173 The Pennsylvania Commonwealth Court also approved an excess capacity adjustment using this approach, holding that investment may be excluded from rate base if the plant "is found to be a result of managerial imprudence at the time the decision to invest was

165. Id. "Of course, the examination of imprudence should not be performed using hindsight but should address the prudence (or lack of) at the time the decision was made." Id.
169. See Colton, supra note 1, at 1141-46.
172. Id. at 132.
173. Id. at 134.
made.”174

Not all utility analysts believe that a limitation should be placed on a prudence review. Dr. Peter Fisher, a professor of planning at the University of Iowa, recently testified to the Illinois Commerce Commission on behalf of the Illinois Governor’s Office of Consumer Services.175 Rather than looking only at the decision to build time as the point at which to ascertain prudence, Fisher posited that there must instead be an inquiry into whether ongoing management diligence was present. Professor Fisher stated: “Reasonable planning is required in every management decision, from the first stages of demand forecasting and capacity planning up through decisions to continue, defer, or cancel further construction at any time up to actual project completion.”176 Under the Fisher line of reasoning, prudence is not a finding which becomes fixed upon initiation of plant construction, but is an ongoing duty of care.177

Several state utility commissions have adopted Professor Fisher’s analytical framework. The Missouri Public Service Commission was one of the first to apply this type of review when it assessed the reasonableness of the actions of Kansas City Power and Light Company regarding the Iatan power plant.178 In May 1980, the utility declared the Iatan unit to be in commercial operation and sought to have the plant included in rate base.179 Even though the utility had been granted a certificate of convenience and necessity seven years before,180 the Missouri commission nevertheless found that the company’s actions regarding Iatan fell short of rational planning and management prudence.181 In reaching that conclusion, the commission did not examine the utility’s decision to initiate Iatan’s construction. Rather, it was subsequent actions by the utility management which fell short of the prescribed duty of care. The commission stated: “[A]t least by early 1976, company management...”

176. Id. at 4.
177. Dr. Fisher also stated: “Reasonable planning in the face of uncertainty requires that planning flexibility be maintained as much as possible. Large and costly projects should be undertaken in such a way as to minimize premature commitments and as to maximize the ability of the company to scale down the project or to defer or cancel the project if conditions change so as to render the project economically unjustified.” Id. Dr. Fisher is a professor in the Graduate Department of Urban and Regional Planning, University of Iowa, Iowa City.
179. Id. at 8.
180. Id. at 10. The certificate was issued on December 14, 1973.
181. Id. at 14.
knew there would be excess capacity in 1980, when Iatan Unit No. 1 was scheduled to be completed."\(^\text{182}\) It then criticized company management for responding to this information by arranging nonjurisdictional sales at a loss without regard to the costs that the sales would impose upon its ratepayers,\(^\text{183}\) and for acting to derate its generating capabilities to create a reasonable reserve margin.\(^\text{184}\) The commission concluded: "[A]lthough the company ordered studies to assist it in developing a construction program which would be beneficial to both the company and its ratepayers, it then ignored the conclusions of those studies which laid out a variety of least cost options which did not include the construction schedule pursued."\(^\text{185}\) The Missouri Public Service Commission thus sharply diverged from those policymakers who urged that prudence should be determined simply at the time the decision to initiate construction of a power plant was made. Instead, the agency adopted the ongoing-management-diligence analysis of Professor Fisher.\(^\text{186}\)

The Missouri decision is similar to an analysis undertaken by the Wisconsin Public Service Commission.\(^\text{187}\) The Wisconsin commission was asked to evaluate the reasonableness of an accelerated construction program pursued by Wisconsin Electric Company in order to assure a June 1980, commercial operation date for the Pleasant Prairie power plant.\(^\text{188}\) The commission found that the actions of Wisconsin Electric constituted imprudent management.\(^\text{189}\) In its decision, however, the commission did not question either the decision to initiate capacity expansion or the decision to initiate the accelerated construction program. Like Missouri, the Wisconsin commission found the utility had undertaken the construction program based on needs which were reasonably forecast in 1976;\(^\text{190}\) however, it noted that "in December of 1979, applicant had new forecasts available which showed substantial excess capacity for the summer of 1980 . . . ."\(^\text{191}\) The commission observed:

[Wisconsin Electric] then had an opportunity to reevaluate its position and determine whether greater savings could be achieved by reducing

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182. \textit{Id.}
183. \textit{Id.}
184. \textit{Id.}
185. \textit{Id.}
186. See supra notes 177-78 and accompanying text.
188. \textit{Id.}
189. \textit{Id.} at 13.
190. \textit{Id.} at 12. The 1976 forecast showed a capacity deficit for the summer of 1980.
191. \textit{Id.}
its extraordinary construction expenses by deferring the completion of Pleasant Prairie Unit 1 . . . . The applicant did not, at that point, make such a comparative cost analysis, but decided to continue with Pleasant Prairie Unit 1 construction on its former accelerated schedule . . . .

The Wisconsin regulators found that this company action resulted in a "substantial excess reserve capacity in the summer of 1980."193 The Iowa Supreme Court also appears to have drawn from this analytical framework in assessing the lawfulness of the excess capacity adjustment. Regulatory review did not stop with a finding of initial prudence, but included an examination of later events. Assuming that the Iowa-Illinois management decision to invest in its Ottumwa plant was "a management decision that was prudent when made but which later events prove to have been mistaken,"194 the court rejected the notion that a prerequisite to a revenue adjustment is a finding of utility misfeasance or malfeasance.195 If diseconomies result from mistakes in investment, utility investors are not insulated from the consequences.196 The court continued: "Nothing in the constitutional requirement that a utility receive a fair return on its investment prohibits a lower return from the ratepaying public upon a part of the investment that turns out to be unnecessary, even when the utility's decision to make the investment was prudent."197 The Iowa Supreme Court has thus adopted the position that the reasonableness of an initial decision to begin construction is not determinative of whether or not a subsequent decision to make an excess capacity adjustment is appropriate.

C. Prior Regulatory Encouragement

Utility claims of prudent management are bolstered when the capacity expansion which results in a surplus is affirmatively encouraged by the regulatory agency making the excess capacity adjustment. In Iowa-Illinois, the utility argued that the commerce commission had urged the construction of additional capacity in the 1970's. The court found that

192. Id.
193. Id.
195. Id. at 428-29. Pierce further argues that in the event a state disallows a rate of return on canceled plants but allows a return on excess capacity, a perverse economic incentive is established. A utility is encouraged to complete a plant, known to be unnecessary, in order to obtain all or part of the return which is granted for excess capacity. Pierce, supra note 2, at 524, 542.
196. 347 N.W.2d at 429.
197. Id.
the construction of the Ottumwa plant was undertaken "in response to concern by the commission and others about electrical energy shortages in the 1980's." Because of this encouragement, Iowa-Illinois asserted that the commerce commission was constitutionally proscribed from subsequently making a revenue adjustment based upon a finding of excess capacity.

1. Policy Considerations

Substantial policy disagreement exists among utility regulators regarding the proper consideration to be afforded prior regulatory encouragement of capacity expansion. The Minnesota Public Utility Commission refused to adjust for excess electric capacity, reasoning that: "It would be a harsh regulatory principle to require [Minnesota Power & Light] to construct generating capacity to meet what was then a clearly expanding demand for electricity and to later penalize MP&L for doing what it and the appropriate jurisdictional agencies found to be reasonable at the time." Opposite conclusions have been reached by the utility commissions of Missouri, Iowa, and North Dakota. State regulatory urging of plant construction may resolve the issue of whether utility management was prudent from the start. Unlike the finding in Washington Water Power Co. that the investment was "unreasonable from its inception," a company urged to build capacity should not be adjudged culpable if the construction was in fact initiated. This analysis, however, assumes the validity of the Manzi approach to the timing of a prudence determination. The Iowa commission, on the other hand, expressly rejected that approach:

As has been apparent during the last 10-year period, projections of growth in demand considered during the certification process may not be realized due to changing economic conditions, international events and the appearance of new national and state policy considerations. Improvements in forecasting may be discovered. We must make sure

198. Id. at 428.
199. Id. at 427.
205. Id. at 133.
206. See supra notes 162-69 and accompanying text.
utility companies respond to such changes, perhaps by modifying their construction plans.\textsuperscript{207} A decision to construct a power plant, approved and possibly even encouraged by state regulators, indicates little about subsequent changes in the need for the plant and utility reactions to those changes. States such as Missouri, North Dakota, and Iowa hold that the actions of a regulatory agency in a certification proceeding address only the initial decision point and not the ongoing prudence of company management.

In any event, constitutional claims based upon the fact that utility regulators previously encouraged the construction of additional generating capacity should be clearly distinguished from arguments regarding ratemaking policy. Despite the regulatory encouragement of new capacity investment, no constitutional infirmities exist with the subsequent imposition of an excess capacity revenue adjustment.\textsuperscript{208}

2. Constitutional Considerations

The actions of a private utility are not converted into the actions of the state merely because the actions have been encouraged by the government.\textsuperscript{209} Only when the state has mandated a utility to undertake certain activities does the company’s management lose its control of, and responsibility for, the results.\textsuperscript{210} The United States Supreme Court first established this principle for utilities in \textit{Jackson v. Metropolitan Edison Co.}\textsuperscript{211} The Court considered a due process challenge to the shutoff of electric service. The utility customer argued that, while Metropolitan Edison was indeed a private company, its actions were also the actions of the state because it was extensively regulated, had a state-protected monopoly status, and provided an essential service.\textsuperscript{212} The Supreme Court rejected each of those arguments: "[T]he inquiry must be whether there is a sufficiently close nexus between the State and the challenged action of the regulated entity so that the action of the latter may be fairly treated

\textsuperscript{207} Order Requiring Additional Information, \textit{In re Ratemaking Treatment of Excess Capacity}, No. RMU-82-4, slip op. at 4 (Iowa State Commerce Comm’n Sept. 29, 1982).
\textsuperscript{208} 347 N.W.2d at 429.
\textsuperscript{209} Jackson v. Metropolitan Edison Co., 419 U.S. 345, 350-51 (1974); see also Blum v. Yaritsky, 457 U.S. 991, 1004-05 (1982) (approval of or acquiescence in the initiatives of a private party is not state action); Daniels v. Twin Oaks Nursing Home, 692 F.2d 1321, 1333 (11th Cir. 1983) (action which is not coerced or significantly encouraged by the state, or is not a power traditionally exclusively reserved to the state, is not state action).
\textsuperscript{210} See, e.g., Iowa Citizen/Labor Energy Coalition v. Iowa State Commerce Comm’n, 335 N.W.2d 178, 182-83 (Iowa 1983).
\textsuperscript{211} 419 U.S. 345 (1974).
\textsuperscript{212} Id. at 350-54.
as that of the State itself." 213 The customer in Jackson argued that state regulatory approval of Metropolitan Edison's disconnections of utility service provided the nexus. 214 The Supreme Court disagreed, holding that approval of utility shutoff practices "where the commission has not put its own weight on the side of the proposed practice by ordering it, does not transmute a practice initiated by the utility and approved by the commission into 'state action.'" 215

The Iowa Supreme Court also considered a constitutional challenge to utility shutoff practices in Iowa Citizen/Labor Energy Coalition v. Iowa State Commerce Commission. 216 In this proceeding, a consumer organization directly challenged the state utility commission's rules permitting shutoffs in particular circumstances. The allegation of state action, the consumers said, was buttressed by the fact that the regulatory commission encouraged the use of shutoffs as a means of minimizing a utility's uncollectable accounts. 217 The court rejected that reasoning:

Nor does the state's encouragement of collection of delinquent bills convert the limitations to state action. Disconnections remain merely a permissive device for utilities to use in attempting to achieve that objective. Commission policy favoring collection of delinquent accounts has resulted in enlargement of the scope of permission to discontinue services, but it has not made disconnection for nonpayment mandatory. 218

That court thus adopted the themes first articulated by the United States Supreme Court in Jackson. The state government was noted to have encouraged the utility action, to have adopted a policy favoring the action, and to have enlarged the scope of permission for the action. 219 Nevertheless, the Iowa Supreme Court determined that the action remained solely that of the utility and could not be attributed to the state. 220 The state utility commission had not made the action mandatory since it had not

213. Id. at 351.
214. Id. at 354-55. Some question exists as to the extent of the commission's "approval." The United States Supreme Court noted: "The District Court observed that the sole connection of the Commission with this regulation was Metropolitan's simple notice filing with the Commission and the lack of any Commission action to prohibit it." Id. at 355.
215. Id. at 357; see also Taylor v. Consolidated Edison Co., 552 F.2d 39, 45-46 (2d Cir.), cert. denied, 434 U.S. 845 (1977) (decision of a private utility not to grant a predisconnection hearing is not state action even if made pursuant to state agency regulation); Stack v. Northern Natural Gas Co., 391 F. Supp. 155, 159 (S.D. Iowa 1975) (decision of a private utility to disconnect service is not state action even if expressly permitted by state agency regulation).
216. 335 N.W.2d 178 (Iowa 1983).
217. Id. at 182-83.
218. Id. at 183.
219. Id. at 182-83.
220. Id.
put its own weight on the side of the proposed practice by ordering it.\textsuperscript{221}

This resolution of utility ratemaking issues is consistent with judicial analysis in other regulatory arenas as well. The imposition of financial consequences for private actions sanctioned or encouraged by the government regarding environmental matters has been approved. The seminal case in this area is \textit{Greater Westchester Homeowners Association v. City of Los Angeles}.\textsuperscript{222} The California Supreme Court considered whether nuisance damages should be imposed for injuries caused by aircraft noise emanating from the Los Angeles International Airport.\textsuperscript{223} The city argued that the construction of the airport was approved, if not urged by the federal government, and that the award of damages pursuant to state law was thus preempted. The court rejected that notion on grounds very similar to those articulated in \textit{Jackson}. The court stated:

City concedes that it, and not the federal government, decided to build and then to expand the airport in the immediate vicinity of a residential area. It is undeniable that City chose the particular location and direction of the airport runways. It approved their usage by jet aircraft. It entered into service agreements with commercial air carriers all with full and prior knowledge of the potential noise impact.

Admittedly, some of the foregoing actions by City followed federal advice, approval, and perhaps even encouragement. Nonetheless, City chose, and was not forced by anyone, to develop [the airport] in its particular location.\textsuperscript{224}

Finding that the city voluntarily elected to expand the airport, the court affirmed a damages award.\textsuperscript{225}

The actions of a public utility in constructing power plants would appear to fall within this same type of reasoning. The decisions of whether, when, and what type of plant to build are all decisions of utility management. Several state legislatures have enacted statutes requiring a certificate of public convenience and necessity prior to plant construction\textsuperscript{226} which generally provide for approval or disapproval of company construction proposals.\textsuperscript{227} The statutes are triggered by applications from the utility. The statutes do not preempt utility management in

\textsuperscript{221} See 419 U.S. at 357.
\textsuperscript{222} 26 Cal. 3d 86, 603 P.2d 1329, Cal. Rptr. 733 (1979), cert. denied, 449 U.S. 820 (1980).
\textsuperscript{223} \textit{Id.} at 92, 603 P.2d at 1330, 160 Cal. Rptr. at 734.
\textsuperscript{224} \textit{Id.} at 98, 603 P.2d at 1335, 160 Cal. Rptr. at 738 (citations omitted).
\textsuperscript{225} \textit{Id.} at 100, 603 P.2d at 1335, 160 Cal. Rptr. at 739. The court said the federal involvement had not "rendered City powerless to prevent or reduce the damages of which plaintiffs complain." \textit{Id.} at 99, 603 P.2d at 1335, 160 Cal. Rptr. at 739.
\textsuperscript{226} Pierce, supra note 2, at 532-35.
\textsuperscript{227} \textit{Id.} at 508-09.
planning a generating system, nor do they provide for regulators mandating the construction of particular power plants.

Under the line of reasoning set forth in *Jackson*\(^{228}\) and its progeny, as well as the reasoning of *Greater Westchester Homeowners Association*,\(^{229}\) a utility is not constitutionally insulated from excess capacity adjustments by prior regulatory review and approval of decisions to construct additional capacity. The licensing of capacity expansion does not change a practice initiated by the utility and approved by the commission into the action of the regulatory agency for purposes of constitutional analysis. The fact that the state encouraged the utility action, adopted a policy favoring the action, or enlarged the scope of permission for the action has no constitutional significance in an excess capacity challenge.

V. CONCLUSION

State appellate court decisions are now being rendered in cases where public utilities challenged administrative decisions to impose electric rate adjustments due to excess capacity. The recent decision in *Iowa-Illinois* is noteworthy for its comprehensive review of issues involved in excess capacity litigation.

The Iowa Supreme Court stated in *Iowa-Illinois* that a utility’s rate base is made up of capital used and useful in providing service to customers, a test which has two distinct elements. To be used, a utility’s physical property must be actually operational and providing services to customers. In contrast, the term useful is applied to the capital investment and not to the physical plant. An investment must be necessary or economically beneficial to ratepayers in order to be useful. According to the Iowa Supreme Court, the determinative issue in excess capacity litigation is whether the cumulative investment, and not the individual plant, is used and useful. If some portion of utility investment is not

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\(^{228}\) 419 U.S. 345 (1974). Power plant certification statutes serve to limit the right which utilities would otherwise have to build new power plants. Approval of a new plant does not make the choice to proceed with the plant the decision of the state. "If rule limitations did not exist, state action plainly would not be present in a utility decision to terminate service for nonpayment. Rules limiting a right that would otherwise exist do not make exercise of the right state action." *Iowa Citizen/Labor Energy Coalition*, 335 N.W.2d at 183.

\(^{229}\) 26 Cal. 3d 86, 603 P.2d 1329, 160 Cal. Rptr. 733. Power plant certification statutes are enabling in character, not mandatory. State regulatory approval of capacity expansion plans thus does not render a utility powerless to prevent or reduce excess capacity. It is the utility which chose, and was not forced by anyone, to develop a particular capacity expansion project.
necessary or if it provides no benefit to ratepayers, then that allotment is excess capacity which should be excluded from rate base.

Consideration of the contrasting prudent management theory of excess capacity ratemaking raises its own issues. A claim of imprudence connotes more than mere error of judgment; it implies some level of misfeasance or malfeasance. Regulatory differences exist over the time at which the prudence of management is to be determined. Although some states hold that prudence is to be established at the time when the decision to initiate capacity expansion is made, the more well-reasoned decisions hold that prudence requires ongoing management diligence. The placement of the threshold time can well be determinative of whether to make a rate base adjustment for mismanagement.

The prudence issue finally raises the question of what impact prior regulatory approval of capacity expansion plans should play in subsequent excess capacity litigation. Some public service commissions hold that prior approval or encouragement of construction should insulate a company from later revenue adjustments. Other commissions hold that these approvals address only initial prudence and not the ongoing diligence of management. In contrast, the imposition of an excess capacity adjustment should not turn on the question of fault; the presence or absence of prior regulatory approval is not relevant to the excess capacity debate. The Iowa-Illinois decision provides an excellent analysis of the ratemaking issues and principles to be considered and applied in the excess capacity litigation which will face the utility industry and state regulators for years to come.